```
1:
    Constructor Function and Procedure List of maxbox 3.9.9
 2:
 4 .
 6: ref Help Extraxt of EXE Functions of maxbox3.exe BigBitBox API HEX in BOX
 7:
 9: File Size of EXE: 20079616 V3.9.9.94 April 2014 To EKON/BASTA/JAX/IBZ/SWS
               *****Now the Funclist**
10:
11: Funclist Function : 12264 //10766 //10165 (7648)
15: Constructlist Constructor Size is: 1253 //995 //
16: def head:max: maXbox7: 12.04.2014 19:11:55
17: file E:\maxbox\maxbox3\docs\maxbox_extract_funclist399.txt
18: doc file: maxbox_extract_funclist399_.txt (sort function list)
19:
20: Funclist total Size all is: 21149! Constructor, Function and Procedure
21: AExtraxt of EXE Functions of maxbox3.exe, locs of file = 20161
22: ASize of EXE: 20079616 (16586240) (13511680) (13023744)
23: SHA1 Hash of maXbox 3.9.9.94: 746418954E790A1713A93FF786ABCB50097FCB59
24:
28:
29:
30: FUNCTION Metric of Script: 256_findfunctions2_of_EXE.txt
31: Function ************Now the Funclist*********
32: function GetResStringChecked(Ident: string; const Args: array of const): string
33: Function ( Index : Longint) : Integer
34: function (Command: Word; Data: Longint; var CallHelp: Boolean): Boolean
35: Function _CheckAutoResult( ResultCode : HResult) : HResult
36: function
             _T(Name: tbtString): Variant;
37: function ABNFToText(const AText : String) : String
38: Function Abs(e : Extended) : Extended;
39: Function Ackermann( const A, B : Integer) : Integer
40: Function AcquireLayoutLock : Boolean
41: Function ActionByName( const AName : string) : TWebActionItem
42: Function ACTIVEBUFFER : PCHAR
43: Function Add : TAggregate
44: function Add : TCollectionItem
45: Function Add : TColumn
46: Function Add : TComboExItem
47: Function Add : TCookie
48: Function Add
                 : TCoolBand
49: Function Add
                  TFavoriteLinkItem
50: Function Add : TFileTypeItem
51: Function Add : THeaderSection
52: Function Add
                 : THTMLTableColumn
53: Function Add
                 : TIdEMailAddressItem
54: Function Add : TIdMessagePart
55: Function Add : TIdUserAccount
56: Function Add
                 : TListColumn
57: Function Add
                 : TListItem
58: Function Add : TStatusPanel
59: Function Add : TTaskDialogBaseButtonItem
60: Function Add : TWebActionItem
61: Function Add : TWorkArea
62: Function Add( AClass : TClass) : Integer
63: Function Add( AComponent : TComponent) : Integer
64: Function Add( AItem, AData : Integer) : Integer
65: Function Add( AItem, AData : Pointer) : Pointer
66: Function Add( AItem, AData : TObject) : TObject
67: Function Add( AObject : TObject) : Integer
68: Function Add( const Access, Count : Cardinal; const Offset : Int64) : Integer
69: Function Add( const S : WideString) : Integer
70: Function Add( Image, Mask: TBitmap): Integer
71: Function Add( Index: LongInt; const Text: string): LongInt
72: Function Add( Sibling : TTreeNode; const S : string) : TTreeNode
73: Function Add(const S: string): Integer
74: function Add(S: string): Integer;
75: Function AddAt( const Access, Count : Cardinal; const Offset : Int64; const Address: Pointer) : Integer
76: Function ADDCHILD : TFIELDDEF
77: Function AddChild( Index : LongInt; const Text : string) : LongInt
78: Function AddChild( Parent : TTreeNode; const S : string) : TTreeNode
79: Function AddChildFirst( Parent : TTreeNode; const S : string) : TTreeNode
80: Function AddChildObject( Index : LongInt; const Text : string; const Data : Pointer) : LongInt 81: Function AddChildObject( Parent : TTreeNode; const S : string; Ptr : Pointer) : TTreeNode
82: Function AddChildObjectFirst( Parent : TTreeNode; const S : string; Ptr : Pointer) : TTreeNode
83: Function ADDFIELDDEF : TFIELDDEF
84: Function AddFileExtIfNecessary( AFileName, AExt : string) : string
85: Function AddFirst( Sibling : TTreeNode; const S : string) : TTreeNode
86: Function AddIcon( Image : TIcon) : Integer
87: Function AddImage( Value : TCustomImageList; Index : Integer) : Integer
88: Function ADDINDEXDEF : TINDEXDEF
89: Function AddItem(const Caption:String;const ImageIdx,SelectImageIdx,OverlayImagIdx,
    Indent:Int;Data:Ptr):TComboExItem
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90: Function AddItem( Item : TheaderSection; Index : Integer) : TheaderSection
 91: Function AddItem( Item : TListItem; Index : Integer) : TListItem
 92: Function AddItem( Item: TStatusPanel; Index: Integer)
93: Function AddMapping( const FieldName: string): Boolean
 94: Function AddMasked( Image : TBitmap; MaskColor : TColor) : Integer
 95: Function AddModuleClass( AClass : TComponentClass) : TComponent
 96: Function AddModuleName( const AClass : string) : TComponent
 97: Function AddNode(Node, Relative: TTreeNode; const S: string; Ptr: Pointer; Method: TNodeAttachMode): TTreeNode
 98: Function AddObject( const S : WideString; AObject : TObject) : Integer
99: Function AddObject( Index : LongInt; const Text : string; const Data : Pointer) : LongInt 100: Function AddObject( Sibling : TTreeNode; const S : string; Ptr : Pointer) : TTreeNode
101: function AddObject(S:String; AObject:TObject):integer
102: Function AddObjectFirst( Sibling : TTreeNode; const S : string; Ptr : Pointer) : TTreeNode
103: Function AddParameter : TParameter
104: Function AddParamSOLForDetail(Params:TParams;SOL:WideStr;Native:Bool;OuoteChar:WideString):WideString
      Function Addr64ToAddr32(const Value: TJclAddr64): TJclAddr32;
106: Function Addr32ToAddr64(const Value: TJclAddr32): TJclAddr64;
107: function AdjustLineBreaksS(const S: string): string)
108: TTextLineBreakStyle', '(tlbsLF, tlbsCRLF)
109: Function AdjustLineBreaks(const S: string; Style: TTextLineBreakStyle): string;
110: Function AllData : string
111: function AllocMemCount: integer;
112: function AllocMemSize: integer;
113: Function AllocPatternBitmap( BkColor, FgColor : TColor) : TBitmap
114: Function AllowRegKeyForEveryone( Key : HKEY; Path : string) : Boolean
115: Function AlphaComponent( const Color32 : TColor32) : Integer
116: Function AlphaSort : Boolean
117: Function AlphaSort( ARecurse : Boolean) : Boolean
118: Function AnsiCat( const x, y : AnsiString) : AnsiString
119: Function AnsiCompareFileName(S1, S2: string): Integer
120: function AnsiCompareFileName(const S1: string; const S2: string): Integer)
121: Function AnsiCompareStr(S1,S2:string): Integer 122: function AnsiCompareStr(const S1:string; const S2:string): Integer;)
123: Function AnsiCompareText(S1, S2: string): Integer
124: function AnsiCompareText(const S1: string; const S2: string): Integer;
125: Function AnsiContainsStr( const AText, ASubText : string) : Boolean
126: Function AnsiContainsText( const AText, ASubText : string) : Boolean
127: Function AnsiCopy( const src : AnsiString; index, count : Integer) : AnsiString
128: Function AnsiDequotedStr( S : string; AQuote : Char) : string
129: Function AnsiEndsStr( const ASubText, AText : string) : Boolean
130: Function AnsiEndsText( const ASubText, AText : string) : Boolean
131: Function AnsiExtractQuotedStr( var Src : PChar; Quote : Char) : string 132: function AnsiExtractQuotedStr(var Src: PChar; Quote: Char): string)
133: Function AnsiIndexStr( const AText : string; const AValues : array of string) : Integer
134: Function AnsiIndexText( const AText : string; const AValues : array of string) : Integer
135: Function AnsiLastChar(S: string): PChar
136: function AnsiLastChar(const S: string): PChar)
137: Function AnsiLeftStr( const AText : AnsiString; const ACount : Integer) : AnsiString
138: Function AnsiLowerCase( S : string) : string
139: Function AnsiLowercase(s: String): String;
140: Function AnsiLowerCaseFileName(S: string): string
141: Function AnsiMatchStr( const AText : string; const AValues : array of string) : Boolean
142: Function AnsiMatchText( const AText : string; const AValues : array of string) : Boolean
143: Function AnsiMidStr( const AText : AnsiString; const AStart, ACount : Integer) : AnsiString
144: Function AnsiPos( const src, sub : AnsiString) : Integer
145: Function AnsiPos( Substr, S : string) : Integer
146: function AnsiPos(const Substr: string; const S: string): Integer;)
147: Function AnsiQuotedStr( S : string; Quote : Char) : string
148: Function AnsiReplaceStr( const AText, AFromText, AToText: string): string
149: Function AnsiReplaceText( const AText, AFromText, AToText: string): string
150: Function AnsiResemblesText( const AText, AOther: string): Boolean
151: Function AnsiReverseString( const AText : AnsiString) : AnsiString
152: Function AnsiRightStr( const AText : AnsiString; const ACount : Integer) : AnsiString 153: function AnsiSameCaption(const Text1: string; const Text2: string): Boolean)
154: Function AnsiSameStr(S1, S2: string): Boolean
155: function AnsiSameStr(const S1: string; const S2: string): Boolean
156: Function AnsiSameText( const S1, S2: string): Boolean
157: Function AnsiSameText(S1, S2: string): Boolean
158: function AnsiSameText(const S1: string; const S2: string): Boolean)
159: Function AnsiStartsStr( const ASubText, AText : string) : Boolean 160: Function AnsiStartsText( const ASubText, AText : string) : Boolean
161: Function AnsiStrComp( S1, S2 : PChar) : Integer
162: function AnsiStrComp(S1: PChar; S2: PChar): Integer)
163: Function AnsiStrIComp( S1, S2 : PChar) : Integer
164: function AnsiStrIComp(S1: PChar; S2: PChar): Integer)
165: Function AnsiStrLastChar( P : PChar) : PChar
166: function AnsiStrLastChar(P: PChar): PChar)
167: Function AnsiStrLComp( S1, S2 : PChar; MaxLen : Cardinal) : Integer 168: Function AnsiStrLIComp( S1, S2 : PChar; MaxLen : Cardinal) : Integer 169: Function AnsiStrLower( Str : PChar) : PChar
170: Function AnsiStrPos( Str, SubStr : PChar) : PChar
171: function AnsiStrPos(Str: PChar; SubStr: PChar): PChar)
172: Function AnsiStrScan(Str: PChar; Chr: Char): PChar)
173: Function AnsiStrUpper( Str : PChar) : PChar
174: Function AnsiToUtf8( const S : string) : UTF8String
175: Function AnsiToUtf8Ex( const S : string; const cp : integer) : UTF8String
176: Function AnsiUpperCase(S:string): string 177: Function AnsiUppercase(S:String): String; 178: Function AnsiUpperCaseFileName(S:string): string
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179: Function ApplyUpdates(const Delta: OleVariant; MaxErrors:Integer; out ErrorCount: Integer): OleVariant
180: Function ApplyUpdates(const Delta:OleVariant; MaxErrors: Integer; out ErrorCount: Integer): OleVariant;
181: Function ApplyUpdates( MaxErrors : Integer) : Integer
182: Function ApplyUpdates1(const Delta:OleVar; MaxErrs:Int; out ErrCount:Int; var OwnerData:OleVar):OleVariant;
183: Function ArcCos( const X : Extended) : Extended
184: Function ArcCosh( const X : Extended) : Extended
185: Function ArcCot( const X : Extended) : Extended
186: Function ArcCotH( const X : Extended) :
187: Function ArcCsc( const X : Extended) : Extended
188: Function ArcCscH( const X : Extended) : Extended
189: Function ArcSec( const X : Extended) : Extended
190: Function ArcSecH( const X : Extended) : Extended
191: Function ArcSin( const X : Extended) : Extended
192: Function ArcSinh( const X : Extended) : Extended
193: Function ArcTan(const X : Extended) : Extended
194: Function ArcTan2( const Y, X : Extended) : Extended
195: Function ArithmeticMean( const X : TDynDoubleArray) : Float
196: function ArrayLength: integer;
197: Function AsHex( const AValue : T4x4LongWordRecord) : string
198: Function AsHex( const AValue : T5x4LongWordRecord) : string
199: Function ASNDecLen( var Start : Integer; const Buffer : string) : Integer
200: Function ASNDecOIDItem( var Start : Integer; const Buffer : string) : Integer
201: Function ASNEncInt( Value : Integer) : string 202: Function ASNEncLen( Len : Integer) : string
203: Function ASNEncOIDItem( Value : Integer) : string
204: Function ASNEncUInt( Value : Integer) : string
205: Function ASNItem( var Start : Integer; const Buffer : string; var ValueType : Integer) : string
206: Function ASNObject( const Data : string; ASNType : Integer) : string 207: Function Assigned(I: Longint): Boolean;
208: Function AspectRatio(aWidth, aHeight: Integer): String
209: Function AsWideString( Field : TField) : WideString
210: Function AtLeast( ACount : Integer) : Boolean
211: Function AttemptToUseSharedMemoryManager : Boolean
212: Function Authenticate : Boolean
213: Function AuthenticateUser( const AUsername, APassword : String) : Boolean
214: Function Authentication : String
215: Function BatchMove( ASource : TBDEDataSet; AMode : TBatchMode) : Longint 216: Function BcdCompare( const bcdl, bcd2 : TBcd) : Integer
217: Function BcdFromBytes( const AValue : TBytes)
                                                           : TBcd
218: Function BcdPrecision( const Bcd : TBcd) : Word
219: Function BcdScale( const Bcd : TBcd) : Word
220: Function BcdToBytes( const Value : TBcd) : TBytes
221: Function BCDToCurr( const BCD : TBcd; var Curr : Currency) : Boolean
222: Function BcdToDouble( const Bcd : TBcd) : Double
223: Function BcdToInteger( const Bcd : TBcd; Truncate : Boolean) : Integer
224: Function BcdToStr( const Bcd : TBcd) : string;
225: Function BcdToStrF(const Bcd : TBcd; Format: TFloatFormat; const Precision, Digits:Integer):string
226: function beep2(dwFreq, dwDuration: integer): boolean;
227: Function BeginPeriod( const Period : Cardinal) : Boolean
228: Function BeginTrans : Integer
229: Function BeginTransaction : TDBXTransaction;
230: Function BeginTransaction1( Isolation : TDBXIsolation) : TDBXTransaction;
231: function BigMulu(aone, atwo: string): string;
232: function BigNumber(aone, atwo: string): string;
233: function BigExp(aone, atwo: string): string; 234: function BigMul(aone, atwo: string): string;
235: function BigAdd(aone, atwo: string): string;
236: function BigSub(aone, atwo: string): string
237: function BigFactorial(aone: string): string;
238: Function BinaryToDouble(ABinary: string; DefValue: Double): Double 239: Function BinomialCoeff(N, R: Cardinal): Float
240: function BinominalCoefficient(n, k: Integer): string;
241: Function BinStrToInt( const ABinary : String) : Integer 242: Function BinToByte(Binary: String): Byte; 243: function BinToHex2(Binary: String): string;
244: function BinToInt(Binary: String): Integer;
245: Function BinToChar(St: String): Char;
246: Function BinToStr(ans: string): string;
247: Function BitBlt(hdcDest:HDC;nXDest,nYDest,nWidth,nHeigh:Int;hdcSrc:HDC;nXSrc,nYSrc:Int;dwRop:DWORD):Bool;
248: Function BitmapsAreIdentical(ABitmap1, ABitmap2: TBitmap): Boolean
249: Function BitsHighest( X : Byte) : Integer;
250: Function BitsHighestl( X : ShortInt) : Integer; 251: Function BitsHighest2( X : SmallInt) : Integer;
252: Function BitsHighest3( X : Word) : Integer;
253: Function BitsHighest4( X : Integer) : Integer;
254: Function BitsHighest5( X : Cardinal) : Integer;
255: Function BitsHighest6( X : Int64) : Integer;
256: Function BitsLowest( X : Byte) : Integer;
257: Function BitsLowest1( X : Shortint) : Integer;
                                               : Integer;
258: Function BitsLowest2( X : Smallint)
259: Function BitsLowest3( X : Word) : Integer;
260: Function BitsLowest4( X : Cardinal) : Integer;
261: Function BitsLowest5( X : Integer) : Integer; 262: Function BitsLowest6( X : Int64) : Integer;
263: Function BitsNeeded( const X : Byte) : Integer;
264: Function BitsNeeded1( const X : Word) : Integer;
265: Function BitsNeeded2( const X : Integer) : Integer;
266: Function BitsNeeded3( const X : Int64) : Integer;
267: Function BlueComponent( const Color32 : TColor32) : Integer
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268: Function BooleanToInteger( const Pb : Boolean) : Integer
269: Function BoolToStr(B: Boolean; UseBoolStrs: Boolean): string)
270: Function BoolToStrl(value : boolean) : string; 271: Function booltoint( aBool : Boolean) : LongInt
272: Function inttobool( aInt : LongInt) : Boolean
273: Function Bounds( ALeft, ATop, AWidth, AHeight: Integer): TRect 274: function Bounds(ALeft, ATop, AWidth, AHeight: Integer): TRect)
275: Function BreakApart( BaseString, BreakString : string; StringList : TStrings) : TStrings
276: Function BrightColor( const Color: TColor; const Pct: Single): TColor
277: Function BrightColorChannel( const Channel: Byte; const Pct: Single): Byte
278: Function BufferRequest( Length: Integer): TStream
279: Function BuildFileList( const Path : string; const Attr : Integer; const List : TStrings) : Boolean
280: Function Buttons : PTaskDialogButton
281: Function BytesPerScanline( PixelsPerScanline, BitsPerPixel, Alignment : Longint) : Longint
282: Function BytesToCardinal( const AValue : TIdBytes; const AIndex : Integer) : Cardinal
283: Function BytesToChar( const AValue : TIdBytes; const AIndex : Integer) : Char
284: Function BytesToInt64( const AValue : TIdBytes; const AIndex : Integer) : Int64
285: Function BytesToInteger( const AValue : TIdBytes; const AIndex : Integer) : Integer 286: Function BytesToIPv6( const AValue : TIdBytes; const AIndex : Integer) : TIdIPv6Address 287: Function BytesToShort( const AValue : TIdBytes; const AIndex : Integer) : Short
288: Function BytesToString(ABytes:TIdBytes; AStartIndex:Integer; AMaxCount:Integer): string;
289: Function BytesToStr(const Value: TBytes): String;
290: Function BytesToWord( const AValue : TIdBytes; const AIndex : Integer) : Word
291: Function ByteToBin(Int: Byte): String;
292: Function ByteToCharIndex( S : string; Index : Integer) : Integer
293: function ByteToCharIndex(const S: string; Index: Integer): Integer)
294: Function ByteToCharLen( S : string; MaxLen : Integer) : Integer
295: function ByteToCharLen(const S: string; MaxLen: Integer): Integer)
296: Function ByteToHex( const AByte : Byte) : string
297: Function ByteToOctal( const AByte : Byte) : string
298: Function ByteType( S : string; Index : Integer) : TMbcsByteType
299: function ByteType(S: String; Index: Integer): TMbcsByteType)
300: Function CalcTitleRect(Col: TColumn; ARow: Integer; var MasterCol: TColumn): TRect
301: Function CalculateDFAFingerprint( oStates : TList) : integer
302: function CallTerminateProcs: Boolean)
303: function CANFOCUS: BOOLEAN
304: Function CanLoad( const Ext : string) : Boolean
305: Function CanParse( AWebRequest : TWebRequest) : Boolean
306: Function CanSave( const Ext: string): Boolean 307: Function CanStart( cChar: char): boolean
308: Function CaptureScreen : TBitmap;
309: Function CaptureScreen1( Rec : TRect) : TBitmap;
310: Function CardinalToFourChar( ACardinal : LongWord) : string
311: Function CastSoapToNative(Info:PTypeInfo;const SoapData:WideString;NatData:Pointer;IsNull:Boolean): Boolean
312: Function CastSoapToVariant1( SoapInfo : PTypeInfo; const SoapData : WideString) : Variant;
313: Function Ceil( const X : Extended) : Integer
314: Function Ceill6( X : Integer) : Integer 315: Function Ceil4( X : Integer) : Integer
316: Function Ceil8( X : Integer) : Integer
317: Function Ceiling( const X : Extended) : Integer 318: Function CellRect( ACol, ARow : Longint) : TRect
319: Function CelsiusToFahrenheit( const AValue : Double) : Double
320: Function CenterPoint( const Rect : TRect) : TPoint
321: function CenterPoint(const Rect: TRect): TPoint)
322: Function ChangeFileExt( FileName, Extension : string) : string
323: function ChangeFileExt(const FileName: string; const Extension: string): string)
324: Function CharInSet2( const Ch : Char; const SetOfChar : TSetOfChar) :
325: Function CharInSet( const Ch : Char; const testSet: TSysCharSet): Boolean
326: Function CharlsInEOF( const AString : string; ACharPos : Integer) : Boolean
327: Function CharlsInSet( const AString : string; const ACharPos : Integer; const ASet : String) : Boolean
328: Function CharLength( S : String; Index : Integer) : Integer
329: Function CharRange( const AMin, AMax : Char) : String
330: function CharsetToIdent(Charset: Longint; var Ident: string): Boolean)
331: Function CharToBin(vChr: Char): String;
332: Function Charlest(lpsz: PChar): PChar; stdcall;
333: Function Charlest(lpsz: PChar): PChar; stdcall;
333: Function CharloByteIndex( S : string; Index : Integer) : Integer
334: function CharToByteIndex(const S: string; Index: Integer): Integer)
335: Function ChartoByteLen( S : string; MaxLen : Integer) : Integer
336: function CharToByteLen(const S: string; MaxLen: Integer): Integer)
337: Function CharToHex(const APrefix : String; const cc : Char) : shortstring; 338: function CharToHexStr(Value: char): string);
339: function CharToOem(ins, outs: PChar):boolean;
340: function CharToUniCode(Value: Char): string;
341: Function CheckMenuDropdown : Boolean
342: Function CheckMessages : longint
343: Function CheckOpen( Status : DBIResult) : Boolean
344: Function CheckPassword( const APassword : String) : Boolean
345: Function CheckResponse(const AResponse:SmallInt;const AAllowedResponses:array of SmallInt): SmallInt
346: Function CheckCrc32( var X : array of Byte; N : Integer; Crc : Cardinal) : Integer;
347: function CheckSynchronize(Timeout: Integer): Boolean
348: Function CheckWin32Version( AMajor : Integer; AMinor : Integer) : Boolean
349: function ChrA(const a: byte): char;
350: Function ClassIDToProgID(const ClassID: TGUID): string;
351: Function ClassNameIs(const Name: string): Boolean
352: Function ClearBit( const Value : Byte; const Bit : TBitRange) : Byte;
353: Function ClearBit1( const Value : Shortint; const Bit : TBitRange) : Shortint; 354: Function ClearBit2( const Value : Smallint; const Bit : TBitRange) : Smallint;
355: Function ClearBit3( const Value : Word; const Bit : TBitRange) : Word;
356: Function ClearBit4( const Value : Integer; const Bit : TBitRange) : Integer;
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357: Function ClearBit5( const Value : Cardinal; const Bit : TBitRange) : Cardinal;
358: Function ClearBit6( const Value : Int64; const Bit : TBitRange) : Int64;
359: function CLIENTTOSCREEN(POINT:TPOINT):TPOINT
360: Function Clipboard : TClipboard
361: Function ClipCodes( const X, Y, MinX, MinY, MaxX, MaxY : Float) : TClipCodes;
362: Function ClipCodes( const X, Y : Float; const ClipRect : TRect) : TClipCodes;
363: Function ClipLine( var X1, Y1, X2, Y2 : Integer; const ClipRect : TRect) : Boolean;
364: Function ClipLineToRect( var P1, P2 : TFloatPoint; const Rect : TFloatRect) : Boolean
365: Function Clone( out stm : IStream) : HResult
366: Function CloneConnection : TSQLConnection
367: Function CloneMemoryStream( Original : TMemoryStream) : TMemoryStream
368: function CLOSEQUERY: BOOLEAN
369: Function CloseVolume( var Volume : THandle) : Boolean
370: Function CloseHandle(Handle: Integer): Integer; stdcall;
371: Function CPlApplet(hwndCPl: THandle; uMsg: DWORD; lParaml, lParam2: Longint): Longint
372: Function CmdLine: PChar;
373: function CmdShow: Integer;
374: Function Color32( const R, G, B : Byte; const A : Byte) : TColor32; 375: Function Color32( WinColor : TColor) : TColor32;
376: Function Color321( const Index : Byte; const Palette : TPalette32) : TColor32;
377: Function ColorAdjustLuma( clrRGB: TColor; n: Integer; fScale: BOOLean): TColor
378: Function ColorHLSToRGB( Hue, Luminance, Saturation : Word) : TColorRef
379: Function ColorToHTML( const Color : TColor) : String
380: function ColorToIdent(Color: Longint; var Ident: string): Boolean)
381: Function ColorToRGB(color: TColor): Longint
382: function ColorToString(Color: TColor): string)
383: Function ColorToWebColorName( Color : TColor) : string
384: Function ColorToWebColorStr( Color : TColor) : string
385: Function ColumnAtDepth( Col : TColumn; ADepth : Integer) : TColumn
386: Function Combination(npr, ncr: integer): extended;
387: Function CombinationInt(npr, ncr: integer): Int64;
388: Function CombineInfo( Bitmap : TCustomBitmap32) : TCombineInfo 389: Function CommaAdd( const AStrl, AStr2 : String) : string 390: Function CommercialRound( const X : Extended) : Int64
391: Function Commit( grfCommitFlags : Longint) : HResult
392: Function Compare( const NameExt : string) : Boolean
393: function CompareDate(const A, B: TDateTime): TValueRelationship;
394: Function CompareDateTime( const ADateTime1, ADateTime2 : TDateTime) : Integer
395: Function CompareFiles(const FN1,FN2 :string; Breathe:TNotifyEvent;BreathingSender:TObject): boolean
396: Function CompareMemoryStreams(S1, S2: TMemoryStream): boolean 397: Function CompareStr(S1, S2: string): Integer
398: function CompareStr(const S1: string; const S2: string): Integer)
399: function CompareString(const S1: string; const S2: string): Integer)
400: Function CompareText( S1, S2 : string) : Integer
401: function CompareText(const S1: string; const S2: string): Integer)
402: Function CompareTextLike(cWildStr,cStr:string;const cWildChar:char;lCaseSensitive:boolean): boolean
403: function CompareTime(const A, B: TDateTime): TValueRelationship;
404: Function CompatibleConversionType( const AType: TConvType; const AFamily: TConvFamily): Boolean
405: Function CompatibleConversionTypes( const AFrom, ATo : TConvType) : Boolean
406: Function ComponentTypeToString( const ComponentType : DWORD) : string
407: Function CompToCurrency( Value : Comp) : Currency
408: Function CompToDouble( Value : Comp) : Double
409: function ComputeFileCRC32(const FileName : String) : Integer;
410: function ComputeSHA256(astr: string; amode: char): string) //mode F:File, S:String 411: function ComputeSHA512(astr: string; amode: char): string) //mode F:File, S:String
412: Function Concat(s: string): string
413: Function ConnectAndGetAll: string
414: Function Connected : Boolean
415: function constrain(x, a, b: integer): integer;  
416: Function ConstraintCallBack( Req : DsInfoReq; var ADataSources : DataSources) : DBIResult  
417: Function ConstraintsDisabled : Boolean
418: function CONTAINSCONTROL(CONTROL:TCONTROL):BOOLEAN
419: Function ContainsState( oState : TniRegularExpressionState) : boolean
420: Function ContainsStr( const AText, ASubText: string) : Boolean
421: Function ContainsText( const AText, ASubText: string) : Boolean
422: Function ContainsTransition( oTransition : TniRegularExpressionTransition) : boolean
423: Function Content : string
424: Function ContentFromStream( Stream : TStream) : string 425: Function ContentFromString( const S : string) : string
426: Function CONTROLSDISABLED : BOOLEAN
427: Function Convert( const AValue : Double; const AFrom, ATo : TConvType) : Double;
428: Function Convert1( const AValue : Double; const AFrom1, AFrom2, ATo1, ATo2 : TConvType) : Double;
429: Function ConvertFrom( const AFrom : TConvType; const AValue : Double) : Double
430: Function ConvertReadStream( Stream : TStream; Buffer : PChar; BufSize : Integer) : Integer
431: Function ConvertTo( const AValue : Double; const ATo : TConvType) : Double
432: Function ConvertWriteStream( Stream: TStream; Buffer: PChar; BufSize: Integer): Integer
433: Function ConvFamilyToDescription( const AFamily : TConvFamily) : string
434: Function ConvTypeToDescription( const AType : TConvType) : string
435: Function ConvTypeToFamily( const AFrom, ATo : TConvType) : TConvFamily;
436: Function ConvTypeToFamily( const AType : TConvType) : TConvFamily;
437: Function ConvAdd(const AVal:Double;const AType1:TConvType;const AVal2:Double;const AType2,
      AResultType:TConvType): Double
438: Function ConvCompareValue(const AValue1:Double;const AType1:TConvType;const AValue2:Double;const
      AType2:TConvType): TValueRelationship
439: Function ConvDec( const AValue : Double; const AType, AAmountType : TConvType) : Double;
440: Function ConvDecl(const AValue:Double; const AType: TConvType; const AAmount:Double; const
      AAmountType: TConvType): Double;
441: Function ConvDiff(const AVall:Double;const AType1:TConvType;const AVal2:Double;const AType2,
      AResuType:TConvType):Double
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442: Function ConvInc( const AValue : Double; const AType, AAmountType : TConvType) : Double;
443: Function ConvIncl(const AValue:Double;const AType:TConvType;const AAmount:Double;const
         AAmountType:TConvType): Double;
444: Function ConvSameValue(const AValue1:Double;const AType1:TConvType;const AValue2:Double;const
         AType2:TConvType):Boolean
445: Function ConvToStr( const AValue : Double; const AType : TConvType) : string
446: Function ConvWithinNext( const AValue, ATest : Double; const AType : TConvType; const AAmount : Double;
         const AAmountType : TConvType) : Boolean
447: Function ConvWithinPrevious(const AValue, ATest: Double; const AType: TConvType; const AAmount: Double; const
         AAmountType: TConvType) : Boolean
448: function Copy(s: AnyString; iFrom, iCount: Longint): AnyString;
449: Function CopyFile (Source, Dest: string; CanOverwrite: Boolean): Boolean
450: Function CopyFileEx( Source, Dest : string; Flags : FILEOP_FLAGS) : Boolean
451: Function CopyFileTo( const Source, Destination: string): Boolean 452: function CopyFrom(Source:TStream;Count:Int64):LongInt
453: Function CopyPalette( Palette : HPALETTE) : HPALETTE
454: Function CopyTo( Length : Integer) : string
455: Function CopyTo(stm: IStream; cb: Largeint; out cbRead: Largeint; out cbWritten:Largeint): HResult 456: Function CopyToEOF: string 457: Function CopyToEOL: string 458: Function Cos(e: Extended): Extended;
459: Function Cosecant( const X : Extended) : Extended
460: Function Cot( const X : Extended) : Extended 461: Function Cotan( const X : Extended) : Extended
462: Function CotH( const X : Extended) : Extended
463: Function Count : Integer
464: Function CountBitsCleared( X : Byte) : Integer;
465: Function CountBitsCleared1( X : Shortint) : Integer; 466: Function CountBitsCleared2( X : Smallint) : Integer;
467: Function CountBitsCleared3( X : Word) : Integer;
468: Function CountBitsCleared4( X : Integer) : Integer;
469: Function CountBitsCleared5( X : Cardinal) : Integer;
470: Function CountBitsCleared6(X: Int64): Integer;
471: Function CountBitsSet( X : Byte) : Integer; 472: Function CountBitsSet( X : Word) : Integer;
473: Function CountBitsSet2( X : Smallint) : Integer;
474: Function CountBitsSet3( X : ShortInt) : Integer;
475: Function CountBitsSet4( X : Integer) : Integer;
476: Function CountBitsSet5( X : Cardinal) : Integer;
477: Function CountBitsSet6( X : Int64) : Integer
478: function CountGenerations(Ancestor, Descendent: TClass): Integer
479: Function Coversine( X : Float) : Float
480: function CRC32(const fileName: string): LongWord;
481: Function CREATEBLOBSTREAM( FIELD : TFIELD; MODE : TBLOBSTREAMMODE) : TSTREAM
482: Function CreateColumns : TDBGridColumns
483: Function CreateDataLink : TGridDataLink
484: Function CreateDir( Dir : string) : Boolean
485: function CreateDir(const Dir: string): Boolean)
486: Function CreateDOSProcessRedirected const CommandLine, InputFile, OutputFile: string) : Boolean
487: Function CreateEnvironmentBlock(const Options:TEnvironmentOptions;const AdditionalVars:TStrings): PChar 488: Function CREATEFIELD(OWNER:TCOMPONENT;PARENTFIELD:TOBJECTFIELD; const
         FIELDNAME: String; CREATECHILDREN: BOOLEAN): TFIELD
489: Function CreateGlobber( sFilespec : string) : TniRegularExpression
490: Function CreateGrayMappedBmp( Handle : HBITMAP) : HBITMAP
491: Function CreateGrayMappedRes( Instance : THandle; ResName : PChar) : HBITMAP 492: function CreateGUID(out Guid: TGUID): HResult)
493: Function CreateInstance( const unkOuter : IUnknown; const iid : TGUID; out obj) : HResult
494: Function CreateMappedBmp( Handle : HBITMAP; const OldColors, NewColors : array of TColor) : HBITMAP
495: Function CreateMappedRes(Instance:THandle;ResName:PChar;const OldColors,NewColors:array of TColor):HBITMAP
496: Function CreateMessageDialog(const Msg:string; DlgType:TMsgDlgType; Buttons: TMsgDlgButtons) : TForm;
497: Function CreateMessageDialog1(const
         \texttt{Msg:string:} \texttt{DlgType:} \texttt{TMsgDlgType:} \texttt{Btns:} \texttt{TMsgDlgBtns:} \texttt{DefaultBtn:} \texttt{TMsgDlgBtn):} \texttt{TForm:} \texttt{TMsgDlgBtn} \texttt{T
498: function CreateOleObject(const ClassName: String): IDispatch;
499: Function CREATEPARAM( FLDTYPE : TFIELDTYPE; const PARAMNAME : String; PARAMTYPE : TPARAMTYPE) : TPARAM
500: Function CreateParameter(const
         Name:WideString;DataType:TDataType;Direction:TParameterDirection;Size:Integer;Value: OleVariant):TParameter
501: Function CreateLocate( DataSet : TDataSet) : TJvLocateObject
502: Function CreateMappedBmp( Handle : HBITMAP; const OldColors, NewColors : array of TColor) : HBITMAP
503: Function CreateMappedRes(Instance:THandle;ResName:PChar;const OldColors,NewColors:array of TColor):HBITMAP
504: Function CreateRecordBuffer( Length: Integer): TRecordBuffer 505: Function CreateValueBuffer( Length: Integer): TValueBuffer
506: Function CreatePopupCalculator( AOwner : TComponent; ABiDiMode : TBiDiMode) : TWinControl
507: Function CreateRecordBuffer( Length : Integer) : TRecordBuffer 508: Function CreateRotatedFont( Font : TFont; Angle : Integer) : HFONT
509: Function CreateTwoColorsBrushPattern( Color1, Color2 : TColor) : TBitmap 510: Function CreateValueBuffer( Length : Integer) : TValueBuffer
511: Function CreateHexDump( AOwner : TWinControl) : THexDump
512: Function Csc( const X : Extended) : Extended
513: Function CscH( const X : Extended) : Extended
514: function currencyDecimals: Byte
515: function currencyFormat: Byte
516: function currencyString: String
517: Function CurrentProcessId : TIdPID 518: Function CurrentReadBuffer : string
519: Function CurrentThreadId : TIdPID
520: Function CurrentYear : Word
521: Function CurrToBCD(const Curr: Currency; var BCD: TBcd; Precision: Integer; Decimals: Integer): Boolean 522: Function CurrToStr( Value : Currency) : string; 523: Function CurrToStr( Value : Currency; FormatSettings : TFormatSettings; Digits: Integer) : string;
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524: Function CurrToStrFS(Value:Currency;Format:TFloatFormat;Digits:Integer;const
      FormatSettings: TFormatSettings): string;
     function CursorToIdent(cursor: Longint; var Ident: string): Boolean;
526: function CursorToString(cursor: TCursor): string;
527: Function CustomSort( SortProc : TLVCompare; lParam : Longint) : Boolean
528: Function CustomSort( SortProc : TTVCompare; Data : Longint; ARecurse : Boolean) : Boolean
529: Function CycleToDeg( const Cycles : Extended) : Extended
530: Function CycleToGrad( const Cycles : Extended) : Extended
531: Function CycleToRad( const Cycles : Extended) : Extended
532: Function D2H( N : Longint; A : Byte) : string
533: Function DarkColor( const Color: TColor; const Pct : Single) : TColor
534: Function DarkColorChannel( const Channel: Byte; const Pct: Single): Byte
535: Function DataLinkDir: string
536: Function DataRequest( Data: OleVariant): OleVariant
537: Function DataRequest( Input: OleVariant): OleVariant
538: Function DataToRawColumn( ACol : Integer) : Integer
539: Function Date : TDateTime
540: function Date: TDateTime;
541: Function DateIsNull( const pdtValue : TDateTime; const pdtKind : TdtKind) : Boolean
542: Function DateOf( const AValue : TDateTime) : TDateTime
543: function DateSeparator: char;
544: Function DateTimeGMTTOHttpStr( const GMTValue : TDateTime) : String
545: Function DateTimeToFileDate( DateTime : TDateTime) : Integer
546: function DateTimeToFileDate(DateTime: TDateTime): Integer;
547: Function DateTimeToGmtOffSetStr( ADateTime : TDateTime; SubGMT : Boolean) : string
548: Function DateTimeToInternetStr( const Value : TDateTime; const AIsGMT : Boolean)
549: Function DateTimeToJulianDate( const AValue : TDateTime) : Double
550: Function DateTimeToModifiedJulianDate( const AValue : TDateTime) : Double
551: Function DateTimeToStr( DateTime : TDateTime) : string;
552: Function DateTimeToStr2( DateTime: TDateTime; FormatSettings: TFormatSettings): string;
553: function DateTimeToTimeStamp(DateTime: TDateTime): TTimeStamp
554: Function DateTimeToUnix( const AValue : TDateTime) : Int64
555: function DateTimeToUnix(D: TDateTime): Int64;
556: Function DateToStr( DateTime : TDateTime) : string;
557: function DateToStr(const DateTime: TDateTime): string;
558: function DateToStr(D: TDateTime): string;
559: Function DateToStr2( DateTime : TDateTime; FormatSettings : TFormatSettings) : string;
560: Function DayOf( const AValue : TDateTime) : Word
561: Function DayOfTheMonth( const AValue : TDateTime)
562: function DayOfTheMonth(const AValue: TDateTime): Word;
563: Function DayOfTheWeek( const AValue : TDateTime) : Word
564: Function DayOfTheYear( const AValue : TDateTime) : Word
565: function DayOfTheYear(const AValue: TDateTime): Word;
566: Function DayOfWeek( DateTime : TDateTime) : Word
567: function DayOfWeek(const DateTime: TDateTime): Word; 568: Function DayOfWeekStr( DateTime : TDateTime) : string
569: Function DaysBetween( const ANow, AThen : TDateTime) : Integer
570: Function DaysInAMonth( const AYear, AMonth: Word) : Word
571: Function DaysInAYear( const AYear : Word) : Word
572: Function DaysInMonth( const AValue : TDateTime) : Word 573: Function DaysInYear( const AValue : TDateTime) : Word
574: Function DaySpan( const ANow, AThen : TDateTime) : Double
575: Function DBUseRightToLeftAlignment( AControl : TControl; AField : TField) : Boolean
576: function DecimalSeparator: char;
577: Function DecLimit( var B : Byte; const Limit : Byte; const Decr : Byte) : Byte;
578: Function DecLimit1( var B : Shortint; const Limit : Shortint; const Decr : Shortint) : Shortint;
579: Function DecLimit2( var B : Smallint; const Limit : Smallint; const Decr : Smallint) : Smallint;
580: Function DecLimit3( var B : Word; const Limit : Word; const Decr : Word) : Word;
581: Function DecLimit4( var B : Integer; const Limit : Integer; const Decr : Integer) : Integer; 582: Function DecLimit5( var B : Cardinal; const Limit : Cardinal; const Decr : Cardinal) : Cardinal; 583: Function DecLimit6( var B : Int64; const Limit : Int64; const Decr : Int64) : Int64;
584: Function DecLimitClamp( var B : Byte; const Limit : Byte; const Decr : Byte) : Byte;
585: Function DecLimitClamp1( var B : Shortint; const Limit : Shortint; const Decr : Shortint) : Shortint; 586: Function DecLimitClamp2( var B : Smallint; const Limit : Smallint; const Decr : Smallint) : Smallint;
587: Function DecLimitClamp3( var B : Word; const Limit : Word; const Decr : Word) : Word;
588: Function DecLimitClamp4( var B : Integer; const Limit : Integer; const Decr : Integer) : Integer
589: Function DecLimitClamp5( var B : Cardinal; const Limit : Cardinal; const Decr : Cardinal) : Cardinal;
590: Function DecLimitClamp6( var B : Int64; const Limit : Int64; const Decr : Int64) : Int64;
591: Function DecodeDateFully( DateTime: TDateTime; var Year, Month, Day, DOW: Word): Boolean 592: Function DecodeSoundexInt( AValue: Integer): string
593: Function DecodeSoundexWord( AValue : Word) : string
594: Function DefaultAlignment : TAlignment
595: Function DefaultCaption : string
596: Function DefaultColor : TColor
597: Function DefaultFont : TFont
598: Function DefaultImeMode : TImeMode
599: Function DefaultImeName : TImeName
600: Function DefaultReadOnly : Boolean
601: Function DefaultWidth : Integer
602: Function DegMinSecToFloat( const Degs, Mins, Secs : Float) : Float
603: Function DegToCycle( const Degrees : Extended) : Extended 604: Function DegToGrad( const Degrees : Extended) : Extended
605: Function DegToGrad( const Value : Extended) : Extended;
606: Function DegToGrad1( const Value : Double) : Double;
607: Function DegToGrad2( const Value : Single) : Single;
608: Function DegToRad( const Degrees : Extended) : Extended
609: Function DegToRad( const Value : Extended) : Extended; 610: Function DegToRad1( const Value : Double) : Double;
611: Function DegToRad2( const Value : Single) : Single;
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612: Function DelChar( const pStr : string; const pChar : Char) : string
613: Function DelEnvironmentVar( const Name : string) : Boolean
614: Function Delete( const MsgNum : Integer) : Boolean
615: Function DeleteDirectory( const DirectoryName : string; MoveToRecycleBin : Boolean) : Boolean
616: Function DeleteFile(const FileName: string): boolean)
617: Function DeleteFileEx( FileName : string; Flags : FILEOP_FLAGS) : Boolean
618: Function DelimiterPosn( const sString : string; const sDelimiters: string): integer;
619: Function DelimiterPosn1(const sString:string;const sDelimiters:string;out cDelimiter: char) : integer;
620: Function DelSpace( const pStr : string) : string
621: Function DelString( const pStr, pDelStr : string)
622: Function DelTree( const Path : string) : Boolean
623: Function Depth : Integer
                                                                         : string
624: Function Description : string
625: Function DescriptionsAvailable : Boolean
626: Function DescriptionToConvFamily( const ADescription : string; out AFamily : TConvFamily) : Boolean 627: Function DescriptionToConvType( const ADescription : string; out AType : TConvType) : Boolean;
628: Function DescriptionToConvType1(const AFamil:TConvFamily;const ADescr:string;out AType:TConvType):Boolean;
629: Function DetectUTF8Encoding( const s : UTF8String) : TEncodeType
630: Function DialogsToPixelsX( const Dialogs : Word) : Word
631: Function DialogsToPixelsY( const Dialogs : Word) : Word
632: Function Digits (const X : Cardinal) : Integer
633: Function DirectoryExists (const Name : string) : Boolean
634: Function DirectoryExists( Directory: string) : Boolean 635: Function DiskFree( Drive : Byte) : Int64
636: function DiskFree(Drive: Byte): Int64)
637: Function DiskInDrive( Drive : Char) : Boolean
638: Function DiskSize( Drive : Byte) : Int64
639: function DiskSize(Drive: Byte): Int64)
640: Function DISPATCHCOMMAND( ACOMMAND: WORD): BOOLEAN
641: Function DispatchEnabled : Boolean
642: Function DispatchMask : TMask
643: Function DispatchMethodType : TMethodType
644: Function DISPATCHPOPUP( AHANDLE : HMENU) : BOOLEAN
645: Function DispatchRequest( Sender : TObject; Request : TWebRequest; Response : TWebResponse) : Boolean
646: Function DisplayCase( const S : String) : String
647: Function DisplayRect( Code : TDisplayCode) : TRect
648: Function DisplayRect( TextOnly : Boolean) : TRect
649: Function DisplayStream( Stream : TStream) : string
650: TBufferCoord', 'record Char: integer; Line: integer; end
651: TDisplayCoord', 'record Column: integer; Row: integer; end
652: Function DisplayCoord( AColumn, ARow: Integer): TDisplayCoord
653: Function BufferCoord( AChar, ALine: Integer): TBufferCoord
654: Function DomainName( const AHost: String): String
655: Function DosPathToUnixPath( const Path: string): string
656: Function DottedLineTo( const Canvas: TCanvas; const X, Y : Integer) : Boolean;
657: Function DoubleDecliningBalance( const Cost, Salvage : Extended; Life, Period : Integer) : Extended 658: Function DoubleToBcd( const AValue : Double) : TBcd;
659: Function DoubleToHex( const D : Double) : string
660: Function DoUpdates : Boolean
661: function Dragging: Boolean;
662: Function DrawCaption(p1: HWND; p2: HDC; const p3: TRect; p4: UINT): BOOL 663: Function DrawAnimatedRects(hwnd: HWND; idAni: Integer; const lprcFrom, lprcTo
                                                                                                                  : TRect) : BOOL
664: Function DrawEdge( hdc : HDC; var qrc : TRect; edge : UINT; grfFlags : UINT) : BOOL
665: Function DrawFrameControl( DC : HDC; const Rect : TRect; uType, uState : UINT) : BOOL
666: {Works like InputQuery but displays 2edits. If PasswordChar <> #0, the second edit's PasswordChar is set} 667: Function DualInputQuery(const ACapt,Prpt1,Prpt2:string;var AVal1,AVal2:string;PasswrdChar:Char= #0):Bool;
668: Function DupeString( const AText : string; ACount : Integer) : string
669: Function Edit : Boolean
670: Function EditCaption : Boolean
671: Function EditText : Boolean
672: Function EditFolderList( Folders : TStrings) : Boolean
673: Function EditQueryParams( DataSet : TDataSet; List : TParams; AHelpContext : THelpContext) : Boolean
674: Function Elapsed( const Update : Boolean) : Cardinal
675: Function EnableProcessPrivilege( const Enable : Boolean; const Privilege : string) : Boolean 676: Function EnableThreadPrivilege( const Enable : Boolean; const Privilege : string) : Boolean
677: Function EncodeDate(Year, Month, Day: Word): TDateTime 678: function EncodeDate(Year, Month, Day: Word): TDateTime;
679: Function EncodeDateDay( const AYear, ADayOfYear : Word) : TDateTime
680: Function EncodeDateMonthWeek( const AYear, AMonth, AWeekOfMonth, ADayOfWeek: Word): TDateTime 681: Function EncodeDateTime(const AYear, AMonth, ADay, AHour, AMinute, ASecond, AMilliSecond: Word): TDateTime
682: Function EncodeDateWeek ( const AYear, AWeekOfYear : Word; const ADayOfWeek : Word) : TDateTime
683: Function EncodeDayOfWeekInMonth( const AYear, AMonth, ANthDayOfWeek, ADayOfWeek: Word) : TDateTime
684: Function EncodeString( s : string) : string 685: Function DecodeString( s : string) : string
686: Function EncodeTime( Hour, Min, Sec, MSec : Word) : TDateTime
687: function EncodeTime(Hour, Min, Sec, MSec: Word): TDateTime;
688: Function EndIP : String
689: Function EndOfADay( const AYear, AMonth, ADay: Word): TDateTime; 690: Function EndOfADay1( const AYear, ADayOfYear: Word): TDateTime; 691: Function EndOfAMonth( const AYear, AMonth: Word): TDateTime
692: Function EndOfAWeek( const AYear, AWeekOfYear : Word; const ADayOfWeek : Word) : TDateTime
693: Function EndOfAYear( const AYear : Word) : TDateTime
694: Function EndOfTheDay( const AValue : TDateTime) : TDateTime
695: Function EndOfTheMonth( const AValue : TDateTime) : TDateTime
696: Function EndOfTheWeek( const AValue : TDateTime) : TDateTime
697: Function EndOfTheYear( const AValue : TDateTime) : TDateTime
698: Function EndPeriod( const Period : Cardinal) : Boolean
699: Function EndsStr( const ASubText, AText : string) : Boolean
700: Function EndsText( const ASubText, AText : string) : Boolean
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701: Function EnsureMsqIDBrackets( const AMsqID : String) : String
702: Function EnsureRange( const AValue, AMin, AMax : Integer) : Integer;
703: Function EnsureRangel (const AValue, AMin, AMax : Int64) : Int64;
704: Function EnsureRange2( const AValue, AMin, AMax : Double) : Double;
705: Function EOF: boolean
706: Function EOln: boolean
707: Function EqualRect( const R1, R2 : TRect) : Boolean 708: function EqualRect(const R1, R2: TRect): Boolean)
709: Function Equals( Strings : TWideStrings) : Boolean
710: function Equals(Strings: TStrings): Boolean;
711: Function EqualState( oState : TniRegularExpressionState) : boolean
712: Function ErrOutput: Text)
713: function ExceptionParam: String;
714: function ExceptionPos: Cardinal;
715: function ExceptionProc: Cardinal;
716: function ExceptionToString(er: TIFException; Param: String): String;
717: function ExceptionType: TIFException;
718: Function ExcludeTrailingBackslash( S : string) : string
719: function ExcludeTrailingBackslash(const S: string): string)
720: Function ExcludeTrailingPathDelimiter( const APath : string) : string
721: Function ExcludeTrailingPathDelimiter(S: string): string
722: function ExcludeTrailingPathDelimiter(const S: string): string)
723: function ExecConsoleApp(const\ AppName,\ Parameters:\ String;\ AppOutput:\ TStrings):\ boolean is
724: Function ExecProc : Integer
725: Function ExecSQL : Integer
726: Function ExecSQL( ExecDirect : Boolean) : Integer
727: Function Execute : _Recordset;
728: Function Execute : Boolean
729: Function Execute : Boolean;
730: Function Execute( const SQL : string; Params : TParams; Cache : Boolean; cursor : phDBICur) : Integer
731: Function Execute( const SQL : WideString; Params : TParams; ResultSet : TPSResult) : Integer
732: Function Execute( ParentWnd : HWND) : Boolean
733: Function Execute1(constCommText:WideString;const CType:TCommType;const
     ExecuteOpts:TExecuteOpts):_Recordset;
734: Function Execute1( const Parameters : OleVariant) : _Recordset;
735: Function Execute1( ParentWnd : HWND) : Boolean;
736: Function Execute2( var RecordsAffected : Integer; const Parameters : OleVariant) : Recordset;
737: Function ExecuteAction( Action : TBasicAction) : Boolean
738: Function ExecuteDirect( const SQL : WideString) : Integer
739: Function ExecuteFile(const FileName:string;const Params:string;const DefDir:string;ShowCmd:Int):THandle
740: Procedure ExecuteThread2(afunc:TThreadFunction2;thrOK:boolean);AddTypeS('TThreadFunction2','procedure
741: Function CreateThread2(ThreadFunc: TThreadFunction2) : THandle 742: function ExeFileIsRunning(ExeFile: string): boolean;
743: function ExePath: string;
744: function ExePathName: string;
745: Function Exists( AItem : Pointer) : Boolean
746: Function ExitWindows( ExitCode : Cardinal) : Boolean
747: function Exp(x: Extended): Extended;
748: Function ExpandEnvironmentVar( var Value : string) : Boolean
749: Function ExpandFileName( FileName : string) : string
750: function ExpandFileName(const FileName: string): string)
751: Function ExpandUNCFileName( FileName : string) : string
752: function ExpandUNCFileName(const FileName: string): string)
753: Function ExpJ( const X : Float) : Float;
754: Function Exsecans( X : Float) : Float
755: Function Extract( const AByteCount : Integer) : string
756: Function Extract (Item : TClass): TClass
757: Function Extract (Item : TComponent): TComponent
758: Function Extract( Item : TObject) : TObject
759: Function ExtractFileDir( FileName : string) : string
760: function ExtractFileDir(const FileName: string): string)
761: Function ExtractFileDrive(FileName: string)
762: function ExtractFileDrive(const FileName: string): string)
763: Function ExtractFileExt( FileName : string) : string
764: function ExtractFileExt(const FileName: string): string)
765: Function ExtractFileExtNoDot( const FileName : string)
766: Function ExtractFileExtNoDotUpper( const FileName : string) : string
767: Function ExtractFileName( FileName : string) : string
768: function ExtractFileName(const filename: string):string;
769: Function ExtractFilePath( FileName : string) : string
770: function ExtractFilePath(const filename: string):string;
771: Function ExtractRelativePath( BaseName, DestName : string) : string
772: function ExtractRelativePath(const BaseName: string; const DestName: string): string)
773: Function ExtractShortPathName(FileName: string): string
774: function ExtractShortPathName(const FileName: string): string)
775: function ExtractStrings(Separators, WhiteSpace: TSysCharSet; Content: PChar;Strings: TStrings): Integer
776: function ExtractStrings(Separators:TSysCharSet;WhiteSpace:TSysCharSet;Content:PChar;Str:TStrings): Integer)
777: Function Fact(numb: integer): Extended;
778: Function FactInt(numb: integer): int64;
779: Function Factorial( const N : Integer) : Extended 780: Function FahrenheitToCelsius( const AValue : Double) : Double
781: function FalseBoolStrs: array of string
782: Function Fetch(var AInput:string;const ADelim:string;const ADelete:Bool;const ACaseSensitive:Bool):string
783: Function FetchCaseInsensitive(var AInput:string; const ADelim:string; const ADelete:Boolean): string
784: Function Fibo(numb: integer): Extended;
785: Function FiboInt(numb: integer): Int64;
786: Function Fibonacci( const N : Integer) : Integer 787: Function FIELDBYNAME( const FIELDNAME : STRING) : TFIELD
788: Function FIELDBYNAME( const FIELDNAME : WIDESTRING) : TFIELD
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789: Function FIELDBYNAME( const NAME : String) : TFIELD
790: Function FIELDBYNAME( const NAME : String) : TFIELDDEF
791: Function FIELDBYNUMBER( FIELDNO : INTEGER) : TFIELD
792: Function FileAge( FileName : string) : Integer
793: Function FileAge(const FileName: string): integer)
794: Function FileCompareText( const A, B : String) : Integer
795: Function FileContains(const FileName:string;Text:string;CaseSensitive:Bool;ExceptionOnError:Bool): Boolean
796: Function FileCreate( FileName : string)
                                                     : Integer;
797: Function FileCreate(const FileName: string): integer)
798: Function FileCreateTemp( var Prefix: string): THandle
799: Function FileDateToDateTime(FileDate: Integer): TDateTime
800: function FileDateToDateTime(FileDate: Integer): TDateTime;
801: Function FileExists( const FileName : string) : Boolean
802: Function FileExists( FileName : string) : Boolean
803: function fileExists(const FileName: string): Boolean;
804: Function FileGetAttr(FileName: string): Integer
805: Function FileGetAttr(const FileName: string): integer)
806: Function FileGetDate( Handle : Integer) : Integer 807: Function FileGetDate(handle: integer): integer
808: Function FileGetDisplayName( const FileName : string) : string
809: Function FileGetSize( const FileName : string) : Integer
810: Function FileGetTempName( const Prefix : string) : string
811: Function FileGetTypeName( const FileName : string) : string
812: Function FileIsReadOnly( FileName : string) : Boolean
813: Function FileLoad( ResType: TResType; const Name: string; MaskColor: TColor): Boolean
814: Function FileOpen(FileName: string; Mode: LongWord): Integer
815: Function FileOpen(const FileName: string; mode:integer): integer)
816: Function FileRead(handle: integer; Buffer: PChar; count: LongWord): integer 817: Function FileSearch( Name, DirList: string): string
818: Function FileSearch(const Name, dirList: string): string)
819: Function FileSeek( Handle : Integer; Offset : Int64; Origin : Integer) : Int64;
820: Function FileSeek( Handle, Offset, Origin : Integer) : Integer; 821: Function FileSeek(handle, offset, origin: integer): integer
822: Function FileSetAttr( FileName : string; Attr : Integer) : Integer
823: function FileSetAttr(const FileName: string; Attr: Integer): Integer)
824: Function FileSetDate(FileName : string; Age : Integer) : Integer;
825: Function FileSetDate(handle: integer; age: integer): integer
826: Function FileSetDate2(FileHandle: Integer; Age: Integer): Integer;
827: Function FileSetDateH( Handle : Integer; Age : Integer) :
                                                                           Integer;
828: Function FileSetReadOnly( FileName : string; ReadOnly : Boolean) : Boolean 829: Function FileSize( const FileName : string) : int64
830: Function FileSizeByName ( const AFilename : string) : Longint
831: function FileWrite(Handle: Integer; const Buffer: pChar; Count: LongWord): Integer)
832: Function FilterSpecArray: TComdlgFilterSpecArray
833: Function FIND( ACAPTION: String): TMENUITEM
834: Function Find( AItem : Pointer; out AData : Pointer) : Boolean
835: Function FIND( const ANAME : String) : TNAMEDITEM
836: Function Find( const DisplayName : string) : TAggregate
837: Function Find( const Item: TBookmarkStr; var Index: Integer): Boolean 838: Function FIND( const NAME: String): TFIELD 839: Function FIND( const NAME: String): TFIELDDEF
840: Function FIND( const NAME : String) : TINDEXDEF
841: Function Find( const S : WideString; var Index : Integer) : Boolean
842: function Find(S:String; var Index:Integer):Boolean
843: Function FindAuthClass( AuthName : String) : TIdAuthenticationClass 844: Function FindBand( AControl : TControl) : TCoolBand
845: Function FindBoundary( AContentType : string) : string
846: Function FindButton( AModalResult : TModalResult) : TTaskDialogBaseButtonItem
847: Function FindCaption(StartIndex: Integer; Value: string; Partial, Inclusive, Wrap: Boolean): TListItem
848: Function FindCdLineSwitch( Switch: string; IgnoreCase: Boolean): Boolean;
849: Function FindCloseW(FindFile: Integer): LongBool; stdcall;
850: Function FindCmdLineSwitch( Switch: string; Chars: TSysCharSet; IgnoreCase: Boolean): Boolean;
851: Function FindCmmdLineSwitch( Switch : string) : Boolean;
852: function FindComponent(AName: String): TComponent;
853: function FindComponent(vlabel: string): TComponent;
854: function FindComponent2(vlabel: string): TComponent;
855: function FindControl(Handle: HWnd): TWinControl;
856: Function FindData( StartIndex : Integer; Value : Pointer; Inclusive, Wrap : Boolean) : TListItem
857: Function FindDatabase( const DatabaseName : string) : TDatabase
858: function FindDragTarget(const Pos: TPoint; AllowDisabled: Boolean): TControl;
859: Function FINDFIELD( const FIELDNAME : STRING) : TFIELD
860: Function FINDFIELD( const FIELDNAME : WideString) : TFIELD
861: Function FindFirst2(const Path: string; Attr: Integer; var F: TSearchRec):Integer) 862: Function FindNext2(var F: TSearchRec): Integer)
863: procedure FindClose2(var F: TSearchRec)
     Function FINDFIRST : BOOLEAN
865: TJvSpecialFolder = (sfRecycleBin, sfControlPanel, sfDesktop, sfDesktopDirectory,
       sfMyComputer, sfFonts, sfNetHood, sfNetwork, sfPersonal, sfPrinters, sfPrograms, sfRecent, sfSendTo,
866:
     sfStartMenu, stStartUp, sfTemplates);
867: FFolder: array [TJvSpecialFolder] of Integer =
868:
          (CSIDL_BITBUCKET, CSIDL_CONTROLS, CSIDL_DESKTOP, CSIDL_DESKTOPDIRECTORY,
869:
            CSIDL_DRIVES, CSIDL_FONTS, CSIDL_NETHOOD, CSIDL_NETWORK, CSIDL_PERSONAL
            CSIDL_PRINTERS, CSIDL_PROGRAMS, CSIDL_RECENT, CSIDL_SENDTO, CSIDL_STARTMENU,
870:
            CSIDL_STARTUP, CSIDL_TEMPLATES);
872: Function FindFilesDlg(StartIn: string; SpecialFolder: TJvSpecialFolder; UseFolder: Boolean); Boolean);
873: function Findfirst(const filepath: string; attr: integer): integer;
874: function FindFirst2(const Path: string; Attr: Integer; var F: TSearchRec): Integer) 875: Function FindFirstNotOf( AFind, AText : String) : Integer
876: Function FindFirstOf( AFind, AText : String) : Integer
```

```
877: Function FindImmediateTransitionOn( cChar : char) : TniRegularExpressionState
878: Function FINDINDEXFORFIELDS( const FIELDS: String): TINDEXDEF
879: Function FindInstanceOf( AClass : TClass; AExact : Boolean; AStartAt : Integer) : Integer
880: Function FINDITEM( VALUE : INTEGER; KIND : TFINDITEMKIND) : TMENUITEM
881: function FindItemId( Id : Integer) : TCollectionItem
882: Function FindKey( const KeyValues : array of const) : Boolean 883: Function FINDLAST : BOOLEAN
884: Function FindLineControl( ComponentType, ControlType : DWORD) : TJclMixerLineControl
885: Function FindModuleClass( AClass : TComponentClass) : TComponent
886: Function FindModuleName( const AClass : string) : TComponent
887: Function FINDNEXT : BOOLEAN
888: function FindNext: integer;
889: function FindNext2(var F: TSearchRec): Integer)
890: Function FindNextPage( CurPage : TTabSheet; GoForward, CheckTabVisible : Boolean) : TTabSheet 891: Function FindNextToSelect : TTreeNode
892: Function FINDPARAM( const VALUE : String) : TPARAM
893: Function FindParam( const Value : WideString) : TParameter
894: Function FINDPRIOR : BOOLEAN
895: Function FindResource( ModuleHandle : HMODULE; ResourceName, ResourceType : PChar) : TResourceHandle
896: Function FindSession( const SessionName : string) : TSession
897: function FindStringResource(Ident: Integer): string)
898: Function FindText( const SearchStr:string;StartPos,Length: Integer; Options: TSearchTypes):Integer
899: Function FindUnusedFileName( const FileName, FileExt, Suffix : AnsiString) : AnsiString 900: function FindVCLWindow(const Pos: TPoint): TWinControl; 901: function FindWindow(C1, C2: PChar): Longint;
902: Function FindInPaths(const fileName,paths: String): String;
903: Function Finger : String
904: Function First : TClass
905: Function First : TComponent
906: Function First : TObject
907: Function FirstDelimiter( const delimiters : string; const Str : String) : integer;
908: Function FirstDelimiter1( const delimiters: WideString; const Str: WideString): integer;
909: Function FirstInstance( const ATitle : string) : Boolean
910: Function FloatPoint( const X, Y : Float) : TFloatPoint;
911: Function FloatPoint1( const P : TPoint) : TFloatPoint;
912: Function FloatPtInRect( const Rect : TFloatRect; const P : TFloatPoint) : Boolean
913: Function FloatRect( const ALeft, ATop, ARight, ABottom : Double) : TFloatRect; 914: Function FloatRect1( const Rect : TRect) : TFloatRect;
915: Function FloatsEqual( const X, Y : Float) : Boolean
916: Function FloatToBin(const D: Double): string;
                                                             //doubletohex -> hextobin! in buffer
917: Function FloatToCurr( Value : Extended) : Currency
918: Function FloatToDateTime( Value : Extended) : TDateTime
919: Function FloatToStr( Value : Extended) : string;
920: Function FloatToStr(e : Extended) : String;
921: Function FloatToStrF( Value : Extended; Format : TFloatFormat; Precision, Digits : Integer) : string;
922: function FloatToStrF(Value: Extended; Format: TFloatFormat; Precision: Integer; Digits: Integer): string)
923: Function FloatToStr2( Value : Extended; Format : TFloatFormat; Precision, Digits : Integer; FormatSettings
      : TFormatSettings) : string;
924: Function FloatToStrFS( Value : Extended; Format : TFloatFormat; Precision, Digits : Integer;
FormatSettings: TFormatSettings): string;
925: function FloatToText(BufferArg: PChar; const Value: Extended; ValueType: TFloatValue; Format: TFloatFormat;
Precision, Digits: Integer): Integer)
926: Function Floor( const X : Extended) : Integer
927: Function FloorInt( Value : Integer; StepSize : Integer) : Integer 928: Function FloorJ( const X : Extended) : Integer 929: Function Flush( const Count : Cardinal) : Boolean 930: Function Flush(var t: Text): Integer
931: function FmtLoadStr(Ident: Integer; const Args: array of const): string)
932: function FOCUSED: BOOLEAN
933: Function ForceBackslash( const PathName : string) : string
934: Function ForceDirectories( const Dir : string) : Boolean
935: Function ForceDirectories( Dir : string) : Boolean
936: Function ForceDirectories( Name : string) : Boolean
937: Function ForceInBox( const Point : TPoint; const Box : TRect) : TPoint
938: Function ForceInRange( A, Min, Max : Integer) : Integer
939: Function ForceInRangeR( const A, Min, Max : Double) : Double
940: Function ForEach( AProc : TBucketProc; AInfo : Pointer) : Boolean;
941: Function ForEach1( AEvent : TBucketEvent) : Boolean;
942: Function ForegroundTask: Boolean
943: function Format(const Format: string; const Args: array of const): string;
944: Function FormatBcd( const Format : string; Bcd : TBcd) : string
945: FUNCTION FormatBigInt(s: string): STRING
946: function FormatBuf(var Buffer:PChar;BufLen:Card;const Format:string;FmtLen:Cardinal;const Args:array of
     const):Cardinal
947: Function FormatCount( iCount : integer; const sSingular : string; const sPlural : string) : string
948: Function FormatCurr( Format : string; Value : Currency) : string;
949: function FormatCurr(const Format: string; Value: Currency): string)
950: Function FormatDateTime( Format : string; DateTime : TDateTime) : string;
951: function FormatDateTime(const fmt: string; D: TDateTime): string;
                                                                     : string;
952: Function FormatFloat( Format : string; Value : Extended)
953: function FormatFloat(const Format: string; Value: Extended): string)
954: Function FormatFloat( Format : string; Value : Extended) : string;
955: Function FormatFloat2( Format : string; Value : Extended; FormatSettings : TFormatSettings) : string;
956: Function FormatCurr( Format : string; Value : Currency) : string;
957: Function FormatCurr2(Format: string; Value : Currency; FormatSettings : TFormatSettings) : string;
958: Function Format2(const Format:string;const Args:array of const;const FSettings:TFormatSettings): string
959: FUNCTION FormatInt(i: integer): STRING; 960: FUNCTION FormatInt64(i: int64): STRING;
961: Function FormatMaskText( const EditMask : string; const Value : string) : string
```

```
962: Function FormatValue( AValue : Cardinal) : string
 963: Function FormatVersionString( const HiV, LoV : Word) : string;
 964: Function FormatVersionString1( const Major, Minor, Build, Revision : Word) : string;
 965: function Frac(X: Extended); Extended);
 966: Function FreeResource( ResData : HGLOBAL) : LongBool
 967: Function FromCommon( const AValue : Double) : Double
 968: function FromCommon(const AValue: Double): Double;
 969: Function FTPGMTDateTimeToMLS( const ATimeStamp : TDateTime; const AIncludeMSecs : Boolean) : String
 970: Function FTPLocalDateTimeToMLS( const ATimeStamp : TDateTime; const AIncludeMSecs : Boolean) : String
 971: Function FTPMLSToGMTDateTime( const ATimeStamp : String) : TDateTime
 972: Function FTPMLSToLocalDateTime( const ATimeStamp : String) : TDateTime
973: Function FuncIn(AValue: Variant; ASet: Variant): Boolean;
 974: //Function Funclist Size is: 6444 of mX3.9.8.9
 975: Function FutureValue(const Rate:Extended;NPeriods:Integer;const Payment,PresentValue:Extended;PaymentTime:
      TPaymentTime):Extended
 976: Function Gauss (const x, Spread : Double) : Double
 977: function Gauss(const x,Spread: Double): Double;
 978: Function GCD(x, y : LongInt) : LongInt;
979: Function GCDJ( X, Y : Cardinal) : Cardinal
980: Function GDAL: LongWord
 981: Function GdiFlush : BOOL
 982: Function GdiSetBatchLimit( Limit : DWORD) : DWORD
 983: Function GdiGetBatchLimit : DWORD 984: Function GenerateHeader : TIdHeaderList
 985: Function GeometricMean( const X : TDynFloatArray) : Float
 986: Function Get( AURL : string) : string;
 987: Function Get2( AURL : string) : string;
 988: Function Get 8087CW : Word
 989: function GetActiveOleObject(const ClassName: String): IDispatch;
 990: Function GetAliasDriverName( const AliasName : string) : string
 991: Function GetAPMBatteryFlag : TAPMBatteryFlag
 992: Function GetAPMBatteryFullLifeTime : DWORD
993: Function GetAPMBatteryLifePercent : Integer
 994: Function GetAPMBatteryLifeTime : DWORD
 995: Function GetAPMLineStatus : TAPMLineStatus
 996: Function GetAppdataFolder : string
 997: Function GetAppDispatcher : TComponent
 998: function GetArrayLength: integer;
 999: Function GetASCII: string;
1000: Function GetASCIILine: string;
1001: Function GetAsHandle( Format : Word) : THandle
1002: function GetAssociatedProgram(const Extension: string; var Filename, Description: string): boolean;
1003: Function GetBackupFileName( const FileName: string): string
1004: Function GetBBitmap( Value : TBitmap) : TBitmap
1005: Function GetBIOSCopyright : string
1006: Function GetBIOSDate : TDateTime
1007: Function GetBIOSExtendedInfo : string
1008: Function GetBIOSName : string
1009: Function getBitmap(apath: string): TBitmap;
1010: Function GetBitmap( Index : Integer; Image : TBitmap) : Boolean //object 1011: Function getBitMapObject(const bitmappath: string): TBitmap;
1012: Function GetButtonState( Button : TPageScrollerButton) : TPageScrollerButtonState
1013: Function GetCapsLockKeyState : Boolean
1014: function GetCaptureControl: TControl;
1015: Function GetCDAudioTrackList( var TrackList : TJclCdTrackInfoArray; Drive : Char) : TJclCdTrackInfo; 1016: Function GetCDAudioTrackList1( TrackList : TStrings; IncludeTrackType : Boolean; Drive : Char) : string;
1017: Function GetCdInfo( InfoType : TJclCdMediaInfo; Drive : Char) : string
1018: Function GetChangedText( const Text : string; SelStart, SelLength : Integer; Key : Char) : string
1019: \textbf{Function} \ \ \texttt{GetClientThread} ( \ \ \texttt{ClientSocket} : \ \ \texttt{TServerClientWinSocket}) : \ \ \texttt{TServerClientThread} 
1020: Function GetClockValue : Int64
1021: function getCmdLine: PChar;
1022: function getCmdShow: Integer;
1023: function GetCPUSpeed: Double;
1024: Function GetColField( DataCol : Integer) : TField
1025: Function GetColorBlue( const Color : TColor) : Byte 1026: Function GetColorFlag( const Color : TColor) : Byte
1027: Function GetColorGreen( const Color : TColor) : Byte
1028: Function GetColorRed( const Color : TColor) : Byte
1029: Function GetComCtlVersion : Integer
1030: Function GetComPorts: TStringlist;
1031: Function GetCommonAppdataFolder : string
1032: Function GetCommonDesktopdirectoryFolder : string
1033: Function GetCommonFavoritesFolder : string
1034: Function GetCommonFilesFolder : string
1035: Function GetCommonProgramsFolder : string
1036: Function GetCommonStartmenuFolder : string
1037: Function GetCommonStartupFolder : string
1038: Function GetComponent( Owner, Parent : TComponent) : TComponent
1039: Function GetConnectionRegistryFile( DesignMode : Boolean) : string
1040: Function GetCookiesFolder : string
1041: Function GetCPUSpeed( var CpuSpeed : TFreqInfo) : Boolean
1042: Function GetCurrent : TFavoriteLinkItem
1043: Function GetCurrent : TListItem
1044: Function GetCurrent : TTaskDialogBaseButtonItem
1045: Function GetCurrent : TToolButton
1046: Function GetCurrent : TTreeNode
1047: Function GetCurrent : WideString
1048: Function GetCurrentDir : string
1049: function GetCurrentDir: string)
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1050: Function GetCurrentFolder : string 1051: Function GETCURRENTRECORD( BUFFER : PCHAR) : BOOLEAN
1052: Function GetCurrentProcessId : TIdPID
1053: Function GetCurrentThreadHandle : THandle
1054: Function GetCurrentThreadID: LongWord; stdcall;
1055: Function GetCustomHeader( const Name : string) : String
1056: Function GetDataItem( Value : Pointer) : Longint
1057: Function GetDataLinkFiles(FileNames: TWideStrings; Directory: string): Integer; 1058: Function GetDataLinkFiles(FileNames: TStrings; Directory: string): Integer;
1059: Function GETDATASIZE : INTEGER
1060: Function GetDC(hdwnd: HWND): HDC;
1061: Function GetDefaultFileExt( const MIMEType : string) : string
1062: Function GetDefaults : Boolean
1063: Function GetDefaultSchemaName : WideString
1064: Function GetDefaultStreamLoader : IStreamLoader
1065: Function GetDesktopDirectoryFolder : string
1066: Function GetDesktopFolder : string
1067: Function GetDFAState( oStates: TList): TniRegularExpressionState 1068: Function GetDirectorySize( const Path: string): Int64 1069: Function GetDisplayWidth: Integer
1070: Function GetDLLVersion( const DLLName : string; var pdwMajor, pdwMinor : Integer) : Boolean
1071: Function GetDomainName : string
1072: Function GetDriverRegistryFile( DesignMode : Boolean) : string
1073: function GetDriveType(rootpath: pchar): cardinal; 1074: Function GetDriveTypeStr( const Drive : Char) : string
1075: Function GetEnumerator : TFavoriteLinkItemsEnumerator
1076: Function GetEnumerator : TListItemsEnumerator
1077: Function GetEnumerator : TTaskDialogButtonsEnumerator
1078: Function GetEnumerator : TToolBarEnumerator
1079: Function GetEnumerator : TTreeNodesEnumerator
1080: Function GetEnumerator : TWideStringsEnumerator
1081: Function GetEnvVar( const VarName : string) : string
1082: Function GetEnvironmentVar( const AVariableName : string) : string
1083: Function GetEnvironmentVariable( const VarName : string) : string
1084: Function GetEnvironmentVar( const Name : string; var Value : string; Expand : Boolean) : Boolean
1085: Function GetEnvironmentVars( const Vars : TStrings; Expand : Boolean) : Boolean
1086: Function getEnvironmentString: string; 1087: Function GetExceptionHandler : TObject
1087: Function GetExceptionHandier : Tobject
1088: Function GetFavoritesFolder: string
1089: Function GetFieldByName( const Name : string) : string
1090: Function GetFieldInfo( const Origin : Widestring; var FieldInfo : TFieldInfo) : Boolean
1091: Function GetFieldValue( ACol : Integer) : string
1092: Function GetFileAgeCoherence( const FileName : string) : Boolean
1093: Function GetFileCreation( const FileName : string) : TFileTime
1094: Function GetFileCreationTime( const Filename : string) : TDateTime 1095: Function GetFileInformation( const FileName : string) : TSearchRec
1096: Function GetFileLastAccess( const FileName : string) : TFileTime
1097: Function GetFileLastWrite( const FileName : string) : TFileTime
1098: Function GetFileList(FileList: TStringlist; apath: string): TStringlist;
1099: Function GetFileListl(apath: string): TStringlist; 1100: Function GetFileMIMEType( const AFileName : string) : string
1101: Function GetFileSize( const FileName : string) : Int64
1102: Function GetFileVersion( AFileName : string) : Cardinal
1103: Function GetFileVersion( const AFilename : string) : Cardinal
1104: Function GetFileSize2(Handle: Integer; x: Integer): Integer; stdcall; 1105: Function GetFileDate(aFile:string; aWithTime:Boolean):string; 1106: Function GetFilterData( Root : PExprNode) : TExprData
1107: Function getFirstChild : LongInt
1108: Function getFirstChild : TTreeNode
1109: Function GetFirstDelimitedToken( const cDelim : char; const cStr : string) : string
1110: Function GetFirstNode : TTreeNode
1111: Function GetFontsFolder : string
1112: Function GetFormulaValue( const Formula : string) : Extended
1113: Function GetFreePageFileMemory : Integer 1114: Function GetFreePhysicalMemory : Integer
1115: Function GetFreeSystemResources( const ResourceType : TFreeSysResKind) : Integer;
1116: Function GetFreeSystemResources1 : TFreeSystemResources;
1117: Function GetFreeVirtualMemory: Integer
1118: Function GetFromClipboard : Boolean
1119: Function GetFullURI( const AOptionalFileds : TIdURIOptionalFieldsSet) : String 1120: Function GetGBitmap( Value : TBitmap) : TBitmap
1121: Function GetGMTDateByName( const AFileName : TIdFileName) : TDateTime
1122: Function GetGroupState( Level : Integer) : TGroupPosInds
1123: Function GetHandle : HWND
1124: Function GETHELPCONTEXT( VALUE : INTEGER; BYCOMMAND : BOOLEAN) : THELPCONTEXT
1125: function GetHexArray(ahexdig: THexArray): THexArray;
1126: Function GetHighLightColor( const Color: TColor; Luminance: Integer): TColor
1127: function GetHINSTANCE: longword;
1128: Function GetHistoryFolder : string
1129: Function GetHitTestInfoAt( X, Y : Integer) : THitTests
1130: function getHMODULE: longword;
1131: Function GetHostByName(const AComputerName: String): String;
1132: Function GetHostName : string
1133: Function getHostIP: string;
1134: Function GetHotSpot : TPoint
1135: Function GetHueBitmap( Value : TBitmap) : TBitmap
1136: Function GetImageBitmap : HBITMAP 1137: Function GETIMAGELIST : TCUSTOMIMAGELIST
1138: Function GetIncome( const aNetto : Currency) : Currency
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1139: Function GetIncome( const aNetto : Extended) : Extended
1140: Function GetIncome( const aNetto : Extended): Extended
1141: Function GetIncome(const aNetto : Extended) : Extended
1142: function GetIncome(const aNetto: Currency): Currency
1143: Function GetIncome2( const aNetto : Currency) : Currency 1144: Function GetIncome2( const aNetto : Currency): Currency
1145: Function getIndex_Attrs( tag : string; var idx : Integer; var Attrs : string) : string
1146: Function GETINDEXFORFIELDS ( const FIELDS : String; CASEINSENSITIVE : BOOLEAN) : TINDEXDEF
1147: Function GetIndexForOrderBy( const SQL : WideString; DataSet : TDataSet) : TIndexDef
1148: Function GetInstRes(Instance: THandle; ResType: TResType; const
         Name: string; Width: Integer; LoadFlags: TLoadResources; MaskColor: TColor): Boolean;
1149: Function
         {\tt GetInstRes1(Instance:Thandle;ResType:TResType;ResID:DWORD;Width:Integer;LoadFlags:TLoadResources;MaskColor:ResType;ResID:DWORD;Width:Thetaper;LoadFlags:TLoadResources;MaskColor:ResType;ResID:DWORD;Width:Thetaper;LoadFlags:TLoadResources;MaskColor:ResType;ResID:DWORD;Width:Thetaper;LoadFlags:TLoadResources;MaskColor:ResType;ResID:DWORD;Width:Thetaper;LoadFlags:TLoadResources;MaskColor:ResType;ResID:DWORD;Width:Thetaper;ResID:DWORD;Width:Thetaper;ResID:DWORD;Width:Thetaper;ResID:DWORD;Width:Thetaper;ResID:DWORD;Width:Thetaper;ResID:DWORD;Width:Thetaper;ResID:DWORD;Width:Thetaper;ResID:DWORD;Width:Thetaper;ResID:DWORD;Width:Thetaper;ResID:DWORD;Width:Thetaper;ResID:DWORD;Width:Thetaper;ResID:DWORD;Width:Thetaper;ResID:DWORD;Width:Thetaper;ResID:DWORD;Width:Thetaper;ResID:DWORD;Width:Thetaper;ResID:DWORD;Width:Thetaper;ResID:DWORD;Width:Thetaper;ResID:DWORD;Width:Thetaper;ResID:DWORD;Width:Thetaper;ResID:DWORD;Width:Thetaper;ResID:DWORD;Width:Thetaper;ResID:DWORD;Width:Thetaper;ResID:DWORD;Width:Thetaper;ResID:DWORD;Width:Thetaper;ResID:DWORD;Width:Thetaper;ResID:DWORD;Width:Thetaper;ResID:DWORD;Width:Thetaper;ResID:DWORD;Width:Thetaper;ResID:DWORD;Width:Thetaper;ResID:DWORD;Width:Thetaper;ResID:DWORD;Width:Thetaper;ResID:DWORD;Width:Thetaper;ResID:DWORD;Width:Thetaper;ResID:DWORD;Width:Thetaper;ResID:DWORD;Width:Thetaper;ResID:DWORD;Width:Thetaper;ResID:DWORD;Width:Thetaper;ResID:DWORD;Width:Thetaper;ResID:DWORD;Width:Thetaper;ResID:DWORD;Width:Thetaper;ResID:DWORD;Width:Thetaper;ResID:DWORD;Width:Thetaper;ResID:Dword;Width:Thetaper;ResID:Dword;Width:Thetaper;ResID:Dword;Width:Thetaper;ResID:Dword;Width:Thetaper;ResID:Dword;Width:Thetaper;ResID:Dword;Width:Thetaper;ResID:Dword;Width:Thetaper;ResID:Dword;Width:Thetaper;ResID:Dword;Width:Thetaper;ResID:Dword;Width:Thetaper;ResID:Dword;Width:Thetaper;ResID:Dword;Width:Thetaper;ResID:Dword;Width:Thetaper;ResID:Dword;Width:Thetaper;ResID:Dword;Width:Thetaper;ResID:Dword;Width:Thetaper;ResID:Dword;Width:Thetaper;ResID:Dword;Width:Thetaper;ResID:Dword;Width:Thetaper
         TColor):Boolean;
1150: Function GetIntelCacheDescription( const D : Byte) : string
1151: Function GetInteractiveUserName : string
1152: Function GetInternetCacheFolder : string
1153: Function GetInternetFormattedFileTimeStamp( const AFilename : String) : String
1154: Function GetIPAddress( const HostName : string) : string 1155: Function GetIP( const HostName : string) : string
1156: Function GetIPHostByName(const AComputerName: String): String;
1157: Function GetIsAdmin: Boolean;
1158: Function GetItem( X, Y : Integer) : LongInt
1159: Function GetItemAt( X, Y : Integer) : TListItem
1160: Function GetItemHeight(Font: TFont): Integer;
1161: Function GetItemPath( Index : Integer) : string
1162: Function GetKeyFieldNames( List : TStrings) : Integer;
1163: Function GetKeyFieldNames1( List : TWideStrings) : Integer;
1164: Function GetKeyState( const VirtualKey : Cardinal) : Boolean
1165: Function GetLastChild : LongInt
1166: Function GetLastChild : TTreeNode
1167: Function GetLastDelimitedToken( const cDelim : char; const cStr : string) : string
1168: function GetLastError: Integer
1169: Function GetLAT_CONV_FACTOR: double; //for WGS84 power(1 - 1 / 298.257223563, 2);
1170: Function GetLoader(Ext: string): TBitmapLoader
1171: Function GetLoadFilter: string
1172: Function GetLocalComputerName : string
1173: Function GetLocaleChar( Locale, LocaleType : Integer; Default : Char) : Char
1174: Function GetLocaleStr( Locale, LocaleType : Integer; Default : string) : string
1175: Function GetLocalUserName: string
1176: Function GetLoginUsername: WideString
1177: function getLongDayNames: string)
1178: Function GetLongHint(const hint: string): string
1179: function getLongMonthNames: string)
1180: Function GetMacAddresses( const Machine : string; const Addresses : TStrings) : Integer
1181: Function GetMainAppWndFromPid( PID : DWORD) : HWND
1182: Function GetMaskBitmap : HBITMAP
1183: Function GetMaxAppAddress : Integer
1184: Function GetMciErrorMessage( const MciErrNo : MCIERROR) : string
1185: Function GetMemoryLoad : Byte
1186: Function GetMIMEDefaultFileExt( const MIMEType : string) : TIdFileName
1187: Function GetMIMETypeFromFile( const AFile : string) : string
1188: Function GetMIMETypeFromFile( const AFile : TIdFileName) : string
1189: Function GetMinAppAddress : Integer
1190: Function GetModule : TComponent
1191: Function GetModuleHandle( ModuleName : PChar) : HMODULE
1192: Function GetModuleName( Module : HMODULE) : string
1193: Function GetModulePath( const Module : HMODULE) : string
1194: Function GetModuleFileName(Module: Integer; Filename: PChar;Size: Integer): Integer; stdcall;
1195: Function GetCommandLine: PChar; stdcall;
1196: Function GetMonochromeBitmap( Value : TBitmap) : TBitmap
1197: Function GetMultiN(aval: integer): string
1198: Function GetName : String
1199: Function GetNearestItem( Point : TPoint; Direction : TSearchDirection) : TListItem 1200: Function GetNethoodFolder : string
1201: Function GetNext : TTreeNode
1202: Function GetNextChild( Value : LongInt) : LongInt
1203: Function GetNextChild( Value : TTreeNode) : TTreeNode
1204: Function GetNextDelimitedToken( const cDelim : char; var cStr : String) : String
1205: Function GetNextItem( StartItem: TListItem; Direction: TSearchDirection; States: TItemStates) : TListItem
1206: Function GetNextPacket : Integer
1207: Function getNextSibling : TTreeNode
1208: Function GetNextVisible : TTreeNode
1209: Function GetNode( ItemId : HTreeItem) : TTreeNode
1210: Function GetNodeAt( X, Y : Integer) : TTreeNode
1211: Function GetNodeDisplayWidth( Node : TOutlineNode) : Integer
1212: function GetNumberOfProcessors: longint;
1213: Function GetNumLockKeyState: Boolean
1214: Function GetObjectProperty (Instance: TPersistent; const PropName: string): TObject
1215: Function GetOnlyTransitionOn(cChar: char): TniRegularExpressionState
1216: Function GetOptionalParam(const ParamName: string): OleVariant
1217: Function GetOSName: string;
1218: Function GetOSVersion: string;
1219: Function GetOSNumber: string;
1220: Function GetOsVersionInfo: TOSVersionInfo;
                                                                                     //thx to wischnewski
1221: Function GetPackageModuleHandle( PackageName : PChar) : HMODULE
1222: function GetPageSize: Cardinal;
1223: Function GetParameterFileName : string
1224: Function GetParams( var OwnerData : OleVariant) : OleVariant
```

```
1225: Function GETPARENTCOMPONENT : TCOMPONENT
1226: Function GetParentForm(control: TControl): TForm
1227: Function GETPARENTMENU : TMENU
1228: Function GetPassword : Boolean
1229: Function GetPassword : string
1230: Function GetPersonalFolder : string
1231: Function GetPidFromProcessName( const ProcessName : string) : DWORD
1232: Function GetPosition : TPoint
1233: Function GetPrev : TTreeNode
1234: Function GetPrevChild( Value : LongInt) : LongInt
1235: Function GetPrevChild( Value : TTreeNode) : TTreeNode
1236: Function getPrevSibling : TTreeNode
1237: Function GetPrevVisible : TTreeNode
1238: Function GetPrinthoodFolder : string
1239: Function GetPrivilegeDisplayName( const PrivilegeName : string) : string
1240: Function getProcessList: TStrings;
1241: Function GetProcessId : TIdPID
1242: Function GetProcessNameFromPid( PID : DWORD) : string
1243: Function GetProcessNameFromWnd( Wnd : HWND) : string
1244: Function GetProcessMemoryInfo(Process: THandle:ppsmemCounters: TProcessMemoryCounters;cb: DWORD):BOOL 1245: Function getProcessAllMemory(ProcessID : DWORD): TProcessMemoryCounters;
1246: Function getProcessMemoryInfo2(ProcessID : DWORD): TProcessMemoryCounters;
1247: Function GetProgramFilesFolder : string
1248: Function GetProgramsFolder : string
1249: Function GetProxy : string
1250: Function GetQuoteChar : WideString
1251: Function GetQrCode4(Width, Height: Word; Correct_Level:string; const
Data:string;aformat:string):TLinearBitmap;
1252: Function GetQrCodetoFile(Width,Height:Word;Correct_Level:string;const
       Data: string; aformat: string): TLinearBitmap;
1253: Function GetRate : Double
1254: Function getPerfTime: string;
1255: Function getRuntime: string;
1256: Function GetRBitmap (Value : TBitmap) : TBitmap
1257: Function GetReadableName (const AName : string) : string
1258: Function GetRecentDocs : TStringList
1259: Function GetRecentFolder: string
1260: Function GetRecords (Count: Integer; out RecsOut: Integer; Options: Integer): OleVariant;
1261: Function GetRecords1(Count:Integer; out RecsOut:Integer;Options:Integer;const CommandText:WideString;var
       Params, OwnerData : OleVariant; OleVariant;
1262: Function GetRecordset( const CommandText : WideString; ConnectionString : WideString) : _Recordset
1263: Function GetRegisteredCompany : string 1264: Function GetRegisteredOwner : string
1265: Function GetResource(ResType:TResType;const
       {\tt Name:} \textbf{string:} \verb|Width:Integer:LoadFlags:TLoadResources:MaskColor:TColor:Boolean||}
1266: Function GetResourceName(ObjStream: TStream; var AName: string): Boolean 1267: Function GetResponse(const AAllowedResponses: array of SmallInt): SmallInt;
1268: Function GetResponsel( const AAllowedResponse : SmallInt) : SmallInt;
1269: Function GetRValue( rgb : DWORD) : Byte
1270: Function GetGValue( rgb : DWORD) : Byte
1271: Function GetBValue( rgb : DWORD) : Byte
1272: Function GetCValue( cmyk : COLORREF) : Byte
1273: Function GetMValue( cmyk : COLORREF) : Byte
1274: Function GetYValue( cmyk : COLORREF) : Byte 1275: Function GetKValue( cmyk : COLORREF) : Byte
1276: Function CMYK( c, m, y, k : Byte) : COLORREF
1277: Function GetOSName: string;
1278: Function GetProcAddress( hModule : HMODULE; lpProcName : LPCSTR) : FARPROC
1279: Function GetProcAddress(Module : HMODULE; Proc : PChar): Dword
1280: Function GetSafeCallExceptionMsg : String
1281: Function GetSaturationBitmap( Value : TBitmap) : TBitmap
1282: Function GetSaveFilter : string
1283: Function GetSaver( Ext : string) : TBitmapLoader
1284: Function GetScrollLockKeyState : Boolean
1285: Function GetSearchString : string
1286: Function GetSelections( AList : TList) : TTreeNode
1287: function GETSELTEXTBUF(BUFFER:PCHAR;BUFSIZE:INTEGER):INTEGER
1288: Function GetSendToFolder : string
1289: Function GetServer : IAppServer
1290: Function GetServerList: OleVariant
1291: Function GetShadowColor( const Color: TColor; Luminance: Integer): TColor
1292: Function GetShellProcessHandle : THandle
1293: Function GetShellProcessName : string
1294: Function GetShellVersion: Cardinal
1295: function getShortDayNames: string)
1296: Function GetShortHint(const hint: string): string
1297: function getShortMonthNames: string)
1298: Function GetSizeOfFile( const FileName : string) : Int64;
1299: Function GetSizeOfFile1( Handle : THandle) : Int64;
1300: Function GetStdHandle(nStdHandle: Integer): Integer; stdcall;
1301: Function GetStartmenuFolder : string
1302: Function GetStartupFolder : string
1303: Function GetStringProperty( Instance : TPersistent; const PropName : string) : WideString
1304: Function GetSuccessor( cChar : char) : TniRegularExpressionState
1305: Function GetSwapFileSize : Integer
1306: Function GetSwapFileUsage : Integer
1307: Function GetSystemLocale : TIdCharSet
1308: Function GetSystemMetrics( nIndex : Integer) : Integer
1309: Function GetSystemPathSH(Folder: Integer): TFilename ;
```

```
1310: Function GetTableNameFromOuery( const SOL : Widestring) : Widestring
1311: Function GetTableNameFromSQL( const SQL : WideString) : WideString
1312: Function GetTableNameFromSQLEx( const SQL: WideString; IdOption: IDENTIFIEROption): WideString
1313: Function GetTasksList( const List : TStrings) : Boolean
1314: Function getTeamViewerID: string;
1315: Function GetTemplatesFolder : string
1316: Function GetText : PwideChar
1317: function GetText:PChar
1318: Function GetTextBuf( Buffer : PChar; BufSize : Integer) : Integer
1319: function GETTEXTBUF(BUFFER: PCHAR; BUFSIZE: INTEGER): INTEGER
1320: Function GetTextItem( const Value : string) : Longint
1321: function GETTEXTLEN:INTEGER
1322: Function GetThreadLocale: Longint; stdcall
1323: Function GetCurrentThreadID: LongWord; stdcall;
1324: Function GetTickCount : Cardinal
1325: Function GetTickDiff( const AOldTickCount, ANewTickCount : Cardinal) : Cardinal
1326: Function GetTicketNr : longint
1327: Function GetTime : Cardinal 1328: Function GetTime : TDateTime
1329: Function GetTimeout : Integer
1330: Function GetTimeStr: String
1331: Function GetTimeString: String
1332: Function GetTodayFiles(startdir, amask: string): TStringlist;
1333: Function getTokenCounts : integer
1334: Function GetTotalPageFileMemory : Integer
1335: Function GetTotalPhysicalMemory : Integer
1336: Function GetTotalVirtualMemory : Integer
1337: Function GetUniqueFileName( const APath, APrefix, AExt : String) : String 1338: Function GetUseNowForDate : Boolean
1339: Function GetUserDomainName( const CurUser : string) : string
1340: Function GetUserName : string
1341: Function GetUserName: string;
1342: Function GetUserObjectName( hUserObject : THandle) : string
1343: Function GetValueBitmap( Value : TBitmap) : TBitmap
1344: Function GetValueMSec : Cardinal
1345: Function GetValueStr : String
1346: Function GetVersion: int;
1347: Function GetVersionString(FileName: string): string;
1348: Function GetVisibleNode( Index : LongInt) : TOutlineNode
1349: Function GetVolumeFileSystem( const Drive : string) : string
1350: Function GetVolumeName( const Drive : string) : string
1351: Function GetVolumeSerialNumber( const Drive : string) : string
1352: Function GetWebAppServices : IWebAppServices
1353: Function GetWebRequestHandler: IWebRequestHandler
1354: Function GetWindowCaption( Wnd : HWND) : string
1355: Function GetWindowDC(hdwnd: HWND): HDC;
1356: Function GetWindowIcon( Wnd : HWND; LargeIcon : Boolean) : HICON
1357: Function GetWindowRect(hwnd: HWND; arect: TRect): Boolean
1358: Function GetWindowsComputerID : string
1359: function GetWindowsDirectory(lpBuffer: PChar; uSize: longword): longword;
1360: Function GetWindowsFolder : string
1361: Function GetWindowsServicePackVersion : Integer
1362: Function GetWindowsServicePackVersionString : string
1363: Function GetWindowsSystemFolder : string
1364: Function GetWindowsTempFolder : string
1365: Function GetWindowsUserID : string
1366: Function GetWindowsVersion : TWindowsVersion
1367: Function GetWindowsVersionString : string
1368: Function GmtOffsetStrToDateTime(S:string): TDateTime
1369: Function GMTToLocalDateTime( S : string) : TDateTime
1370: Function GotoKey : Boolean
1371: Function GradToCycle( const Grads : Extended) : Extended
1372: Function GradToDeg( const Grads : Extended) : Extended 1373: Function GradToDeg( const Value : Extended) : Extended;
1374: Function GradToDeg1( const Value : Double) : Double;
1375: Function GradToDeg2( const Value : Single) : Single
1376: Function GradToRad( const Grads : Extended) : Extended
1377: Function GradToRad( const Value : Extended) : Extended;
1378: Function GradToRad1( const Value : Double) : Double; 1379: Function GradToRad2( const Value : Single) : Single;
1380: Function Gray32( const Intensity : Byte; const Alpha : Byte) : TColor32
1381: Function GreenComponent( const Color32 : TColor32) : Integer
1382: function GUIDToString(const GUID: TGUID): string)
1383: Function HandleAllocated : Boolean
1384: function HandleAllocated: Boolean;
1385: Function HandleRequest: Boolean
1386: Function HandleRequest( Request: TWebRequest; Response: TWebResponse): Boolean
1387: Function HarmonicMean( const X: TDynFloatArray): Float
1388: Function HasAsParent( Value : TTreeNode) : Boolean
1389: Function HASCHILDDEFS : BOOLEAN 1390: Function HasCurValues : Boolean
1391: Function HasExtendCharacter( const s : UTF8String) : Boolean
1392: Function HasFormat( Format : Word) : Boolean
1393: Function HashValue( AStream : TStream) : T5x4LongWordRecord;
1394: Function HashValue(AStream : TStream) : T4x4LongWordRecord
1395: Function HashValue(AStream: TStream): LongWord
1396: Function HashValue(AStream: TStream): Word
1397: Function HashValuel( AStream : TStream; const ABeginPos, AEndPos : Int64) : T5x4LongWordRecord;
1398: Function HashValuel(AStream : TStream): T4x4LongWordRecord
```

```
1399: Function HashValue128(const ASrc: string): T4x4LongWordRecord;
1400: Function HashValue128Stream(AStream: TStream): T4x4LongWordRecord;
1401: Function HashValue16( const ASrc : string) : Word;
1402: Function HashValue16stream( AStream: TStream): Word;
1403: Function HashValue32( const ASrc : string) : LongWord;
1404: Function HashValue32Stream( AStream : TStream) : LongWord;
1405: Function HasMergeConflicts : Boolean
1406: Function hasMoreTokens : boolean
1407: Function HASPARENT : BOOLEAN
1408: function HasParent: Boolean
1409: Function HasTransaction( Transaction: TDBXTransaction): Boolean
1410: Function HasUTF8BOM( S : TStream) : boolean;
1411: Function HasUTF8BOM1( S : AnsiString) : boolean;
1412: Function Haversine( X : Float) : Float
1413: Function Head( s : string; const subs : string; var tail : string) : string
1414: function HELPCOMMAND(COMMAND:INTEGER; DATA:LONGINT):BOOLEAN
1415: function HELPCONTEXT(CONTEXT:THELPCONTEXT):BOOLEAN
1416: function HELPJUMP(JUMPID:STRING):BOOLEAN
1417: Function HeronianMean(const a, b : Float) : Float
1418: function HexStrToStr(Value: string): string;
1419: function HexToBin(Text, Buffer: PChar; BufSize: Integer): Integer;
1420: function HexToBin2(HexNum: string): string;
1421: Function HexToDouble( const Hex : string) : Double
1422: function HexToInt(hexnum: string): LongInt;
1423: function HexToStr(Value: string): string;
1424: Function HexifyBlock( var Buffer, BufferSize : Integer) : string
1425: function Hi(vdat: word): byte;
1426: function HiByte(W: Word): Byte)
1427: function High: Int64;
1428: Function HighlightCell(DataCol,DataRow: Integer; const Value:string; AState:TGridDrawState): Boolean
1429: function HINSTANCE: longword;
1430: function HiWord(1: DWORD): Word)
1431: function HMODULE: longword;
1432: Function HourOf( const AValue : TDateTime) : Word
1433: Function HourOfTheDay( const AValue : TDateTime)
1434: Function HourOfTheMonth( const AValue : TDateTime) : Word
1435: Function HourOfTheWeek( const AValue : TDateTime) : Word 1436: Function HourOfTheYear( const AValue : TDateTime) : Word
1437: Function HoursBetween( const ANow, AThen : TDateTime) :
1438: Function HourSpan( const ANow, AThen : TDateTime) : Double
1439: Function HSLToRGB1( const H, S, L : Single) : TColor32;
1440: Function HTMLDecode( const AStr : String) : String
1441: Function HTMLEncode( const AStr : String) : String
1442: Function HTMLEscape( const Str : string) : string
1443: Function HtmlTable( DataSet : TDataSet; DataSetHandler : TDSTableProducer; MaxRows : Integer) : string
1444: Function HTTPDecode( const AStr : String) : string 1445: Function HTTPEncode( const AStr : String) : string
1446: Function Hypot( const X, Y : Extended) : Extended
1447: Function IBMax( n1, n2 : Integer) : Integer 1448: Function IBMin( n1, n2 : Integer) : Integer
1449: Function IBRandomString( iLength : Integer) : String
1450: Function IBRandomInteger( iLow, iHigh : Integer) : Integer
1451: Function IBStripString( st : String; CharsToStrip : String) : String
1452: Function IBFormatIdentifier( Dialect : Integer; Value : String) : String
1453: Function IBFormatIdentifierValue( Dialect : Integer; Value : String) : String 1454: Function IBExtractIdentifier( Dialect : Integer; Value : String) : String 1455: Function IBQuoteIdentifier( Dialect : Integer; Value : String) : String
1456: Function IBAddIBParamSQLForDetail(Params:TParams;SQL:string;Native:Boolean;Dialect:Integer):string
1457: \textbf{ Procedure} \ \texttt{IBDecomposeDatabaseName} ( \texttt{DatabaseName} : \textbf{String} ; \textbf{var} \ \texttt{ServerName} , \texttt{Protocol} , \texttt{DatabasePath} : \textbf{String} )
1458:
       Function RandomString( iLength : Integer) : String');
Function RandomInteger( iLow, iHigh : Integer) : Integer');
1459:
        Function StripString( st : String; CharsToStrip : String) : String')
        Function FormatIdentifier( Dialect : Integer; Value : String) : String');
1461:
       Function FormatIdentifierValue( Dialect : Integer; Value : String) : String');
Function ExtractIdentifier( Dialect : Integer; Value : String) : String');
Function QuoteIdentifier( Dialect : Integer; Value : String) : String');
1462:
1463:
        Function AddIBParamSQLForDetail( Params : TParams; SQL : string; Native : Boolean; Dialect : Integer) :
       string');
1466: Procedure DecomposeDatabaseName ( DatabaseName : String; var ServerName, Protocol, DatabasePath :
       String)')
1467: function NextSQLToken(var p: PChar; var Token: String; CurSection: TSQLToken): TSQLToken; ');
1468: Function IconToBitmap( Ico : HICON) : TBitmap
1469: Function IconToBitmap2( Ico : HICON; Size : Integer; TransparentColor : TColor) : TBitmap 1470: Function IconToBitmap3( Ico : HICON; Size : Integer; TransparentColor : TColor) : TBitmap
1471: function IdentToCharset(const Ident: string; var Charset: Longint): Boolean)
1472: function IdentToColor(const Ident: string; var Color: Longint): Boolean)
1473: function IdentToCursor(const Ident: string; var cursor: Longint): Boolean;
1474: Function IdGetDefaultCharSet : TIdCharSet
1475: function IDispatchInvoke(Self:IDispatch;ProperSet:Boolean;const Name:String;Par:array of variant):variant
1476: Function IdPorts2 : TStringList
1477: Function IdToMib( const Id : string) : string
1478: Function IdSHAlHash(apath: string): string; 1479: Function IdHashSHAl(apath: string): string;
1480: Function IfStr( const bCondition : boolean; const sTrue : string; const sFalse : string) : string
1481: Function IfThen( AValue : Boolean; const ATrue : string; AFalse : string) : string;
1482: Function iif1( ATest : Boolean; const ATrue : Integer; const AFalse : Integer) : Integer; 1483: Function iif2( ATest : Boolean; const ATrue : string; const AFalse : string) : string; 1484: Function iif3( ATest : Boolean; const ATrue : Boolean; const AFalse : Boolean) : Boolean;
1485: function ImportTest(S1: string;s2:longint; s3:Byte; s4:word; var s5:string): string;
```

```
1486: Function IncDay( const AValue : TDateTime; const ANumberOfDays : Integer) : TDateTime
1487: Function IncHour( const AValue : TDateTime; const ANumberOfHours : Int64) : TDateTime
1488: Function IncLimit( var B : Byte; const Limit : Byte; const Incr : Byte) : Byte;
1489: Function IncLimit1 (var B : Shortint; const Limit : Shortint; const Incr : Shortint) : Shortint;
1490: Function IncLimit2( var B : Smallint; const Limit : Smallint; const Incr : Smallint) : Smallint;
1491: Function IncLimit3( var B : Word; const Limit : Word; const Incr : Word) : Word;
1492: Function IncLimit4( var B : Integer; const Limit : Integer; const Incr : Integer) :
1493: Function IncLimit5( var B : Cardinal; const Limit : Cardinal; const Incr : Cardinal) : Cardinal;
1494: Function IncLimit6( var B : Int64; const Limit : Int64; const Incr : Int64) : Int64;
1495: Function IncLimitClamp( var B : Byte; const Limit : Byte; const Incr : Byte) : Byte;
1496: Function IncLimitClamp1 (var B : Shortint; const Limit : Shortint; const Incr : Shortint) : Shortint; 1497: Function IncLimitClamp2 (var B : Smallint; const Limit : Smallint; const Incr : Smallint) : Smallint;
1498: Function IncLimitClamp3( var B : Word; const Limit : Word; const Incr : Word) : Word;
1499: Function IncLimitClamp4( var B : Integer; const Limit : Integer; const Incr : Integer; : Integer; 1500: Function IncLimitClamp5( var B : Cardinal; const Limit : Cardinal; const Incr : Cardinal) : Cardinal;
1501: Function IncLimitClamp6( var B : Int64; const Limit : Int64; const Incr : Int64) : Int64;
1502: Function IncludeTrailingBackslash( S : string) : string
1503: function IncludeTrailingBackslash(const S: string): string)
1504: Function IncludeTrailingPathDelimiter( const APath : string) : string
1505: Function IncludeTrailingPathDelimiter( S : string) : string
1506: function IncludeTrailingPathDelimiter(const S: string): string)
1507: Function IncludeTrailingSlash( const APath : string) : string
1508: Function IncMilliSecond( const AValue : TDateTime; const ANumberOfMilliSeconds : Int64) : TDateTime
1509: Function IncMinute( const AValue : TDateTime; const ANumberOfMinutes : Int64) : TDateTime 1510: Function IncMonth( DateTime : TDateTime; NumberOfMonths : Integer) : TDateTime
1511: function IncMonth(const DateTime: TDateTime; NumberOfMonths: Integer): TDateTime)
1512: Function IncSecond( const AValue : TDateTime; const ANumberOfSeconds : Int64) : TDateTime
1513: Function IncWeek( const AValue : TDateTime; const ANumberOfWeeks : Integer) : TDateTime 1514: Function IncYear( const AValue : TDateTime; const ANumberOfYears : Integer) : TDateTime
1515: Function IndexOf( AClass : TClass) : Integer
1516: Function IndexOf( AComponent : TComponent) : Integer
1517: Function IndexOf( AObject : TObject) : Integer
1518: Function INDEXOF( const ANAME : String) : INTEGER
1519: Function IndexOf( const DisplayName : string) : Integer 1520: Function IndexOf( const Item : TBookmarkStr) : Integer
1521: Function IndexOf( const S : WideString) : Integer
1522: Function IndexOf( const View : TJclFileMappingView) : Integer
1523: Function INDEXOF( FIELD : TFIELD) : INTEGER
1524: Function IndexOf( ID : LCID) : Integer
1525: Function INDEXOF( ITEM : TMENUITEM) : INTEGER
1526: Function IndexOf( Value : TListItem) : Integer
1527: Function IndexOf( Value : TTreeNode) : Integer
1528: function IndexOf(const S: string): Integer;
1529: Function IndexOfName( const Name : WideString) : Integer
1530: function IndexOfName(Name: string): Integer;
1531: Function IndexOfObject( AObject : TObject) : Integer
1532: function IndexofObject(AObject:tObject):Integer
1533: Function IndexOfTabAt( X, Y : Integer) : Integer
1534: Function IndexStr( const AText : string; const AValues : array of string) : Integer
1535: Function IndexText( const AText : string; const AValues : array of string) : Integer
1536: Function IndexOfInteger( AList : TStringList; Value : Variant) : Integer
1537: Function IndexOfFloat( AList: TStringList; Value: Variant): Integer 1538: Function IndexOfDate( AList: TStringList; Value: Variant): Integer
1539: Function IndexOfString( AList : TStringList; Value : Variant) : Integer
1540: Function IndyCompareStr( const A1 : string; const A2 : string) : Integer
1541: Function IndyGetHostName : string
1542: Function IndyInterlockedDecrement( var I : Integer) : Integer
1543: Function IndyInterlockedExchange( var A : Integer; B : Integer) : Integer
1544: Function IndyInterlockedExchangeAdd( var A : Integer; B : Integer) : Integer
1545: Function IndyInterlockedIncrement( var I : Integer) : Integer 1546: Function IndyLowerCase( const A1 : string) : string
1547: Function IndyStrToBool( const AString : String) : Boolean
1548: Function IndyUpperCase(const A1 : string) : string
1549: Function InitCommonControl(CC : Integer) : Boolean
1550: Function InitTempPath: string
1551: Function InMainThread: boolean
1552: Function inOpArray( W : WideChar; sets : array of WideChar) : boolean
1553: Function Input: Text)
1554: Function InputBox( const ACaption, APrompt, ADefault : string) : string
1555: function InputBox(const ACaption: string; const APrompt: string; const ADefault: string): string)
1556: Function InputLn(const AMask: string; AEcho:Boolean; ATabWidth:Integer; AMaxLineLength:Integer): string
1557: Function InputQuery( const ACaption, APrompt : string; var Value : string) : Boolean
1558: function InputQuery(const ACaption: string; const APrompt: string; var Value: string): Boolean)
1559: Function InquireSignal(RtlSigNum: Integer): TSignalState 1560: Function InRangeR(const A, Min, Max: Double): Boolean
1561: function Insert( Index : Integer) : TCollectionItem
1562: Function Insert( Index : Integer) : TComboExItem
1563: Function Insert( Index : Integer) : THeaderSection
1564: Function Insert( Index : Integer) : TListItem
1565: Function Insert( Index :
                                    Integer) : TStatusPanel
1566: Function Insert( Index : Integer) : TWorkArea
1567: Function Insert( Index : LongInt; const Text : string) : LongInt
1568: Function Insert(Sibling: TTreeNode: const S: string): TTreeNode
1569: Function INSERTNEWLINEAFTER(AITEM: TMENUITEM): INTEGER
1570: Function INSERTNEWLINEBEFORE( AITEM : TMENUITEM) : INTEGER
1571: Function InsertNode( Node, Sibling : TTreeNode; const S : string; Ptr : Pointer) : TTreeNode
1572: Function InsertObject( Index : LongInt; const Text : string; const Data : Pointer) : LongInt 1573: Function InsertObject( Sibling : TTreeNode; const S : string; Ptr : Pointer) : TTreeNode
1574: Function Instance : Longint
```

```
1575: function InstanceSize: Longint
1576: Function Int(e : Extended) : Extended;
1577: function Int64ToStr(i: Int64): String;
1578: Function IntegerToBcd( const AValue : Integer) : TBcd
1579: Function Intensity( const Color32 : TColor32) : Integer;
1580: Function Intensity( const R, G, B : Single) : Single;
1581: Function InterestPayment(const Rate:Extended;Period,NPeriods:Integer;const PresentValue,
       FutureValue: Extended; PaymentTime : TPaymentTime) : Extended
1582: Function InterestRate(NPeriods:Integer; const Payment, PresentVal,
       FutureVal:Extended; PaymentTime: TPaymentTime): Extended
1583: Function InternalDecodeDate( DateTime: TDateTime; var Year, Month, Day, DOW: Word): Boolean
1584: Function InternalRateOfReturn( const Guess: Extended; const CashFlows: array of Double): Extended
1585: Function InternalUpdateRecord( Tree : TUpdateTree) : Boolean
1586: Function IntersectRect( out Rect : TRect; const R1, R2 : TRect) : Boolean
1587: function IntersectRect(out Rect: TRect; const R1, R2: TRect): Boolean
1588: Function IntMibToStr( const Value : string) : string
1589: Function IntPower( const Base : Extended; const Exponent : Integer) : Extended
1590: Function IntToBin( Value : cardinal) : string
1591: Function IntToHex( Value : Integer; Digits : Integer) : string;
1592: function IntToHex(a: integer; b: integer): string;
1593: Function IntToHex64( Value : Int64; Digits : Integer) : string;
1594: function IntToHex64(Value: Int64; Digits: Integer): string)
1595: Function IntTo3Str( Value : Longint; separator: string) : string 1596: Function inttobool( aInt : LongInt) : Boolean
1597: function IntToStr(i: Int64): String;
1598: Function IntToStr64(Value: Int64): string)
1599: function IOResult: Integer
1600: Function IPv6AddressToStr(const AValue: TIdIPv6Address): string
1601: Function IsAccel(VK: Word; const Str: string): Boolean
1602: Function IsAddressInNetwork( Address : String) : Boolean
1603: Function IsAdministrator : Boolean
1604: Function IsAlias( const Name : string) : Boolean
1605: Function IsApplicationRunning( const AClassName, ApplName : string) : Boolean
1606: Function IsASCII( const AByte : Byte) : Boolean;
1607: Function IsASCIILDH( const AByte : Byte)
1608: Function IsAssembly(const FileName: string): Boolean;
1609: Function IsBcdNegative( const Bcd : TBcd): Boolean
1610: Function IsBinary(const AChar : Char): Boolean
1611: function IsConsole: Boolean)
1612: Function IsDelimiter( Delimiters, S : string; Index : Integer) : Boolean
1613: function IsDelimiter(const Delimiters: string; const S: string; Index: Integer): Boolean)
1614: Function IsDelphiDesignMode : boolean
1615: Function IsDelphiRunning : boolean
1616: Function IsDFAState : boolean
1617: Function IsDirectory( const FileName : string) : Boolean
1618: Function IsDomain( const S : String) : Boolean
1619: function IsDragObject(Sender: TObject): Boolean;
1620: Function IsEditing : Boolean
1621: Function ISEMPTY : BOOLEAN
1622: Function IsEqual ( Value : TParameters) : Boolean
1623: Function ISEQUAL ( VALUE : TPARAMS) : BOOLEAN
1624: function IsEqualGUID(const guid1, guid2: TGUID): Boolean)
1625: Function IsFirstNode: Boolean
1626: Function IsFloatZero( const X : Float) : Boolean
1627: Function IsFormatRegistered( Extension, AppID : string) : Boolean
1628: Function IsFormOpen(const FormName: string): Boolean;
1629: Function IsFQDN( const S : String) : Boolean
1630: Function IsGrayScale : Boolean
1631: Function IsHex( AChar : Char) : Boolean;
1632: Function IsHexString(const AString: string): Boolean;
1633: Function IsHostname(const S: String): Boolean
1634: Function IsInfinite( const AValue : Double) : Boolean
1635: Function IsInLeapYear( const AValue : TDateTime) : Boolean
1636: Function IsInternet: boolean;
1637: Function IsLeadChar( ACh : Char) : Boolean
1638: Function IsLeapYear( Year : Word) : Boolean
1639: function IsLeapYear(Year: Word): Boolean)
1640: function IsLibrary: Boolean)
1641: Function ISLINE : BOOLEAN
1642: Function IsLinkedTo( DataSet : TDataSet) : Boolean
1643: Function IsLinkeDTO( DATASOURCE : TDATASOURCE) : BOOLEAN
1644: Function IsLiteralChar( const EditMask : string; Offset : Integer) : Boolean
1645: Function IsMatch( const Pattern, Text: string): Boolean //Grep like RegEx 1646: Function IsMainAppWindow( Wnd: HWND): Boolean
1647: Function IsMediaPresentInDrive( Drive : Char) : Boolean
1648: function IsMemoryManagerSet: Boolean)
1649: Function IsMultiTableQuery( const SQL : WideString) : Boolean
1650: function IsMultiThread: Boolean)
1651: Function IsNumeric( AChar : Char) : Boolean;
1652: Function IsNumeric2( const AString : string) : Boolean;
1653: Function IsOctal( AChar : Char) : Boolean;
1654: Function IsOctalString(const AString: string) : Boolean;
1655: Function IsPathDelimiter( S: string; Index: Integer): Boolean
1656: function IsPathDelimiter(const S: string; Index: Integer): Boolean)
1657: Function IsPM( const AValue : TDateTime) : Boolean
1658: Function IsPositiveFloatArray( const X : TDynFloatArray) : Boolean
1659: Function IsPrimeFactor( const F, N : Cardinal) : Boolean
1660: Function IsPrimeRM( N : Cardinal) : Boolean //rabin miller
1661: Function IsPrimeTD( N : Cardinal) : Boolean //trial division
```

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1662: Function IsPrivilegeEnabled( const Privilege : string) : Boolean
1663: Function ISgrt( const I : Smallint) : Smallint
1664: Function IsReadOnly(const Filename: string): boolean;
                                                                                     : Boolean
1665: Function IsRectEmpty( const Rect : TRect)
1666: function IsRectEmpty(const Rect: TRect): Boolean)
1667: Function IsRelativePrime( const X, Y : Cardinal) : Boolean
1668: Function ISRIGHTTOLEFT : BOOLEAN
1669: function IsRightToLeft: Boolean
1670: Function IsSameDay( const AValue, ABasis : TDateTime) : Boolean
1671: Function ISSEQUENCED : BOOLEAN
1672: Function IsSystemModule( const Module : HMODULE) : Boolean
1673: Function IsSystemResourcesMeterPresent : Boolean
1674: Function IsTCPPortOpen(dwPort : Word; ipAddressStr: String): boolean;
1675: Function IsToday( const AValue : TDateTime) : Boolean
1676: function IsToday(const AValue: TDateTime): Boolean;
1677: Function IsTopDomain( const AStr : string) : Boolean
1678: Function IsUTF8LeadByte( Lead : Char) : Boolean
1679: Function IsUTF8String( const s : UTF8String) : Boolean 1680: Function IsUTF8TrailByte( Lead : Char) : Boolean 1681: Function ISVALIDCHAR( INPUTCHAR : CHAR) : BOOLEAN
1682: Function IsValidDate( const AYear, AMonth, ADay : Word) : Boolean
1683: Function IsValidDateDay( const AYear, ADayOfYear: Word) : Boolean
1684: Function IsValidDateMonthWeek( const AYear, AMonth, AWeekOfMonth, ADayOfWeek: Word): Boolean
1685: Function IsValidDateTime(const AYear, AMonth, ADay, AHour, AMinute, ASecond, AMilliSecond: Word): Boolean
1686: Function IsValidDateWeek( const AYear, AWeekOfYear, ADayOfWeek: Word): Boolean
1687: Function IsValidIdent( Ident : string) : Boolean
1688: function IsValidIdent(const Ident: string; AllowDots: Boolean): Boolean)
1689: Function IsValidIP( const S : String) : Boolean
1690: Function IsValidTime( const AHour, AMinute, ASecond, AMilliSecond : Word) : Boolean
1691: Function IsValidISBN( const ISBN : AnsiString) : Boolean
1692: Function IsVariantManagerSet: Boolean; //deprecated;
1693: Function IsVirtualPcGuest : Boolean;
1694: Function IsVmWareGuest : Boolean;
1695: Function IsVCLControl(Handle: HWnd): Boolean;
1696: Function IsWhiteString( const AStr : String) : Boolean
1697: Function IsWindowResponding( Wnd : HWND; Timeout : Integer) : Boolean
1698: Function IsWoW64: boolean;
1699: Function IsWin64: boolean;
1700: Function IsWow64String(var s: string): Boolean;
1701: Function IsWin64String(var s: string): Boolean;
1702: Function IsWindowsVista: boolean;
1703: Function isPowerof2(num: int64): boolean;
1704: Function powerOf2(exponent: integer): int64;
1705: function IsZero(const A: Extended; Epsilon: Extended): Boolean //overload;
1706: function IsZerol(const A: Double; Epsilon: Double): Boolean //overload;
1707: function IsZero2(const A: Single; Epsilon: Single): Boolean //overload;
1708: Function ItemAtPos( Pos : TPoint; IgnoreTabHeight : Boolean) : Integer
1709: function ITEMATPOS(POS:TPOINT; EXISTING:BOOLEAN):INTEGER
1710: Function ItemRect( Index : Integer) : TRect
1711: function ITEMRECT(INDEX:INTEGER):TRECT
1712: Function ItemWidth( Index : Integer) : Integer
1713: Function JavahashCode(val: string): Integer;
1714: Function JosephusG(n,k: integer; var graphout: string): integer;
1715: Function JulianDateToDateTime( const AValue : Double): TDateTime
1716: Function JvMessageBox( const Text, Caption : string; Flags : DWORD) : Integer;
1717: Function JvMessageBox1( const Text : string; Flags : DWORD) : Integer;
1718: Function KeepAlive : Boolean
1719: Function KeysToShiftState(Keys: Word): TShiftState;
1720: Function KeyDataToShiftState(KeyData: Longint): TShiftState;
1721: \textbf{Function} \hspace{0.1cm} \texttt{KeyboardStateToShiftState2} (\textbf{const}^{\top} \texttt{KeyboardState}: \hspace{0.1cm} \texttt{TKeyboardState}): \hspace{0.1cm} \texttt{TShiftState} i \\ \texttt{TShiftState} i 
1722: Function KeyboardStateToShiftState: TShiftState; overload;
1723: Function Languages : TLanguages
1724: Function Last : TClass
1725: Function Last : TComponent
1726: Function Last : TObject
1727: Function LastDelimiter( Delimiters, S : string) : Integer
1728: function LastDelimiter(const Delimiters: string; const S: string): Integer)
1729: Function LastPos( const ASubstr : string; const AStr : string) : Integer
1730: Function Latitude 2WGS84 (lat: double): double;
1731: Function LCM(m,n:longint):longint;
1732: Function LCMJ( const X, Y : Cardinal) : Cardinal
1733: Function Ldexp( const X : Extended; const P : Integer) : Extended
1734: Function LeftStr( const AText : AnsiString; const ACount : Integer) : AnsiString; 1735: Function LeftStr( const AText : WideString; const ACount : Integer) : WideString; 1736: function Length: Integer;
1737: Procedure LetFileList(FileList: TStringlist; apath: string);
1738: function lengthmp3(mp3path: string):integer;
1739: Function LineInRect( const P1, P2 : TPoint; const Rect : TRect) : Boolean; 1740: Function LineInRect1( const P1, P2 : TFloatPoint; const Rect : TFloatRect) : Boolean;
1741: Function LineSegmentIntersection(const L1P1 : TFloatPoint; L1P2 : TFloatPoint; const L2P1 : TFloatPoint;
          L2P2 : TFloatPoint; var P : TFloatPoint) : Boolean
1742: function LineStart(Buffer, BufPos: PChar): PChar
1743: function LineStart(Buffer, BufPos: PChar): PChar)
1744: function ListSeparator: char;
1745: function Ln(x: Extended): Extended;
1746: Function LnXP1( const X : Extended) : Extended 1747: function Lo(vdat: word): byte;
1748: Function LoadCursor(hInstance: HINST; lpCursorName: PChar): HCURSOR
1749: Function LoadedModulesList( const List: TStrings; ProcessID: DWORD; HandlesOnly: Boolean): Boolean
```

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1750: Function LoadFileAsString( const FileName : string) : string
1751: Function LoadFromFile( const FileName : string) : TBitmapLoader
1752: Function LoadLibraryEx(LibName: PChar; hFile: Longint; Flags: Longint): Longint; stdcall;
1753: Function LoadPackage(const Name: string): HMODULE
1754: Function LoadResource( ModuleHandle : HMODULE; ResHandle : TResourceHandle) : HGLOBAL 1755: Function LoadStr( Ident : Integer) : string
1756: Function LoadString(Instance: Longint; IDent: Integer; Buffer: PChar; Size: Integer): Integer; stdcall; 1757: Function LoadWideStr( Ident: Integer): WideString
1758: Function LOCATE(const KEYFIELDS: String;const KEYVALUES:VARIANT;OPTIONS: TLOCATEOPTIONS) : BOOLEAN 1759: Function LockRegion( libOffset : Longint; cb : Largeint; dwLockType : Longint) : HResult 1760: Function LockServer( fLock : LongBool) : HResult
1761: Function LockVolume( const Volume: string; var Handle: THandle): Boolean
1762: Function Log( const X : Extended) : Extended
1763: Function Log10( const X : Extended) : Extended
1764: Function Log2( const X : Extended) : Extended
1765: function LogBase10(X: Float): Float;
1766: Function LogBase2(X: Float): Float;
1767: Function LogBaseN(Base, X: Float): Float;
1768: Function LogN( const Base, X : Extended) : Extended
1769: Function LogOffOS : Boolean
1770: Function LoginDialog( const ADatabaseName : string; var AUserName, APassword : string) : Boolean
1771: Function LoginDialogEx(const ADatabaseName:string;var AUserName,APassword:string;NameReadOnly:Bool):Bool;
1772: Function LongDateFormat: string; 1773: function LongTimeFormat: string;
1774: Function LongWordToFourChar( ACardinal : LongWord) : string
1775: Function LOOKUP(const KEYFIELDS: String; const KEYVALUES: VARIANT; const RESULTFIELDS: String): VARIANT
1776: Function LookupName( const name : string) : TInAddr
1777: Function LookupService( const service : string) : Integer
1778: function Low: Int64;
1779: Function LowerCase( S : string) : string
1780: Function Lowercase(s : AnyString) : AnyString;
1781: Function LRot( const Value : Byte; const Count : TBitRange) : Byte; 1782: Function LRot1( const Value : Word; const Count : TBitRange) : Word;
1783: Function LRot2 ( const Value : Integer; const Count : TBitRange) : Integer;
1784: function MainInstance: longword
1785: function MainThreadID: longword
1786: Function Map(x, in_min, in_max, out_min, out_max: integer): integer; //arduino
1787: Function mapMax(ax, in_min, in_max, out_min, out_max: integer): integer; 1788: Function MakeCanonicalIPv4Address( const AAddr : string) : string 1789: Function MakeCanonicalIPv6Address( const AAddr : string) : string
1790: Function MakeDIB( out Bitmap : PBitmapInfo) : Integer
1791: Function MakeDWordIntoIPv4Address( const ADWord : Cardinal) : string
1792: function MakeLong(A, B: Word): Longint)
1793: Function MakeTempFilename( const APath : String) : string
1794: Function MakeValidFileName(const Str:string): string
1795: Function MakeValueMap( Enumeration : string; ToCds : Boolean) : string
1796: function MakeWord(A, B: Byte): Word)
1797: Function MakeYear4Digit( Year, Pivot : Integer) : Integer
1798: Function MapDateTime(const DateFormatType:string; DateFormat:string; Value:string; ToCds:Boolean): string
1799: Function MapValues (Mapping: string; Value: string): string
1800: Function MaskDoFormatText( const EditMask: string; const Value: string; Blank: Char): string
1801: Function MaskGetCharType( const EditMask: string; MaskOffset: Integer): TMaskCharType
1802: Function MaskGetCurrentDirectives( const EditMask: string; MaskOffset: Integer): TMaskDirectives
1803: Function MaskGetFldSeparator( const EditMask : string) : Integer
1804: Function MaskGetMaskBlank( const EditMask : string) : Char
1805: Function MaskGetMaskSave( const EditMask : string) : Boolean
1806: Function MaskIntlLiteralToChar( IChar: Char): Char
1807: Function MaskOffsetToOffset( const EditMask: String; MaskOffset: Integer): Integer
1808: Function MaskOffsetToWideOffset( const EditMask: String; MaskOffset: Integer): Integer
1809: Function MaskString( Mask, Value : String) : String
1810: Function Match( const sString : string) : ThiRegularExpressionMatchResul
1811: Function Match1( const sString : string; iStart : integer) : TniRegularExpressionMatchResult
1812: Function Matches( const Filename : string) : Boolean
1813: Function MatchesMask( const Filename, Mask : string) : Boolean
1814: Function MatchStr( const AText : string; const AValues : array of string) : Boolean 1815: Function MatchText( const AText : string; const AValues : array of string) : Boolean
1816: Function Max( AValueOne, AValueTwo : Integer) : Integer
1817: function Max(const x,y: Integer): Integer;
1818: Function Max1( const B1, B2 : Shortint) : Shortint;
1819: Function Max2( const B1, B2 : Smallint) : Smallint;
1820: Function Max3( const B1, B2 : Word) : Word;
1821: function Max3(const x,y,z: Integer): Integer;
1822: Function Max4( const B1, B2 : Integer) : Integer;
1823: Function Max5( const B1, B2 : Cardinal) : Cardinal;
1824: Function Max6( const B1, B2 : Int64) : Int64;
1825: Function Max64( const AValueOne, AValueTwo : Int64) : Int64
1826: Function MaxFloat( const X, Y : Float) : Float
1827: Function MaxFloatArray( const B : TDynFloatArray) : Float
1828: Function MaxFloatArrayIndex( const B : TDynFloatArray) : Integer
1829: function MaxIntValue(const Data: array of Integer):Integer)
1830: Function MaxJ( const B1, B2 : Byte) : Byte;
1831: function MaxPath: string;
1832: function MaxValue(const Data: array of Double): Double)
1833: Function MaxCalc( const Formula : string) : Extended //math expression parser
1834: Procedure MaxCalcF( const Formula : string);
1835: function MD5(const fileName: string): string;
1836: Function Mean( const Data : array of Double) : Extended 1837: Function Median( const X : TDynFloatArray) : Float 1838: Function Memory : Pointer
```

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1839: Function MemoryPos( const ASubStr : string; MemBuff : PChar; MemorySize : Integer) : Integer
1840: Function MessageBox(hndl: cardinal; text, caption: string; utype: cardinal): Integer;
1841: function MESSAGEBOX(TEXT, CAPTION: PCHAR; FLAGS: WORD):INTEGER
1842: \textbf{Function} \ \texttt{MessageDlg(const} \ \texttt{Msg:string;DlgType:TMsgDlgType;Buttons:TMsgDlgButtons;HelpCtx:Longint)} : \ \texttt{Integer;DlgType:MsgDlgType;Buttons:TMsgDlgButtons;HelpCtx:Longint)} : \ \texttt{Integer;DlgType:MsgDlgType;Buttons:TMsgDlgButtons;HelpCtx:Longint)} : \ \texttt{Integer:MsgDlgType;Buttons:TMsgDlgType;Buttons:HelpCtx:Longint)} : \ \texttt{Integer:MsgDlgType;Buttons:TMsgDlgType;Buttons:HelpCtx:Longint)} : \ \texttt{Integer:MsgDlgType;Buttons:HelpCtx:Longint)} : \ \texttt{Integer:MsgDlgType:MsgDlgType;Buttons:HelpCtx:Longint)} : \ \texttt{Integer:MsgDlgType:MsgDlgType;Buttons:HelpCtx:Longint)} : \ \texttt{Integer:MsgDlgType:MsgDlgType;Buttons:HelpCtx:Longint)} : \ \texttt{Integer:MsgDlgType:MsgDlgType} : \ \texttt{Integer:MsgDlgType} : \ \texttt{Integer:Ms
1843: Function MessageDlg1(const
           Msg:string;DlgTvpe:TMsgDlgTvpe;Buttons:TMsgDlgButtons;HelpCtx:Longint;DefaultButton:TMsgDlgBtn): Integer;
1844: Function MessageDlgPos(const Msg:string;DlgType:TMsgDlgType;Buttons:TMsgDlgButtons;HelpCtx:Longint;X,
           Y:Integer):Integer;
1845: Function MessageDlgPos1( const Msg : string; DlgType : TMsgDlgType; Buttons : TMsgDlgButtons; HelpCtx :
Longint; X, Y : Integer; DefaultButton : TMsgDlgBtn) : Integer;

1846: Function MessageDlgPosHelp( const Msg : string; DlgType : TMsgDlgType; Buttons : TMsgDlgButtons; HelpCtx :
          Longint; X, Y : Integer; const HelpFileName : string) : Integer;
1847: Function MessageDlgPosHelp1( const Msg : string; DlgType : TMsgDlgType; Buttons : TMsgDlgButtons; HelpCtx : Longint; X, Y : Integer; const HelpFileName : string; DefaultButton : TMsgDlgBtn) : Integer;

1848: Function MibToId( Mib : string) : string

1849: Function MidStr( const AText : AnsiString; const AStart, ACount : Integer) : AnsiString;

1850: Function MidStr( const AText : WideString; const AStart, ACount : Integer) : WideString;

1851: Tunction MidStr( const AText : WideString; const AStart, ACount : Integer) : WideString;
1851: Function microsecondsToCentimeters(mseconds: longint): longint; //340m/s speed of sound
1852: Function Micros(const Timer:THPTimer; const TimerRunning:Boolean):Int64//TypeS('THPTimer', 'Int64
1853: Function MIDIOut( DeviceID : Cardinal) : IJcIMIDIOut
1854: Procedure GetMidiOutputs( const List : TStrings)
1855: Function MIDISingleNoteTuningData( Key : TMIDINote; Frequency : Single) : TSingleNoteTuningData
1856: Function MIDINoteToStr( Note: TMIDINote): string
1857: Function WinMidiOut( DeviceID: Cardinal): IJclWinMidiOut
1858: Procedure GetMidiOutputs( const List : TStrings)
1859: Procedure MidiOutCheck( Code : MMResult)
1860: Procedure MidiInCheck( Code : MMResult)
1861: Function MilliSecondOf( const AValue : TDateTime) : Word
1862: Function MilliSecondOfTheDay( const AValue : TDateTime) : LongWord
1863: Function MilliSecondOfTheHour( const AValue : TDateTime) : LongWord
1864: Function MilliSecondOfTheMinute( const AValue : TDateTime) : LongWord
1865 \colon \textbf{Function} \ \texttt{MilliSecondOfTheMonth} ( \ \textbf{const} \ \texttt{AValue} \ : \ \texttt{TDateTime}) \ : \ \texttt{LongWord}
1866: Function MilliSecondOfTheSecond( const AValue : TDateTime) : Word
1867: Function MilliSecondOfTheWeek( const AValue : TDateTime) : LongWord 1868: Function MilliSecondOfTheYear( const AValue : TDateTime) : Int64
1869: Function MilliSecondsBetween( const ANow, AThen : TDateTime) : Int64
1870: Function MilliSecondSpan( const ANow, AThen : TDateTime) : Double
1871: Function Micros( const Timer : THPTimer; const TimerRunning : Boolean) : Int64
1872: Function millis: int64;
1873: Function Min( AValueOne, AValueTwo : Integer) : Integer
1874: Function Min1( const B1, B2 : Shortint) : Shortint; 1875: Function Min2( const B1, B2 : Smallint) : Smallint;
1876: Function Min3( const B1, B2 : Word) : Word;
1877: Function Min4( const B1, B2 : Integer) : Integer;
1878: Function Min5( const B1, B2 : Cardinal) : Cardinal;
1879: Function Min6( const B1, B2 : Int64) : Int64;
1880: Function Min64( const AValueOne, AValueTwo : Int64) : Int64
1881: Function MinClientRect : TRect;
1882: Function MinClientRect1( IncludeScroller : Boolean) : TRect;
1883: Function MinClientRect2 ( TabCount : Integer; IncludeScroller : Boolean) : TRect; 1884: Function MinFloat( const\ X,\ Y : Float) : Float
1885: Function MinFloatArray( const B : TDynFloatArray) : Float
1886: Function MinFloatArrayIndex( const B : TDynFloatArray) : Integer
1887: Function MinimizeName( const Filename: string Canvas: TCanvas; MaxLen: Integer): string
1888: Function MinimizeName( const Filename: TFileName; Canvas: TCanvas; MaxLen: Integer): TFileName
1889: function MinimizeName(const Filename: String; Canvas: TCanvas: MaxLen: Integer): TFileName
1890: Function MinIntValue(const Data: array of Integer): Integer
1891: function MinIntValue(const Data: array of Integer):Integer)
1892: Function MinJ( const B1, B2 : Byte) : Byte;
1893: Function MinuteOf( const AValue : TDateTime) : Word
1894: Function MinuteOfTheDay( const AValue : TDateTime) : Word
1895: Function MinuteOfTheHour( const AValue : TDateTime) : Word
1896: Function MinuteOfTheMonth( const AValue : TDateTime) : Word
1897: Function MinuteOfTheWeek( const AValue : TDateTime) : Word 1898: Function MinuteOfTheYear( const AValue : TDateTime) : LongWord
1899: Function MinutesBetween( const ANow, AThen : TDateTime) :
1900: Function MinuteSpan( const ANow, AThen : TDateTime) : Double
1901: Function MinValue( const Data : array of Double) : Double
1902: function MinValue(const Data: array of Double): Double)
1903: Function MixerLeftRightToArray( Left, Right : Cardinal) : TDynCardinalArray
1904: Function MMCheck( const MciError : MCIERROR; const Msg : string) : MCIERROR
1905: Function ModFloat( const X, Y : Float) : Float
1906: Function ModifiedJulianDateToDateTime( const AValue : Double) : TDateTime
1907: Function Modify( const Key : string; Value : Integer) : Boolean
1908: Function ModuleCacheID : Cardinal
1909: Function ModuleFromAddr( const Addr : Pointer) : HMODULE
1910: Function MonitorFromPoint( const Point : TPoint; MonitorDefault : TMonitorDefaultTo) : TMonitor 1911: Function MonitorFromRect( const Rect : TRect; MonitorDefault : TMonitorDefaultTo) : TMonitor
1912: Function MonitorFromWindow( const Handle: THandle; MonitorDefault: TMonitorDefaultTo): TMonitor
1913: Function MonthOf( const AValue : TDateTime) : Word
1914: Function MonthOfTheYear( const AValue : TDateTime) : Word
1915: Function MonthsBetween( const ANow, AThen: TDateTime): Integer
1916: Function MonthSpan( const ANow, AThen : TDateTime) : Double
1917: Function MonthStr( DateTime : TDateTime) : string
1918: Function MouseCoord( X, Y : Integer) : TGridCoord
1919: Function MOVEBY( DISTANCE : INTEGER) : INTEGER
1920: Function MoveFile( Source, Dest : string: Flags : FILEOP_FLAGS) : Boolean
1921: Function MoveNext : Boolean
1922: Function MSecsToTimeStamp( MSecs : Comp) : TTimeStamp
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1923: function MSecsToTimeStamp(MSecs: Comp): TTimeStamp)
1924: Function Name : string
1925: Function NetPresentValue(const Rate:Extended;const CashFlows:array of
       Double; PaymentTime: TPaymentTime): Extended
1926: function NetworkVolume(DriveChar: Char): string
1927: Function NEWBOTTOMLINE : INTEGER
1928: Function NewCompareNode( Field : TField; Operator : TCANOperator; const Value : Variant) : PExprNode
1929: Function NEWITEM( const ACAPTION: String; ASHORTCUT: TSHORTCUT; ACHECKED, AENABLED: BOOLEAN; AONCLICK:
       TNOTIFYEVENT; HCTX : WORD; const ANAME : String) : TMENUITEM
1930: Function NEWLINE : TMENUITEM
1931: Function NEWMENU( OWNER : TCOMPONENT; const ANAME : STRING; ITEMS : array of TMenuItem) : TMAINMENU
1932: Function NewNode(Kind: TExprNodeKind; Operator: TCANOperator; const Data: Variant; Left,
      Right:PExprNode):PExprNode
1933: Function Newpopupmenu(owner:TCOMPONENT;const ANAME:String; ALIGNMENT:TPOPUPALIGNMENT;AUTOPOPUP:BOOLEAN;
       const ITEMS : array of TCMENUITEM) : TPOPUPMENU
1934: Function NewState( eType : TniRegularExpressionStateType) : TniRegularExpressionState
1935: Function NEWSUBMENU(const ACAPT:String;HCTX:WORD;const ANAME:String;ITEMS:array of
       TMenuItem;AENABLED:BOOL): TMENUITEM
1936: Function NEWTOPLINE : INTEGER
1937: Function Next : TIdAuthWhatsNext
1938: Function NextCharIndex( S : String; Index : Integer) : Integer
1939: Function NextRecordSet : TCustomSQLDataSet
1940: Function NextRecordset( var RecordsAffected : Integer) :
                                                                          _Recordset
1941: Function NextSQLToken1( var p : WideChar; out Token : WideString; CurSection : TSQLToken) : TSQLToken;
1942: Function NextToken : Char
1943: Function nextToken : WideString
1944: function NextToken:Char
1945: Function Norm( const Data : array of Double) : Extended
1946: Function NormalizeAngle( const Angle : Extended) : Extended
1947: Function NormalizeBcd( const InBcd: TBcd; var OutBcd: TBcd; const Prec, Scale: Word): Boolean
1948: Function NormalizeRect( const Rect : TRect) : TRect
1949: function NormalizeRect(const Rect: TRect): TRect;
1950: Function Now : TDateTime
1951: function Now2: tDateTime
1952: Function NumProcessThreads : integer
1953: Function NumThreadCount : integer
1954: Function NthDayOfWeek( const AValue : TDateTime) : Word
1955: Function NtProductType : TNtProductType
1956: Function NtProductTypeString : string
1957: function Null: Variant;
1958: Function NullPoint : TPoint
1959: Function NullRect: TRect
1960: Function Null2Blank(aString:String):String;
1961: Function NumberOfPeriods( const Rate : Extended; Payment : Extended; const PresentValue, FutureValue :
       {\tt Extended: PaymentTime : TPaymentTime) : Extended}
1962: Function NumIP : integer
1963: function Odd(x: Longint): boolean;
1964: Function OffsetFromUTC : TDateTime
1965: Function OffsetPoint( const P, Offset : TPoint) : TPoint
1966: Function OffsetRect( var Rect: TRect; DX : Integer; DY : Integer) : Boolean
1967: function OffsetRect(var Rect: TRect; DX:Integer; DY:Integer): Boolean)
1968: Function OffsetToMaskOffset( const EditMask: string; Offset: Integer): Integer
1969: Function OkToChangeFieldAlignment( AField: TField; Alignment: TAlignment): Boolean
1970: Function OldBCDToCurr( const BCD: TBcd; var Curr: Currency): Boolean
1971: Function OldCurrToBCD(const Curr:Currency; var BCD:TBcd; Precision:Integer; Decimals:Integer): Boolean
1972: function OpenBit:Integer
1973: Function OpenDatabase : TDatabase
1974: Function OpenDatabase( const DatabaseName : string) : TDatabase
1975: Function OpenGLColorToWinColor( const Red, Green, Blue : Float) : TColor
1976: Function OpenObject( Value : PChar) : Boolean;
1977: Function OpenObject( Value : string) : Boolean;
1978: Function OpenSession( const SessionName : string) : TSession
1979: Function OpenVolume( const Drive : Char) : THandle
1980: function OrdFourByteToCardinal(AByte1, AByte2, AByte3, AByte4 : Byte): Cardinal 1981: Function OrdFourByteToLongWord( AByte1, AByte2, AByte3, AByte4 : Byte) : LongWord
1982: Function OrdToBinary( const Value : Byte) : string;
1983: Function OrdToBinary1( const Value : Shortint) : string;
1984: Function OrdToBinary2( const Value : Smallint) : string;
1985: Function OrdToBinary3( const Value : Word) : string
1986: Function OrdToBinary4( const Value : Integer) : string;
1987: Function OrdToBinary5( const Value : Cardinal) : string;
1988: Function OrdToBinary6( const Value : Int64) : string;
1989: Function OSCheck( RetVal : Boolean) : Boolean
1990: Function OSFileTypeToString( const OSFileType : DWORD; const OSFileSubType : DWORD) : string
1991: Function OSIdentToString( const OSIdent : DWORD) : string
1992: Function Output: Text)
1993: Function Overlay( ImageIndex : Integer; Overlay : TOverlay) : Boolean
1994: Function Owner : TCustomListView
1995: function Owner : TPersistent
1996: Function PadInputLiterals( const EditMask: String; const Value: string; Blank: Char): string
1997: Function PadL( pStr : String; pLth : integer) : String
1998: Function Padl(s : AnyString; I : longInt) : AnyString;
1999: Function PadLCh( pStr: String; pLth: integer; pChr: char): String
2000: Function PadR( pStr: String; pLth: integer): String
2001: Function PadR(s: AnyString; I: longInt): AnyString;
2002: Function PadRCh( pStr : String; pLth : integer; pChr : char) : String
2003: Function PadString( const AString: String; const ALen: Integer; const AChar: Char): String 2004: Function Padz(s: AnyString;I: longInt): AnyString; 2005: Function PaethPredictor(a,b,c:Byte): Byte
```

```
2006: Function PARAMBYNAME( const VALUE : String) : TPARAM
2007: Function ParamByName( const Value : WideString) : TParameter
2008: Function ParamCount: Integer
2009: Function ParamsEncode( const ASrc : string) : string
2010: function ParamStr(Index: Integer): string)
2011: Function ParseDate( const DateStr : string) : TDateTime
2012: Function PARSESQL( SQL : String; DOCREATE : BOOLEAN) : String
2013: Function ParseSQL( SQL : WideString; DoCreate : Boolean) : WideString
2014: Function PathAddExtension( const Path, Extension: string): string
2015: Function PathAddSeparator( const Path: string): string
2016: Function PathAppend( const Path, Append: string): string
2017: Function PathBuildRoot( const Drive : Byte) : string
2018: Function PathCanonicalize( const Path : string) : string
2019: Function PathCommonPrefix( const Path1, Path2 : string) : Integer
2020: Function PathCompactPath(const DC:HDC;const Path:string;const Width:Integer;CmpFmt:TCompactPath):string;
2021: Function PathCompactPath1(const Canv:TCanvas;const Path:string;const Width:Int;CmpFmt:TCompactPath):string;
2022: Function PathEncode( const ASrc : string) : string
2023: Function PathExtractFileDirFixed( const S : AnsiString) : AnsiString
2024: Function PathExtractFileNameNoExt( const Path : string) : string
2025: Function PathExtractPathDepth( const Path: string; Depth: Integer): string
2026: Function PathGetDepth( const Path: string): Integer
2027: Function PathGetLongName( const Path : string) : string
2028: Function PathGetLongName2( Path : string) : string
2029: Function PathGetShortName(const Path:string): string
2030: Function PathIsAbsolute(const Path:string): Boolean
2031: Function PathIsChild( const Path, Base : AnsiString) : Boolean
2032: Function PathIsDiskDevice( const Path : string) : Boolean
2033: Function PathIsUNC( const Path : string) : Boolean 2034: Function PathRemoveExtension( const Path : string) : string 2035: Function PathRemoveSeparator( const Path : string) : string
2036: Function Payment(Rate:Extended; NPeriods:Int; const PresentVal,
       FutureVal: Extended; PaymentTime: TPaymentTime): Extended
2037: Function Peek : Pointer 2038: Function Peek : TObject
2039: function PERFORM(MSG:CARDINAL;WPARAM,LPARAM:LONGINT):LONGINT
2040: Function PeriodPayment(const Rate:Extended;Period,NPeriods:Integer; const PresentValue, FutureValue:
Extended; PaymentTime : TPaymentTime) : Extended
2041: function Permutation(npr, k: integer): extended;
2042: function PermutationInt(npr, k: integer): Int64; 2043: Function PermutationJ( N, R : Cardinal) : Float
2044: Function Pi : Extended;
2045: Function PiE : Extended;
2046: Function PixelsToDialogsX( const Pixels : Word) : Word
2047: Function PixelsToDialogsY( const Pixels : Word) : Word
2048: Function PlaySound(s: pchar; flag,syncflag: integer): boolean; 2049: Function Point( X, Y: Integer): TPoint 2050: function Point(X, Y: Integer): TPoint)
2051: Function PointAssign( const X, Y : Integer) : TPoint
2052: Function PointDist( const P1, P2 : TPoint) : Double;
2053: function PointDist(const P1,P2: TFloatPoint): Double;
2054: Function PointDist1(const P1, P2: TFloatPoint): Double;
2055: function PointDist2(const P1, P2: TPoint): Double;
2056: Function PointEqual( const P1, P2 : TPoint) : Boolean
2057: Function PointIsNull( const P : TPoint) : Boolean
2058: Function PointToLineSegmentDist( const Point, LineP1, LineP2: TFloatPoint): Double 2059: Function Poly( const X: Extended; const Coefficients: array of Double): Extended
2060: Function PortTCPIsOpen(dwPort : Word; ipAddressStr: String): boolean;
2061: Function IsTCPPortOpen(dwPort : Word; ipAddressStr: String): boolean;
2062: Function Pop : Pointer 2063: Function Pop : TObject
2064: Function PopnStdDev( const Data : array of Double) : Extended
2065: Function PopnVariance( const Data : array of Double) : Extended
2066: Function PopulationVariance( const X : TDynFloatArray) : Float
2067: function Pos(SubStr, S: AnyString): Longint;
2068: Function PosEqual( const Rect : TRect) : Boolean
2069: Function PosEx( const SubStr, S : string; Offset : Integer) : Integer
2070: Function PosInSmallIntArray( const ASearchInt : SmallInt; AArray : array of SmallInt) : Integer
2071: Function PosInStrArray(const SearchStr:string;Contents:array of string;const CaseSensitive:Boolean):Integer
2072: Function Post1( AURL : string; const ASource : TStrings) : string; 2073: Function Post2( AURL : string; const ASource : TStream) : string;
2074: Function Post3( AURL : string; const ASource : TIdMultiPartFormDataStream) : string;
2075: Function PostData( const UserData: WideString; const CheckSum: DWORD): Boolean 2076: Function PostData( const UserData: WideString; const CheckSum: integer): Boolean
2077: function PostMessage(hWnd: HWND; Msg: longword; wParam: longint; lParam: longint): Boolean;
2078: Function Power( const Base, Exponent : Extended) : Extended
2079: Function PowerBig(aval, n:integer): string;
2080: Function PowerIntJ( const X : Float; N : Integer) : Float; 2081: Function PowerJ( const Base, Exponent : Float) : Float;
2082: Function PowerOffOS: Boolean
2083: Function PreformatDateString( Ps : string) : string
2084: Function PresentValue(const Rate:Extend; NPeriods:Int;const Payment,
       FutureVal:Extend; PaymentTime: TPaymentTime):Extended
2085: Function PrimeFactors( N : Cardinal) : TDynCardinalArray
2086: Function Printer : TPrinter
2087: Function ProcessPath2( const ABasePath:String; const APath: String; const APathDelim:string): string
2088: Function ProcessResponse: TIdHTTPWhatsNext 2089: Function ProduceContent: string
2090: Function ProduceContentFromStream( Stream : TStream) : string
2091: Function ProduceContentFromString( const S : string) : string
```

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2092: Function ProgIDToClassID(const ProgID: string): TGUID;
2093: Function PromptDataLinkFile( ParentHandle : THandle; InitialFile : WideString) : WideString
2094: Function PromptDataEnthRifte (Parenthandle: Handle; InitialFire: WideString): WideString
2094: Function PromptDataSource(Parenthandle: Thandle; InitialString: WideString): WideString
2095: Function PromptForFileName(var AFileName: string; const AFilter: string; const ADefaultExt: string;
const ATitle: string; const AInitialDir: string; SaveDialog: Boolean): Boolean
2096: function PromptForFileName(var AFileName: string; const AFilter: string; const ADefaultExt: string; const
ATitle: string; const AInitialDir: string; SaveDialog: Boolean): Boolean)
2097: Function PSScriptNeedFile(Sender:TObject/const OrginFileName:String/var FileName,Output:String):Boolean
2098: Function PtInRect( const Rect : TRect; const P : TPoint) : Boolean
2099: function PtInRect(const Rect: TRect; const P: TPoint): Boolean)
2100: Function Push( AItem : Pointer) : Pointer
2101: Function Push( AObject : TObject) : TObject
2102: Function Putl( AURL : string; const ASource : TStream) : string; 2103: Function Pythagoras( const X, Y : Extended) : Extended
2104: Function queryDLLInterface( var queryList : TStringList) : TStringList
2105: Function queryDLLInterfaceTwo( var queryList : TStringList) : TStringList
2106: Function QueryInterface(const IID: TGUID; out Obj): HResult, CdStdCall
2107: Function queryPerformanceCounter2(mse: int64): int64;
2108: //Function QueryPerformanceCounter(var lpPerformanceCount: Int64): LongBool; stdcall; 2109: //Function QueryPerformanceFrequency(mse: int64): boolean;
2110: Function QueryPerformanceCounter(var lcount: Int64): Boolean; stdcall;
2111: Function QueryPerformanceFrequency(var lfreq: int64): boolean; stdcall;
2112: Procedure QueryPerformanceCounter1(var aC: Int64);
2113: Function QueryPerformanceFrequency1(var freq: int64): boolean;
2114: Function Quote( const ACommand : String) : SmallInt
2115: Function QuotedStr( S : string) : string
2116: Function RadToCycle(const Radians: Extended): Extended 2117: Function RadToDeg(const Radians: Extended): Extended 2118: Function RadToDeg(const Value: Extended): Extended;
2119: Function RadToDeg1( const Value : Double) : Double;
2120: Function RadToDeg2( const Value : Single) : Single;
2121: Function RadToGrad( const Radians : Extended) : Extended 2122: Function RadToGrad( const Value : Extended) : Extended;
2123: Function RadToGrad1( const Value : Double) : Double;
2124: Function RadToGrad2( const Value : Single) : Single;
2125: Function RandG( Mean, StdDev : Extended) : Extended
2126: function Random(const ARange: Integer): Integer;
2127: function random2(a: integer): double
2128: function RandomE: Extended;
2129: function RandomF: Extended;
2130: Function RandomFrom( const AValues : array of string) : string_i
2131: Function RandomRange( const AFrom, ATo : Integer) : Integer
2132: function randSeed: longint
2133: Function RawToDataColumn( ACol : Integer) : Integer
2134: Function Read : Char
2135: Function Read( pv : Pointer; cb : Longint; pcbRead : PLongint) : HResult
2136: function Read(Buffer:String;Count:LongInt):LongInt
2137: Function ReadBinaryStream( const Section, Name : string; Value : TStream) : Integer
2138: Function ReadBool( const Section, Ident : string; Default : Boolean) : Boolean
2139: Function ReadCardinal( const AConvert : boolean) : Cardinal
2140: Function ReadChar : Char
2141: Function ReadClient( var Buffer, Count : Integer) : Integer
2142: Function ReadDate( const Section, Name : string; Default : TDateTime) : TDateTime
2143: Function ReadDateTime( const Section, Name : string; Default : TDateTime) : TDateTime
2144: Function ReadFloat( const Section, Name : string; Default : Double) : Double
2145: Function ReadFromStack(const ARaiseExceptfDisconnected:Bool; ATimeout:Int; const ARaiseExceptonTimeout:
        Boolean): Integer
2146: Function ReadInteger( const AConvert : boolean) : Integer
2147: Function ReadInteger( const Section, Ident : string; Default : Longint) : Longint
2148: Function ReadLn : string
2149: Function ReadIn( ATerminator: string; const ATimeout: Integer; AMaxLineLength: Integer): string
2150: function Readln(question: string): string;
2151: Function ReadLnWait( AFailCount : Integer) : string
2152: Function ReadReg(Base: HKEY; KeyName, ValueName: string): string;
2153: Function ReadRegistry(Base: HKEY; KeyName, ValueName: string): string;
2154: Function ReadSmallInt( const AConvert : boolean) : SmallInt
2155: Function ReadString( const ABytes : Integer) : string
2156: Function ReadString( const Section, Ident, Default : string) : string
2157: Function ReadString( Count : Integer) : string
2158: Function ReadTime( const Section, Name : string; Default : TDateTime) : TDateTime
2159: Function ReadTimeStampCounter : Int64
2160: Function RebootOS : Boolean
2161: Function Receive( ATimeOut : Integer) : TReplyStatus 2162: Function ReceiveBuf( var Buf, Count : Integer) : Integer
2163: Function ReceiveLength : Integer
2164: Function ReceiveText : string
2165: Function ReceiveSerialData(var Data: TByteArray; DataSize: cardinal): cardinal
2166: Function ReceiveSerialText: string
2167: Function RecodeDate( const AValue : TDateTime; const AYear, AMonth, ADay : Word) : TDateTime
2168: Function RecodeDateTime(const AValue:TDateTime;const AYear,AMonth,ADay,AHr,AMin,ASec,
       AMilliSec:Word):TDateTime
2169: Function RecodeDay( const AValue : TDateTime; const ADay : Word) : TDateTime
2170: Function RecodeHour( const AValue : TDateTime; const AHour : Word) : TDateTime
2171: Function RecodeMilliSecond( const AValue : TDateTime; const AMilliSecond : Word) : TDateTime
2172: Function RecodeMinute( const AValue : TDateTime; const AMinute : Word) : TDateTime
2173: Function RecodeMonth( const AValue : TDateTime; const AMonth : Word) : TDateTime 2174: Function RecodeSecond( const AValue : TDateTime; const ASecond : Word) : TDateTime
2176: Function RecodeStand Const Avalue: TDateTime/ Const AHour, AMinute, ASecond, AMilliSecond: Word): TDateTime 2176: Function RecodeYear( const AValue: TDateTime; const AYear: Word): TDateTime
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2177: Function Reconcile( const Results : OleVariant) : Boolean
2179: Function Rect( Left, Top, Right, Bottom: Integer): TRect
2179: function Rect(ALeft: Integer; ATop: Integer; ARight: Integer; ABottom: Integer): TRect
2180: Function Rect2( const ATopLeft, ABottomRight : TPoint) : TRect;
2181: Function RectAssign( const Left, Top, Right, Bottom : Integer) : TRect
2182: Function RectAssignPoints( const TopLeft, BottomRight: TPoint): TRect 2183: Function RectBounds( const Left, Top, Width, Height: Integer): TRect
2184: Function RectCenter( const R : TRect)
                                                     : TPoint
2185: Function RectEqual( const R1, R2 : TRect) : Boolean
2186: Function RectHeight( const R : TRect) : Integer
2187: Function RectIncludesPoint( const R : TRect; const Pt : TPoint) : Boolean
2188: Function RectIncludesRect( const R1, R2 : TRect) : Boolean
2189: Function RectIntersection( const R1, R2 : TRect) : TRect
2190: Function RectIntersectRect( const R1, R2 : TRect) : Boolean
2191: Function RectIsEmpty( const R : TRect) : Boolean 2192: Function RectIsNull( const R : TRect) : Boolean
2193: Function RectIsSquare( const R : TRect) : Boolean
2194: Function RectIsValid( const R : TRect) : Boolean
2195: Function RectsAreValid(R: array of TRect): Boolean 2196: Function RectUnion(const R1, R2: TRect): TRect 2197: Function RectWidth(const R: TRect): Integer
2198: Function RedComponent( const Color32 : TColor32) : Integer
2199: Function Refresh : Boolean
2200: Function RefStringListCopy(aRefArray:TStringList):TStringList;
2201: Function RegisterConversionFamily( const ADescription : string) : TConvFamily
2202: Function RegisterConversionType( AConvTypeInfo: TConvTypeInfo: out AType: TConvType) : Boolean;
2203: Function RegisterConversionType(const AFam:TConvFamil;const ADescr:string;const AFact:Double):TConvType
2204: Function RegistryRead(keyHandle: Longint; keyPath, myField: String): string; 2205: Function ReleaseDC(hdwnd: HWND; hdc: HDC): integer;
2206: Function ReleaseHandle : HBITMAP
2207: Function ReleaseHandle : HENHMETAFILE
2208: Function ReleaseHandle : HICON
2209: Function ReleasePalette : HPALETTE
2210: Function RemainderFloat( const X, Y : Float) : Float 2211: Function Remove( AClass : TClass) : Integer
2212: Function Remove( AComponent : TComponent) : Integer
2213: Function Remove( AItem : Integer) : Integer 2214: Function Remove( AItem : Pointer) : Pointer
2215: Function Remove( Altem : TObject) : TObject
2216: Function Remove( AObject : TObject) : Integer
2217: Function RemoveBackslash( const PathName : string) : string
2218: Function RemoveDF( aString : String) : String //removes thousand separator 2219: Function RemoveDir( Dir : string) : Boolean
2220: function RemoveDir(const Dir: string): Boolean)
2221: Function RemoveDirectory(PathName: PChar): WordBool; stdcall;
2222: Function RemoveFileExt( const FileName : string) : string
2223: Function RemoveHeaderEntry( AHeader, AEntry : string) : string
2224: Function RenameFile(OldName, NewName: string): Boolean
2225: function RenameFile(const OldName: string; const NewName: string): Boolean)
2226: Function ReplaceStr( const AText, AFromText, AToText : string) : string
2227: Function ReplaceText( const AText, AFromText, AToText: string) : string
2228: Function Replicate(c : char; I : longInt) : String;
2229: Function Request : TWebRequest
2230: Function ResemblesText( const AText, AOther : string) : Boolean
2231: Function Reset : Boolean
2232: function Reset2(mypath: string):string;
2233: Function ResInstLoad(Instance:THandle; ResType:TResType; const Name: string; MaskColor: TColor): Boolean
2234: Function ResourceLoad( ResType : TResType; const Name : string; MaskColor : TColor) : Boolean
2235: Function Response : TWebResponse
2236: Function ResumeSupported: Boolean 2237: Function RETHINKHOTKEYS: BOOLEAN
2238: Function RETHINKLINES : BOOLEAN
2239: Function Retrieve( const MsgNum : Integer; AMsg : TIdMessage) : Boolean
2240: Function RetrieveCurrentDir : string
2241: Function RetrieveDeltas( const cdsArray : array of TClientDataset) : Variant 2242: Function RetrieveHeader( const MsgNum : Integer; AMsg : TIdMessage) : Boolean
2243: Function RetrieveMailBoxSize : integer
2244: Function RetrieveMsgSize( const MsgNum : Integer) : Integer
2245: Function RetrieveProviders( const cdsArray : array of TClientDataset) : Variant 2246: Function RetrieveRaw( const MsgNum : Integer; const Dest : TStrings) : boolean 2247: Function ReturnMIMEType( var MediaType, EncType : String) : Boolean
2248: Function ReverseBits( Value : Byte) : Byte;
2249: Function ReverseBits1( Value : Shortint) : Shortint;
2250: Function ReverseBits2( Value : Smallint) : Smallint;
2251: Function ReverseBits3( Value : Word) : Word;
2252: Function ReverseBits4( Value : Cardinal) : Cardinal; 2253: Function ReverseBits4( Value : Integer) : Integer;
2254: Function ReverseBits5( Value : Int64;
2255: Function ReverseBytes( Value : Word) : Word;
2256: Function ReverseBytes1( Value : Smallint): Smallint;
2257: Function ReverseBytes2( Value : Integer): Integer;
2258: Function ReverseBytes3( Value : Cardinal) : Cardinal;
2259: Function ReverseBytes4( Value : Int64) : Int64;
2260: Function ReverseString( const AText : string) : string
2261: Function ReverseDNSLookup(const IPAddrs:String;DNSServer:String;Timeout,Retries:Int;var
       HostName:String):Bool;
2262: Function Revert : HResult
2263: Function RGB(R,G,B: Byte): TColor;
2264: Function RGB2BGR( const Color : TColor) : TColor
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2265: Function RGB2TColor( R. G. B : Byte) : TColor
2266: Function RGBToWebColorName( RGB : Integer) : string
2267: Function RGBToWebColorStr( RGB : Integer)
2268: Function RgbToHtml( Value : TColor) : string
2269: Function HtmlToRgb(const Value: string): TColor;
2270: Function RightStr( const AStr : String; Len : Integer) : String
2271: Function RightStr( const AText : AnsiString; const ACount : Integer) : AnsiString;
2272: Function RightStr( const AText : WideString; const ACount : Integer) : WideString;
2273: Function ROL( AVal : LongWord; AShift : Byte) : LongWord 2274: Function ROR( AVal : LongWord; AShift : Byte) : LongWord
2276: Function RotatePoint( Point: TFloatPoint; const Center: TFloatPoint; const Angle: Float): TFloatPoint
2276: function RotatePoint(Point: TFloatPoint; const Center: TFloatPoint; const Angle: Double): TFloatPoint;
2277: Function Round(e : Extended) : Longint; 2278: Function Round64(e: extended): Int64;
2279: Function RoundAt( const Value : string; Position : SmallInt) : string
2280: Function RoundFrequency( const Frequency : Integer) : Integer
2281: Function RoundInt( Value : Integer; StepSize : Integer) : Integer
2282: Function RoundPoint( const X, Y : Double) : TPoint
2283: Function RoundRect( const ALeft, ATop, ARight, ABottom : Double) : TRect 2284: Function RowCount : Integer
2285: Function RowRequest( const Row : OleVariant; RequestType : Integer; var OwnerData : OleVariant): OleVariant
2286: Function RowRequest( Row : OleVariant; Requestlype : Integer; Var Owne.
2286: Function RowRequest( Row : OleVariant; Options : TFetchOptions) : OleVariant
2287: Function RPos( const ASub, AIn : String; AStart : Integer) : Integer
2288: Function RRot( const Value : Byte; const Count : TBitRange) : Byte;
2289: Function RRot1( const Value : Word; const Count : TBitRange) : Word;
2290: Function RRot2( const Value : Integer; const Count : TBitRange) : Integer;
2291: Function RunDLL32(const ModuleNa,FuncName,CmdLine:string;WaitForCompletion:Bool;CmdShow:Integer):Boolean
2292: Function RunningProcessesList( const List: TStrings; FullPath: Boolean): Boolean
2293: Function S_AddBackSlash( const ADirName : string) : string
2294: Function S_AllTrim( const cStr : string) : string
2295: Function S_AtRepl( const cAT, cStr, cRepl : string) : string
2296: Function S_Cut( const cStr : string; const iLen : integer) : string
2297: Function S_DecryptCRC32( const crc : string; StartKey, MultKey, AddKey : integer) : integer
2298: Function S_DirExists( const ADir : string) : Boolean
2299: Function S_Empty( const cStr : string) : boolean
2300: Function S_EncryptCRC32( const crc : LongWORD; StartKey, MultKey, AddKey : integer) : string
2301: Function S LargeFontsActive : Boolean
2302: Function S_LimitDigits( AValue : Extended; ANumDigits : Integer) : Extended
2303: Function S_Introduction Stream; string const cStr: string): string 2304: Function S_ReadNextTextLineFromStream( stream: TStream): string
2305: Function S_RepeatChar( const iLen : integer; const AChar : Char): String
2306: Function S_ReplFirst( const cAT, cStr, cRepl : string) : string
2307: Function S_RoundDecimal( AValue : Extended; APlaces : Integer) : Extended
2308: Function S_RTrim( const cStr : string) : string
2309: Function S_RTrimCopy( const cStr : string; iPos, iLen : integer) : string
2310: //Type TS_ShellExecuteCmd = (seCmdOpen,seCmdPrint,seCmdExplore);
2311: Function S_ShellExecute( aFilename : string; aParameters : string; aCommand : TS_ShellExecuteCmd) : string
2312: Function S_Space( const iLen : integer) : String
2313: Function S_StrBlanks( const cStr : string; const iLen : integer) : string
2314: Function S_StrBlanksCuttooLong( const cStr : string; const iLen : integer) : string 2315: Function S_StrCRC32( const Text : string) : LongWORD
2316: Function S_StrDecrypt96( const InString: string; StartKey, MultKey, AddKey: Integer): string
2317: Function S_StrEncrypt96( const InString: string; StartKey, MultKey, AddKey: Integer): string
2318: Function S_StringtoUTF_8( const AString : string) : string
2319: Function S_StrLBlanks( const cStr : string; const iLen : integer) : string 2320: function S_StrToReal(const cStr: string; var R: Double): Boolean
2321: Function S_TokenEnd( cBuffer : PChar; lEmptyToken : boolean) : boolean
2322: Function S_TokenNext( cBuffer : PChar; lEmptyToken : boolean) : string
2323: Function S_UTF_8ToString( const AString : string) : string
2324: Function S_WBox( const AText : string) : integer
2325: Function SameDate( const A, B : TDateTime) : Boolean
2326: function SameDate(const A, B: TDateTime): Boolean;
2327: Function SameDateTime( const A, B : TDateTime) : Boolean
2328: function SameDateTime(const A, B: TDateTime): Boolean;
2329: Function SameFileName(S1, S2: string): Boolean
2330: Function SameText(S1, S2: string): Boolean
2331: function SameText(const S1: string; const S2: string): Boolean)
2332: Function SameTime( const A, B : TDateTime) : Boolean
2333: function SameTime(const A, B: TDateTime): Boolean;
2334: function SameValue(const A, B: Extended; Epsilon: Extended): Boolean //overload;
2335: function SameValuel(const A, B: Double; Epsilon: Double): Boolean //overload;
2336: function SameValue2(const A, B: Single; Epsilon: Single): Boolean //overload;
2337: Function SampleVariance( const X : TDynFloatArray) : Float 2338: Function Sar( const Value : Shortint; const Count : TBitRange) : Shortint;
2339: Function Sar1( const Value : Smallint; const Count : TBitRange) : Smallint;
2340: Function Sar2( const Value : Integer; const Count : TBitRange) : Integer;
2341: Function SaveToFile( const AFileName : TFileName) : Boolean
2342: Function SaveAsExcelFile(AGrid: TStringGrid; ASheetName, AFileName: string; open: boolean): Boolean; 2343: Function SaveAsExcel(aGrid: TStringGrid; aSheetName, aFileName: string; openexcel: boolean): Boolean;
2344: Function ScanF(const aformat: String; const args: array of const): string; 2345: Function SCREENTOCLIENT(POINT:TPOINT):TPOINT
2346: Function SearchBuf(Buf:PChar; BufLen:Integer;SelStart,SelLength:Integer;SearchString:String;Options:
       TStringSearchOptions):PChar
2347: Function SearchBuf2(Buf: String; SelStart, SelLength: Integer; SearchString:
       String; Options: TStringSearchOptions): Integer;
2348: function SearchRecattr: integer;
2349: function SearchRecExcludeAttr: integer;
2350: Function SearchRecFileSize64( const SearchRec : TSearchRec) : Int64
2351: function SearchRecname: string;
```

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2352: function SearchRecsize: integer;
2353: function SearchRecTime: integer;
2354: Function Sec( const X : Extended) : Extended
2355: Function Secant( const X : Extended) : Extended
2356: Function SecH( const X : Extended) : Extended
2357: Function SecondOf( const AValue : TDateTime) : Word
2358: Function SecondOfTheDay( const AValue : TDateTime) : LongWord
2359: Function SecondOfTheHour( const AValue : TDateTime) : Word
2360: Function SecondOfTheMinute( const AValue : TDateTime) : Word
2361: Function SecondOfTheMonth( const AValue : TDateTime) : LongWord
2362: Function SecondOfTheWeek( const AValue : TDateTime) : LongWord
2363: Function SecondOfTheYear( const AValue : TDateTime) : LongWord
2364: Function SecondsBetween( const ANow, AThen : TDateTime) :
2365: Function SecondSpan(const ANow, AThen: TDateTime): Double 2366: Function SectionExists(const Section: string): Boolean
2367: Function Seek( const KeyValues : Variant; SeekOption : TSeekOption) : Boolean
2368: Function Seek( dlibMove : Longint; dwOrigin : Longint; out libNewPosition : Largeint) : HResult
2369: function Seek(Offset:LongInt;Origin:Word):LongInt
2370: Function SelectDirectory( var Directory: string; Options: TSelectDirOpts; HelpCtx:Longint): Boolean;
2371: Function SelectDirectory1( const Caption: string; const Root: WideString; var Directory: string;
Options: TSelectDirExtOpts; Parent: TWinControl): Boolean;
2372: Function SelectImage( var AFileName: string; const Extensions, Filter: string): Boolean
2373: Function SelectImage( var AFileName: string; const Extensions, Filter: string): Boolean
2373: function SendAppMessage(Msg: Cardinal; WParam, LParam: Longint): Longint
2374: Function SendBuf( var Buf, Count : Integer) : Integer
2375: Function SendCmd( const AOut : string; const AResponse : SmallInt) : SmallInt;
2376: Function SendCmd1( const AOut : string; const AResponse : array of SmallInt) : SmallInt;
2377: Function SendKey( AppName : string; Key : Char) : Boolean
2378: function SendMessage(hWnd: HWND; Msg: longword; wParam: longint; lParam: longint): Boolean;
2379: Function SendStream( AStream : TStream) : Boolean
2380: Function SendStreamThenDrop( AStream : TStream) : Boolean
2381: Function SendText( const S : string) : Integer
2382: Function SendSerialData(Data: TByteArray; DataSize: cardinal): cardinal 2383: Function SendSerialText(Data: String): cardinal
2384: Function Sent : Boolean
2385: Function ServiceSfilePath: string
2386: Function SetAlpha( const Color32 : TColor32; NewAlpha : Integer) : TColor32
2387: Function SetBit( const Value : Byte; const Bit : TBitRange) : Byte; 2388: Function SetBit1( const Value : Shortint; const Bit : TBitRange) : Shortint;
2389: Function SetBit2( const Value :
                                                 Smallint; const Bit
                                                                           : TBitRange)
                                                                                              Smallint;
2390: Function SetBit3( const Value : Word; const Bit : TBitRange) : Word;
2391: Function SetBit4( const Value : Cardinal; const Bit : TBitRange) : Cardinal;
2392: Function SetBit4( const Value : Integer; const Bit : TBitRange) : Integer; 2393: Function SetBit5( const Value : Int64; const Bit : TBitRange) : Int64;
2394: Function SetClipboard( NewClipboard : TClipboard) : TClipboard
2395: Function SetColorBlue( const Color: TColor; const Blue: Byte): TColor 2396: Function SetColorFlag( const Color: TColor; const Flag: Byte): TColor
2397: Function SetColorGreen( const Color: TColor; const Green: Byte): TColor
2398: Function SetColorRed( const Color: TColor; const Red: Byte): TColor
2399: Function SetCurrentDir( Dir : string) : Boolean
2400: function SetCurrentDir(const Dir: string): Boolean)
2401: Function SetCurrentDirectory(PathName: PChar): WordBool; stdcall;
2402: Function SetDirCreation( const DirName : string; const DateTime : TDateTime) : Boolean
2403: Function SetDirLastAccess( const DirName : string; const DateTime : TDateTime) : Boolean
2404: Function SetDirLastWrite( const DirName : string; const DateTime : TDateTime) : Boolean
2405: Function SetDisplayResolution( const XRes, YRes : DWORD) : Longint 2406: Function SetEndOfFile(Handle: Integer): LongBool; stdcall; 2407: Function SetEnvironmentVar( const Name, Value : string) : Boolean
2408: Function SetErrorProc( ErrorProc : TSocketErrorProc) : TSocketErrorProc
2409: Function SetFileCreation( const FileName : string; const DateTime : TDateTime) : Boolean
2410: Function SetFileLastAccess( const FileName : string; const DateTime : TDateTime) : Boolean
2411: Function SetFileLastWrite( const FileName : string; const DateTime : TDateTime) : Boolean
2412: Function SetFileTimeStamp( const FileName : string; TimeStamp : Integer) : Boolean
2413: function SETFOCUSEDCONTROL(CONTROL:TWINCONTROL):BOOLEAN
2414: Function SetLocalTime( Value : TDateTime) : boolean
2415: Function SetPrecisionTolerance( NewTolerance: Float): Float
2416: Function SetPrinter( NewPrinter : TPrinter): TPrinter
2417: Function SetRGBValue( const Red, Green, Blue : Byte) : TColor
2418: Function SetSequence( S, Localizar, Substituir : shortstring) : shortstring
2419: Function SetSize( libNewSize : Longint) : HResult
2420: Function SetUserObjectFullAccess( hUserObject : THandle) : Boolean 2421: Function Sgn( const X : Extended) : Integer
2422: function SHA1(const fileName: string): string;
2423: function SHA256(astr: string; amode: char): string) 2424: function SHA512(astr: string; amode: char): string)
2425: Function ShareMemoryManager : Boolean
2426: function ShellExecute(hWnd:HWND;Operation,FileN,Parameters,Dir:string;ShowCmd:Integer):integer;stdcall;
2427: function Shellexecute2(hwnd: HWND; const FileName: string):integer; stdcall;
2428: Function ShellExecute3(aFilename: string; aParameters: string; aCommand:TS_ShellExecuteCmd): string; 2429: Function SHORTCUT( KEY: WORD; SHIFT: TSHIFTSTATE): TSHORTCUT
2430: Function SHORTCUTTOTEXT( SHORTCUT : TSHORTCUT) : String
2431: function ShortDateFormat: string;
2432: Function ShortenString(const DC:HDC;const S:WideString;const Width:Int;const
       RTL:Bool; EllipsisWidth:Int):WideString
2433: function ShortTimeFormat: string;
2434: function SHOWMODAL: INTEGER
2435: function ShowWindow(C1: HWND; C2: integer): boolean;
2436: procedure ShowMemory //in 2437: function ShowMemory2: string;
                                       //in Dialog
2438: Function ShutDownOS : Boolean
```

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2439: Function Signe( const X, Y : Extended) : Extended 2440: Function Sign( const X : Extended) : Integer
2441: Function Sin(e : Extended) : Extended;
2442: Function sinc(const x : Double) : Double
2443: Function SinJ( X : Float) : Float
2444: Function Size( const AFileName : String) : Integer
2445: function SizeOf: Longint;
2446: Function SizeofResource( ModuleHandle : HMODULE; ResHandle : TResourceHandle) : Integer
2447: function SlashSep(const Path, S: String): String
2448: Function SLNDepreciation( const Cost, Salvage : Extended; Life : Integer) : Extended
2449: Function SleepEx( dwMilliseconds: DWORD; bAlertable: BOOL): DWORD
2450: Function SmallPoint(X, Y: Integer): TSmallPoint)
2451: Function Soundex( const AText : string; ALength : TSoundexLength) : string
2452: Function SoundexCompare( const AText, AOther: string; ALength: TSoundexLength): Integer 2453: Function SoundexInt( const AText: string; ALength: TSoundexIntLength): Integer
2454: Function SoundexProc( const AText, AOther : string) : Boolean
2455: Function SoundexSimilar( const AText, AOther : string; ALength : TSoundexLength) : Boolean
2456: Function SoundexWord( const AText : string) : Word
2457: Function SourcePos : Longint
2458: function SourcePos:LongInt
2459: Function Split0( Str : string; const substr : string) : TStringList
2460: Procedure SplitNameValue (const Line : string; var Name, Value : string)
2461: Function SQLRequiresParams (const SQL : WideString) : Boolean
2462: Function Sqr(e: Extended): Extended;
2463: Function Sqrt(e: Extended): Extended;
2464: Function StartIP : String
2465: Function StartPan( WndHandle : THandle; AControl : TControl) : Boolean
2466: Function StartOfADay( const AYear, AMonth, ADay: Word): TDateTime; 2467: Function StartOfADayl( const AYear, ADayOfYear: Word): TDateTime;
2468: Function StartOfAMonth( const AYear, AMonth: Word): TDateTime
2469: Function StartOfAWeek( const AYear, AWeekOfYear : Word; const ADayOfWeek : Word) : TDateTime
2470: Function StartOfAYear( const AYear: Word): TDateTime 2471: Function StartOfTheDay( const AValue: TDateTime): TDateTime
2472: Function StartOfTheMonth( const AValue : TDateTime) : TDateTime
2473: Function StartOfTheWeek( const AValue : TDateTime) : TDateTime
2474: Function StartOfTheYear( const AValue : TDateTime) : TDateTime
2475: Function StartsStr( const ASubText, AText : string) : Boolean 2476: Function StartsText( const ASubText, AText : string) : Boolean
2477: Function StartsWith( const ANSIStr, APattern : String) : Boolean
2478: Function StartsWith( const str : string; const sub : string) : Boolean
2479: Function StartsWithACE( const ABytes : TIdBytes) : Boolean
2480: Function StatusString(StatusCode: Integer): string
2481: Function StdDev(const Data: array of Double): Extended
2482: Function Stop : Float
2483: Function StopCount( var Counter : TJclCounter) : Float
2484: Function StoreColumns : Boolean
2485: Function StrAfter( const sString : string; const sDelimiters : string) : string;
2486: Function StrAfter1( const sString: string; const sDelimiters: string; out cDelimiter: char): string;
2487: Function StrAlloc( Size : Cardinal) : PChar
2488: function StrAlloc(Size: Cardinal): PChar)
2489: Function StrBefore( const sString: string; const sDelimiters: string): string;
2490: Function StrBeforel( const sString: string; const sDelimiters:string; out cDelimiter:char): string;
2491: Function StrBufSize( Str : PChar) : Cardinal
2492: function StrBufSize(const Str: PChar): Cardinal)
2493: Function StrByteType(Str: PChar; Index: Cardinal): TMbcsByteType 2494: function StrByteType(Str: PChar; Index: Cardinal): TMbcsByteType)
2495: Function StrCat( Dest : PChar; Source : PChar) : PChar
2496: function StrCat(Dest: PChar; const Source: PChar): PChar)
2497: Function StrCharLength(Str: PChar): Integer 2498: Function StrComp(Str1, Str2: PChar): Integer
2499: function StrComp(const Str1: PChar; const Str2: PChar): Integer)
2500: Function StrCopy( Dest : PChar; Source : PChar) : PChar
2501: function StrCopy(Dest: PChar; const Source: PChar): PChar)
2502: Function Stream to AnsiString( Source : TStream) : ansistring
2503: Function Stream_to_Base64( Source : TStream) : ansistring
2504: Function Stream_to_decimalbytes( Source : TStream) : string
2505: Function Stream?WideString(oStream: TStream): WideString 2506: Function StreamtoAnsiString(Source: TStream): ansistring
2507: Function StreamToByte(Source: TStream): string
2508: Function StreamToDecimalbytes(Source: TStream): string
2509: Function StreamtoOrd(Source: TStream): string
2510: Function StreamToString( Source : TStream) : string
2511: Function StrECopy( Dest : PChar; Source : PChar) : PChar
2512: Function StrEmpty( const sString : string) : boolean
2513: Function StrEnd( Str : PChar) : PChar
2514: function StrEnd(const Str: PChar): PChar)
2515: Function StrFilter( const sString: string; xValidChars: TCharSet): string
2516: Function StrFitter (Const StrIng: StrIng: StrIng: Args: array of const): PChar; 2517: Function StrGet(var S : String; I : Integer) : Char;
2518: Function StrGet2(S : String; I : Integer) : Char;
2519: Function StrHasPrefix( const sString: string; const sPrefix: string): boolean 2520: Function StrHasSuffix( const sString: string; const sSuffix: string): boolean
2521: Function StrHtmlDecode( const AStr : String) : String 2522: Function StrHtmlEncode( const AStr : String) : String
2523: Function StrToBytes(const Value: String): TBytes;
2524: Function StrIComp(Str1, Str2 : PChar) : Integer
2525: Function StringOfChar(c : char;I : longInt) : String;
2526: Function StringOfChar2( ch : WideChar; Count : Integer) : WideString;
2527: Function StringPad(InputStr,FillChar: String; StrLen:Integer; StrJustify:Boolean): String;
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2528: Function StringRefCount(const s: String): integer;
2529: Function StringReplace(S, OldPattern, NewPattern: string; Flags: TReplaceFlags): string
2530: Function JStringReplace( const S, OldPattern, NewPattern: string; Flags: TReplaceFlags): string
2531: Function StringReplace(const SourceString, OldPattern, NewPattern: string; Flags: TReplaceFlags): string;
2532: Function StringRemove( const S, Pattern : string; Flags : TReplaceFlags) : string
2533: Function StringToBoolean( const Ps : string) : Boolean
2534: function StringToColor(const S: string): TColor)
2535: function StringToCursor(const S: string): TCursor;
2536: function StringToGUID(const S: string): TGUID)
2537: Function StringTokenizer( const str: string; const delim: string): IStringTokenizer
2538: Function StringToStringArray( const str: string; const delim: string): TStringDynArray
2539: Function StringWidth( S : string) : Integer
2540: Function StrInternetToDateTime( Value : string) : TDateTime
2541: Function StrIsDateTime( const Ps : string) : Boolean 2542: Function StrIsFloatMoney( const Ps : string) : Boolean
2543: Function StrIsInteger( const S : string) : Boolean
2544: Function StrLCat( Dest : PChar; Source : PChar; MaxLen : Cardinal) : PChar
2545: Function StrLComp( Str1, Str2 : PChar; MaxLen : Cardinal) : Integer
2546: Function StrLCopy( Dest : PChar; Source : PChar; MaxLen : Cardinal) : PChar
2547: Function StrLen(Str : PChar) : Cardinal
2548: function StrLen(const Str: PChar): Cardinal)
2549: Function StrLessPrefix( const sString: string; const sPrefix: string): string
2550: Function StrLessSuffix( const sString: string; const sSuffix: string): string
2551: Function StrllComp(Strl, Str2: PChar; MaxLen: Cardinal): Integer 2552: Function StrlLower(Str: PChar): PChar
2553: Function StrMove( Dest : PChar; Source : PChar; Count : Cardinal) : PChar
2554: function StrMove(Dest: PChar; const Source: PChar; Count: Cardinal): PChar)
2555: Function StrNew( Str : PChar) : PChar
2556: function StrNew(const Str: PChar): PChar)
2557: Function StrNextChar( Str : PChar) : PChar
2558: Function StrPad( const sString: string: const sPad: string: const iLength: integer): string
2559: Function StrParse( var sString: string; const sDelimiters: string): string;
2560: Function StrParse( var sString: string; const sDelimiters: string; out cDelimiter: char): string;
2561: Function StrPas( Str: PChar): string
2562: function StrPas(const Str: PChar): string)
2563: Function StrPCopy( Dest : PChar; Source : string) : PChar
2564: function StrPCopy(Dest: PChar; const Source: string): PChar)
2565: Function StrPLCopy(Dest: PChar; Source: string; MaxLen: Cardinal): PChar
2566: Function StrPos( Str1, Str2 : PChar) : PChar
2567: Function StrScan(const Str: PChar; Chr: Char): PChar)
2568: Function StrRScan(const Str: PChar; Chr: Char): PChar)
2569: Function StrToBcd( const AValue : string) : TBcd
2570: Function StrToBool( S : string) : Boolean
2571: Function StrToBoolDef(S: string; Default: Boolean): Boolean
2572: Function StrToCard( const AStr : String) : Cardinal
2573: Function StrToConv( AText : string; out AType : TConvType) : Double
2574: Function StrToCurr( S : string) : Currency;
2575: function StrToCurr(const S: string): Currency)
2576: Function StrToCurrDef(S: string; Default: Currency): Currency; 2577: Function StrToDate(S: string): TDateTime;
2578: function StrToDate(const s: string): TDateTime;
2579: Function StrToDateDef( S : string; Default : TDateTime) : TDateTime;
2580: Function StrToDateTime(S: string): TDateTime;
2581: function StrToDateTime(const S: string): TDateTime)
2582: Function StrToDateTimeDef( S: string; Default : TDateTime) : TDateTime; 2583: Function StrToDay( const ADay : string) : Byte 2584: Function StrToFloat( <math>S: string) : Extended;
2585: function StrToFloat(s: String): Extended;
2586: Function StrToFloatDef( S : string; Default : Extended) : Extended;
2587: function StrToFloatDef(const S: string; const Default: Extended): Extended)
2588: Function StrToFloat( S: string): Extended;
2589: Function StrToFloat2( S : string; FormatSettings : TFormatSettings) : Extended;
2590: Function StrToFloatDef( S : string; Default : Extended) : Extended;
2591: \textbf{Function} \ \texttt{StrToFloatDef2}(S: \textbf{string}; \ \textbf{Default}: \ \texttt{Extended}; \\ \texttt{FormatSettings}: \texttt{TFormatSettings}): \ \texttt{Extended}; \\ \texttt{Extended}; \\
2592: Function StrToCurr( S : string) : Currency;
2593: Function StrToCurr2( S : string; FormatSettings : TFormatSettings) : Currency;
2594: Function StrToCurrDef(S: string; Default: Currency): Currency; 2595: Function StrToCurrDef2(S: string; Default: Currency; FormatSettings: TFormatSettings): Currency;
 2596: \textbf{Function} \  \, \texttt{StrToTime2} ( \  \, \texttt{S} \, : \, \textbf{string}; \, \, \texttt{FormatSettings} \, : \, \, \texttt{TFormatSettings}) \, : \, \, \texttt{TDateTime}; \, \, \texttt{TDateTime
2590: Function StrToTimeDef( S : string; Default : TDateTime) : TDateTime;
2598: Function StrToTimeDef2( S : string; Default : TDateTime; FormatSettings: TFormatSettings): TDateTime;
2599: Function TryStrToTime( S : string; Value : TDateTime) : Boolean;
2600: Function StrToDateTime(S: string): TDateTime;
2601: Function StrToDateTime2(S: string; FormatSettings: TFormatSettings): TDateTime;
2602: Function StrToDateTimeDef( S : string; Default : TDateTime) : TDateTime;
2603: \textbf{Function} \ \texttt{StrToFloatRegionalIndependent} (a Value: \textbf{String}; a \texttt{DecimalSymbol:Char}; a \texttt{DigitGroupSymbol:Char}): \ \texttt{Extended} \ \texttt{Extended
2604: Function StrToInt(S:string):Integer
2605: function StrToInt(s: String): Longint;
2606: Function StrToInt64( S : string) : Int64
2607: function StrToInt64(s: String): int64;
2608: Function StrToInt64Def( S : string; Default : Int64) : Int64
2609: function StrToInt64Def(const S: string; const Default: Int64):Int64)
2610: Function StrToIntDef( S : string; Default : Integer) : Integer
2611: function StrToIntDef(const S: string; Default: Integer): Integer)
2612: function StrToIntDef(s: String; def: Longint): Longint;
2613: Function StrToMonth( const AMonth : string) : Byte
2614: Function StrToTime(S:string): TDateTime; 2615: function StrToTime(const S:string): TDateTime)
2616: Function StrToTimeDef( S : string; Default : TDateTime) : TDateTime;
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2617: Function StrToWord( const Value : String) : Word
2618: Function StrToXmlDate( const DateStr : string; const Format : string) : string
 2619: Function StrToXmlDateTime( const DateStr : string; const Format : string) : string
2620: Function StrToXmlTime( const TimeStr : string; const Format : string) : string
2621: Function StrUpper( Str : PChar) : PChar
2622: Function StuffString( const AText : string; AStart, ALength : Cardinal; const ASubText : string) : string
2622: Function StuffString( const AText: string; AStart, ALength: Cardinal; const ASul 2623: Function Sum( const Data: array of Double): Extended 2624: Function SumFloatArray( const B: TDynFloatArray): Float 2625: Function SumInt( const Data: array of Integer): Integer 2626: Function SumOfSquares( const Data: array of Double): Extended 2627: Function SumPairProductFloatArray( const X, Y: TDynFloatArray): Float 2628: Function SumSquareDiffFloatArray( const B: TDynFloatArray; Diff: Float): Float
2629: Function SumSquareFloatArray( const B : TDynFloatArray) : Float 2630: Function Supports( CursorOptions : TCursorOptions) : Boolean 2631: Function SupportsClipboardFormat( AFormat : Word) : Boolean
2632: Function SwapWord(w : word): word)
2633: Function SwapInt(i : integer): integer)
2634: Function SwapLong(L : longint): longint)
2635: Function Swap(i : integer): integer)
2636: Function SYDDepreciation (const Cost, Salvage : Extended; Life, Period : Integer) : Extended
 2637: Function SyncTime : Boolean
2638: Function SysErrorMessage(ErrorCode: Integer): string
2639: function SysErrorMessage(ErrorCode: Integer): string)
2640: Function SystemTimeToDateTime(SystemTime: TSystemTime): TDateTime
2641: function SystemTimeToDateTime(const SystemTime: TSystemTime): TDateTime;
2642: Function SysStringLen(const S: WideString): Integer; stdcall;
2643: Function TabRect( Index : Integer) : TRect 2644: Function Tan( const X : Extended) : Extended
           Function TaskMessageDlg(const Title,
2645:
           Msg:string;DlgType:TMsgDlgType;Buttons:TMsgDlgButtons;HelpCtx:Longint): Integer;
2646: \textbf{Function} \ \ \texttt{TaskMessageDlg1}(\ \textbf{const} \ \texttt{Title}, \ \texttt{Msg}: \ \textbf{string}; \ \texttt{DlgType}: \ \texttt{TMsgDlgType}; \ \texttt{Buttons}: \ \texttt{TMsgDlgButtons}; 
HelpCtx : Longint; DefaultButton : TMsgDlgBtn) : Integer;
2647: Function TaskMessageDlgPos( const Title, Msg : string; DlgType : TMsgDlgType; Buttons : TMsgDlgButtons;
           HelpCtx : Longint; X, Y : Integer) : Integer;
HelpCtx: Longint; X, Y: Integer) - Integer;

2648: Function TaskMessageDlgPosl( const Title, Msg: string; DlgType: TMsgDlgType; Buttons: TMsgDlgButtons;
HelpCtx: Longint; X, Y: Integer; DefaultButton: TMsgDlgBtn): Integer;

2649: Function TaskMessageDlgPosHelp( const Title, Msg: string; DlgType: TMsgDlgType; Buttons:
TMsgDlgButtons; HelpCtx: Longint; X, Y: Integer; const HelpFileName: string): Integer;
2650: Function TaskMessageDlgPosHelp1(const Title, Msg:string;DlgType: TMsgDlgType; Buttons: TMsgDlgButtons;
           HelpCtx:Longint; X,Y: Integer; const HelpFileName: string; DefaultButton: TMsgDlgBtn): Integer;
2651: Function TenToY( const Y : Float) : Float 2652: Function TerminateApp( ProcessID : DWORD; Timeout : Integer) : TJclTerminateAppResult
2653: Function TerminateTask( Wnd : HWND; Timeout : Integer) : TJclTerminateAppResult
2654: Function TestBit( const Value : Byte; const Bit : TBitRange) : Boolean;
2655: Function TestBit2( const Value : Shortint; const Bit : TBitRange) : Boolean; 2656: Function TestBit3( const Value : Smallint; const Bit : TBitRange) : Boolean;
2657: Function TestBit4( const Value : Word; const Bit : TBitRange) : Boolean;
2658: Function TestBit5( const Value : Cardinal; const Bit : TBitRange) : Boolean;
2659: Function TestBit6( const Value : Integer; const Bit : TBitRange) : Boolean;
2660: Function TestBit7( const Value : Int64; const Bit : TBitRange) : Boolean;
2661: Function TestBits( const Value, Mask : Byte) : Boolean;
2662: Function TestBits1( const Value, Mask : Shortint) : Boolean;
2663: Function TestBits2( const Value, Mask :
                                                                                        Smallint) : Boolean;
2664: Function TestBits3( const Value, Mask : Word) : Boolean;
2665: Function TestBits4( const Value, Mask : Cardinal) : Boolean; 2666: Function TestBits5( const Value, Mask : Integer) : Boolean;
2667: Function TestBits6( const Value, Mask : Int64) : Boolean
2668: Function TestFDIVInstruction : Boolean
2669: function TestStreamFormat(Stream: TStream): TStreamOriginalFormat
2670: Function TextExtent( const Text : string) : TSize
2671: function TextHeight(Text: string): Integer;
2672: Function TextIsSame( const A1 : string; const A2 : string) : Boolean
2673: Function TextStartsWith( const S, SubS : string) : Boolean
2674: function TextToFloat(Buffer: PChar; var Value: Extended; ValueType: TFloatValue): Boolean)
2675: Function ConvInteger(i : integer):string;
2676: Function IntegerToText(i : integer):string;
2677: Function TEXTTOSHORTCUT( TEXT : String) :
                                                                                           TSHORTCUT
2678: function TextWidth(Text: string): Integer;
2679: Function ThreadCount : integer
2680: function ThousandSeparator: char;
2681: Function Ticks : Cardinal
2682: Function Time : TDateTime
2683: function Time: TDateTime;
2684: function TimeGetTime: int64;
2685: Function TimeOf( const AValue : TDateTime) : TDateTime
2686: function TimeSeparator: char;
2687 \colon \textbf{function} \ \texttt{TimeStampToDateTime}(\textbf{const} \ \texttt{TimeStamp}) \colon \ \texttt{TDateTime}
2688: Function TimeStampToMSecs( TimeStamp : TTimeStamp) : Comp
2689: function TimeStampToMSecs(const TimeStamp: TTimeStamp): Comp)
 2690: Function TimeToStr( DateTime : TDateTime)
                                                                                           : string
2691: function TimeToStr(const DateTime: TDateTime): string;
2692: Function TimeZoneBias : TDateTime
2693: Function ToCommon(const AValue : Double) : Double
2694: function ToCommon(const AValue: Double): Double;
2695: Function Today : TDateTime
2696: Function ToggleBit( const Value : Byte; const Bit : TBitRange) : Byte;
2697: Function ToggleBit1( const Value : Shortint; const Bit : TBitRange) : Shortint; 2698: Function ToggleBit2( const Value : Smallint; const Bit : TBitRange) : Smallint;
2699: Function ToggleBit3( const Value : Word; const Bit : TBitRange) : Word;
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2700: Function ToggleBit4( const Value : Cardinal; const Bit : TBitRange) : Cardinal;
2701: Function ToggleBit5( const Value : Integer; const Bit : TBitRange) : Integer;
2702: Function ToggleBit6 (const Value : Int64; const Bit : TBitRange) : Int64;
2703: function TokenComponentIdent:String
2704: Function TokenFloat : Extended
2705: function TokenFloat:Extended
2706: Function TokenInt : Longint
2707: function TokenInt:LongInt
2708: Function TokenString : string
2709: function TokenString:String
2710: Function TokenSymbolIs( const S : string) : Boolean
2711: function TokenSymbolIs(S:String):Boolean
2712: Function Tomorrow: TDateTime
2713: Function ToRightOf( const pc: TControl; piSpace: Integer): Integer
2714: Function ToString : string
2715: Function TotalVariance( const Data : array of Double) : Extended
2716: Function Trace2( AURL : string) : string;
2717: Function TrackMenu( Button : TToolButton) : Boolean
2718: Function TRANSLATE( SRC, DEST : PCHAR; TOOEM : BOOLEAN) : INTEGER
2719: Function TranslateURI( const URI : string) : string
2720: Function TranslationMatchesLanguages(Exact: Boolean): Boolean
2721: Function TransparentStretchBlt(DstDC:HDC;DstX,DstY,DstW,DstH:Integer;SrcDC:HDC;SrcX,SrcY,SrcW,
       SrcH:Integer;MaskDC : HDC; MaskX, MaskY : Integer) : Boolean
2722: Function Trim( S : string) : string;
2723: Function Trim( S : WideString) : WideString;
2724: Function Trim(s : AnyString) : AnyString;
2725: Function TrimAllOf( ATrim, AText : String) : String
2726: Function TrimLeft(S: string): string;
2727: Function TrimLeft(S: WideString): WideString;
2728: function TrimLeft(const S: string): string)
2729: Function TrimRight( S : string) : string;
2730: Function TrimRight( S : WideString) : WideString;
2731: function TrimRight(const S: string): string)
2732: function TrueBoolStrs: array of string
2733: Function Trunc(e : Extended) : Longint;
2734: Function Trunc64(e: extended): Int64;
2735: Function TruncPower( const Base, Exponent : Float) : Float
 2736: \textbf{Function} \ \texttt{TryConvTypeToFamily} ( \ \textbf{const} \ \texttt{AFrom}, \ \texttt{ATo} \ : \ \texttt{TConvType}; \ \textbf{out} \ \texttt{AFamily} : \ \texttt{TConvFamily}) \ : \ \texttt{Boolean}; 
2738: function TryConVTypeToFamily1 (const ATOm) reconvType; out AFamily: TConvFamily): Boolean; 2738: function TryEnvCodeDate(Year, Month, Day: Word; var Date: TDateTime): Boolean;
2739: Function TryEncodeDateDay( const AYear, ADayOfYear : Word; out AValue : TDateTime) : Boolean
2740: Function TryEncodeDateMonthWeek(const AY,AMonth,AWeekOfMonth,ADayOfWeek:Word;var AValue:TDateTime): Boolean
2741: Function TryEncodeDateTime(const AYear, AMonth, ADay, AHour, AMin, ASec, AMilliSecond: Word; out
        AValue:TDateTime):Boolean
2742: Function TryEncodeDateWeek(const AY,AWeekOfYear:Word;out AValue:TDateTime;const ADayOfWeek:Word): Boolean
2743: Function TryEncodeDayOfWeekInMonth(const AYear, AMonth, ANthDayOfWeek, ADayOfWeek:Word; out
        AVal:TDateTime):Bool
2744: function TryEncodeTime(Hour, Min, Sec, MSec: Word; var Time: TDateTime): Boolean;
2746: Function TryFloatToDateTime( Value : Extended AResult : TDateTime) : Boolean 2746: Function TryJulianDateToDateTime( const AValue : Double; out ADateTime : TDateTime) : Boolean
2747: Function TryLock : Boolean
2748: Function TryModifiedJulianDateToDateTime( const AValue : Double; out ADateTime : TDateTime) : Boolean
2749: Function TryRecodeDateTime( const AValue : TDateTime; const AYear, AMonth, ADay, AHour, AMinute, ASecond,
        AMilliSecond : Word; out AResult : TDateTime) : Boolean
2750: Function TryStrToBcd( const AValue : string; var Bcd : TBcd) : Boolean 2751: Function TryStrToConv( AText : string; out AValue : Double; out AType : TConvType) : Boolean 2752: Function TryStrToDate( S : string; Value : TDateTime) : Boolean;
2753: Function TryStrToDateTime( S : string; Value : TDateTime) : Boolean;
2754: Function TryStrToTime( S : string; Value : TDateTime) : Boolean;
2755: Function TryStrToInt(const S: AnsiString; var I: Integer): Boolean;
2756: Function TryStrToInt64(const S: AnsiString; var I: Int64): Boolean;
2757: Function TwoByteToWord( AByte1, AByte2 : Byte) : Word
2758: Function TwoCharToWord( AChar1, AChar2 : Char) : Word
2759: Function TwoToY( const Y : Float) : Float 2760: Function UCS4StringToWideString( const S : UCS4String) : WideString
2761: Function UIDL( const ADest : TStrings; const AMsgNum : Integer) : Boolean
2762: function Unassigned: Variant;
2763: Function UndoLastChange( FollowChange : Boolean) : Boolean
2764: function UniCodeToStr(Value: string): string;
2765: Function UnionRect( out Rect : TRect; const R1, R2 : TRect) : Boolean
2766: function UnionRect(out Rect: TRect; const R1, R2: TRect): Boolean)
2767: Function UnixDateTimeToDelphiDateTime( UnixDateTime: Cardinal) : TDateTime
2768: Function UnixPathToDosPath( const Path : string) : string 2769: Function UnixToDateTime( const AValue : Int64) : TDateTime
2770: function UnixToDateTime(U: Int64): TDateTime;
2771: Function UnlockRegion( libOffset : Longint; cb : Largeint; dwLockType : Longint) : HResult
2772: Function UnlockResource( ResData : HGLOBAL) : LongBool
2773: Function UnlockVolume( var Handle : THandle) : Boolean 2774: Function UnMaskString( Mask, Value : String) : String 2775: function UpCase(ch : Char ) : Char;
2776: Function UpCaseFirst( const AStr : string) : string
2777: Function UpCaseFirstWord( const AStr : string) : string
2778: Function UpdateAction( Action : TBasicAction) : Boolean
2779: Function UpdateKind : TUpdateKind
2780: Function UpDATESTATUS : TUPDATESTATUS
2781: Function UpDerCase(S: string): string
2782: Function Uppercase(s: AnyString): AnyString;
2783: Function URLDecode(ASrc: string): string
2784: Function URLEncode( const ASrc : string) : string
```

```
2785: Function UseRightToLeftAlignment : Boolean
2786: Function UseRightToLeftAlignmentForField( const AField: TField; Alignment: TAlignment): Boolean
2787: Function UseRightToLeftReading: Boolean 2788: Function UTF8CharLength(Lead: Char): Integer
2789: Function UTF8CharSize( Lead : Char) : Integer
2790: Function UTF8Decode( const S : UTF8String) : WideString
2791: Function UTF8Encode( const WS : WideString) : UTF8String
2792: Function UTF8LowerCase( const S : UTF8string) : UTF8string
2793: Function Utf8ToAnsi( const S : UTF8String) : string
2794: Function Utf8ToAnsiEx( const S : UTF8String; const cp : integer) : string 2795: Function UTF8UpperCase( const S : UTF8string) : UTF8string 2796: Function ValidFieldIndex( FieldIndex : Integer) : Boolean
2797: Function ValidParentForm(control: TControl): TForm
2798: Function Value : Variant
2799: Function ValueExists( const Section, Ident : string) : Boolean
2800: Function ValueOf( const Key: string): Integer
2801: Function ValueInSet(AValue: Variant; ASet: Variant): Boolean;
2802: Function VALUEOFKEY( const AKEY : VARIANT) : VARIANT
2803: Function VarArrayFromStrings( Strings : TStrings) : Variant
2804: Function VarArrayFromWideStrings( Strings : TWideStrings) : Variant
2805: Function VarArrayGet(var S : Variant; I : Integer) : Variant;
2806: Function VarFMTBcd : TVarType
2807: Function VarFMTBcdCreate1 : Variant;
2808: Function VarFMTBcdCreate2( const AValue : string; Precision, Scale : Word) : Variant;
2809: Function VarFMTBcdCreate3( const AValue : Double; Precision : Word; Scale : Word) : Variant;
2810: Function VarFMTBcdCreate4( const ABcd : TBcd) : Variant;
2811: Function Variance( const Data : array of Double) : Extended
2812: Function VariantAdd2( const V1 : Variant; const V2 : Variant) : Variant 2813: Function VariantAnd2( const V1 : Variant; const V2 : Variant) : Variant
2814: Function VariantDiv2( const V1 : Variant; const V2 : Variant) : Variant
2815: Function VariantGetElement( const V : Variant; i1 : integer) : Variant; 2816: Function VariantGetElement1( const V : Variant; i1, i2 : integer) : Variant;
2817: Function VariantGetElement2( const V : Variant; i1, i2, i3 : integer) : Variant;
2818: Function VariantGetElement3( const V : Variant; i1, i2, i3, i4 : integer) : Variant;
2819: Function VariantGetElement4( const V : Variant; i1, i2, i3, i4, i5 : integer) : Variant;
2820: Function VariantMod2( const V1 : Variant; const V2 : Variant) : Variant
2821: Function VariantMul2( const V1 : Variant; const V2 : Variant) : Variant
2822: Function VariantNeg( const V1 : Variant) : Variant
2823: Function VariantNot( const V1 : Variant) : Variant
2824: Function VariantOr2( const V1 : Variant; const V2 : Variant) : Variant
2825: Function VariantShl2( const V1 : Variant; const V2 : Variant) : Variant
2826: Function VariantShr2( const V1 : Variant; const V2 : Variant) : Variant
2827: Function VariantSub2( const V1 : Variant; const V2 : Variant) : Variant
2828: Function VariantXor2( const V1 : Variant; const V2 : Variant) : Variant
2829: function VarIsEmpty(const V: Variant): Boolean;
2830: Function VarIsEMTRcd( const AValue : Variant) : Boolean;
2831: function VarIsNull(const V: Variant): Boolean;
2832: Function VarToBcd( const AValue : Variant) : TBcd
2833: function VarType(const V: Variant): TVarType;
2834: Function VarType(const V: Variant): TVarType
2835: Function VarAsType(const V: Variant; AVarType: TVarType): Variant
2836: Function VarIsType( const V : Variant; AVarType : TVarType) : Boolean;
2837: Function VarIsType1 ( const V : Variant; const AVarTypes : array of TVarType) : Boolean;
2838: Function VarIsByRef( const V : Variant) : Boolean
2839: Function VarIsEmpty( const V : Variant) : Boolean
2840: Procedure VarCheckEmpty( const V : Variant)
2841: Function VarIsNull( const V : Variant) : Boolean
2842: Function VarIsClear( const V : Variant) : Boolean
2843: Function VarIsCustom( const V:Variant): Boolean 2844: Function <math>VarIsOrdinal( const V:Variant): Boolean
2845: Function VarIsFloat( const V : Variant) : Boolean
2846: Function VarIsNumeric( const V : Variant) : Boolean
2847: Function VarIsStr( const V : Variant) : Boolean 2848: Function VarToStr( const V : Variant) : string
2849: Function VarToStrDef( const V : Variant; const ADefault : string) : string
2850: Function VarToWideStr( const V : Variant) : WideString
2851: Function VarToWideStrDef( const V : Variant; const ADefault : WideString) : WideString
2852: Function VarToDateTime( const V : Variant) : TDateTime
2853: Function VarFromDateTime( const DateTime : TDateTime) : Variant
2854: Function VarInRange( const AValue, AMin, AMax : Variant) : Boolean
2855: Function VarEnsureRange( const AValue, AMin, AMax : Variant) : Variant
2856: TVariantRelationship', '( vrEqual, vrLessThan, vrGreaterThan, vrNotEqual ) 2857: Function VarSameValue( const A, B : Variant) : Boolean
2858: Function VarCompareValue( const A, B : Variant) : TVariantRelationship
2859: Function VarIsEmptyParam( const V : Variant) : Boolean
2860: Function VarIsError( const V : Variant; out AResult : HRESULT) : Boolean;
2861: Function VarIsError1( const V : Variant) : Boolean;
2862: Function VarAsError( AResult : HRESULT) : Variant
2863: Procedure VarCopyNoInd( var Dest : Variant; const Source : Variant)
2864: Function VarIsArray( const A : Variant) : Boolean;
2865: Function VarIsArray1( const A : Variant; AResolveByRef : Boolean) : Boolean;
2866: Function VarArrayCreate( const Bounds : array of Integer; AVarType : TVarType) : Variant
2867: Function VarArrayOf( const Values : array of Variant) : Variant 2868: Function VarArrayRef( const A : Variant) : Variant
2869: Function VarTypeIsValidArrayType( const AVarType : TVarType) : Boolean
2870: Function VarTypeIsValidElementType( const AVarType : TVarType) : Boolean
2871: Function VarArrayDimCount( const A : Variant) : Integer 2872: Function VarArrayLowBound( const A : Variant; Dim : Integer) : Integer
2873: Function VarArrayHighBound( const A : Variant; Dim : Integer) : Integer
```

```
2874: Function VarArrayLock( const A : Variant) : ____Pointer 2875: Procedure VarArrayUnlock( const A : Variant)
2876: Function VarArrayGet( const A : Variant; const Indices : array of Integer) : Variant
2877: Procedure VarArrayPut( var A : Variant; const Value : Variant; const Indices : array of Integer)
2878: Procedure DynArrayToVariant( var V : Variant; const DynArray : ___Pointer; TypeInfo : ___Pointer)
2879: Procedure DynArrayFromVariant( var DynArray : ___Pointer; const V : Variant; TypeInfo : ___Pointer)
2880: Function Unassigned : Variant
2881: Function Null:
                                   Variant
2882: Function VectorAdd( const V1, V2 : TFloatPoint) : TFloatPoint
2883: function VectorAdd(const V1,V2: TFloatPoint): TFloatPoint;
2884: Function VectorDot( const V1, V2: TFloatPoint): Double
2885: function VectorDot(const V1, V2: TFloatPoint): Double;
2886: Function VectorLengthSqr( const V : TFloatPoint) : Double
2887: function VectorLengthSqr(const V: TFloatPoint): Double;
2888: Function VectorMult( const V : TFloatPoint; const s : Double) : TFloatPoint
2889: function VectorMult(const V: TFloatPoint; const s: Double): TFloatPoint;
2890: Function VectorSubtract( const V1, V2 : TFloatPoint) : TFloatPoint
2891: function VectorSubtract(const V1, V2: TFloatPoint): TFloatPoint;
2892: Function Verify( AUserName : String) : String 2893: Function Versine( X : Float) : Float
2894: function VersionCheck: boolean;
2895: Function VersionLanguageId( const LangIdRec : TLangIdRec) : string
2896: Function VersionLanguageName( const LangId : Word) : string
2897: Function VersionResourceAvailable( const FileName : string) : Boolean
2898: Function Visible : Boolean
2899: function VolumeID(DriveChar: Char): string
2900: Function WaitFor( const AString : string) : string
2901: Function WaitFor( const TimeOut : Cardinal) : TJclWaitResult
2902: Function WaitFor1 : TWaitResult;
2903: Function WaitForData( Timeout : Longint) : Boolean
2904: Function WebColorNameToColor( WebColorName : string) : TColor
2905: Function WebColorStrToColor( WebColor : string) : TColor
2906: Function WebColorToRGB( WebColor : Integer) : Integer
2907: Function wGet(aURL, afile: string): boolean;'
2908: Function wGet2(aURL, afile: string): boolean;' //without file open
2909: Function WebGet(aURL, afile: string): boolean;'
2910: Function WebExists: boolean; //alias to isinternet 2911: Function WeekOf( const AValue : TDateTime) : Word
2912: Function WeekOfTheMonth( const AValue : TDateTime) : Word;
2913: Function WeekOfTheMonth1( const AValue : TDateTime; var AYear, AMonth : Word) : Word;
2914: Function WeekOfTheYear( const AValue : TDateTime) : Word;
2915: Function WeekOfTheYear1( const AValue : TDateTime; var AYear : Word) : Word;
2916: Function WeeksBetween( const ANow, AThen : TDateTime) : Integer
2917: Function WeeksInAYear( const AYear: Word): Word
2918: Function WeeksInYear( const AValue : TDateTime) : Word
2919: Function WeeksInYear( const ANow, AThen : TDateTime) : Double
2920: Function WideAdjustLineBreaks( const S : WideString; Style : TTextLineBreakStyle) : WideString
2921: Function WideCat( const x, y: WideString): WideString 2922: Function WideCompareStr( S1, S2: WideString): Integer
2923: function WideCompareStr(const S1: WideString; const S2: WideString): Integer)
2924: Function WideCompareText( S1, S2 : WideString) : Integer
2925: function WideCompareText(const S1: WideString; const S2: WideString): Integer)
2926: Function WideCopy( const src : WideString; index, count : Integer) : WideString
2927: Function WideDequotedStr( const S: WideString; AQuote: WideChar): WideString
2928: Function WideEqual( const x, y: WideString): Boolean
2929: function WideFormat(const Format: WideString; const Args: array of const): WideString)
2930: Function WideGreater( const x, y : WideString) : Boolean
2931: Function WideLength( const src : WideString) : Integer
2932: Function WideLess(const x, y: WideString): Boolean 2933: Function WideLowerCase(S: WideString): WideString 2934: function WideLowerCase(const S: WideString): WideString)
2935: Function WidePos( const src, sub : WideString) : Integer
2936: Function WideQuotedStr( const S : WideString; Quote : WideChar) : WideString
2937: Function WideReplaceStr( const AText, AFromText, AToText: WideString): WideString 2938: Function WideReplaceText( const AText, AFromText, AToText: WideString): WideString 2939: Function WideSameStr( S1, S2: WideString): Boolean
2940: function WideSameStr(const S1: WideString; const S2: WideString): Boolean)
2941: Function WideSameText(S1, S2: WideString): Boolean
2942: function WideSameText(const S1: WideString; const S2: WideString): Boolean)
2943: Function WideStringReplace(const S,OldPattern, NewPattern: Widestring; Flags: TReplaceFlags): Widestring 2944: Function WideStringToUCS4String( const S: WideString): UCS4String
2945: Function WideUpperCase( S : WideString) : WideString
2946: Function Win32BackupFile( const FileName : string; Move : Boolean) : Boolean
2947: function Win32Check(RetVal: boolean): boolean)
2948: Function Win32DeleteFile( const FileName : string; MoveToRecycleBin : Boolean) : Boolean 2949: Function Win32RestoreFile( const FileName : string) : Boolean
2950: Function Win32Type : TIdWin32Type
2951: Function WinColor( const Color32 : TColor32) : TColor
2952: function winexec(FileName: pchar; showCmd: integer): integer;
2953: Function WinExec32( const Cmd : string; const CmdShow : Integer) : Boolean
2954: Function WinExec32AndWait( const Cmd : string; const CmdShow : Integer) : Cardinal
2955: Function WithinPastDays( const ANow, AThen : TDateTime; const ADays : Integer) : Boolean 2956: Function WithinPastHours( const ANow, AThen : TDateTime; const AHours : Int64) : Boolean
2957: Function WithinPastMilliSeconds( const ANow, AThen : TDateTime; const AMilliSeconds : Int64) : Boolean
2958: Function WithinPastMinutes( const ANow, AThen : TDateTime; const AMinutes : Int64) : Boolean 2959: Function WithinPastMonths( const ANow, AThen : TDateTime; const AMonths : Integer) : Boolean 2960: Function WithinPastSeconds( const ANow, AThen : TDateTime; const ASeconds : Int64) : Boolean 2961: Function WithinPastSeconds( const ANow, AThen : TDateTime; const ASeconds : Int64) : Boolean 2962: Function WithinPastWeeks( const ANow, AThen : TDateTime; const AWeeks : Integer) : Boolean 2962: Function WithinPastYears( const ANow, AThen : TDateTime; const AYears : Integer) : Boolean
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2963: Function WNetAddConnection( lpRemoteName, lpPassword, lpLocalName : PChar) : DWORD
2964: Function WordToStr( const Value : Word) : String
2965: Function WordGridFormatIdentToInt( const Ident : string; var Value : Longint) : Boolean
2966: Function IntToWordGridFormatIdent( Value : Longint; var Ident : string) : Boolean
2967: Procedure GetWordGridFormatValues( Proc : TGetStrProc)
2968: Function WorkArea : Integer
2969: Function WrapText( Line : string; MaxCol : Integer) : string;
2970: Function WrapText( Line, BreakStr : string; BreakChars : TSysCharSet; MaxCol : Integer) : string; 2971: Function Write( pv : Pointer; cb : Longint; pcbWritten : PLongint) : HResult
2972: function Write(Buffer:String;Count:LongInt):LongInt
2973: Function WriteClient( var Buffer, Count : Integer) : Integer
2974: Function WriteFile( const AFile : string; const AEnableTransferFile : Boolean) : Cardinal
2975: Function WriteHeaders( StatusCode : Integer; const ReasonString, Headers : string) : Boolean
2976: Function WriteString( const AString : string) : Boolean 2977: Function WStrGet(var S : AnyString; I : Integer) : WideChar;
2978: Function wvsprintf( Output : PChar; Format : PChar; arglist : va_list) : Integer
2979: Function wsprintf( Output : PChar; Format : PChar) : Integer
2980: Function XmlDateTimeToStr( const XmlDateTime: string; const Format: string): string
2981: Function XmlTimeToStr( const XmlTime: string; const Format: string): string
2982: Function XorDecode( const Key, Source: string): string
2983: Function XorEncode( const Key, Source: string): string
2984: Function KorString( const Key, Src : ShortString) : ShortString
2985: Function Yield: Bool
2986: Function YearOf( const AValue: TDateTime): Word
2987: Function YearsBetween( const ANow, AThen : TDateTime) : Integer
2988: Function YearSpan( const ANow, AThen : TDateTime) : Double
2989: Function Yesterday : TDateTime
2990: Function YesNoDialog(const ACaption, AMsg: string): boolean; 2991: Function( const Name : string; Proc : TUserFunction) 2992: Function using Special_Scholz from 3.8.5.0
2993: Function TimeToFloat(value:Extended):Extended; // Normalstunden --> Industriestunden 2994: Function FloatToTime(value:Extended):Extended; // Industriestunden --> Normalstunden
2995: Function FloatToTime2Dec(value:Extended):Extended;
2996: Function MinToStd(value:Extended):Extended;
2997: Function MinToStdAsString(value:Extended):String
2998: Function RoundFloatToStr(zahl:Extended; decimals:integer):String;
2999: Function RoundFloat(zahl:Extended; decimals:integer):Extended; 3000: Function Round2Dec (zahl:Extended):Extended;
3001: Function GetAngle(x,y:Extended):Double;
3002: Function AddAngle(a1,a2:Double):Double;
3003:
3005: unit uPSI_StText;
3007: Function TextSeek( var F : TextFile; Target : LongInt) : Boolean 3008: Function TextFileSize( var F : TextFile) : LongInt
3009: Function TextPos( var F : TextFile) : LongInt 3010: Function TextFlush( var F : TextFile) : Boolean
3013: from JvVCLUtils;
3015: { Windows resources (bitmaps and icons) VCL-oriented routines }
3016: procedure DrawBitmapTransparent(Dest:TCanvas;DstX,DstY:Integer;Bitmap:TBitmap;TransparentColor:TColor);
3017: procedure DrawBitmapRectTransparent(Dest: TCanvas;DstX,
       DstY:Int;SrcRect:TRect;Bitmap:TBitmap;TransparColor:TColor);
3018: procedure StretchBitmapRectTransparent(Dest: TCanvas; DstX, DstY, DstW,DstH: Integer; SrcRect: TRect;
       Bitmap: TBitmap; TransparentColor: TColor);
3019: function MakeBitmap(ResID: PChar): TBitmap;
3020: function MakeBitmapID(ResID: Word): TBitmap;
3021: function MakeModuleBitmap(Module: THandle; ResID: PChar): TBitmap;
3022: function CreateTwoColorsBrushPattern(Color1, Color2: TColor): TBitmap;
3023: function CreateDisabledBitmap_NewStyle(FOriginal: TBitmap; BackColor: TColor): TBitmap;
3024: function CreateDisabledBitmapEx(FOriginal: TBitmap; OutlineColor, BackColor, 3025: HighlightColor, ShadowColor: TColor; DrawHighlight: Boolean): TBitmap; 3026: function CreateDisabledBitmap(FOriginal: TBitmap; OutlineColor: TColor): TBitmap;
3027: function ChangeBitmapColor(Bitmap: TBitmap; Color, NewColor: TColor): TBitmap; 3028: procedure AssignBitmapCell(Source: TGraphic; Dest: TBitmap; Cols, Rows,Index: Integer);
3029: {$IFDEF WIN32}
3030: procedure ImageListDrawDisabled(Images: TImageList; Canvas: TCanvas; 3031: X, Y, Index: Integer; HighlightColor, GrayColor: TColor; DrawHighlight: Boolean);
3032: { $ENDIF }
3033: function MakeIcon(ResID: PChar): TIcon;
3034: function MakeIconID(ResID: Word): TIcon;
3035: function MakeModuleIcon(Module: THandle; ResID: PChar): TIcon;
3036: function CreateBitmapFromIcon(Icon: TIcon; BackColor: TColor): TBitmap;
3037: { $ IFDEF WIN32 }
3038: function CreateIconFromBitmap(Bitmap: TBitmap; TransparentColor: TColor): TIcon;
3039: {$ENDIF}
3040: { Service routines }
3041: procedure NotImplemented;
3042: procedure ResourceNotFound(ResID: PChar);
3043: function PointInRect(const P: TPoint; const R: TRect): Boolean;
3044: function PointInPolyRgn(const P: TPoint; const Points: array of TPoint): Boolean;
3045: function PaletteColor(Color: TColor): Longint;
3046: function WidthOf(R: TRect): Integer; 3047: function HeightOf(R: TRect): Integer;
3048: procedure PaintInverseRect(const RectOrg, RectEnd: TPoint);
3049: procedure DrawInvertFrame(ScreenRect: TRect; Width: Integer);
```

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3050: procedure CopyParentImage(Control: TControl; Dest: TCanvas);
3051: procedure Delay(MSecs: Longint);
3052: procedure CenterControl(Control: TControl);
3053: Function PaletteEntries( Palette : HPALETTE) : Integer
3054: Function WindowClassName( Wnd : HWND) : string
3055: Function ScreenWorkArea : TRect
3056: Procedure MoveWindowOrg( DC : HDC; DX, DY : Integer)
3057: Procedure SwitchToWindow( Wnd : HWND; Restore : Boolean)
3058: Procedure ActivateWindow( Wnd : HWND)
3059: Procedure ShowWinNoAnimate( Handle : HWND; CmdShow : Integer)
3060: Procedure CenterWindow( Wnd: HWND)
3061: Procedure ShadeRect( DC: HDC; const Rect: TRect)
3062: Procedure KillMessage( Wnd : HWND; Msg : Cardinal)
3063: Function DialogsToPixelsX( Dlgs : Word) : Word 3064: Function DialogsToPixelsY( Dlgs : Word) : Word
3065: Function PixelsToDialogsX( Pixs : Word)
                                                          : Word
3066: Function PixelsToDialogsY( Pixs : Word) : Word
3067: { $IFDEF WIN32}
3068: procedure ShowMDIClientEdge(ClientHandle: THandle; ShowEdge: Boolean);
3069: function MakeVariant(const Values: array of Variant): Variant;
3071: function CreateRotatedFont(Font: TFont; Angle: Integer): HFONT;
3072: function MsgBox(const Caption, Text: string; Flags: Integer): Integer;
3073: function MsgDlg(const Msg:string; AType:TMsgDlgType; AButtons: TMsgDlgButtons; HelpCtx: Longint): Word;
3074: {$IFDEF CBUILDER}
3075: function FindPrevInstance(const MainFormClass: ShortString; const ATitle: string): HWND;
3076: function ActivatePrevInstance(const MainFormClass: ShortString; const ATitle: string): Boolean;
3077: \\ \SELSE
3078: function FindPrevInstance(const MainFormClass, ATitle: string): HWND;
3079: function ActivatePrevInstance(const MainFormClass, ATitle: string): Boolean;
3080: { $ENDIF CBUILDER }
3081: function IsForegroundTask: Boolean;
3082: procedure MergeForm(AControl: TWinControl; AForm: TForm; Align: TAlign; Show: Boolean);
3083: function GetAveCharSize(Canvas: TCanvas): TPoint;
3084: function MinimizeText(const Text: string; Canvas: TCanvas; MaxWidth: Integer): string;
3085: procedure FreeUnusedOle;
3086: procedure Beep;
3087: function GetWindowsVersionJ: string;
3088: function LoadDLL(const LibName: string): THandle;
3089: function RegisterServer(const ModuleName: string): Boolean;
3090: {STENDER WIN32}
3091: function IsLibrary: Boolean;
3092: {$ENDIF}
3093: { Gradient filling routine }
3094: type TFillDirection = (fdTopToBottom, fdBottomToTop, fdLeftToRight, fdRightToLeft);
3095: procedure GradientFillRect(Canvas: TCanvas; ARect: TRect; StartColor, EndColor: TColor; Direction:
       TFillDirection; Colors: Byte);
3096: { String routines }
3097: function GetEnvVar(const VarName: string): string;
3098: function AnsiUpperFirstChar(const S: string): string;
3099: function StringToPChar(var S: string): PChar;
3100: function StrPAlloc(const S: string): PChar;
3101: procedure SplitCommandLine(const CmdLine: string; var ExeName, Params: string);
3102: function DropT(const S: string): string;
3103: { Memory routines }
3104: function AllocMemo(Size: Longint): Pointer;
3105: function ReallocMemo(fpBlock: Pointer; Size: Longint): Pointer;
3106: procedure FreeMemo(var fpBlock: Pointer);
3107: function GetMemoSize(fpBlock: Pointer): Longint; 3108: function CompareMem(fpBlock1, fpBlock2: Pointer; Size: Cardinal): Boolean;
3109: {$IFNDEF COMPILER5_UP}
3110: procedure FreeAndNil(var Obj);
3111: {$ENDIF}
3112: // from PNGLoader
3113: Function OptimizeForPNG(Image:TLinearBitmap;QuantizationSteps:Integer;TransparentColor:TColor):Integer
3114: Procedure TransformRGB2LOCO( Image : TLinearBitmap)
3115: Procedure TransformLOCO2RGB( Image : TLinearBitmap)
3116: Procedure SortPalette( const Pal : TPalette; var ColorMap : TColorMap)
3117: Function DrawButtonFace( Canvas : TCanvas; const Client : TRect; BevelWidth : Integer; Style :
TButtonStyle; IsRounded, IsDown, IsFocused : Boolean) : TRect //TButtons
3118: Function IsAnAllResult( const AModalResult : TModalResult) : Boolean
3119:
          Function InitWndProc( HWindow : HWnd; Message, WParam : Longint; LParam : Longint) : Longint
3120:
        AddConstantN('CTL3D_ALL','LongWord').SetUInt( $FFFF);
//Procedure ChangeBiDiModeAlignment( var Alignment: TAlignment)
3121:
3122:
         //Function SendAppMessage( Msg : Cardinal; WParam, LParam : Longint) : Longint
        //Procedure MoveWindowOrg( DC : HDC; DX, DY : Integer)
Procedure SetImeMode( hWnd : HWND; Mode : TImeMode)
Procedure SetImeName( Name : TImeName)
3123:
3124:
3125:
        Function Win32NLSEnableIME( hWnd : HWND; Enable : Boolean) : Boolean
3126:
         Function Imm32GetContext( hWnd : HWND) : HIMC
         Function Imm32ReleaseContext( hWnd : HWND; hImc : HIMC) : Boolean
3128:
        Function Imm32GetConversionStatus( hImc : HIMC; var Conversion, Sentence : longword) : Boolean Function Imm32SetConversionStatus( hImc : HIMC; Conversion, Sentence : longword) : Boolean Function Imm32SetOpenStatus( hImc : HIMC; fOpen : Boolean) : Boolean
3129:
3130:
3131:
3132: // Function Imm32SetCompositionWindow( hImc : HIMC; lpCompForm : PCOMPOSITIONFORM) : Boolean
        //Function Imm32SetCompositionFont( hImc: HIMC; lpLogfont: PLOGFONTA): Boolean
Function Imm32GetCompositionString(hImc:HIMC;dWord1:longword;lpBuf:string;dwBufLen:longint):Longint
3133:
3134:
3136: Function Imm32IssIME( hKl : longword) : Boolean
3136: Function Imm32NotifyIME( hImc : HIMC; dwAction, dwIndex, dwValue:longword):Boolean
```

```
3137: Procedure DragDone( Drop : Boolean)
3138:
3141: function CanvasMaxTextHeight(Canvas: TCanvas): Integer;
3142: function ReplaceComponentReference(This, NewReference:TComponent; var VarReference:TComponent):Boolean;
3143: procedure DrawLine(Canvas: TCanvas; X, Y, X2, Y2: Integer);
3144: function IsPositiveResult(Value: TModalResult): Boolean; 3145: function IsNegativeResult(Value: TModalResult): Boolean;
3146: function IsAbortResult(const Value: TModalResult): Boolean;
3147: function StripAllFromResult(const Value: TModalResult): TModalResult;
3148: // returns either BrightColor or DarkColor depending on the luminance of AColor
3149: // This function gives the same result (AFAIK) as the function used in Windows to
3150: // calculate the desktop icon text color based on the desktop background color 3151: function SelectColorByLuminance(AColor, DarkColor, BrightColor: TColor): TColor;
3152: type TJvHTMLCalcType = (htmlShow, htmlCalcWidth, htmlCalcHeight, htmlHyperLink);
3154: procedure HTMLDrawTextEx(Canvas: TCanvas; Rect: TRect;
        const State: TOwnerDrawState; const Text: string; var Width: Integer;
CalcType: TJvHTMLCalcType; MouseX, MouseY: Integer; var MouseOnLink: Boolean;
3155:
3156:
        var LinkName: string; Scale: Integer = 100); overload;
3158: procedure HTMLDrawTextEx(Canvas: TCanvas; Rect: TRect;
3159:
        const State: TOwnerDrawState; const Text: string; var Width, Height: Integer;
        CalcType: TJvHTMLCalcType; MouseX, MouseY: Integer; var MouseOnLink: Boolean;
var LinkName: string; Scale: Integer = 100); overload;
3160:
3161:
3162: function HTMLDrawText(Canvas: TCanvas; Rect: TRect;
        const State: TOwnerDrawState; const Text: string; Scale: Integer = 100): string;
3163:
3164: function HTMLDrawTextHL(Canvas: TCanvas; Rect: TRect;
        const State: TOwnerDrawState; const Text: string; MouseX, MouseY: Integer;
3165:
        Scale: Integer = 100): string;
3167: function HTMLPlainText(const Text: string): string;
3168: function HTMLTextExtent(Canvas: TCanvas; Rect: TRect;
       const State: TownerDrawState; const Text: string; Scale: Integer = 100): TSize;
3169:
3170: function HTMLTextWidth(Canvas: TCanvas; Rect: TRect;
3171: const State: TOwnerDrawState; const Text: string; Scale: Integer = 100): Integer; 3172: function HTMLTextHeight(Canvas: TCanvas; const Text: string; Scale: Integer = 100): Integer;
3173: function HTMLPrepareText(const Text: string): string;
3174:
3175: ******** uPSI_JvAppUtils;
3176: Function GetDefaultSection( Component : TComponent) : string
3177: Procedure GetDefaultIniData(Control:TControl; var IniFileName, Section : string; UseRegistry : Boolean)
3178: Procedure GetDefaultIniData( Control : TControl; var IniFileName, Section : string) 3179: Function GetDefaultIniName : string
3180: //'OnGetDefaultIniName','TOnGetDefaultIniName);
3181: Function GetDefaultIniRegKey: string
3182: Function FindForm(FormClass: TFormClass): TForm
3183: Function FindShowForm( FormClass: TFormClass; const Caption: string): TForm
3184: Function ShowDialog( FormClass : TFormClass) : Boolean
3185: //Function InstantiateForm( FormClass : TFormClass; var Reference) : TForm
3186: Procedure SaveFormPlacement( Form : TForm; const IniFileName : string; UseRegistry : Boolean)
3187: Procedure RestoreFormPlacement( Form : TForm; const IniFileName : string; UseRegistry : Boolean)
3188: Procedure SaveMDIChildrenReg( MainForm : TForm; IniFile : TRegIniFile)
3189: Procedure SaveFormPlacement( Form : TForm; const IniFileName : string
3190: Procedure RestoreFormPlacement( Form : TForm; const IniFileName : string)
3191: Function GetUniqueFileNameInDir( const Path, FileNameMask : string) : string
3192: Function StrToIniStr( const Str : string) : string 3193: Function IniStrToStr( const Str : string) : string
3194: Function IniReadString( IniFile : TObject; const Section, Ident, Default : string) : string
3195: Procedure IniWriteString( IniFile : Tobject; const Section, Ident, Value : string)
3196: Function IniReadInteger( IniFile : Tobject; const Section, Ident : string; Default : Longint) : Longint
3197: Procedure IniWriteInteger( IniFile : TObject; const Section, Ident : string; Value : Longint)
3198: Function IniReadBool( IniFile : TObject; const Section, Ident : string; Default : Boolean) : Boolean
3199: Procedure IniWriteBool( IniFile : TObject; const Section, Ident : string; Value : Boolean)
3200: Procedure IniReadSections( IniFile : TObject; Strings : TStrings)
3201: Procedure IniEraseSection( IniFile : TObject; const Section : string)
3202: Procedure IniDeleteKey( IniFile : TObject; const Section, Ident : string)
3203: Procedure AppBroadcast (Msg, wParam : Longint; lParam : Longint)
3204: Procedure AppBroadcast (Msg, wParam : Word; lParam : Longint)
3205: Procedure AppTaskbarIcons( AppOnly : Boolean)
3206: Procedure InternalSaveGridLayout( Grid : TCustomGrid; IniFile : TObject; const Section : string)
3207: Procedure InternalRestoreGridLayout( Grid : TCustomGrid; IniFile : TObject; const Section : string)
3208: Procedure InternalSaveMDIChildren( MainForm : TForm; IniFile : TObject)
3211: Function CreateLocate( DataSet : TDataSet) : TJvLocateObject
3212: Function IsDataSetEmpty( DataSet : TDataSet) : Boolean
3213: Procedure RefreshQuery( Query : TDataSet)
3214: Function DataSetSortedSearch(DataSet:TDataSet;const Value,FieldName:string;CaseInsensitive:Bool):Boolean
3215: Function DataSetSectionName( DataSet : TDataSet; IniFile : TObject; const Section : string)
3217: Procedure InternalRestoreFields(DataSet:TDataSet;IniFile:TObject;const Section:string;RestoreVisible:Bool)
3218: Function DataSetLocateThrough(DataSet:TDataSet; const KeyFields: string; const KeyValues: Variant;
      Options: TLocateOptions) : Boolean
3219: Procedure SaveFields( DataSet : TDataSet; IniFile : TIniFile)
3220: Procedure RestoreFields( DataSet : TDataSet; IniFile : TIniFile; RestoreVisible : Boolean)
3221: Procedure AssignRecord( Source, Dest : TDataSet; ByName : Boolean) 3222: Function ConfirmDelete : Boolean
3223: Procedure ConfirmDataSetCancel( DataSet : TDataSet)
3224: Procedure CheckRequiredField( Field : TField)
```

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3225: Procedure CheckRequiredFields( const Fields : array of TField)
3226: Function DateToSOL( Value : TDateTime) : string
3227: Function FormatSQLDateRange( Date1, Date2 : TDateTime; const FieldName : string) : string
3228: Function FormatSQLDateRangeEx( Date1, Date2 : TDateTime; const FieldName : string) : string
3229: Function FormatSQLNumericRange(const FieldName:string;LowVal, HighVal,LowEmpty,
         HighEmpty:Double;Inclusive:Bool):string
3230: Function StrMaskSQL( const Value : string) : string
3231: Function FormatSQLCondition(const FieldName, Operator, Val:string; FieldType:TFieldType; Exact:Bool):string
3232: Function FormatAnsiSQLCondition(const FieldName,Operator,Val:string;FieldType:TFieldType;Exact:Bool):string
3233: Procedure _DBError( const Msg : string)
3234:
          Const('TrueExpr','String '0=0
          Const('sdfStandard16','String '''"'mm''/''dd''/''yyyy''"''
          3236:
3237:
3238:
3239:
          AddTypeS('Largeint', 'Longint
3240:
3241 .
          \verb|addTypeS|'TIFException', '(ErNoError, erCannotImport, erInvalidType, ErInternalError, erCannotImport, erInvalidType, erInvalidType,
              'erInvalidHeader, erInvalidOpcode, erInvalidOpcodeParameter, erNoMainProc, erOutOfGlobalVarsRange, '+
'erOutOfProcRange, ErOutOfRange, erOutOfStackRange, ErTypeMismatch, erUnexpectedEof, '+
'erVersionError, ErDivideByZero, ErMathError, erCouldNotCallProc, erOutofRecordRange, '+
3242:
3243:
3244:
             'erOutOfMemory,erException,erNullPointerException,erNullVariantErrorerInterfaceNotSupportederError);
3245:
3246: (*----
3247: procedure SIRegister JclIniFiles(CL: TPSPascalCompiler);
3248: begin
3249:
          Function JIniReadBool( const FileName, Section, Line : string) : Boolean
3250:
          Function JIniReadInteger( const FileName, Section, Line : string) : Integer
          Function JIniReadString( const FileName, Section, Line : string) : string
Procedure JIniWriteBool( const FileName, Section, Line : string; Value : Boolean)
3251:
3252:
          Procedure JIniWriteInteger( const FileName, Section, Line : string; Value : Integer)
          Procedure JIniWriteString( const FileName, Section, Line, Value : string)
3254:
          Procedure JIniReadStrings( IniFile : TCustomIniFile; const Section : string; Strings : TStrings)
Procedure JIniWriteStrings( IniFile : TCustomIniFile; const Section : string; Strings : TStrings)
3255:
3256:
3257:
         end;
3258:
3259:
         (* === compile-time registration functions === *)
3260:
         (*----
3261: procedure SIRegister JclDateTime(CL: TPSPascalCompiler);
3262:
         begin
           'UnixTimeStart', 'LongInt'( 25569);
3263:
          Function JEncodeDate( const Year : Integer; Month, Day : Word) : TDateTime
3264:
          Procedure JDecodeDate( Date : TDateTime; var Year, Month, Day : Word);
Procedure DecodeDatel( Date : TDateTime; var Year : Integer; var Month, Day : Word);
3265:
3266:
          Procedure DecodeDate2( Date : TDateTime; var Year, Month, Day : Integer);
          \textbf{Function} \ \texttt{CenturyOfDate}(\ \textbf{const} \ \texttt{DateTime} \ : \ \texttt{TDateTime}) \ : \ \texttt{Integer}
3268:
3269:
          Function CenturyBaseYear( const DateTime : TDateTime) : Integer
          Function DayOfDate( const DateTime : TDateTime) : Integer
Function MonthOfDate( const DateTime : TDateTime) : Integer
3270:
3271:
3272:
          Function YearOfDate( const DateTime : TDateTime) : Integer
3273:
          Function JDayOfTheYear( const DateTime : TDateTime; var Year : Integer) : Integer;
Function DayOfTheYear1( const DateTime : TDateTime) : Integer;
3274:
          Function DayOfTheYearToDateTime( const Year, Day : Integer) : TDateTime
Function HourOfTime( const DateTime : TDateTime) : Integer
3275:
3276:
3277:
          Function MinuteOfTime( const DateTime : TDateTime) : Integer
3278:
          Function SecondOfTime( const DateTime : TDateTime) : Integer
          Function GetISOYearNumberOfDays( const Year : Word) : Word
3279:
           Function IsISOLongYear( const Year : Word) : Boolean;
3280:
          Function IsISOLongYear1( const DateTime : TDateTime) : Boolean;
3281:
3282:
          Function ISODayOfWeek( const DateTime : TDateTime) : Word
          Function JISOWeekNumber( DateTime: TDateTime; var YearOfWeekNumber, WeekDay: Integer): Integer;
Function ISOWeekNumber1( DateTime: TDateTime; var YearOfWeekNumber: Integer): Integer;
3283:
3284:
           Function ISOWeekNumber2( DateTime : TDateTime) : Integer;
          Function ISOWeekToDateTime( const Year, Week, Day : Integer) : TDateTime Function JIsLeapYear( const Year : Integer) : Boolean;
3286:
3287:
          Function IslampYearl( const DateTime: TDateTime): Boolean;
Function JDaysInMonth( const DateTime: TDateTime): Integer
3288:
                                                 Year, Pivot : Integer) : Integer
3290:
           Function Make4DigitYear(
          Function JMakeYear4Digit( Year, WindowsillYear : Integer) : Integer
3291:
          Function JEasterSunday( const Year : Integer) : TDateTime // TDosDateTime', 'Integer
3292:
          Function JFormatDateTime(Form: string; DateTime: TDateTime): string
Function FATDateSEqual(const FileTime1, FileTime2: Int64): Boolean;
3293:
3294:
3295:
          Function FATDatesEqual1( const FileTime1, FileTime2 : TFileTime) : Boolean;
3296:
          \textbf{Function} \ \texttt{HoursToMSecs(Hours:Integer):Integer}
          Function MinutesToMSecs( Minutes: Integer): Integer
Function SecondsToMSecs( Seconds: Integer): Integer
3297:
3298:
3299:
          Function TimeOfDateTimeToSeconds( DateTime : TDateTime) : Integer
3300:
          Function TimeOfDateTimeToMSecs( DateTime : TDateTime) : Integer
          Function DateTimeToLocalDateTime( DateTime : TDateTime) : TDateTime
3301:
          Function LocalDateTimeToDateTime( DateTime : TDateTime) : TDateTime
3302:
           Function DateTimeToDosDateTime( const DateTime : TDateTime)
3304:
          Function JDateTimeToFileTime( DateTime : TDateTime) : TFileTime
3305:
          Function JDateTimeToSystemTime( DateTime: TDateTime): TSystemTime;
          Procedure DateTimeToSystemTime1( DateTime : TDateTime; var SysTime : TSystemTime);
3306:
          Function LocalDateTimeToFileTime( DateTime : TDateTime) : FileTime
3307:
          Function DosDateTimeToDateTime( const DosTime : TDosDateTime)
3308:
3309:
          \textbf{Function} \  \, \texttt{JDosDateTimeToFileTime( DosTime : TDosDateTime) : TFileTime;} \\
          Procedure DosDateTimeToFileTime1( DTH, DTL : Word; FT : TFileTime);
3310:
3311:
          Function DosDateTimeToSystemTime( const DosTime : TDosDateTime) : TSystemTime
          Function DosDateTimeToStr( DateTime : Integer) : string
```

```
3313:
         Function JFileTimeToDateTime( const FileTime : TFileTime) : TDateTime
         Function FileTimeToLocalDateTime( const FileTime : TFileTime) : TDateTime
3314:
         Function JFileTimeToDosDateTime( const FileTime : TFileTime) : TDosDateTime;
3316:
         Procedure FileTimeToDosDateTime1( const FileTime : TFileTime; var Date, Time : Word);
         Function JFileTimeToSystemTime( const FileTime: TFileTime): TSystemTime;
3317:
         Procedure FileTimeToSystemTime1( const FileTime : TFileTime; var ST : TSystemTime);
3318:
         Function FileTimeToStr( const FileTime : TFileTime) : string
3319:
         Function SystemTimeToDosDateTime( const SystemTime: TSystemTime): TDosDateTime
3320:
3321:
         Function JSystemTimeToFileTime( const SystemTime : TSystemTime) : TFileTime;
3322:
         Procedure SystemTimeToFileTime1( const SystemTime : TSystemTime; FTime : TFileTime);
         Function SystemTimeToStr( const SystemTime : TSystemTime) : string
3323:
         Function CreationDateTimeOfFile( const Sr : TSearchRec) : TDateTime
3325:
         Function LastAccessDateTimeOfFile( const Sr : TSearchRec) : TDateTime
         Function LastWriteDateTimeOfFile( const Sr : TSearchRec) : TDateTime
3326:
          TJclUnixTime32', 'Longword
3327:
3328:
         Function JDateTimeToUnixTime( DateTime : TDateTime) : TJclUnixTime32
         Function JUnixTimeToDateTime( const UnixTime : TJclUnixTime32) : TDateTime
3329:
         Function FileTimeToUnixTime( const AValue : TFileTime) : TJclUnixTime32
Function UnixTimeToFileTime( const AValue : TJclUnixTime32) : TFileTime
3330:
3331:
         Function JNullStamp : TTimeStamp
3332:
         Function JCompareTimeStamps( const Stamp1, Stamp2 : TTimeStamp) : Int64
        Function JEqualTimeStamps (const Stamp1, Stamp2: TTimeStamp): Boolean
Function JIsNullTimeStamp (const Stamp: TTimeStamp): Boolean
Function TimeStampDOW (const Stamp: TTimeStamp): Integer
Function FirstWeekDay (const Year, Month: Integer; var DOW: Integer): Integer;
3334:
3335:
3336:
3337:
3338:
         Function FirstWeekDay1( const Year, Month : Integer) : Integer;
3339:
         Function LastWeekDay( const Year, Month : Integer; var DOW : Integer) : Integer;
         Function LastWeekDay1( const Year, Month : Integer) : Integer;
Function IndexedWeekDay( const Year, Month : Integer; Index : Integer) : Integer
Function FirstWeekendDay( const Year, Month : Integer; var DOW : Integer) : Integer;
3340:
3341:
3342:
         \textbf{Function} \  \, \texttt{FirstWeekendDayl} \, ( \  \, \textbf{const} \  \, \texttt{Year} \, , \, \, \texttt{Month} \, : \, \, \texttt{Integer}) \, : \, \, \texttt{Integer};
3343:
         Function LastWeekendDay( const Year, Month : Integer; var DOW : Integer) : Integer;
Function LastWeekendDay1( const Year, Month : Integer) : Integer;
3344:
3345:
         Function IndexedWeekendDay( const Year, Month: Integer; Index: Integer): Integer Function FirstDayOfWeek( const Year, Month, DayOfWeek: Integer): Integer Function LastDayOfWeek( const Year, Month, DayOfWeek: Integer): Integer
3346:
3348:
         Function IndexedDayOfWeek( const Year, Month, DayOfWeek, Index: Integer FindClass('TOBJECT'),'EJclDateTimeError
3349:
3350:
3351:
       end
3352:
3353:
       procedure SIRegister_JclMiscel2(CL: TPSPascalCompiler);
3354:
       begin
3355:
        Function SetDisplayResolution( const XRes, YRes : DWORD) : Longint
         Function CreateDOSProcessRedirected( const CommandLine, InputFile, OutputFile: string): Boolean Function WinExec32( const Cmd : string; const CmdShow: Integer): Boolean Function WinExec32AndWait( const Cmd : string; const CmdShow: Integer): Cardinal
3357:
3358:
         Function WinExec32AndRedirectOutput(const Cmd: string; var Output: string; RawOutput:Boolean):Cardinal
3359:
3360:
          TJclKillLevel', '( klNormal, klNoSignal, klTimeOut )
         Function ExitWindows( ExitCode : Cardinal) : Boolean
Function LogOffOS( KillLevel : TJclKillLevel) : Boolean
Function PowerOffOS( KillLevel : TJclKillLevel) : Boolean
3361:
3362:
3363:
         Function ShutDownOS( KillLevel : TJclKillLevel) : Boolean
3364:
         Function RebootOS( KillLevel : TJclKillLevel) : Boolean
3365:
         Function HibernateOS( Force, DisableWakeEvents : Boolean) : Boolean
3366:
         Function SuspendOS( Force, DisableWakeEvents : Boolean) : Boolean
Function ShutDownDialog( const DialogMessage:string;TimeOut:DWORD;Force,Reboot:Boolean):Boolean;
3367:
3368:
3369:
         Function ShutDownDialog1(const MachineName, DialogMessage:string; TimeOut:DWORD; Force, Reboot:Bool):Bool;
         Function AbortShutDown : Boolean;
3370:
3371:
         Function AbortShutDown1( const MachineName : string) : Boolean;
          TJclAllowedPowerOperation', '(apoHibernate, apoShutdown, apoSuspend)
TJclAllowedPowerOperations', 'set of TJclAllowedPowerOperation
3372:
3373:
3374:
         Function GetAllowedPowerOperations : TJclAllowedPowerOperations
         FindClass('TOBJECT'), 'EJclCreateProcessError

Procedure CreateProcAsUser( const UserDomain, UserName, PassWord, CommandLine: string)

Procedure CreateProcAsUserEx(const UserDomain, UserName, Password, CommandLine: string; const
3375:
3376:
3377:
        Environment:PChar);
         // with Add(EJclCreateProcessError) do end;
3378:
3379:
3380:
3381:
       procedure SIRegister_JclAnsiStrings(CL: TPSPascalCompiler);
3382:
3383:
       begin
         //'AnsiSigns','Set').SetSet(['-', '+']);
'C1_UPPER','LongWord( $0001);
'C1_LOWER','LongWord( $0002);
3384:
3385:
3386:
         'C1_DIGIT'
                       ,'LongWord').SetUInt( $0004);
3387:
3388:
         'C1_SPACE', 'LongWord').SetUInt( $0008);
         'Cl_PUNCT','LongWord').SetUInt( $0010);
3389:
         'C1_CNTRL', 'LongWord').SetUInt( $0020);
3390:
         'C1_BLANK', 'LongWord').SetUInt( $0040);
'C1_XDIGIT', 'LongWord').SetUInt( $0080);
3391:
3392:
         'C1_ALPHA','LongWord').SetUInt($0100);
3393:
3394:
          AnsiChar',
                         'Char
3395:
         Function StrIsAlpha( const S : AnsiString) : Boolean
         Function StrIsAlphaNum( const S : AnsiString) : Boolean
Function StrIsAlphaNumUnderscore( const S : AnsiString) : Boolean
3396:
3397:
         Function StrContainsChars(const S:AnsiString;Chars:TSysCharSet; CheckAll : Boolean) : Boolean
3398:
         Function StrConsistsOfNumberChars(const S : AnsiString) : Boolean
Function StrIsDigit(const S : AnsiString) : Boolean
3399:
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3401:
         Function StrIsSubset( const S : AnsiString; const ValidChars : TSysCharSet) : Boolean
3402:
         Function StrSame( const S1, S2 : AnsiString) : Boolean
         //Function StrCenter( const S : AnsiString; L : Integer; C : AnsiChar) : AnsiString
         Function StrCharPosLower( const S : AnsiString; CharPos : Integer) : AnsiString
Function StrCharPosUpper( const S : AnsiString; CharPos : Integer) : AnsiString
3404:
3405:
3406:
         Function StrDoubleOuote( const S : AnsiString) : AnsiString
3407:
         Function StrEnsureNoPrefix( const Prefix, Text : AnsiString) : AnsiString
         Function StrEnsureNoSuffix( const Suffix, Text : AnsiString) : AnsiString
3408:
         Function StrEnsurePrefix( const Prefix, Text : AnsiString) : AnsiString
Function StrEnsureSuffix( const Suffix, Text : AnsiString) : AnsiString
3409:
3410:
         Function StrEscapedToString( const S : AnsiString) : AnsiString
3411:
         Function JStrLower( const S : AnsiString) : AnsiString
3413:
         Procedure StrLowerInPlace( var S : AnsiString)
         ///Procedure StrLowerBuff( S : PAnsiChar)

Procedure JStrMove( var Dest:AnsiString; const Source:AnsiString; const ToIndex,FromIndex,Count:Integer;
3414:
3415:
         Function StrPadLeft( const S : AnsiString; Len : Integer; C : AnsiChar) : AnsiString
Function StrPadRight( const S : AnsiString; Len : Integer; C : AnsiChar) : AnsiString
3416:
3417:
3418:
         Function StrProper( const S : AnsiString) : AnsiString
         //Procedure StrProperBuff( S : PAnsiCthar)
Function StrQuote( const S : AnsiString; C : AnsiChar) : AnsiString
3419:
3420:
         Function StrRemoveChars( const S: AnsiString; const Chars: TSysCharSet): AnsiString
Function StrRemoveChars( const S: AnsiString; const Chars: TSysCharSet): AnsiString
3421:
3422:
         Procedure JStrReplace(var S:AnsiString; const Search, Replace : AnsiString; Flags : TReplaceFlags)
Function StrReplaceChar( const S : AnsiString; const Source, Replace : AnsiChar) : AnsiString
3423:
3424:
         Function StrReplaceChars(const S:AnsiString;const Chars:TSysCharSet;Replace:AnsiChar):AnsiString
3425:
3426:
         Function StrReplaceButChars(const S:AnsiString;const Chars:TSysCharSet;Replace:AnsiChar):AnsiString;
3427:
         Function StrRepeat( const S : AnsiString; Count : Integer) : AnsiString
3428:
         Function StrRepeatLength( const S : AnsiString; const L : Integer) : AnsiString
3429:
         Function StrReverse (const S : AnsiString) : AnsiString
         Procedure StrReverseInPlace( var S : AnsiString)
3431:
         \textbf{Function} \  \, \texttt{StrSingleQuote}( \  \, \textbf{const} \  \, \texttt{S} \  \, \texttt{:} \  \, \texttt{AnsiString}) \  \, \texttt{:} \  \, \texttt{AnsiString}
         \textbf{Function} \  \, \texttt{StrSmartCase}( \  \, \textbf{const} \  \, \texttt{S} \  \, : \  \, \texttt{AnsiString}; \  \, \texttt{Delimiters} \  \, : \  \, \texttt{TSysCharSet}) \  \, : \  \, \texttt{AnsiString}; \\
3432:
         Function StrStringToEscaped( const S : AnsiString) : AnsiString
3433:
         Function StrStripNonNumberChars( const S : AnsiString) : AnsiString
3434:
         Function StrToHex( const Source : AnsiString) : AnsiString
3436:
         Function StrTrimCharLeft( const S : AnsiString; C : AnsiChar) : AnsiString
         Function StrTrimCharsLeft( const S : AnsiString; const Chars : TSysCharSet) : AnsiString
Function StrTrimCharRight( const S : AnsiString; C : AnsiChar) : AnsiString
3437:
3438:
3439:
         Function StrTrimCharsRight( const S : AnsiString; const Chars : TSysCharSet) : AnsiString
         Function StrTrimQuotes( const S : AnsiString) : AnsiString
3440:
3441:
         \textbf{Function} \  \, \texttt{JStrUpper( const S : AnsiString) : AnsiString}
         Procedure StrUpperInPlace( var S : AnsiString)
3442:
         //Procedure StrUpperBuff( S : PAnsiChar)
3443:
         Function StrOemToAnsi( const S : AnsiString) : AnsiString
3445:
         \textbf{Function} \  \, \texttt{StrAnsiToOem( const S : AnsiString) : AnsiString)} \\
3446:
         Procedure StrAddRef( var S : AnsiString)
         Function StrAllocSize( const S : AnsiString) : Longint
3447:
         Procedure StrDecRef( var S : AnsiString)
3448:
         //Function StrLen( S : PAnsiChar) : Integer
Function StrLength( const S : AnsiString) : Longint
Function StrRefCount( const S : AnsiString) : Longint
3449:
3450:
3451:
         Procedure StrResetLength( var S : AnsiString)
3452:
         Function StrCharCount( const S : AnsiString; C : AnsiChar) : Integer
3453:
         Function StrCharsCount( const S : AnsiString; Chars : TSysCharSet) : Integer Function StrStrCount( const S, SubS : AnsiString) : Integer Function StrCompare( const S1, S2 : AnsiString) : Integer
3454:
3455:
3456:
         Function StrCompareRange( const S1, S2 : AnsiString; const Index, Count : Integer) : Integer
3457:
         //Function StrFillChar( const C : AnsiChar; Count : Integer) : AnsiString;
3458:
3459:
         Function StrFillCharl( const C : Char; Count : Integer) : AnsiString;
         Function StrFillChar(const C: Char; Count: Integer): string)');
Function IntFillChar(const I: Integer; Count: Integer): string)');
3460:
3461:
3462:
         Function ByteFillChar(const B: Byte; Count: Integer): string)');
3463:
         Function ArrFillChar(const AC: Char; Count: Integer): TCharArray; ');
3464:
         Function ArrByteFillChar(const AB: Char; Count: Integer): TByteArray;
         Function StrFind( const Substr, S : AnsiString; const Index : Integer) : Integer
3465:
         //Function StrHasPrefix( const S : AnsiString; const Prefixes : array of AnsiString) : Boolean
         Function StrIndex( const S: AnsiString; const List: array of AnsiString): Integer Function StrILastPos( const SubStr, S: AnsiString): Integer Function StrIPos( const SubStr, S: AnsiString): Integer
3467:
3468:
3469:
         Function StrIFOS ( const SubStr, S : AmsiString; const List : array of AnsiString) : Boolean Function StrLastPos( const SubStr, S : AnsiString) : Integer
3470:
3471:
3472:
         Function StrMatch( const Substr, S : AnsiString; const Index : Integer) : Integer
3473:
         Function StrMatches( const Substr, S : AnsiString; const Index : Integer) : Boolean Function StrNIPos( const S, SubStr : AnsiString; N : Integer) : Integer
3474:
         Function StrNPos( const S, SubStr : AnsiString; N : Integer) : Integer
3475:
3476:
         Function StrPrefixIndex( const S : AnsiString; const Prefixes : array of AnsiString) : Integer
3477:
         Function StrSearch( const Substr, S : AnsiString; const Index : Integer) : Integer
         //Function StrAfter( const SubStr, S : AnsiString) : AnsiString
//Function StrBefore( const SubStr, S : AnsiString) : AnsiString
3478:
3479:
         Function StrBetween( const S : AnsiString; const Start, Stop : AnsiChar) : AnsiString
        Function StrEetween Const S : AnsiString; Const Start, Stop : AnsiString Function StrEeft( const S : AnsiString; N : Integer) : AnsiString Function StrMid( const S : AnsiString; Count : Integer) : AnsiString Function StrMid( const S : AnsiString; Start, Count : Integer) : AnsiString Function StrRestOf( const S : AnsiString; N : Integer) : AnsiString
3481:
3482:
3483:
3484:
         Function StrRight( const S : AnsiString; Count : Integer) : AnsiString
3485:
3486:
         Function CharEqualNoCase( const C1, C2 : AnsiChar) : Boolean
         Function CharIsAlpha( const C : AnsiChar) : Boolean
Function CharIsAlphaNum( const C : AnsiChar) : Boolean
3487:
3488:
         Function CharlsBlank( const C : AnsiChar) : Boolean
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3490:
             Function CharlsControl( const C : AnsiChar) : Boolean
             Function CharIsDelete( const C : AnsiChar) : Boolean
3491:
             Function CharlsDigit( const C : AnsiChar) : Boolean
Function CharlsLower( const C : AnsiChar) : Boolean
3493:
3494:
             \textbf{Function} \ \texttt{CharlsNumberChar}( \ \textbf{const} \ \texttt{C} \ : \ \texttt{AnsiChar}) \ : \ \texttt{Boolean}
             Function CharlsPrintable( const C : AnsiChar) : Boolean
3495:
             Function CharlsPunctuation( const C : AnsiChar) : Boolean
3496:
             Function CharlsReturn( const C : AnsiChar) : Boolean
3497:
             Function CharlsSpace(const C : AnsiChar) : Boolean
Function CharlsUpper(const C : AnsiChar) : Boolean
3498:
3499:
             Function CharlsyMiteSpace( const C : AnsiChar) : Boolean
Function CharType( const C : AnsiChar) : Word
3500:
             Function CharHex( const C : AnsiChar) : Byte
Function CharLower( const C : AnsiChar) : AnsiChar
Function CharUpper( const C : AnsiChar) : AnsiChar
3502:
3503:
3504:
3505:
              Function CharToggleCase( const C : AnsiChar) : AnsiChar
             Function CharPos( const S : AnsiString; const C : AnsiChar; const Index : Integer) : Integer
3506:
             Function CharLastPos( const S : AnsiString; const C : AnsiChar; const Index : Integer) : Integer Function CharlPos( const S : AnsiString; C : AnsiChar; const Index : Integer) : Integer Function CharReplace( var S : AnsiString; const Search, Replace : AnsiChar) : Integer
3507:
3508:
3509:
             Procedure StrIToStrings(S, Sep: AnsiString; const List: TStrings; const AllowEmptyString: Boolean)

Procedure StrToStrings(S, Sep: AnsiString; const List: TStrings; const AllowEmptyString: Boolean)
3510:
3511:
3512:
             \textbf{Function} \ \texttt{StringsToStr}(\textbf{const} \ \texttt{List:TStrings}; \textbf{const} \ \texttt{Sep:AnsiString}; \textbf{const} \ \texttt{AllowEmptyString:Bool}) : \texttt{AnsiString}; \textbf{const} \ \texttt{AllowEmptyString:Bool}) : \texttt{AnsiString}; \textbf{const} \ \texttt{AllowEmptyString:Bool} : \texttt{AnsiString:Bool} : \texttt{AllowEmptyString:Bool} : \texttt{AllowEmptyString:Bool} : \texttt{AnsiString:Bool} : \texttt{AllowEmptyString:Bool} :
             Procedure TrimStrings( const List : TStrings; DeleteIfEmpty : Boolean)
3513:
             Procedure TrimStringsRight( const List: TStrings; DeleteIfEmpty: Boolean)

Procedure TrimStringsRight( const List: TStrings; DeleteIfEmpty: Boolean)
3514:
3515:
3516:
             Function AddStringToStrings(const S:AnsiString;Strings:TStrings; const Unique:Boolean):Boolean
             Function BooleanToStr( B : Boolean) : AnsiString
Function FileToString( const FileName : AnsiString) : AnsiString
3517:
3518:
             Procedure StringToFile( const FileName, Contents : AnsiString; Append : Boolean)
3520:
             \textbf{Function} \  \, \texttt{StrToken}( \  \, \textbf{var} \  \, \texttt{S} \  \, \texttt{:} \  \, \texttt{AnsiString}; \  \, \texttt{Separator} \  \, \texttt{:} \  \, \texttt{AnsiChar}) \  \, \texttt{:} \  \, \texttt{AnsiString};
             Procedure StrTokens( const S: AnsiString; const List: TStrings)

Procedure StrTokens( const S: AnsiString; const List: TStrings)

Procedure StrTokenToStrings( S: AnsiString; Separator: AnsiChar; const List: TStrings)

//Function StrWord( var S: PAnsiChar; out Word: AnsiString): Boolean

Function StrToFloatSafe( const S: AnsiString): Float
3521:
3522:
3523:
3525:
             Function StrToIntSafe( const S : AnsiString) : Integer
             Procedure StrNormIndex( const StrLen : Integer; var Index : Integer; var Count : Integer);
Function ArrayOf( List : TStrings) : TDynStringArray;
3526:
3527:
3528:
               EJclStringError',
                                                   'EJclError
             function IsClass(Address: TObject): Boolean;
3529:
3530:
             function IsObject(Address: TObject): Boolean;
              // Console Utilities
//function ReadKey: Char;
3531:
3532:
              function IntToStrZeroPad(Value, Count: Integer): AnsiString;
3533:
              function JclGUIDToString(const GUID: TGUID): string;
3534:
3535:
             function JclStringToGUID(const S: string): TGUID;
3536:
3538:
3539:
3540: ******* uPSI_JvDBUtil;
3541: Procedure ExecuteSQLScript(Base:TDataBase; const Script: string; const
           Commit:TCommit;OnProgress:TOnProgress; const UserData : Integer)
3542: Function GetQueryResult( const DatabaseName, SQL : string) : Variant
3543: Function GetStoredProcResult( const ADatabaseName, AStoredProcName : string; AParams : array of Variant; const AResultName : string) : Variant
3544: //Function StrFieldDesc( Field : FLDDesc) : string
3545: Function Var2Type( V : Variant; const VarType : Integer) : Variant
3546: Procedure CopyRecord( DataSet : TDataSet)
3547: //Procedure AddReference( Tbl : TTable; RefName : string; RefField : Word; MasterTable : string; MasterField : Word; ModOp, DelOp : RINTQual)
3548: Procedure AddMasterPassword( Table: TTable; pswd: string)
3549: Procedure PackTable( Table: TTable)
3550: Procedure PackEncryptedTable( Table: TTable; pswd: string)
3551: Function EncodeQuotes (const S: string): string 3552: Function Cmp(const S1, S2: string): Boolean
3553: Function SubStr( const S : string; const Index : Integer; const Separator : string) : string
3554: Function SubStrEnd( const S : string; const Index : Integer; const Separator : string) : string 3555: Function ReplaceString( S : string; const OldPattern, NewPattern : string) : string
3558: //JvBDEUtils
3559: Function CreateDbLocate : TJvLocateObject
3560: //Function CheckOpen( Status : DBIResult) : Boolean
3561: Procedure FetchAllRecords( DataSet : TBDEDataSet)
3562: Function TransActive( Database : TDatabase) : Boolean
3563: Function AsyncQrySupported( Database : TDatabase) : Boolean
3564: Function GetQuoteChar( Database : TDatabase) : string
3565: Procedure ExecuteQuery( const DbName, QueryText : string)
3566: Procedure ExecuteQueryEx( const SessName, DbName, QueryText : string)
3567: Function FieldLogicMap( FldType : TFieldType) : Integer
3568: Function FieldSubtypeMap( FldType : TrieldType) : Integer Value : string; Buffer : Pointer)
3569: Function GetAliasPath( const AliasName : string) : string
3570: Function IsDirectory( const DatabaseName : string) : Boolean
3571: Function GetBdeDirectory: string
3572: Function LoginToDatabase( Database: TDatabase; OnLogin: TDatabaseLoginEvent): Boolean
3573: Function DataSetFindValue( ADataSet : TBDEDataSet; const Value, FieldName : string) : Boolean 3574: Function DataSetFindLike( ADataSet : TBDEDataSet; const Value, FieldName : string) : Boolean
3575: Function DataSetRecNo( DataSet : TDataSet) : Longint
```

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3576: Function DataSetRecordCount( DataSet : TDataSet) : Longint
3577: Function DataSetPositionStr( DataSet : TDataSet) : string
3578: Procedure DataSetShowDeleted( DataSet : TBDEDataSet; Show
3579: Function CurrentRecordDeleted( DataSet : TBDEDataSet) : Boolean
3580: Function IsFilterApplicable( DataSet : TDataSet) : Boolean
3581: Function IsBookmarkStable( DataSet : TBDEDataSet) : Boolean
3582: Procedure SetIndex( Table : TTable; const IndexFieldNames : string)
3583: Procedure RestoreIndex( Table : TTable)
3584: Procedure DeleteRange( Table : TTable; IndexFields : array of const; FieldValues : array of const)
3585: Procedure PackTable( Table : TTable)
3586: Procedure ReindexTable( Table : TTable)
3587: Procedure BdeFlushBuffers
3588: Function GetNativeHandle( Database : TDatabase; Buffer : Pointer; BufSize : Integer) : Pointer
3589: Procedure ToggleDebugLayer( Active : Boolean; const DebugFile : string)
3590: Procedure DbNotSupported
3591: Procedure ExportDataSet( Source : TBDEDataSet; DestTable : TTable; TableType : TTableType; const
       AsciiCharSet : string; AsciiDelimited : Boolean; MaxRecordCount : Longint)
3592: Procedure ExportDataSetEx( Source : TBDEDataSet; DestTable : TTable; TableType : TTableType; const
       AsciiCharSet:string;AsciiDelimited:Boolean;AsciiDelimiter,AsciiSeparator:Char;MaxRecordCount:Longint);
3593: Procedure
        ImportDataSet(Source:TBDEDataSet;DestTable:TTable;MaxRecordCount:Longint;Mappings:TStrings;Mode:TBatchMode);
3594: Procedure InitRSRUN(Database: TDatabase; const ConName: string; ConType:Integer; const ConServer: string);
3596: function CurrentYear: Word;
3597: function IsLeapYear(AYear: Integer): Boolean;
3598: function DaysPerMonth(AYear, AMonth: Integer): Integer;
3599: function FirstDayOfPrevMonth: TDateTime;
3600: function LastDayOfPrevMonth: TDateTime;
3601: function FirstDayOfNextMonth: TDateTime;
3602: function ExtractDay(ADate: TDateTime): Word;
3603: function ExtractMonth(ADate: TDateTime): Word;
3604: function ExtractYear(ADate: TDateTime): Word;
3605: function IncDate(ADate: TDateTime; Days, Months, Years: Integer): TDateTime; 3606: function IncDay(ADate: TDateTime; Delta: Integer): TDateTime;
3607: function IncMonth(ADate: TDateTime; Delta: Integer): TDateTime;
3608: function IncYear(ADate: TDateTime; Delta: Integer): TDateTime;
3609: function ValidDate(ADate: TDateTime): Boolean;
3610: procedure DateDiff(Date1, Date2: TDateTime; var Days, Months, Years: Word);
3611: function MonthsBetween(Date1, Date2: TDateTime): Double;
3612: function DaysInPeriod(Date1, Date2: TDateTime): Longint;
3613: { Count days between Date1 and Date2 + 1, so if Date1 = Date2 result = 1 } 3614: function DaysBetween(Date1, Date2: TDateTime): Longint; 3615: { The same as previous but if Date2 < Date1 result = 0 }
3616: function IncTime(ATime: TDateTime; Hours, Minutes, Seconds, MSecs: Integer): TDateTime;
3617: function IncHour(ATime: TDateTime; Delta: Integer): TDateTime;
3618: function IncMinute(ATime: TDateTime; Delta: Integer): TDateTime;
3619: function IncSecond(ATime: TDateTime; Delta: Integer): TDateTime;
3620: function IncMSec(ATime: TDateTime; Delta: Integer): TDateTime;
3621: function CutTime(ADate: TDateTime): TDateTime; { Set time to 00:00:00:00 }
3622: { String to date conversions }
3623: function GetDateOrder(const DateFormat: string): TDateOrder;
3624: function MonthFromName(const S: string; MaxLen: Byte): Byte;
3625: function StrToDateDef(const S: string; Default: TDateTime): TDateTime;
3626: function StrToDateFmt(const DateFormat, S: string): TDateTime;
3627: function StrToDateFmtDef(const DateFormat, S: string; Default: TDateTime): TDateTime; 3628: function DefDateFormat(FourDigitYear: Boolean): string;
3629: function DefDateMask(BlanksChar: Char; FourDigitYear: Boolean): string;
3630:
3632: { GetWordOnPos returns Word from string, S, on the cursor position, P} 3633: function GetWordOnPos(const S: string; const P: Integer): string;
3634: { GetWordOnPosEx work like GetWordOnPos function, also returns Word position in iBeg, iEnd variables } 3635: function GetWordOnPosEx(const S: string; const P: Integer; var iBeg, iEnd: Integer): string;
3636: { SubStr returns substring from string, S, separated with Separator string} 3637: function SubStr(const S: string; const Index: Integer; const Separator: string): string;
3638: { SubStrEnd same to previous function but Index numerated from the end of string } 3639: function SubStrEnd(const S: string; const Index: Integer; const Separator: string): string;
3640: { SubWord returns next Word from string, P, and offsets Pointer to the end of Word, P2 } 3641: function SubWord(P: PChar; var P2: PChar): string; 3642: { NumberByWord returns the text representation of
         the number, N, in normal russian language. Was typed from Monitor magazine }
3644: function NumberByWord(const N: Longint): string;
3645: // function CurrencyByWord(Value : Currency) : string; GetLineByPos returns Line number, there 3646: //the symbol Pos is pointed. Lines separated with #13 symbol } 3647: function GetLineByPos(const S: string; const Pos: Integer): Integer;
3648: { GetXYByPos is same to previous function, but returns X position in line too}
3649: procedure GetXYByPos(const S: string; const Pos: Integer; var X, Y: Integer);
3650: { ReplaceString searches for all substrings, OldPattern, in a string, S, replaces them with NewPattern } 3651: function ReplaceString(S: string; const OldPattern, NewPattern: string): string; 3652: { ConcatSep concatenate S and S2 strings with Separator. if S = '', separator don't included }
3653: function ConcatSep(const S, S2, Separator: string): string;
3654: { ConcatLeftSep is same to previous function, but strings concatenate right to left }
3655: function ConcatLeftSep(const S, S2, Separator: string): string;
3656: { MinimizeString truncs long string, S, and appends '...' symbols, if Length of S is more than MaxLen }
3657: function MinimizeString(const S: string; const MaxLen: Integer): string;
3658: { Next 4 function for russian chars transliterating.
3659: This functions are needed because Oem2Ansi and Ansi2Oem functions sometimes works sucks } 3660: procedure Dos2Win(var S: string);
3661: procedure Win2Dos(var S: string);
```

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3662: function Dos2WinRes(const S: string): string;
3663: function Win2DosRes(const S: string): string;
3664: function Win2Koi(const S: string): string;
       { Spaces returns string consists on N space chars }
3665:
3666: function Spaces(const N: Integer): string;
3667: { AddSpaces add spaces to string, S, if it Length is smaller than N }
3668: function AddSpaces(const S: string; const N: Integer): string;
3669: { function LastDate for russian users only } { returns date relative to current date: '' }
3670: function LastDate(const Dat: TDateTime): string;
3671: { CurrencyToStr format currency, Cur, using ffCurrency float format}
3672: function CurrencyToStr(const Cur: currency): string;
       { Cmp compares two strings and returns True if they are equal. Case-insensitive.}
3674: function Cmp(const S1, S2: string): Boolean;
3675: { StringCat add S2 string to S1 and returns this string } 3676: function StringCat(var S1: string; S2: string): string;
3677: { HasChar returns True, if Char, Ch, contains in string, S } 3678: function HasChar(const Ch: Char; const S: string): Boolean;
3679: function HasAnyChar(const Chars: string; const S: string): Boolean;
3680: function CountOfChar(const Ch: Char; const S: string): Integer;

3681: function CountOfChar(const Ch: Char; const S: string): Integer;
3682: function DefStr(const S: string; Default: string): string
3683: {**** files routines}
3684: { GetWinDir returns Windows folder name }
3685: function GetWinDir: TFileName;
3686: function GetSysDir: String;
3687: { GetTempDir returns Windows temporary folder name }
3688: function GetTempDir: string;
3689: { GenTempFileName returns temporary file name on drive, there FileName is placed }
3690: function GenTempFileName(FileName: string): string;
3691: { GenTempFileNameExt same to previous function, but returning filename has given extension, FileExt }
3692: function GenTempFileNameExt(FileName: string; const FileExt: string): string;
3693: { ClearDir clears folder Dir }
3694: function ClearDir(const Dir: string): Boolean;
3695: { DeleteDir clears and than delete folder Dir }
3696: function DeleteDir(const Dir: string): Boolean;
3697: { FileEquMask returns True if file, FileName, is compatible with given dos file mask, Mask } 3698: function FileEquMask(FileName, Mask: TFileName): Boolean; 3699: { FileEquMasks returns True if file, FileName, is compatible with given Masks.
3700: Masks must be separated with comma (';') }
3701: function FileEquMasks(FileName, Masks: TFileName): Boolean;
3702: procedure DeleteFiles(const Folder: TFileName; const Masks: string);
3703: { LZFileExpand expand file, FileSource into FileDest.File must be compressed, using MS Compress program } 3704: function LZFileExpand(const FileSource, FileDest: string): Boolean;
3705: { FileGetInfo fills SearchRec record for specified file attributes}
3706: function FileGetInfo(FileName: TFileName; var SearchRec: TSearchRec): Boolean; 3707: { HasSubFolder returns True, if folder APath contains other folders } 3708: function HasSubFolder(APath: TFileName): Boolean;
3709: { IsEmptyFolder returns True, if there are no files or folders in given folder, APath}
3710: function IsEmptyFolder(APath: TFileName): Boolean;
3711: { AddSlash add slash Char to Dir parameter, if needed }
3712: procedure AddSlash(var Dir: TFileName);
       \{ AddSlash returns string with added slash Char to Dir parameter, if needed \}
3713:
3714: function AddSlash2(const Dir: TFileName): string;
3715: { AddPath returns FileName with Path, if FileName not contain any path }
3716: function AddPath(const FileName, Path: TFileName): TFileName;
3717: function AddPaths(const PathList, Path: string): string;
3718: function ParentPath(const Path: TFileName): TFileName;
3719: function FindInPath(const FileName, PathList: string): TFileName;
3720: function FindInPaths(const fileName,paths: String): String;
3721: {$IFNDEF BCB1}
3722: { BrowseForFolder displays Browse For Folder dialog
3723: function BrowseForFolder(const Handle: HWND; const Title: string; var Folder: string): Boolean;
3724: { $ENDIF BCB1 }
3725: Function BrowseForFolder(const ATitle: string; AllowCreate : Boolean; var ADirectory : string;
       AHelpContext : THelpContext) : Boolean
3726: Function BrowseForComputer(const ATitle : string; AllowCreate : Boolean; var ADirectory : string;
AHelpContext: THelpContext): Boolean

3727: Function BrowseDirectory(var AFolderName:string;const DlgText:string;AHelpContext:THelpContext):Boolean
3728: Function BrowseComputer(var AComputerName:string;const DlqText:string;AHelpContext:THelpContext):Boolean
3729:
3730:
       { DeleteReadOnlyFile clears R/O file attribute and delete file }
3731: function DeleteReadOnlyFile(const FileName: TFileName): Boolean;
3732: { HasParam returns True, if program running with specified parameter, Param } 3733: function HasParam(const Param: string): Boolean;
3734: function HasSwitch(const Param: string): Boolean;
3735: function Switch(const Param: string): string
3736: { ExePath returns ExtractFilePath(ParamStr(0)) }
3737: function ExePath: TFileName;
3738: function CopyDir(const SourceDir, DestDir: TFileName): Boolean;
3739: function FileTimeToDateTime(const FT: TFileTime): TDateTime
3740: function MakeValidFileName(const FileName: TFileName; const ReplaceBadChar: Char): TFileName;
3741: {**** Graphic routines }
3742: { TTFontSelected returns True, if True Type font is selected in specified device context } 3743: function TTFontSelected(const DC: HDC): Boolean;
3744: { TrueInflateRect inflates rect in other method, than InflateRect API function }
3745: function TrueInflateRect(const R: TRect; const I: Integer): TRect;
3746: {**** Windows routines }
3747: { SetWindowTop put window to top without recreating window
3748: procedure SetWindowTop(const Handle: HWND; const Top: Boolean);
```

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3749: {**** other routines }
3750: { KeyPressed returns True, if Key VK is now pressed }
3751: function KeyPressed(VK: Integer): Boolean;
3752: procedure SwapInt(var Int1, Int2: Integer);
3753: function IntPower(Base, Exponent: Integer): Integer;
3754: function ChangeTopException(E: TObject): TObject;
3755: function StrToBool(const S: string): Boolean;
3757: { AnsiStrLIComp compares S1 to S2, without case-sensitivity, up to a maximum
3758:
        Length of MaxLen bytes. The compare operation is controlled by the
3759: current Windows locale. The return value is the same as for CompareStr. } 3760: function AnsiStrLIComp(S1, S2: PChar; MaxLen: Cardinal): Integer;
3761: function AnsiStrIComp(S1, S2: PChar): Integer;
3762: { $ENDIF }
3763: function Var2Type(V: Variant; const VarType: Integer): Variant;
3764: function VarToInt(V: Variant): Integer;
3765: function VarToFloat(V: Variant): Double;
3766: \{ \text{ following functions are not documented because they are don't work properly , so don't use them } \}
3767: function ReplaceSokr1(S: string; const Word, Frase: string): string;
3768: { ReplaceSokr1 is full equal to ReplaceString function - only for compatibility - don't use } 3769: { GetSubStr is full equal to SubStr function - only for compatibility - don't use }
3770: function GetSubStr(const S: string; const Index: Integer; const Separator: Char): string;
3771: function GetParameter: string;
3772: function GetLongFileName(FileName: string): string;
3773: {* from FileCtrl}
3774: function DirectoryExists(const Name: string): Boolean;
3775: procedure ForceDirectories(Dir: string);
3776: { # from FileCtrl }
3777: function FileNewExt(const FileName, NewExt: TFileName): TFileName;
       function GetComputerID: string;
3779: function GetComputerName: string;
3780: {**** string routines }
3781: { ReplaceAllSokr searches for all substrings, Words,in a string, S, and replaces them with Frases with the
       same Index.Also see RAUtilsW.ReplaceSokr1 function }
3782: function ReplaceAllSokr(S: string; Words, Frases: TStrings): string;
3783: { ReplaceSokr searches the Word in a string, S, on PosBeg position,
3784:
         in the list, Words, and if founds, replaces this Word with string from another list, Frases, with the
       same Index, and then update NewSelStart variable }
3785: function ReplaceSokr(S:string; PosBeg, Len:Integer; Words, Frases:TStrings; var NewSelStart:Integer): string;
3786: { CountOfLines calculates the lines count in a string, each line separated from another with CrLf sequence }
3787: function CountOfLines(const S: string): Integer;
3788: { DeleteEmptyLines deletes all empty lines from strings, Ss. Lines contained only spaces also deletes. } 3789: procedure DeleteEmptyLines(Ss: TStrings);
3790: { SQLAddWhere addes or modifies existing where-statement, where, to the strings, SQL.
3791:
         Note: If strings SQL allready contains where-statement, it must be started on begining of any line }
3792: procedure SOLAddWhere(SOL: TStrings; const Where: string);
3793: {**** files routines - }
3794: { ResSaveToFile save resource named as Name with Typ type into file FileName.
3795:
         Resource can be compressed using MS Compress program}
3796: function ResSaveToFile(const Typ, Name: string; const Compressed:Boolean; const FileName: string): Boolean;
3797: function ResSaveToFileEx(Inst:HINST;Typ,Name:PChar;const Compressed:Bool;const FileName:string): Bool
3798: function ResSaveToString(Instance: HINST; const Typ, Name: string; var S: string): Boolean; 3799: { Execute executes other program and waiting for it terminating, then return its Exit Code
3800: function ExecuteJ(const CommandLine, WorkingDirectory: string): Integer;
3801: { IniReadSection read section, Section, from ini-file,
3802:
         IniFileName, into strings, Ss.This function reads ALL strings from specified section.
         Note: TIninFile.ReadSection function reads only strings with '=' symbol.}
3804: function IniReadSection(const IniFileName: TFileName: const Section: string; Ss: TStrings): Boolean;
3805: { LoadTextFile load text file, FileName, into string }
3806: function LoadTextFile(const FileName: TFileName): string;
3807: procedure SaveTextFile(const FileName: TFileName; const Source: string);
3808: { ReadFolder reads files list from disk folder, Folder, that are equal Mask, into strings, FileList} 3809: function ReadFolder(const Folder, Mask: TFileName; FileList: TStrings): Integer;
3810: function ReadFolders(const Folder: TFileName; FolderList: TStrings): Integer
3811: {$IFDEF COMPILER3_UP}
3812: { TargetFileName - if FileName is ShortCut returns filename ShortCut linked to }
3813: function TargetFileName(const FileName: TFileName): TFileName;
3814: { return filename ShortCut linked to }
3815: function ResolveLink(const hWnd: HWND; const LinkFile: TFileName; var FileName: TFileName): HRESULT;
3816: {$ENDIF COMPILER3_UP}
3817: {**** Graphic routines - }
3818: { LoadIcoToImage loads two icons from resource named NameRes, into two image lists ALarge and ASmall}
3819: procedure LoadIcoToImage(ALarge, ASmall: TImageList; const NameRes: string);
3820: { RATextOut same with TCanvas.TextOut procedure, but can clipping drawing with rectangle, RClip. }
3821: procedure RATextOut(Canvas: TCanvas; const R, RClip: TRect; const S: string);
       { RATextOutEx same with RATextOut function, but can calculate needed height for correct output }
3823: function RATextOutEx(Canvas: TCanvas: const R,RClip:TRect; const S: string; const CalcHeight:Boolean):Integer;
3824: { RATextCalcHeight calculate needed height to correct output, using RATextOut or RATextOutEx functions } 3825: function RATextCalcHeight(Canvas: TCanvas; const R: TRect; const S: string): Integer;
3826: { Cinema draws some visual effect }
3827: procedure Cinema(Canvas: TCanvas; rS {Source}, rD {Dest}: TRect);
3828: { Roughed fills rect with special 3D pattern }
3829: procedure Roughed (ACanvas: TCanvas; const ARect: TRect; const AVert: Boolean);
3830: { BitmapFromBitmap creates new small bitmap from part of source bitmap, SrcBitmap, with specified width
       and height, AWidth, AHeight and placed on a specified Index, Index in the source bitmap
3831: function BitmapFromBitmap(SrcBitmap: TBitmap; const AWidth, AHeight, Index: Integer): TBitmap;
3832: { TextWidth calculate text with for writing using standard desktop font }
3833: function TextWidth(AStr: string): Integer;
3834: { DefineCursor load cursor from resource, and return available cursor number, assigned to it }
```

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3835: function DefineCursor(Identifer: PChar): TCursor;
3836: {**** other routines - }
         FindFormByClass returns first form specified class, FormClass, owned by Application global variable }
       function FindFormByClass(FormClass: TFormClass): TForm;
3838:
3839: function FindFormByClassName(FormClassName: string): TForm;
3840: { FindByTag returns the control with specified class, ComponentClass, from WinContol.Controls property, 3841: having Tag property value, equaled to Tag parameter }
3842: function FindByTag(WinControl:TWinControl;ComponentClass:TComponentClass;const Tag:Integer):TComponent;
3843: { ControlAtPos2 equal to TWinControl.ControlAtPos function, but works better } 3844: function ControlAtPos2(Parent: TWinControl; X, Y: Integer): TControl;
       { RBTag searches WinControl.Controls for checked RadioButton and returns its Tag property value } function RBTag(Parent: TWinControl): Integer;
3845:
3847:
       { AppMinimized returns True, if Application is minimized }
3848: function AppMinimized: Boolean;
3849: { MessageBox is Application.MessageBox with string (not PChar) parameters.
3850: if Caption parameter = '', it replaced with Application.Title }
3851: function MessageBoxJ(const Msg: string; Caption: string; const Flags: Integer): Integer;
3852: function MsgDlg2(const Msg, ACaption: string; DlgType: TMsgDlgType; 3853: Buttons: TMsgDlgButtons; HelpContext: Integer; Control: TWinControl): Integer; 3854: function MsgDlgDef(const Msg, ACaption: string; DlgType: TMsgDlgType;
         Buttons: TMsgDlgButtons; DefButton:TMsgDlgBtn; HelpContext: Integer;Control: TWinControl): Integer;
3856: { Delay stop program execution to MSec msec }
3857: procedure Delay(MSec: Longword);
3858: procedure CenterHor(Parent: TControl; MinLeft: Integer; Controls: array of TControl);
3859: procedure EnableControls(Control: TWinControl; const Enable: Boolean);
3860: procedure EnableMenuItems(MenuItem: TMenuItem; const Tag: Integer; const Enable: Boolean);
3861: procedure ExpandWidth(Parent: TControl; MinWidth: Integer; Controls: array of TControl);
3862: function PanelBorder(Panel: TCustomPanel): Integer;
3863: function Pixels(Control: TControl; APixels: Integer): Integer;
3864: procedure SetChildPropOrd(Owner: TComponent; PropName: string; Value: Longint);
       procedure Error(const Msg: string);
3865:
3866: procedure ItemHtDrawEx(Canvas: TCanvas; Rect: TRect; const State: TOwnerDrawState; const Text: string; 3867: const HideSelColor: Boolean; var PlainItem: string; var Width: Integer; CalcWidth: Boolean);
3868: {ex. Text parameter: Item 1 <b>bbold</b><i>italic ITALIC <c:Red>red<c:Green>green <c:blue>blue</i>'}
3869: function ItemHtDraw(Canvas: TCanvas; Rect: TRect; const State: TOwnerDrawState; const Text: string;
3870:
         const HideSelColor: Boolean): string;
3871: function ItemHtWidth(Canvas: TCanvas; Rect: TRect; const State: TOwnerDrawState; const Text: string;
3872:
         const HideSelColor: Boolean): Integer;
3873: function ItemHtPlain(const Text: string): string;
       { ClearList - clears list of TObject }
3874:
3875: procedure ClearList(List: TList);
3876: procedure MemStreamToClipBoard(MemStream: TMemoryStream; const Format: Word); 3877: procedure ClipBoardToMemStream(MemStream: TMemoryStream; const Format: Word);
       { RTTI support }
3879: function GetPropType(Obj: TObject; const PropName: string): TTypeKind;
3880: function GetPropStr(Obj: TObject; const PropName: string): string; 3881: function GetPropOrd(Obj: TObject; const PropName: string): Integer;
3882: function GetPropMethod(Obj: TObject; const PropName: string): TMethod;
3883: procedure PrepareIniSection(SS: TStrings)
3884:
       { following functions are not documented because they are don't work properly, so don't use them }
3885:
       {STFDEF COMPTLER2}
3886: function CompareMem(P1, P2: Pointer; Length: Integer): Boolean; assembler;
3887:
3888:
3889:
       procedure SIRegister_JvBoxProcs(CL: TPSPascalCompiler);
3890: begin
3891:
        Procedure BoxMoveSelectedItems( SrcList, DstList : TWinControl)
        Procedure BoxMoveAllItems( SrcList, DstList : TWinControl)
3892:
3893:
        Procedure BoxDragOver(List:TWinControl;Source:TObject;X,Y:Int;State:TDragState;var
       Accept:Bool;Sorted:Bool;
3894: Procedure BoxMoveFocusedItem( List : TWinControl; DstIndex : Integer)
3895:
        Procedure BoxMoveSelected( List : TWinControl; Items : TStrings)
3896:
        Procedure BoxSetItem( List : TWinControl; Index : Integer)
       Function BoxGetFirstSelection( List : TWinControl) : Integer
Function BoxCanDropItem( List : TWinControl; X, Y : Integer; var DragIndex : Integer) : Boolean
3897:
3898:
      end;
3900:
3901: procedure SIRegister_JvCsvParse(CL: TPSPascalCompiler);
3902: begin
        Const('MaxInitStrNum','LongInt'( 9);
3903:
3904: Function JvAnsiStrSplit( const InString: AnsiString; const SplitChar, QuoteChar: AnsiChar; var OutStrings
        array of AnsiString; MaxSplit : Integer) : Integer
3905: Function JvStrSplit( const InString : string; const SplitChar, QuoteChar : Char; var OutStrings : array of
       string; MaxSplit : Integer) : Integer
3906: Function JvAnsiStrSplitStrings(const InStr:AnsiString;const SplitChar,
       QuoteChar:AnsiChar;OutStrs:TStrings):Integer;
3907: Function JvAnsiStrStrip(S:AnsiString):AnsiString
3908: Function JvStrStrip( S : string) : string
3909: Function GetString( var Source : AnsiString; const Separator : AnsiString) : AnsiString
3910: Function PadString( const S : AnsiString; Len : Integer; PadChar : AnsiChar) : AnsiString
3911: Function BuildPathName( const PathName, FileName : AnsiString) : AnsiString
3912: Function StrEatWhiteSpace( const S : string) : string
3913: Function HexToAscii( const S : AnsiString) : AnsiString
3914: Function AsciiToHex( const S : AnsiString) : AnsiString
3915: Function StripQuotes(const S1: AnsiString): AnsiString
3916: Function ValidNumericLiteral(S1: PAnsiChar): Boolean
3917: Function ValidIntLiteral( S1 : PAnsiChar) : Boolean
3918: Function ValidHexLiteral( S1 : PAnsiChar) : Boolean
3919: Function HexPCharToInt( S1 : PAnsiChar) : Integer
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3920: Function ValidStringLiteral(S1: PAnsiChar): Boolean
3921: Function StripPCharQuotes(S1: PAnsiChar): AnsiString
3922: Function JvValidIdentifierAnsi( S1 : PAnsiChar) : Boolean
3923: Function JvValidIdentifier(S1:String):Boolean
3924: Function JvEndChar(X:AnsiChar):Boolean
3925: Procedure JvGetToken(S1, S2: PAnsiChar)
3926: Function IsExpressionKeyword(S1: PAnsiChar): Boolean
3927: Function IsKeyword( S1 : PAnsiChar) : Boolean
3928: Function JvValidVarReference(S1: PAnsiChar): Boolean 3929: Function GetParenthesis(S1, S2: PAnsiChar): Boolean 3930: Procedure JvGetVarReference(S1, S2, SIdx: PAnsiChar) 3931: Procedure JvEatWhitespaceChars(S1: PAnsiChar);
3932: Procedure JvEatWhitespaceChars1( S1 : PWideChar);
3933: Function GetTokenCount : Integer
3934: Procedure ResetTokenCount
3935: end
3936:
3937: procedure SIRegister_JvDBQueryParamsForm(CL: TPSPascalCompiler);
3938: begin
3939:
       SIRegister TJvQueryParamsDialog(CL);
        Function EditQueryParams( DataSet : TDataSet; List : TParams; AHelpContext : THelpContext) : Boolean
3941: end;
3942:
3945: function AnsiChangeCase(const S: string): string;
3946: function GetWordOnPos(const S: string; const P: Integer): string;
3947: function GetWordOnPosEx(const S: string; const P: Integer; var iBeg, iEnd: Integer): string;
3948: function Cmp(const S1, S2: string): Boolean;
3949: { Spaces returns string consists on N space chars }
3950: function Spaces(const N: Integer): string;
3951: { HasChar returns True, if char, Ch, contains in string, S }
3952: function HasChar(const Ch: Char; const S: string): Boolean;
3953: function HasAnyChar(const Chars: string; const S: string): Boolean;
3954: { SubStr returns substring from string, S, separated with Separator string} 3955: function SubStr(const S: string; const Index: Integer; const Separator: string): string;
3956: { SubStrEnd same to previous function but Index numerated from the end of string }
3957: function SubStrEnd(const S: string; const Index: Integer; const Separator: string): string;
3958: { ReplaceString searches for all substrings, OldPattern, in a string, S, replaces them with NewPattern } 3959: function ReplaceString(S: string; const OldPattern, NewPattern: string): string;
3960: function CharInSet(const Ch: Char; const SetOfChar: TSetOfChar): Boolean;
3961: { GetXYByPos is same to previous function, but returns X position in line too} 3962: procedure GetXYByPos(const S: string; const Pos: Integer; var X, Y: Integer);
3963: { AddSlash returns string with added slash char to Dir parameter, if needed }
3964: function AddSlash2(const Dir: TFileName): string;
3965: { AddPath returns FileName with Path, if FileName not contain any path }
3966: function AddPath(const FileName, Path: TFileName): TFileName;
3967: { ExePath returns ExtractFilePath(ParamStr(0)) }
       function ExePath: TFileName;
3969: function LoadTextFile(const FileName: TFileName): string;
3970: procedure SaveTextFile(const FileName: TFileName; const Source: string);
        { ConcatSep concatenate S and S2 strings with Separator. if S = '', separator don't included }
3971:
3972: function ConcatSep(const S, S2, Separator: string): string;
3973: { FileEquMask returns True if file, FileName, is compatible with given dos file mask, Mask } 3974: function FileEquMask(FileName, Mask: TFileName): Boolean; 3975: { FileEquMasks returns True if file, FileName, is compatible with given Masks.
3976: Masks must be separated with comma (';') }
3977: function FileEquMasks(FileName, Masks: TFileName): Boolean;
3978: function StringEndsWith(const Str, SubStr: string): Boolean;
3979: function ExtractFilePath2(const FileName: string): string;
3980: function StrToOem(const AnsiStr: string): string;
       { StrToOem translates a string from the Windows character set into the OEM character set. }
3982: function OemToAnsiStr(const OemStr: string): string;
3983: { OemToAnsiStr translates a string from the OEM character set into the Windows character set. }
3984: function IsEmptyStr(const S: string; const EmptyChars: TCharSet): Boolean;
3985: { EmptyStr returns true if the given string contains only character from the EmptyChars. } 3986: function ReplaceStr(const S, Srch, Replace: string): string;
3987:
       { Returns string with every occurrence of Srch string replaced with Replace string. }
3988: function DelSpace(const S: string): string;
3989: { DelSpace return a string with all white spaces removed. }
3990: function DelChars(const S: string; Chr: Char): string;
3991: { DelChars return a string with all Chr characters removed. } 3992: function DelBSpace(const S: string): string;
3993: { DelBSpace trims leading spaces from the given string. }
3994: function DelESpace(const S: string): string;
3995: { DelESpace trims trailing spaces from the given string. }
3996: function DelRSpace(const S: string): string;
3997: { DelRSpace trims leading and trailing spaces from the given string. }
3998: function DelSpace1(const S: string): string;
3999: { DelSpace1 return a string with all non-single white spaces removed. }
4000: function Tab2Space(const S: string; Numb: Byte): string;
4001: { Tab2Space converts any tabulation character in the given string to the Numb spaces characters. }
4002: function NPos(const C: string; S: string; N: Integer): Integer;
4003: { NPos searches for a N-th position of substring C in a given string. }
4004: function MakeStr(C: Char; N: Integer): string;
4005: function MS(C: Char; N: Integer): string;
4006: { MakeStr return a string of length N filled with character C. } 4007: function AddChar(C: Char; const S: string; N: Integer): string;
4008: { AddChar return a string left-padded to length N with characters C. }
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4009: function AddCharR(C: Char; const S: string; N: Integer): string;
4010: { AddCharR return a string right-padded to length N with characters C. }
4011: function LeftStr(const S: string; N: Integer): string;
      { LeftStr return a string right-padded to length N with blanks. }
4012:
4013: function RightStr(const S: string; N: Integer): string;
4014: { RightStr return a string left-padded to length N with blanks. } 4015: function CenterStr(const S: string; Len: Integer): string;
4016: { CenterStr centers the characters in the string based upon the Len specified. }
4017: function CompStr(const S1, S2: string): Integer;
4018: {CompStr compares S1 to S2, case-sensitivity. return val is -1 if S1 < S2,0 if S1 = S2,or 1 if S1>S2. } 4019: function CompText(const S1, S2: string): Integer;
      { CompText compares S1 to S2, without case-sensitivity. The return value is the same as for CompStr. }
4021:
      function Copy2Symb(const S: string; Symb: Char): string;
4022: { Copy2Symb returns a substring of a string S from begining to first character Symb. } 4023: function Copy2SymbDel(var S: string; Symb: Char): string;
      { Copy2SymbDel returns a substr of string S from to first character Symb and removes substring from S. }
4025: function Copy2Space(const S: string): string;
4026: { Copy2Symb returns a substring of a string S from begining to first white space. }
4027: function Copy2SpaceDel(var S: string): string;
4028: { Copy2SpaceDel returns a substring of a string S from begining to first
        white space and removes this substring from S.
4030: function AnsiProperCase(const S: string; const WordDelims: TCharSet): string;
4031: { Returns string, with the first letter of each word in uppercase,
4032:
        all other letters in lowercase. Words are delimited by WordDelims.
4033: function WordCount(const S: string; const WordDelims: TCharSet): Integer;
4034: { WordCount given a set of word delimiters, returns number of words in S.
4035: function WordPosition(const N: Integer; const S: string; const WordDelims: TCharSet): Integer;
4036: { Given a set of word delimiters, returns start position of N'th word in S. } 4037: function ExtractWord(N: Integer; const S: string; const WordDelims: TCharSet): string;
4038: function ExtractWordPos(N:Integer; const S:string; const WordDelims:TCharSet; var Pos: Integer): string;
4039: function ExtractDelimited(N: Integer; const S: string; const Delims: TCharSet): string;
4040: { ExtractWord, ExtractWordPos and ExtractDelimited given a set of word
        delimiters, return the N'th word in S. }
4041:
4042: function ExtractSubstr(const S: string; var Pos: Integer; const Delims: TCharSet): string;
      { ExtractSubstr given set of word delimiters, returns the substring from S, that started from position Pos.}
4044: function IsWordPresent(const W, S: string; const WordDelims: TCharSet): Boolean;
4045: { IsWordPresent given a set of word delimiters, returns True if word W is present in string S. } 4046: function QuotedString(const S: string; Quote: Char): string;
4047: { QuotedString returns the given string as a quoted string, using the provided Quote character. } 4048: function ExtractQuotedString(const S: string; Quote: Char): string;
4049: { ExtractQuotedString removes the Quote characters from the beginning and end of a quoted string,
4050: and reduces pairs of Quote characters within the quoted string to a single character. } 4051: function FindPart(const HelpWilds, InputStr: string): Integer;
4052: { FindPart compares a string with '?'
                                                and another, returns the position of HelpWilds in InputStr. }
4053: function IsWild(InputStr, Wilds: string; IgnoreCase: Boolean): Boolean;
4054: { IsWild compares InputString with WildCard string and returns True if corresponds. }
4055: function XorString(const Key, Src: ShortString): ShortString;
4056: function XorEncode(const Key, Source: string): string;
4057: function XorDecode(const Key, Source: string): string 4058: { ** Command line routines ** }
4059: {STENDER COMPTLER4 UP}
4060: function FindCmdLineSwitch(const Switch: string; SwitchChars: TCharSet; IgnoreCase: Boolean): Boolean;
4062: function GetCmdLineArg(const Switch: string; SwitchChars: TCharSet): string;
4063:
      { ** Numeric string handling routines **
4064: function Numb2USA(const S: string): string;
4065: { Numb2USA converts numeric string S to USA-format. }
4066: function Dec2Hex(N: Longint; A: Byte): string;
4067: function D2H(N: Longint; A: Byte): string;
4068: { Dec2Hex converts the given value to a hexadecimal string representation 4069: with the minimum number of digits (A) specified. }
4070: function Hex2Dec(const S: string): Longint;
4071: function H2D(const S: string): Longint;
4072: { Hex2Dec converts the given hexadecimal string to the corresponding integer value. } 4073: function Dec2Numb(N: Longint; A, B: Byte): string;
4074: { Dec2Numb converts the given value to a string representation with the
        base equal to B and with the minimum number of digits (A) specified. }
4075:
4076: function Numb2Dec(S: string; B: Byte): Longint;
4077: { Numb2Dec converts the given B-based numeric string to the corresponding integer value. }
4078: function IntToBin(Value: Longint; Digits, Spaces: Integer): string;
      { IntToBin converts given value to a bin string representation with min number of digits specified. }
4080: function IntToRoman(Value: Longint): string;
4081: { IntToRoman converts the given value to a roman numeric string representation. } 4082: function RomanToInt(const S: string): Longint;
4083: { RomanToInt converts the given string to an integer value. If the string
        doesn't contain a valid roman numeric value, the 0 value is returned.
4084:
4085: procedure I64ToCardinals(I: Int64; var LowPart, HighPart: Cardinal);
4088: procedure CopyFileJ(const FileName, DestName: string; ProgressControl: TControl);
      procedure CopyFileEx(const FileName, DestName:string;OverwriteReadOnly, ShellDialog:Boolean;ProgressControl:
4089:
      TControl);
4090: procedure MoveFile(const FileName, DestName: TFileName);
4091: procedure MoveFileEx(const FileName, DestName: TFileName; ShellDialog: Boolean);
4093: function GetFileSize(const FileName: string): Int64;
4094: { $ELSE
4095: function GetFileSize(const FileName: string): Longint;
4096: {$ENDIF}
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4097: function FileDateTime(const FileName: string): TDateTime;
4098: function HasAttr(const FileName: string; Attr: Integer): Boolean;
4099: function DeleteFiles(const FileMask: string): Boolean;
4100: function DeleteFilesEx(const FileMasks: array of string): Boolean;
4101: function ClearDir(const Path: string; Delete: Boolean): Boolean;
4102: function NormalDir(const DirName: string): string;
4103: function RemoveBackSlash(const DirName: string): string
4104: function ValidFileName(const FileName: string): Boolean;
4105: function DirExists(Name: string): Boolean;
4106: procedure ForceDirectories(Dir: string);
4107: function FileLock(Handle: Integer; Offset, LockSize: Longint): Integer; 4108: 

[SIFDEF COMPILER4_UP] overload; 
[SENDIF]
4109: {$IFDEF COMPILER4_UP}
4110: function FileLock(Handle: Integer; Offset, LockSize: Int64): Integer; overload;
4111: { $ENDTE }
4112: function FileUnlock(Handle: Integer; Offset, LockSize: Longint): Integer;
4113: ($IPDEF COMPILER4_UP) overload; ($ENDIF)
4114: ($IFDEF COMPILER4_UP)
4115: function FileUnlock(Handle: Integer; Offset, LockSize: Int64): Integer; overload;
4116: { $ENDIF }
4117: function GetTempDir: string;
4118: function GetWindowsDir: string;
4119: function GetSystemDir: string
4120: function BrowseDirectory(var AFolderName:string; const DlgText:string; AHelpContext:THelpContext): Boolean;
4121: { $ I F D E F W I N 3 2 }
4122: function BrowseComputer(var ComputerName:string; const DlgText:string; AHelpContext:THelpContext): Boolean;
4123: function ShortToLongFileName(const ShortName: string): string;
4124: function ShortToLongPath(const ShortName: string): string;
4125: function LongToShortFileName(const LongName: string): string;
4126: function LongToShortPath(const LongName: string): string;
4127: procedure CreateFileLink(const FileName, DisplayName: string; Folder: Integer);
4128: procedure DeleteFileLink(const DisplayName: string; Folder: Integer);
4129: {$ENDIF WIN32}
4130: {$IFNDEF COMPILER3_UP}
4131: function IsPathDelimiter(const S: string; Index: Integer): Boolean;
4132: { $ENDIF }
4133: Function CreateCalculatorForm( AOwner : TComponent; AHelpContext : THelpContext) : TJvCalculatorForm
4134: Function CreatePopupCalculator( AOwner : TComponent; ABiDiMode : TBiDiMode) : TWinControl 4135: Function CreatePopupCalculator( AOwner : TComponent) : TWinControl
4136: Procedure SetupPopupCalculator( PopupCalc : TWinControl; APrecision : Byte; ABeepOnError : Boolean)
4137:
4140: Procedure VariantArrayRedim( var V : Variant; High : Integer)
       Procedure VariantCast( const src : Variant; var dst : Variant; vt : Integer)
Procedure VariantCpy( const src : Variant; var dst : Variant)
Procedure VariantAdd( const src : Variant; var dst : Variant)
4141:
4142:
4143:
4144:
       Procedure VariantSub( const src : Variant; var dst : Variant
4145:
       Procedure VariantMul( const src : Variant; var dst : Variant
4146:
       Procedure VariantDiv( const src : Variant; var dst : Variant
       Procedure VariantMod( const src : Variant; var dst : Variant
4147:
       Procedure VariantAnd( const src : Variant; var dst : Variant)
4148:
       Procedure VariantOr( const src : Variant; var dst : Variant)
4149:
4150:
       Procedure VariantXor( const src : Variant; var dst : Variant)
4151:
       Procedure VariantShl( const src : Variant; var dst : Variant)
       Procedure VariantShr( const src : Variant; var dst : Variant)
4152:
4153:
       Function VariantAdd2( const V1 : Variant; const V2 : Variant) : Variant
       Function VariantSub2( const V1 : Variant; const V2 : Variant) : Variant
4154:
4155:
       Function VariantMul2( const V1 : Variant; const V2 : Variant)
                                                                              : Variant
4156:
       Function VariantDiv2( const V1 : Variant; const V2 : Variant) : Variant
4157:
       Function VariantMod2( const V1 : Variant; const V2 : Variant)
                                                                              : Variant
       Function VariantAnd2( const V1 : Variant; const V2 : Variant)
4159:
       Function VariantOr2( const V1 : Variant; const V2 : Variant) : Variant
       Function VariantXor2( const V1 : Variant; const V2 : Variant) : Variant
Function VariantShl2( const V1 : Variant; const V2 : Variant) : Variant
4160:
4161:
       Function VariantShr2( const V1 : Variant; const V2 : Variant) : Variant
4162:
       Function VariantNot( const VI : Variant) : Variant
Function VariantNeg( const VI : Variant) : Variant
4163:
4164:
       Function VariantGetElement( const V : Variant; i1 : integer) : Variant;
4165:
       Function VariantGetElement1( const V : Variant; i1, i2 : integer) : Variant;
Function VariantGetElement2( const V : Variant; i1, i2, i3 : integer) : Variant;
4166:
4167:
4168:
       Function VariantGetElement3( const V : Variant; i1, i2, i3, i4 : integer) : Variant;
4169:
       Function VariantGetElement4( const V : Variant; i1, i2, i3, i4, i5 : integer) : Variant;
Procedure VariantPutElement( var V : Variant; const data : Variant; i1 : integer);
4170:
       Procedure VariantPutElement1( var V : Variant; const data : Variant; i1, i2 : integer);
4171:
4172:
       Procedure VariantPutElement2( var V : Variant; const data : Variant; i1, i2, i3 : integer);
4173: Procedure VariantPutElement3( var V : Variant; const data : Variant; i1, i2, i3, i4 : integer); 4174: Procedure VariantPutElement4( var V : Variant; const data : Variant; i1, i2, i3, i4, i5 : integer);
4175: end;
4178: function IsEven(I: Integer): Boolean;
4179: function InchesToPixels(DC: HDC; Value: Single; IsHorizontal: Boolean): Integer; 4180: function CentimetersToPixels(DC: HDC; Value: Single; IsHorizontal: Boolean): Integer;
4181: procedure SwapInt(var I1, I2: Integer);
4182: function Spaces(Count: Integer): string;
4183: function DupStr(const Str: string; Count: Integer): string; 4184: function DupChar(C: Char; Count: Integer): string;
4185: procedure Msg(const AMsg: string);
```

```
4186: function RectW(R: TRect): Integer;
4187: function RectH(R: TRect): Integer;
4188: function IncColor(AColor: Longint; AOffset: Byte): Longint;
4189: function DecColor(AColor: Longint; AOffset: Byte): Longint;
4190: function IsItAFilledBitmap(Bmp: TBitmap): Boolean;
4191: procedure DrawTextInRectWithAlign(DC: HDC; R: TRect; const Text: string;
       HAlign: TglHorAlign; VAlign: TglVertAlign; Style: TglTextStyle; Fnt: TFont; Flags: UINT);
4192:
4193: procedure DrawTextInRect(DC: HDC; R:TRect; const Text:string;Style:TglTextStyle;Fnt:TFont;Flags: UINT);
4194: procedure ExtTextOutExt(DC: HDC; X, Y: Integer; R: TRect; const Text: string;
4195: Style: TglTextStyle; ADelineated, ASupress3D: Boolean; FontColor, DelinColor, HighlightColor, ShadowColor: TColor; Illumination: TJvgIllumination; Gradient: TJvgGradient; Font: TFont);
4196: procedure DrawBox(DC:HDC; var R:TRect; Style:TglBoxStyle;BackgrColor: Longint; ATransparent: Boolean);
4197: function DrawBoxEx(DC: HDC; ARect: TRect; Borders: TglSides;
4198: BevelInner, BevelOuter: TPanelBevel; Bold:Boolean; BackgrColor: Longint; ATransparent: Boolean): TRect; 4199: procedure GradientBox(DC: HDC; R: TRect; Gradient: TJvgGradient; PenStyle, PenWidth: Integer);
4200: procedure ChangeBitmapColor(Bitmap: TBitmap; FromColor, ToColor: TColor);
4201: procedure DrawBitmapExt(DC: HDC: { DC - background & result} }
4202: SourceBitmap: TBitmap; R: TRect; X, Y: Integer; //...X,Y _in_ rect!
4203: BitmapOption: TglWallpaperOption; DrawState: TglDrawState;
4204:
          ATransparent: Boolean; TransparentColor: TColor; DisabledMaskColor: TColor);
4205: procedure CreateBitmapExt(DC: HDC: { DC - background & result} 4206: SourceBitmap: TBitmap; R: TRect; X, Y: Integer; //...X,Y _in_ rect!
4207:
          BitmapOption: TglWallpaperOption; DrawState: TglDrawState;
          ATransparent: Boolean; TransparentColor: TColor; DisabledMaskColor: TColor);
4208:
4209: procedure BringParentWindowToTop(Wnd: TWinControl);
4210: function GetParentForm(Control: TControl): TForm;
4211: \textbf{procedure} \ \texttt{GetWindowImageFrom(Control:TWinControl;X,Y:Integer;ADrawSelf,ADrawChildWindows:Boolean;DC:HDC)} \\
4212: procedure GetWindowImage(Control: TWinControl; ADrawSelf, ADrawChildWindows: Boolean; DC: HDC); 4213: procedure GetParentImageRect(Control: TControl; Rect: TRect; DC: HDC);
4214: function CreateRotatedFont(F: TFont; Escapement: Integer): HFONT;
4215: function FindMainWindow(const AWndClass, AWndTitle: string): THandle;
4216: procedure CalcShadowAndHighlightColors(BaseColor: TColor: Colors: TJvgLabelColors);
4217: function CalcMathString(AExpression: string): Single;
4218: function IIF(AExpression: Boolean; IfTrue, IfFalse: Variant): Variant; overload;
4219: function IIF(AExpression: Boolean; const IfTrue, IfFalse: string): string; overload;
4220: function GetTransparentColor(Bitmap: TBitmap; AutoTrColor: TglAutoTransparentColor): TColor;
4221: procedure TypeStringOnKeyboard(const S: string);
4222: function NextStringGridCell( Grid: TStringGrid ): Boolean;
4223: procedure DrawTextExtAligned(Canvas:TCanvas;const
        Text:string;R:TRect;Alignment:TglAlignment;WordWrap:Boolean);
4224: procedure LoadComponentFromTextFile(Component: TComponent; const FileName: string);
4225: procedure SaveComponentToTextFile(Component: TComponent; const FileName: string)
4226: function ComponentToString(Component: TComponent): string;
4227: procedure StringToComponent(Component: TComponent; const Value: string);
4228: function PlayWaveResource(const ResName: string): Boolean;
4229: function UserName: string;
4230: function ComputerName: string;
4231: function CreateIniFileName: string;
4232: function ExpandString(const Str: string; Len: Integer): string;
4233: function Transliterate(const Str: string; RusToLat: Boolean): string;
4234: function IsSmallFonts: Boolean;
4235: function SystemColorDepth: Integer;
4236: function GetFileTypeJ(const FileName: string): TglFileType;
4237: Function GetFileType( hFile : THandle) : DWORD');
4238: function FindControlAtPt(Control: TWinControl; Pt: TPoint; MinClass: TClass): TControl; 4239: function StrPosExt(const Str1, Str2: PChar; Str2Len: DWORD): PChar;
        4241:
4242: function LineStart(Buffer, BufPos: PChar): PChar
4243: function ExtractStrings(Separators, WhiteSpace: TSysCharSet; Content: PChar;'+
4244:
           'Strings: TStrings): Integer
         \textbf{Function} \ \ \texttt{TestStreamFormat} ( \ \ \texttt{Stream} : \ \ \texttt{TStream}) \ : \ \ \texttt{TStreamOriginalFormat}
4246:
        Procedure RegisterClass( AClass : TPersistentClass)
        Procedure RegisterClasses( AClasses : array of TPersistentClass)
Procedure RegisterClassAlias( AClass : TPersistentClass; const Alias : string)
4247:
4248:
         Procedure UnRegisterClass( AClass : TPersistentClass)
         Procedure UnRegisterClasses( AClasses: array of TPersistentClass)
4250:
        Procedure UnRegisterModuleClasses( Module : HMODULE)
Function FindGlobalComponent( const Name : string) : TComponent
Function IsUniqueGlobalComponentName( const Name : string) : Boolean
4251:
4252:
4253:
         Function InitInheritedComponent( Instance : TComponent; RootAncestor : TClass) : Boolean
4254:
4255:
         \textbf{Function} \  \, \texttt{InitComponentRes}( \  \, \textbf{const} \  \, \texttt{ResName} \  \, : \  \, \textbf{string}; \  \, \texttt{Instance} \  \, : \  \, \texttt{TComponent}) \  \, : \  \, \texttt{Boolean}
        Function ReadComponentRes( const ResName : string; Instance : TComponent) : TComponent Function ReadComponentResEx( HInstance : THandle; const ResName : string) : TComponent
4256:
4257:
         Function ReadComponentResFile( const FileName : string; Instance : TComponent) : TComponent
4258:
         Procedure WriteComponentResFile( const FileName : string; Instance : TComponent)
4259:
4260:
         Procedure GlobalFixupReferences
         Procedure GetFixupReferenceNames( Root : TComponent; Names : TStrings)
4261:
         Procedure GetFixupInstanceNames(Root: TComponent; const ReferenceRootName string; Names: TStrings)
4262:
        Procedure RedirectFixupReferences (Root: TComponent; const OldRootName, NewRootName: string)

Procedure RemoveFixupReferences (Root: TComponent; const RootName: string)
4263:
4264:
4265:
        Procedure RemoveFixups( Instance : TPersistent)
4266:
        Function FindNestedComponent( Root : TComponent; const NamePath : string) : TComponent
4267:
         Procedure BeginGlobalLoading
4268:
         Procedure NotifyGlobalLoading
        Procedure EndGlobalLoading
Function GetUltimateOwner1( ACollection : TCollection) : TPersistent;
Function GetUltimateOwner( APersistent : TPersistent) : TPersistent;
// AddTypeS('TWndMethod', 'Procedure (var Message : TMessage)
4269:
4270:
```

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4273:
             //Function MakeObjectInstance( Method : TWndMethod) : Pointer Procedure FreeObjectInstance( ObjectInstance : Pointer)
4274:
4275: // Function AllocateHWnd( Method : TWndMethod) : HWND
4276 .
             Procedure DeallocateHWnd( Wnd : HWND)
4279: Procedure VarSQLTimeStampCreate4( var aDest: Variant; const ASQLTimeStamp : TSQLTimeStamp);
4280: Function VarSQLTimeStampCreate3: Variant;
4281: Function VarsQLTimeStampCreate2( const AValue : string) : Variant;
4282: Function VarsQLTimeStampCreate1( const AValue : TDateTime) : Variant;
4283: Function VarsQLTimeStampCreate( const ASQLTimeStamp : TSQLTimeStamp) : Variant;
4284: Function VarSQLTimeStamp : TVarType
4285: Function VarIsSQLTimeStamp( const aValue : Variant) : Boolean;
4286: Function LocalToUTC( var TZInfo : TTimeZone; var Value : TSQLTimeStamp) : TSQLTimeStamp //beta 4287: Function UTCToLocal( var TZInfo : TTimeZone; var Value : TSQLTimeStamp) : TSQLTimeStamp //beta
4288: Function VarToSQLTimeStamp( const aValue : Variant) : TSQLTimeStamp
4289: Function SQLTimeStampToStr( const Format : string; DateTime : TSQLTimeStamp) : string
4290: Function SQLDayOfWeek( const DateTime : TSQLTimeStamp) : integer
4291: Function SqLDayotweek Const DateTime : TogotimeStamp) : Trottime) : TSQLTimeStamp 4291: Function SqLTimeStampToDateTime( const DateTime : TSQLTimeStamp) : TDateTime
4293: Function TryStrToSQLTimeStamp( const S : string; var TimeStamp : TSQLTimeStamp) : Boolean
4294: Function StrToSQLTimeStamp( const S : string) : TSQLTimeStamp
4295: Procedure CheckSqlTimeStamp( const ASQLTimeStamp: TSQLTimeStamp)
4296: Function ExtractFieldName( const Fields: string; var Pos: Integer): string;
4297: Function ExtractFieldName( const Fields: WideString; var Pos: Integer): WideString;
            //'Procedure RegisterFields( const FieldClasses : array of TFieldClass)
4299: Procedure DatabaseError( const Message : WideString; Component : TComponent)
4300: Procedure DatabaseErrorFmt(const Message:WIdeString; const Args:array of const;Component:TComponent)
4301: Procedure DisposeMem( var Buffer, Size : Integer)
4302: Function BuffersEqual( Buf1, Buf2 : Pointer; Size : Integer) : Boolean
4303: \textbf{Function} \ \ \texttt{GetFieldProperty}(\texttt{DataSet}: \texttt{TDataSet}; \ \texttt{Control}: \texttt{TComponent}; \ \textbf{const} \ \ \texttt{FieldName}: \ \texttt{WideString}): \ \ \texttt{TFieldname}: \
4306: {template functions}
4307: function ReplaceFirst(const SourceStr, FindStr, ReplaceStr: string): string;
4308: function ReplaceLast(const SourceStr, FindStr, ReplaceStr: string): string
4309: function InsertLastBlock(var SourceStr: string; BlockStr: string): Boolean;
4310: function RemoveMasterBlocks(const SourceStr: string): string;
4311: function RemoveFields(const SourceStr: string): string;
4312: {http functions}
4313: function URLEncode(const Value: AnsiString): AnsiString; // Converts string To A URLEncoded string 4314: function URLDecode(const Value: AnsiString): AnsiString; // Converts string From A URLEncoded string
4315: {set functions}
4316: procedure SplitSet(AText: string; AList: TStringList);
4317: function JoinSet(AList: TStringList): string;
4318: function FirstOfSet(const AText: string): string;
4319: function LastOfSet(const AText: string): string;
4320: function CountOfSet(const AText: string): Integer
4321: function SetRotateRight(const AText: string): string
4322: function SetRotateLeft(const AText: string): string;
4323: function SetPick(const AText: string; AIndex: Integer): string;
4324: function SetSort(const AText: string): string;
4325: function SetUnion(const Set1, Set2: string): string;
4326: function SetIntersect(const Set1, Set2: string): string;
4327: function SetExclude(const Set1, Set2: string): string;
4328: {replace any <,> etc by &lt; &gt;}
4329: function XMLSafe(const AText: string): string;
4330: {simple hash, Result can be used in Encrypt}
4331: function Hash(const AText: string): Integer
4332: { Base64 encode and decode a string }
4333: function B64Encode(const S: AnsiString): AnsiString;
4334: function B64Decode(const S: AnsiString): AnsiString;
4335: {Basic encryption from a Borland Example}
4336: function Encrypt(const InString: AnsiString; StartKey, MultKey, AddKey: Integer): AnsiString;
4337: function Decrypt(const InString: AnsiString; StartKey, MultKey, AddKey: Integer): AnsiString;
4338: {Using Encrypt and Decrypt in combination with B64Encode and B64Decode}
            function EncryptB64(const InString: AnsiString; StartKey, MultKey, AddKey: Integer): AnsiString;
4340: \textbf{ function } \texttt{DecryptB64}(\textbf{const} \texttt{ InString: AnsiString: StartKey, MultKey, AddKey: Integer): AnsiString: \texttt{AnsiString: AnsiString: AnsiS
4341: procedure CSVToTags(Src, Dst: TStringList);
4342: // converts a csv list to a tagged string list
4343: procedure TagsToCSV(Src, Dst: TStringList);
4344: // converts a tagged string list to a csv list
4345: // only fieldnames from the first record are scanned ib the other records
4346: procedure ListSelect(Src, Dst: TStringList; const AKey, AValue: string);
4347: {selects akey=avalue from Src and returns recordset in Dst}
4348: procedure ListFilter(Src: TStringList; const AKey, AValue: string);
            {filters Src for akey=avalue}
4349:
4350: procedure ListOrderBy(Src: TStringList; const AKey: string; Numeric: Boolean);
4351: {orders a tagged Src list by akey}
4352: function PosStr(const FindString, SourceString: string;
4353:
               StartPos: Integer = 1): Integer;
4354: { PosStr searches the first occurrence of a substring FindString in a string
               given by SourceString with case sensitivity (upper and lower case characters are differed). This function returns the index value of the first character
4355:
4356:
                of a specified substring from which it occurs in a given string starting with
4358:
               StartPos character index. If a specified substring is not found Q_PosStr
4359: returns zero. author of algorithm is Peter Morris (UK) (Faststrings unit from www.torry.ru). } 4360: function PosStrLast(const FindString, SourceString: string): Integer;
4361: {finds the last occurance}
```

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4362: function LastPosChar(const FindChar: Char; SourceString: string): Integer;
4363: function PosText(const FindString, SourceString: string; StartPos: Integer = 1): Integer;
4364: { PosText searches the first occurrence of a substring FindString in a string
         given by SourceString without case sensitivity (upper and lower case characters are not differed). This
4365:
       function returns the index value of the first character of a specified substring from which it occurs in a
       given string starting with Start
4366: function PosTextLast(const FindString, SourceString: string): Integer;
4367: {finds the last occurance}
4368: function NameValuesToXML(const AText: string): string;
      { STEDER MSWINDOWS }
4369:
4370: procedure LoadResourceFile(AFile: string; MemStream: TMemoryStream);
4372: procedure DirFiles(const ADir, AMask: string; AFileList: TStringList);
4373: procedure RecurseDirFiles(const ADir: string; var AFileList: TStringList);
4374: procedure RecurseDirProgs(const ADir: string; var AFileList: TStringList);
4375: procedure SaveString(const AFile, AText: string);
4376: Procedure SaveStringasFile( const AFile, AText : string
4377: function LoadStringJ(const AFile: string): string;
4378: Function LoadStringofFile( const AFile: string): string
4379: Procedure SaveStringtoFile( const AFile, AText: string)
4380: Function LoadStringfromFile( const AFile: string): string
4381: function HexToColor(const AText: string): TColor;
4382: function UppercaseHTMLTags(const AText: string): string; 4383: function LowercaseHTMLTags(const AText: string): string;
4384: procedure GetHTMLAnchors(const AFile: string; AList: TStringList);
4385: function RelativePath(const ASrc, ADst: string): string;
4386: function GetToken(var Start: Integer; const SourceText: string): string;
4387: function PosNonSpace(Start: Integer; const SourceText: string): Integer; 4388: function PosEscaped(Start: Integer; const SourceText, FindText: string; EscapeChar: Char): Integer;
4389: function DeleteEscaped(const SourceText: string; EscapeChar: Char): string;
4390: function BeginOfAttribute(Start: Integer; const SourceText: string): Integer;
4391: // parses the beginning of an attribute: space + alpha character
4392: function ParseAttribute(var Start:Integer; const SourceText:string; var AName, AValue:string): Boolean;
4393: //parses a name="value" attrib from Start; returns 0 when not found or else the position behind attribute 4394: procedure ParseAttributes(const SourceText: string; Attributes: TStrings);
4395:
       // parses all name=value attributes to the attributes TStringList
4396: function HasStrValue(const AText, AName: string; var AValue: string): Boolean; 4397: // checks if a name="value" pair exists and returns any value
4398: function GetStrValue(const AText, AName, ADefault: string): string;
4399: // retrieves string value from a line like:
4400: // name="jan verhoeven" email="jan1 dott verhoeven att wxs dott nl"
       // returns ADefault when not found
4401:
4402: function GetHTMLColorValue(const AText, AName: string; ADefault: TColor): TColor;
4403: // same for a color
4404: function GetIntValue(const AText, AName: string; ADefault: Integer): Integer;
4405: // same for an Integer
4406: function GetFloatValue(const AText, AName: string; ADefault: Extended): Extended;
4407: // same for a float
4408: function GetBoolValue(const AText, AName: string): Boolean;
4409: // same for Boolean but without default
4410: function GetValue(const AText, AName: string): string;
4411: //retrieves string value from a line like: name="jan verhoeven" email="jan1 verhoeven att wxs dott nl" 4412: procedure SetValue(var AText: string; const AName, AValue: string);
4413: // sets a string value in a line
4414: procedure DeleteValue(var AText: string; const AName: string); 4415: // deletes a AName="value" pair from AText 4416: procedure GetNames(AText: string; AList: TStringList);
      // get a list of names from a string with name="value" pairs
4417:
4418: function GetHTMLColor(AColor: TColor): string;
4419: // converts a color value to the HTML hex value 4420: function BackPosStr(Start: Integer; const FindString, SourceString: string): Integer;
       // finds a string backward case sensitive
4422: function BackPosText(Start: Integer; const FindString, SourceString: string): Integer;
4423: // finds a string backward case insensitive
4424: function PosRangeStr(Start: Integer; const HeadString, TailString, SourceString: string;
         var RangeBegin: Integer; var RangeEnd: Integer): Boolean;
4426: // finds a text range, e.g. <TD>....</TD> case sensitive
4427: function PosRangeText(Start: Integer; const HeadString, TailString, SourceString: string;
4428:
         var RangeBegin: Integer; var RangeEnd: Integer): Boolean;
4429: // finds a text range, e.g. <TD>.... case insensitive
4430: function BackPosRangeStr(Start: Integer; const HeadString, TailString, SourceString: string;
         var RangeBegin: Integer; var RangeEnd: Integer): Boolean;
4431:
4432: // finds a text range backward, e.g. <TD>....</TD> case sensitive 4433: function BackPosRangeText(Start: Integer; const HeadString, TailString, SourceString: string;
         var RangeBegin: Integer; var RangeEnd: Integer): Boolean;
4434:
       // finds a text range backward, e.g. <TD>.... case insensitive
4435:
4436: function PosTag(Start: Integer; SourceString: string; var RangeBegin: Integer;
4437:
        var RangeEnd: Integer): Boolean;
       // finds a HTML or XML tag: <....>
4438:
4439: function InnerTag(Start: Integer; const HeadString, TailString, SourceString: string;
         var RangeBegin: Integer; var RangeEnd: Integer): Boolean;
4440:
4441: // finds the innertext between opening and closing tags
4442: function Easter(NYear: Integer): TDateTime;
4443: // returns the easter date of a year.
4444: function GetWeekNumber(Today: TDateTime): string;
4445: //gets a datecode. Returns year and weeknumber in format: YYWW
4446: function ParseNumber(const S: string): Integer;
4447: // parse number returns the last position, starting from 1 4448: function ParseDate(const S: string): Integer;
```

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4449: // parse a SQL style data string from positions 1,
4450: // starts and ends with #
4453:
4454: function VarIsInt(Value: Variant): Boolean;
       // VarIsInt returns VarIsOrdinal-[varBoolean]
4455:
         PosIdx returns the index of the first appearance of SubStr in Str. The search starts at index "Index". }
4457: function PosIdx(const SubStr, S: string; Index: Integer = 0): Integer; 4458: function PosIdxW(const SubStr, S: WideString; Index: Integer = 0): Integer;
4459: function PosLastCharIdx(Ch: Char; const S: string; Index: Integer = 0): Integer;
4460: { GetWordOnPos returns Word from string, S, on the cursor position, P}
4461: function GetWordOnPos(const S: string; const P: Integer): string;
4462: function GetWordOnPosW(const S: WideString; const P: Integer): WideString;
4463: function GetWordOnPos2(const S: string; P: Integer; var iBeg, iEnd: Integer): string;
4464: function GetWordOnPos2W(const S: WideString; P: Integer; var iBeg, iEnd: Integer): WideString;
4465: { GetWordOnPosEx working like GetWordOnPos function, but
         also returns Word position in iBeg, iEnd variables
4466:
4467: function GetWordOnPosEx(const S: string; const P: Integer; var iBeg, iEnd: Integer): string;
4468: function GetWordOnPosExW(const S: WideString; const P: Integer; var iBeg, iEnd: Integer): WideString;
4469: function GetNextWordPosEx(const Text: string; StartIndex: Integer; var iBeg, iEnd: Integer): string;
4470: function GetNextWordPosExW(const Text:WideString;StartIndex:Integer; var iBeg,iEnd:Integer):WideString;
4471: procedure GetEndPosCaret(const Text: string; CaretX, CaretY: Integer; var X, Y: Integer);
4472: { GetEndPosCaret returns the caret position of the last char. For the position 4473: after the last char of Text you must add 1 to the returned X value. }
4474: procedure GetEndPosCaretW(const Text: WideString;CaretX,CaretY:Integer;var X,Y:Integer);
4475: { GetEndPosCaret returns the caret position of the last char. For the position
4476:
         after the last char of Text you must add 1 to the returned \boldsymbol{X} value.
4477: { SubStrBySeparator returns substring from string, S, separated with Separator string} 4478: function SubStrBySeparator(const S:string;const Index:Integer;const
       Separator:string;StartIndex:Int=1):string;
4479: function SubStrBySeparatorW(const S:WideString;const Index:Int;const
       Separator:WideString;StartIndex:Int:WideString;
4480:
       { SubStrEnd same to previous function but Index numerated from the end of string }
       function SubStrEnd(const S: string; const Index: Integer; const Separator: string): string;
4482:
       { SubWord returns next Word from string, P, and offsets Pointer to the end of Word, P2 }
4483: function SubWord(P: PChar; var P2: PChar): string;
4484: function CurrencyByWord(Value: Currency): string;
       { GetLineByPos returns the Line number, there the symbol Pos is pointed. Lines separated with #13 symbol }
4485:
4486: function GetLineByPos(const S: string; const Pos: Integer): Integer;
4487: { GetXYByPos is same as GetLineByPos, but returns X position in line as well}
4488: procedure GetXYByPos(const S: string; const Pos: Integer; var X, Y: Integer);
4489: procedure GetXYByPosW(const S: WideString; const Pos: Integer; var X, Y: Integer);
4490: { ReplaceString searches for all substrings, OldPattern,
          in a string, S, and replaces them with NewPattern }
4491:
4492: function ReplaceString(S: string; const OldPattern, NewPattern: string; StartIndex:Integer = 1):string;
       function ReplaceStringW(S: WideString; const OldPattern, NewPattern:
4493:
       WideString;StartIndex:Integer=1):WideString;
4494: { ConcatSep concatenate S1 and S2 strings with Separator. if S = '' then separator not included }
4495: function ConcatSep(const S1, S2, Separator: string): string; {$IFDEF SUPPORTS_INLINE} inline; {$ENDIF}
        SUPPORTS INLINE }
         ConcatLeftSep is same to previous function, but strings concatenate right to left
4497: function ConcatLeftSep(const S1, S2, Separator: string): string; [$IFDEF SUPPORTS_INLINE] inline; [$ENDIF
       SUPPORTS_INLINE }
4498:
4499: { Next 4 function for russian chars transliterating.
         This functions are needed because Oem2Ansi and Ansi2Oem functions sometimes suck }
4501: procedure Dos2Win(var S: AnsiString);
4502: procedure Win2Dos(var S: AnsiString);
4503: function Dos2WinRes(const S: AnsiString): AnsiString; inline; ($ENDIF SUPPORTS_INLINE)
4504: function Win2DosRes(const S: AnsiString): AnsiString; inline; ($ENDIF SUPPORTS_INLINE)
4505: function Win2Koi(const S: AnsiString): AnsiString;
4506: { FillString fills the string Buffer with Count Chars }
4507: procedure FillString(var Buffer: string; Count: Integer; const Value: Char); overload; 4508: procedure FillString(var Buffer: string; StartIndex, Count: Integer; const Value: Char); overload;
       { MoveString copies Count Chars from Source to Dest }

procedure MoveString(const Source: string; var Dest: string; Count: Integer); { SIFDEF SUPPORTS_INLINE }
4510:
       inline; {$ENDIF SUPPORTS_INLINE} overload;
4511: procedure MoveString(const Source: string; SrcStartIdx: Integer; var Dest: string;
4512: DstStartIdx: Integer; Count: Integer); {$IFDEF SUPPORTS_INLINE} inline; {$ENDIF SUPPORTS_INLINE} overload;
4513: { FillWideChar fills Buffer with Count WideChars (2 Bytes) }
4514: procedure FillWideChar(var Buffer; Count: Integer; const Value: WideChar);
4515: { MoveWideChar copies Count WideChars from Source to Dest }
4516: procedure MoveWideChar(const Source; var Dest;Count:Integer); { $IFDEF SUPPORTS_INLINE } inline; { $ENDIF
       SUPPORTS_INLINE }
4517: { FillNativeChar fills Buffer with Count NativeChars }
4518: procedure FillNativeChar(var Buffer; Count: Integer; const Value: Char); // D2009 internal error {$IFDEF}
       4519: { MoveWideChar copies Count WideChars from Source to Dest }
4520: procedure MoveNativeChar(const Source; var Dest; Count: Integer); // D2009 internal error {$IFDEF
       SUPPORTS_INLINE | inline; { $ENDIF SUPPORTS_INLINE }
4521: { IsSubString() compares the sub string to the string. Indices are 1th based. }
4522: function IsSubString(const S: string; StartIndex: Integer; const SubStr: string): Boolean; 4523: { Spaces returns string consists on N space chars }
4524: function Spaces(const N: Integer): string;
4525: { AddSpaces adds spaces to string S, if its Length is smaller than N }
4526: function AddSpaces(const S: string; const N: Integer): string; 4527: function SpacesW(const N: Integer): WideString;
4528: function AddSpacesW(const S: WideString; const N: Integer): WideString;
```

```
4529: { function LastDateRUS for russian users only } 4530: { returns date relative to current date: 'äâà ãíỹ íàçàā' }
4531: function LastDateRUS(const Dat: TDateTime): string;
           { CurrencyToStr format Currency, Cur, using ffCurrency float format}
4532:
4533: function CurrencyToStr(const Cur: Currency): string;
4534: { HasChar returns True, if Char, Ch, contains in string, S } 4535: function HasChar(const Ch: Char; const S: string): Boolean;
4536: function HasCharW(const Ch: WideChar; const S: WideString): Boolean; inline; ($ENDIF SUPPORTS_INLINE)
4537: function HasAnyChar(const Chars: string; const S: string): Boolean;
4538:
                          COMPTLER12 IIP
4539: function CharInSet(const Ch: AnsiChar; const SetOfChar:TSysCharSet):Boolean; inline; ($ENDIF SUPPORTS INLINE)
          { $ENDIF ~COMPILER12 UP }
4541: function CharInSetW(const Ch: WideChar; const SetOfChar: TSysCharSet):Boolean; inline; ($ENDIF
             UPPORTS_INLINE}
4542: function CountOfChar(const Ch: Char; const S: string): Integer;
4543: function DefStr(const S: string; Default: string): string; ($IFDEF SUPPORTS_INLINE) inline; ($ENDIF
             UPPORTS INLINE }
             StrLICompW2 is a faster replacement for JclUnicode.StrLICompW }
4545: function StrLICompW2(S1, S2: PWideChar; MaxLen: Integer; Integer; 4546: function StrPosW(S, SubStr: PWideChar): PWideChar;
4547: function StrLenW(S: PWideChar): Integer;
4548: function TrimW(const S: WideString):WideString; {$IFDEF SUPPORTS_INLINE} inline; {$ENDIF SUPPORTS_INLINE} 4549: function TrimLeftW(const S: WideString): WideString; {$IFDEF SUPPORTS_INLINE} inline; {$ENDIF
SUPPORTS_INLINE 4550: function TrimRightW(const S: WideString): WideString; inline; ($ENDIF SUPPORTS_INLINE)
4551: TPixelFormat', '4552: TMappingMethod',
                                      '( pfDevice, pf1bit, pf4bit, pf8bit, pf24bit )
                                          '( mmHistogram, mmQuantize, mmTrunc784, mmTrunc666, mmTripel, mmGrayscale )
4553: Function GetBitmapPixelFormat(Bitmap: TBitmap): TPixelFormat 4554: Function GetPaletteBitmapFormat(Bitmap: TBitmap): TPixelFormat
4555: Procedure SetBitmapPixelFormat(Bitmap: TBitmap; PixelFormat: TPixelFormat; Method: TMappingMethod)
4556: \textbf{Function} \ \ \texttt{BitmapToMemoryStream} (\texttt{Bitmap:TBitmap:PixelFormat:TPixelFormat:Method:TMappingMethod}) : \texttt{TMemoryStream} (\texttt{Attention BitmapToMemoryStream}) : \texttt{TM
4557: Procedure GrayscaleBitmap( Bitmap: TBitmap)
4558: Function BitmapToMemory( Bitmap: TBitmap; Colors: Integer): TStream
4559: Procedure SaveBitmapToFile( const Filename : string; Bitmap : TBitmap; Colors : Integer)
4560: Function ScreenPixelFormat :
                                                              TPixelFormat
4561: Function ScreenColorCount : Integer
4562: Procedure TileImage( Canvas : TCanvas; Rect : TRect; Image : TGraphic)
4563: Function ZoomImage( ImageW, ImageH, MaxW, MaxH : Integer; Stretch : Boolean) : TPoint
4564: //
                 SIRegister_TJvGradient(CL);
4565:
4567: procedure SetDelimitedText(List: TStrings; const Text: string; Delimiter: Char);
4568: const
4570:
              DefaultCaseSensitivity = False;
              {$ENDIF MSWINDOWS}
{$IFDEF UNIX}
4571:
4572:
4573:
              DefaultCaseSensitivity = True;
4574:
4575: {
             GenTempFileName returns temporary file name on
4576: drive, there FileName is placed }
4577: function GenTempFileName(FileName: string): string;
4578: { GenTempFileNameExt same to previous function, but
              returning filename has given extension, FileExt
4579:
4580: function GenTempFileNameExt(FileName: string; const FileExt: string): string;
4581:
          { ClearDir clears folder Dir }
function ClearDir(const Dir: string): Boolean;
           { DeleteDir clears and than delete folder Dir }
4584: function DeleteDir(const Dir: string): Boolean;
4585: { FileEquMask returns True if file, FileName, is compatible with given dos file mask, Mask }
4586: function FileEquMask(FileName, Mask: TFileName; CaseSensitive: Boolean=DefaultCaseSensitivity): Boolean;
4587: { FileEquMasks returns True if file, FileName, is compatible with given Masks.
4588: Masks must be separated with SepPath (MSW: ';' / UNIX: ':') }
4589: function FileEquMasks(FileName, Masks: TFileName;
          CaseSensitive: Boolean = DefaultCaseSensitivity): Boolean;
function DeleteFiles(const Folder: TFileName; const Masks: string): Boolean;
4590:
4592:
           { SIFDEF MSWINDOWS }
4593: {
             LZFileExpand expand file, FileSource,
4594:
              into FileDest. Given file must be compressed, using MS Compress program \}
4595: function LZFileExpand(const FileSource, FileDest: string): Boolean;
4596:
4597:
              FileGetInfo fills SearchRec record for specified file attributes)
4598: function FileGetInfo(FileName: TFileName; var SearchRec: TSearchRec): Boolean; 4599: { HasSubFolder returns True, if folder APath contains other folders } 4600: function HasSubFolder(APath: TFileName): Boolean;
4601: { IsEmptyFolder returns True, if there are no files or
4602:
              folders in given folder, APath}
4603: function IsEmptyFolder(APath: TFileName): Boolean;
4604: { AddSlash returns string with added slash Char to Dir parameter, if needed }
4605: function AddSlash(const Dir: TFileName): string; {$IFDEF SUPPORTS_INLINE} inline; {$ENDIF SUPPORTS_INLINE}
4606: { AddPath returns FileName with Path, if FileName not contain any path } 4607: function AddPath(const FileName, Path: TFileName): TFileName; 4608: function AddPaths(const PathList, Path: string): string;
4609: function ParentPath(const Path: TFileName): TFileName;
4610: function FindInPath(const FileName, PathList: string): TFileName;
4611: { DeleteReadOnlyFile clears R/O file attribute and delete file }
4612: function DeleteReadOnlyFile(const FileName: TFileName): Boolean;
4613: { HasParam returns True, if program running with specified parameter, Param } 4614: function HasParam(const Param: string): Boolean;
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```
4615: function HasSwitch(const Param: string): Boolean;
4616: function Switch(const Param: string): string
4617: { ExePath returns ExtractFilePath(ParamStr(0))
4618: function ExePath: TFileName; [$IFDEF SUPPORTS_INLINE] inline; [$ENDIF SUPPORTS_INLINE] 4619: function CopyDir(const SourceDir, DestDir: TFileName): Boolean;
4620: //function FileTimeToDateTime(const FT: TFileTime): TDateTime;
4621: procedure FileTimeToDosDateTimeDWord(const FT: TFileTime; out Dft: DWORD);
4622: function MakeValidFileName(const FileName: TFileName; ReplaceBadChar: Char): TFileName;
4623: {**** Graphic routines }
4624: { IsTTFontSelected returns True, if True Type font is selected in specified device context }
4625: function IsTTFontSelected(const DC: HDC): Boolean;
4626: function KeyPressed(VK: Integer): Boolean;
4627: Function isKeypressed: boolean; //true if key on memo2 (shell output) is pressed 4628: { TrueInflateRect inflates rect in other method, than InflateRect API function } 4629: function TrueInflateRect(const R: TRect; const I: Integer): TRect;
4630: {**** Color routines }
4631: procedure RGBToHSV(R, G, B: Integer; var H, S, V: Integer)
4632: function RGBToBGR(Value: Cardinal): Cardinal;
4633: //function ColorToPrettyName(Value: TColor): string;
4634: //function PrettyNameToColor(const Value: string): TColor;
4635: {**** other routines }
4636: procedure SwapInt(var Int1, Int2: Integer); {$IFDEF SUPPORTS_INLINE} inline; {$ENDIF SUPPORTS_INLINE} 4637: function IntPower(Base, Exponent: Integer): Integer; 4638: function ChangeTopException(E: TObject): TObject; // Linux version writes error message to ErrOutput
4639: function StrToBool(const S: string): Boolean;
4640: function Var2Type(V: Variant; const DestVarType: Integer): Variant;
4641: function VarToInt(V: Variant): Integer;
4642: function VarToFloat(V: Variant): Double;
4643: { following functions are not documented because they not work properly sometimes, so do not use them } 4644: // (rom) ReplaceStrings1, GetSubStr removed
4645: function GetLongFileName(const FileName: string): string;
4646: function FileNewExt(const FileName, NewExt: TFileName): TFileName;
4647: function GetParameter: string;
4648: function GetComputerID: string;
4649: function GetComputerName: string
4650: {**** string routines }
4651: { ReplaceAllStrings searches for all substrings, Words,
             in a string, S, and replaces them with Frases with the same Index. }
4652:
4653: function ReplaceAllStrings(const S: string; Words, Frases: TStrings): string;
4654: { ReplaceStrings searches the Word in a string, S, on PosBeg position,
4655:
            in the list, Words, and if founds, replaces this Word with string from another list, Frases, with the
same Index, and then update NewSelStart variable }
4656: function ReplaceStrings(const S:string;PosBeg,Len:Int;Words,Frases:TStrings;var NewSelStart:Int):string;
4657: { CountOfLines calculates the lines count in a string, S,
             each line must be separated from another with CrLf sequence }
4658:
4659: function CountOfLines(const S: string): Integer;
4660: { DeleteLines deletes all lines from strings which in the words, words.
             The word of will be deleted from strings. }
4662: procedure DeleteOfLines(Ss: TStrings; const Words: array of string);
4663: { DeleteEmptyLines deletes all empty lines from strings, Ss.
4664: Lines contained only spaces also deletes. }
4665: procedure DeleteEmptyLines(Ss: TStrings);
4666: { SQLAddWhere addes or modifies existing where-statement, where,
             to the strings, SQL. Note: If strings SQL allready contains where-statement,
4667:
4668: it must be started on the begining of any line } 4669: procedure SQLAddWhere(SQL: TStrings; const Where: string);
            **** files routines - )
4671: {$IFDEF MSWINDOWS}
4672: { ResSaveToFile save resource named as Name with Typ type into file FileName.
4673: Resource can be compressed using MS Compress program}
4674: function ResSaveToFile(const Typ,Name:string; const Compressed: Boolean; const FileName: string): Boolean;
          \textbf{function} \ \ \text{ResSaveToFileEx} ( \ \ \text{Instance:HINST;Typ}, \ \ \text{Name:PChar}; \ \ \text{const} \ \ \ \text{Compressed:Boolean}; \ \ \text{const} \ \ \text{FileName:string}) : \ \ \text{The position of the position of th
4676: function ResSaveToString(Instance: HINST; const Typ, Name: string; var S: string): Boolean;
4677: { $ENDIF MSWINDOWS }
4678: { IniReadSection read section, Section, from ini-file,
                                   into strings, Ss. This function reads ALL strings from specified section.
4679:
4680:
             Note: TIninFile.ReadSection function reads only strings with '=' symbol.}
4681: function IniReadSection(const IniFileName: TFileName: const Section: string; Ss: TStrings): Boolean;
4682: { LoadTextFile load text file, FileName, into string } 4683: function LoadTextFile(const FileName: TFileName): string;
4684: procedure SaveTextFile(const FileName: TFileName: const Source: string);
4685: { ReadFolder reads files list from disk folder,Folder,that are equal to mask, Mask,into strings, FileList} 4686: function ReadFolder(const Folder, Mask: TFileName; FileList: TStrings): Integer; 4687: function ReadFolders(const Folder: TFileName; FolderList: TStrings): Integer;
4688: { RATextOut same with TCanvas.TextOut procedure, but can clipping drawing with rectangle, RClip. }
4689: procedure RATextOut(Canvas: TCanvas; const R, RClip: TRect; const S: string);
4690: { RATextOutEx same with RATextOut function, but can calculate needed height for correct output }
4691: function RATextOutEx(Canvas:TCanvas;const R,RClip:TRect; const S:string;const CalcHeight:Boolean):Integer;
4692: { RATextCalcHeight calculate needed height for
4693:
             correct output, using RATextOut or RATextOutEx functions
4694: function RATextCalcHeight(Canvas: TCanvas; const R: TRect; const S: string): Integer;
4695: { Cinema draws some visual effect }
4696: procedure Cinema(Canvas: TCanvas; rS {Source}, rD {Dest}: TRect);
4697: { Roughed fills rect with special 3D pattern }
4698: procedure Roughed(ACanvas: TCanvas; const ARect: TRect; const AVert: Boolean);
4699: { BitmapFromBitmap creates new small bitmap from part of source bitmap, SrcBitmap, with specified width and height, AWidth, AHeight and placed on a specified Index, Index in the source bitmap } 4700: function BitmapFromBitmap(SrcBitmap: TBitmap; const AWidth, AHeight, Index: Integer): TBitmap;
```

```
4701: { TextWidth calculate text with for writing using standard desktop font }
4702: function TextWidth(const AStr: string): Integer;
4703: { TextHeight calculate text height for writing using standard desktop font }
4704: function TextHeight(const AStr: string): Integer;
4705: procedure SetChildPropOrd(Owner: TComponent; const PropName: string; Value: Longint);
4706: procedure Error(const Msg: string);
4707: procedure ItemHtDrawEx(Canvas: TCanvas: Rect: TRect; const State: TOwnerDrawState; const Text: string;
         const HideSelColor: Boolean; var PlainItem: string; var Width: Integer; CalcWidth: Boolean)
4708:
4709:
       {example Text parameter:'Item 1<b>bold</b><i>i>italic ITALIC <c:Red>red<c:Green>green<c:blue>blue</i>' }
4710: function ItemHtDraw(Canvas: TCanvas; Rect: TRect;
         const State: TOwnerDrawState; const Text: string; const HideSelColor: Boolean): string;
4711:
4712: function ItemHtWidth(Canvas: TCanvas; Rect: TRect;
4713:
         const State: TOwnerDrawState; const Text: string; const HideSelColor: Boolean): Integer;
4714: function ItemHtPlain(const Text: string): string;
4715: { ClearList - clears list of TObject }
4716: procedure ClearList(List: TList);
4717: procedure MemStreamToClipBoard(MemStream: TMemoryStream; const Format: Word);
4718: procedure ClipBoardToMemStream(MemStream: TMemoryStream; const Format: Word);
       { RTTI support }
4719:
4720: function GetPropType(Obj: TObject; const PropName: string): TTypeKind;
4721: function GetPropStr(Obj: TObject; const PropName: string): string; 4722: function GetPropOrd(Obj: TObject; const PropName: string): Integer;
4723: function GetPropMethod(Obj: TObject; const PropName: string): TMethod;
4724: procedure PrepareIniSection(Ss: TStrings);
4725: { following functions are not documented because they are don't work properly, so don't use them }
4726:
       // (rom) from JvBandWindows to make it obsolete
4727: function PointL(const X, Y: Longint): TPointL; {$IFDEF SUPPORTS_INLINE} inline; {$ENDIF SUPPORTS_INLINE}
4728: // (rom) from JvBandUtils to make it obsolete
4729: function iif(const Test: Boolean; const ATrue, AFalse: Variant): Variant;
4730: procedure CopyIconToClipboard(Icon: TIcon; BackColor: TColor);
4731: function CreateIconFromClipboard: TIcon;
4732:
       { begin JvIconClipboardUtils } { Icon clipboard routines }
4733: function CF ICON: Word;
4734: procedure AssignClipboardIcon(Icon: TIcon);
      { Real-size icons support routines (32-bit only) }
4736:
       procedure GetIconSize(Icon: HICON; var W, H: Integer);
4737: function CreateRealSizeIcon(Icon: TIcon): HICON;
4738: procedure DrawRealSizeIcon(Canvas: TCanvas; Icon: TIcon; X, Y: Integer);
4739:
       {end JvIconClipboardUtils }
4740: function CreateScreenCompatibleDC: HDC;
4741: function InvalidateRect(hWnd: HWND; const lpRect: TRect; bErase: BOOL): BOOL; overload; (SIFDEF
SUPPORTS_INLINE inline; {$ENDIF }
4742: function InvalidateRect(hWnd: HWND; lpRect: PRect; bErase: BOOL): BOOL; overload;
4743: { begin JvRLE } // (rom) changed API for inclusion in JCL
4744: procedure RleCompressTo(InStream, OutStream: TStream);
4745: procedure RleDecompressTo(InStream, OutStream: TStream)
4746: procedure RleCompress(Stream: TStream);
4747: procedure RleDecompress(Stream: TStream);
4748: { end JvRLE } { begin JvDateUtil }
4749: function CurrentYear: Word; {$IFDEF SUPPORTS_INLINE} inline; {$ENDIF SUPPORTS_INLINE}
4750: function IsLeapYear(AYear: Integer): Boolean;
4751: function DaysInAMonth(const AYear, AMonth: Word): Word;
4752: function DaysPerMonth(AYear, AMonth: Integer): Integer;
4753: function FirstDayOfPrevMonth: TDateTime;
4754: function LastDayOfPrevMonth: TDateTime; 4755: function FirstDayOfNextMonth: TDateTime;
4756: function ExtractDay(ADate: TDateTime): Word;
4757: function ExtractMonth(ADate: TDateTime): Word;
4758: function ExtractYear(ADate: TDateTime): Word;
4759: function IncDate(ADate: TDateTime; Days, Months, Years: Integer): TDateTime;
4760: function IncDay(ADate: TDateTime;Delta:Integer):TDateTime; inline; {$ENDIF SUPPORTS_INLINE}
4761: function IncMonth(ADate: TDateTime; Delta: Integer): TDateTime;
4762: function IncYear(ADate: TDateTime; Delta: Integer): TDateTime;
4763: function ValidDate(ADate: TDateTime): Boolean;
4764: procedure DateDiff(Date1, Date2: TDateTime; var Days, Months, Years: Word);
4765: function MonthsBetween(Date1, Date2: TDateTime): Double;
4766: function DaysInPeriod(Date1, Date2: TDateTime): Longint;
4767:
       { Count days between Date1 and Date2 + 1, so if Date1 = Date2 result = 1 }
4768: function DaysBetween(Date1, Date2: TDateTime): Longint;
4769: { The same as previous but if Date2 < Date1 result = 0 }
4770: function IncTime(ATime: TDateTime; Hours, Minutes, Seconds, MSecs: Integer): TDateTime;
4771: function IncHour(ATime: TDateTime; Delta: Integer): TDateTime;
4772: function IncMinute(ATime: TDateTime; Delta: Integer): TDateTime; 4773: function IncSecond(ATime: TDateTime; Delta: Integer): TDateTime;
4774: function IncMSec(ATime: TDateTime; Delta: Integer): TDateTime;
4775: function CutTime(ADate: TDateTime): TDateTime; { Set time to 00:00:00:00 }
4776:
       { String to date conversions }
4777: function GetDateOrder(const DateFormat: string): TDateOrder;
4778: function MonthFromName(const S: string; MaxLen: Byte): Byte;
4779: function StrToDateDef(const S: string; Default: TDateTime): TDateTime;
4780: function StrToDateFmt(const DateFormat, S: string): TDateTime;
4781: function StrToDateFmtDef(const DateFormat, S: string; Default: TDateTime): TDateTime;
4782: //function DefDateFormat(AFourDigitYear: Boolean): string;
4783: //function DefDateMask(BlanksChar: Char; AFourDigitYear: Boolean): string;
4784: function FormatLongDate(Value: TDateTime): string;
4785: function FormatLongDateTime(Value: TDateTime): string;
4786: { end JvDateUtil }
4787: function BufToBinStr(Buf: Pointer; BufSize: Integer): string;
4788: function BinStrToBuf(Value: string; Buf: Pointer; BufSize: Integer): Integer;
```

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4789: { begin JvStrUtils } { ** Common string handling routines ** }
4790: { $IFDEF UNIX }
4791: function iconversion(InP: PAnsiChar; OutP: Pointer; InBytes, OutBytes: Cardinal;
4792.
            const ToCode, FromCode: AnsiString): Boolean;
4793: function iconvString(const S, ToCode, FromCode: AnsiString): string;
4794: function iconvWideString(const S: WideString; const ToCode, FromCode: AnsiString): WideString;
4795: function OemStrToAnsi(const S: AnsiString): AnsiString;
         function AnsiStrToOem(const S: AnsiString): AnsiString
4797:
         { $ENDIF UNIX }
4798: function StrToOem(const AnsiStr: AnsiString): AnsiString;
4799: { StrToOem\ translates\ a\ string\ from\ the\ Windows\ character\ set\ into\ the\ OEM\ character\ set.\ } 4800: function OemToAnsiStr(const\ OemStr:\ AnsiString): AnsiString;
4801: { OemToAnsiStr translates a string from the OEM character set into the Windows character set. }
4802: function IsEmptyStr(const S: string; const EmptyChars: TSysCharSet): Boolean;
4803: { EmptyStr returns True if the given string contains only character from the EmptyChars. } 4804: function ReplaceStr(const S, Srch, Replace: string): string;
         { Returns string with every occurrence of Srch string replaced with Replace string. }
4806: function DelSpace(const S: string): string;
4807: { DelSpace return a string with all white spaces removed. }
4808: function DelChars(const S: string; Chr: Char): string;
4809: { DelChars return a string with all Chr characters removed. } 4810: function DelBSpace(const S: string): string;
4811: { DelBSpace trims leading spaces from the given string. }
4812: function DelESpace(const S: string): string;
4813:
         { DelESpace trims trailing spaces from the given string. }
4814: function DelRSpace(const S: string): string;
4815: { DelRSpace trims leading and trailing spaces from the given string. }
         function DelSpace1(const S: string): string;
{ DelSpace1 return a string with all non-single white spaces removed. }
4816:
4817:
4818: function Tab2Space(const S: string; Numb: Byte): string;
4819: { Tab2Space converts any tabulation character in the given string to the
4820:
            Numb spaces characters. }
4821: function NPos(const C: string; S: string; N: Integer): Integer;
4822: { NPos searches for a N-th position of substring C in a given string. } 4823: function MakeStr(C: Char; N: Integer): string; overload;
4824: {\$IFNDEF COMPILER12_UP}
4825: function MakeStr(C: WideChar; N: Integer): WideString; overload;
4826: {\$ENDIF !COMPILER12_UP}
4827: function MS(C: Char; N: Integer): string; {$IFDEF SUPPORTS_INLINE} inline; {$ENDIF SUPPORTS_INLINE}
         { MakeStr return a string of length N filled with character C. }
4828:
4829: function AddChar(C: Char; const S: string; N: Integer): string;
         { AddChar return a string left-padded to length N with characters C. } function AddCharR(C: Char; const S: string; N: Integer): string;
4830:
4831:
4832: { AddCharR return a string right-padded to length N with characters C. }
4833: function LeftStr(const S: string; N: Integer): string;
4834:
         { LeftStr return a string right-padded to length N with blanks. }
4835: function RightStr(const S: string; N: Integer): string;
         { RightStr return a string left-padded to length N with blanks. }
         function CenterStr(const S: string; Len: Integer): string;
4838:
         { CenterStr centers the characters in the string based upon the Len specified. }
4839: function CompStr(const S1, S2: string): Integer; { $IFDEF SUPPORTS_INLINE} inline; { $ENDIF SUPPORTS_INLINE}
4840: { CompStr compares S1 to S2, with case-sensitivy. The return value is 4841: -1 if S1 < S2, 0 if S1 = S2, or 1 if S1 > S2. }
4842: function CompText(const S1, S2: string):Integer; {$IPDEF SUPPORTS_INLINE} inline; {$ENDIF SUPPORTS_INLINE}
4843: { CompText compares S1 to S2, without case-sensitivity. The return value is the same as for CompStr. } 4844: function Copy2Symb(const S: string; Symb: Char): string;
          { Copy2Symb returns a substring of a string S from begining to first character Symb. }
4846: function Copy2SymbDel(var S: string; Symb: Char): string;
4847: { Copy2SymbDel returns a substring of a string S from begining to first
4848: character Symb and removes this substring from S. } 4849: function Copy2Space(const S: string): string;
          { Copy2Symb returns a substring of a string S from begining to first white space. }
4851: function Copy2SpaceDel(var S: string): string;
4852: { Copy2SpaceDel returns a substring of a string S from begining to first
4853: white space and removes this substring from S. }
4854: function AnsiProperCase(const S: string; const WordDelims: TSysCharSet): string;
4855: { Returns string, with the first letter of each word in uppercase,
4856:
             all other letters in lowercase. Words are delimited by WordDelims.
4857: function WordCount(const S: string; const WordDelims: TSysCharSet): Integer;
         full testing work of work of the first work of work work of work 
4858:
         { Given a set of word delimiters, returns start position of N'th word in S. }
4860:
4861: function ExtractWord(N: Integer; const S: string; const WordDelims: TSysCharSet): string;
4862: function ExtractWordPos(N: Integer;const S: string;const WordDelims:TSysCharSet;var Pos: Integer): string;
4863: function ExtractDelimited(N: Integer; const S: string; const Delims: TSysCharSet): string;
4864: { ExtractWord, ExtractWordPos and ExtractDelimited given a set of word
4865: delimiters, return the N'th word in S. }
4866: function ExtractSubstr(const S: string; var Pos: Integer; const Delims: TSysCharSet): string;
4867: { ExtractSubstr given a set of word delimiters, returns the substring from S,
4868: that started from position Pos. }
4869: function IsWordPresent(const W, S: string; const WordDelims: TSysCharSet): Boolean;
4870: { IsWordPresent given a set of word delimiters, returns True if word W is present in string S. } 4871: function QuotedString(const S: string; Quote: Char): string;
4872: { QuotedString returns the given string as a quoted string, using the provided Quote character. } 4873: function ExtractQuotedString(const S: string; Quote: Char): string;
4874: \{ \ \textit{ExtractQuotedString removes the Quote characters from the beginning and } \\
4875: end of a quoted string, and reduces pairs of Quote characters within quoted string to single character.}
4876: function FindPart(const HelpWilds, InputStr: string): Integer;
4877: { FindPart compares a string with '?' and another, returns the position of HelpWilds in InputStr. }
```

```
4878: function IsWild(InputStr. Wilds: string; IgnoreCase: Boolean): Boolean;
4879: { IsWild compares InputString with WildCard string and returns True if corresponds. }
       function XorString(const Key, Src: ShortString): ShortString;
4881: function XorEncode(const Key, Source: string): string;
4882: function XorDecode(const Key, Source: string): string; 4883: { ** Command line routines ** }
4884: function GetCmdLineArg(const Switch: string; ASwitchChars: TSysCharSet): string;
4885: { ** Numeric string handling routines **
4886: function Numb2USA(const S: string): string;
4887: { Numb2USA converts numeric string S to USA-format. }
4888: function Dec2Hex(N: Longint; A: Byte): string; {$IFDEF SUPPORTS_INLINE} inline; {$ENDIF SUPPORTS_INLINE} 4889: { Dec2Hex converts the given value to a hexadecimal string representation
4890:
         with the minimum number of digits (A) specified. }
4891: function Hex2Dec(const S: string): Longint;
4892: { Hex2Dec converts the given hexadecimal string to the corresponding integer value. }
4893: function Dec2Numb(N: Int64; A, B: Byte): string;
4894: { Dec2Numb converts the given value to a string representation with the
4895 .
         base equal to B and with the minimum number of digits (A) specified. }
4896: function Numb2Dec(S: string; B: Byte): Int64;
4897: { Numb2Dec converts the given B-based numeric string to the corresponding
         integer value.
4899: function IntToBin(Value: Longint; Digits, Spaces: Integer): string;
4900: { IntToBin converts the given value to a binary string representation
4901: with the minimum number of digits specified. }
4902: function IntToRoman(Value: Longint): string;
4903: { IntToRoman converts the given value to a roman numeric string representation. }
4904: function RomanToInt(const S: string): Longint;
4905: { RomanToInt converts the given string to an integer value. If the string
4906: doesn't contain a valid roman numeric value, the 0 value is returned.
4907: function FindNotBlankCharPos(const S: string): Integer;
4908: function FindNotBlankCharPosW(const S: WideString): Integer;
4909: function AnsiChangeCase(const S: string): string; 4910: function WideChangeCase(const S: string): string;
4911: function StartsText(const SubStr, S: string): Boolean; 4912: function EndsText(const SubStr, S: string): Boolean;
4913: function DequotedStr(const S: string; QuoteChar: Char = ''''): string;
4914: function AnsiDequotedStr(const S: string; AQuote: Char): string; //follow Delphi 2009's "Ansi" prefix
4915: {end JvStrUtils}
4916: {$IFDEF UNIX}
4917: function GetTempFileName(const Prefix: AnsiString): AnsiString;
4918: { $ENDIF UNIX }
4919:
        begin JvFileUtil )
4920: function FileDateTime(const FileName: string): TDateTime;
4921: function HasAttr(const FileName: string; Attr: Integer): Boolean;
4922: function DeleteFilesEx(const FileMasks: array of string): Boolean;
4923: function NormalDir(const DirName: string): string;
4924: function RemoveBackSlash(const DirName: string): string; // only for Windows/DOS Paths
4925: function ValidFileName(const FileName: string): Boolean;
4926: {$IFDEF MSWINDOWS
4927: function FileLock(Handle: Integer; Offset, LockSize: Longint): Integer; overload;
4928: function FileLock(Handle: Integer; Offset, LockSize: Int64): Integer; overload;
4929: function FileUnlock(Handle: Integer; Offset, LockSize: Longint): Integer; overload; 4930: function FileUnlock(Handle: Integer; Offset, LockSize: Int64): Integer; overload;
4931: { $ENDIF MSWINDOWS }
4932: function GetWindowsDir: string;
4933: function GetSystemDir: string;
4934: function ShortToLongFileName(const ShortName: string): string;
4935: function LongToShortFileName(const LongName: string): string;
4936: function ShortToLongPath(const ShortName: string): string;
4937: function LongToShortPath(const LongName: string): string;
4938: { $IFDEF MSWINDOWS
4939: procedure CreateFileLink(const FileName, DisplayName: string; Folder: Integer);
4940: procedure DeleteFileLink(const DisplayName: string; Folder: Integer);
4941: {$ENDIF MSWINDOWS}
4942: { end JvFileUtil }
4943: // Works like PtInRect but includes all edges in comparision
4944: function PtInRectInclusive(R: TRect; Pt: TPoint): Boolean
4945: // Works like PtInRect but excludes all edges from comparision
4946: function PtInRectExclusive(R: TRect; Pt: TPoint): Boolean;
4947: function FourDigitYear: Boolean; {$IFDEF SUPPORTS_DEPRECATED} deprecated; {$ENDIF}
4948: function IsFourDigitYear: Boolean;
4949: { moved from JvJVCLUTils }
4950: //Open an object with the shell (url or something like that)
4951: function OpenObject(const Value: string): Boolean; overload;
4952: function OpenObject(Value: PChar): Boolean; overload;
4953: { $IFDEF MSWINDOWS }
4954: //Raise the last Exception
4955: procedure RaiseLastWin32; overload;
4956: procedure RaiseLastWin32(const Text: string); overload;
4957: //Raise the last Exception with a small comment from your part { GetFileVersion returns the most
       significant 32 bits of a file's binary version number. Typically, this includes the major and minor
       version placed together in one 32-bit Integer. I
4958: function GetFileVersion(const AFileName: string): Cardinal;
4959: {$EXTERNALSYM GetFileVersion}
4960: //Get version of Shell.dll
4961: function GetShellVersion: Cardinal;
4962: { $EXTERNALSYM GetShellVersion} 4963: // CD functions on HW
4964: procedure OpenCdDrive;
```

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4965: procedure CloseCdDrive;
4966: // returns True if Drive is accessible
4967: function DiskInDrive(Drive: Char): Boolean;
4968: { $ENDIF MSWINDOWS }
4969: //Same as linux function ;)
4970: procedure PError(const Text: string);
4971: // execute a program without waiting
4972: procedure Exec(const FileName, Parameters, Directory: string);
4973:
           // execute a program and wait for it to finish
4974: \textbf{ function } \texttt{ExecuteAndWait}(\texttt{CmdLine}: \textbf{string}; \textbf{const } \texttt{WorkingDirectory}: \textbf{string}; \texttt{Visibility}: \texttt{Integer}=\texttt{SW\_SHOW}): \texttt{Int}; \texttt{Integer}=\texttt{SW\_SHOW} : \texttt{SW\_SHOW} 
4975: // returns True if this is the first instance of the program that is running 4976: function FirstInstance(const ATitle: string): Boolean;
4977: // restores a window based on it's classname and Caption. Either can be left empty 4978: // to widen the search
4979: procedure RestoreOtherInstance(const MainFormClassName, MainFormCaption: string);
4980: // manipulate the traybar and start button
4981: procedure HideTraybar;
4982: procedure ShowTraybar;
4983: procedure ShowStartButton(Visible: Boolean = True);
4984: // (rom) SC_MONITORPOWER is documented as Win 95 only(rom) better do some testing set monitor functions
4985: procedure MonitorOn;
4986: procedure MonitorOff;
4987: procedure LowPower;
4988: // send a key to the window named AppName
4989: function SendKey(const AppName: string; Key: Char): Boolean;
4990: { $IFDEF MSWINDOWS }
4991: // returns a list of all win currently visible, the Objects property is filled with their window handle
4992: procedure GetVisibleWindows(List: TStrings);
4993: Function GetVisibleWindowsF( List : TStrings):TStrings');
4994: // associates an extension to a specific program
4995: procedure AssociateExtension(const IconPath, ProgramName, Path, Extension: string);
4996: procedure AddToRecentDocs(const FileName: string);
4997: function GetRecentDocs: TStringList;
4998: { $ENDIF MSWINDOWS }
4999: function CharlsMoney(const Ch: Char): Boolean;
5000: //function StrToCurrDef(const Str: string; Def: Currency): Currency;
5001: function IntToExtended(I: Integer): Extended;
5002: { GetChangedText works out the new text given the current cursor pos & the key pressed}
5003:
              It is not very useful in other contexts, but in this unit as it is needed in both MemoEx and TypedEdit }
5004: function GetChangedText(const Text: string; SelStart, SelLength: Integer; Key: Char): string; 5005: function MakeYear4Digit(Year, Pivot: Integer): Integer;
5006: //function StrIsInteger(const S: string): Boolean; 5007: function StrIsFloatMoney(const Ps: string): Boolean;
5008: function StrIsDateTime(const Ps: string): Boolean;
5009: function PreformatDateString(Ps: string): string;
5010: function BooleanToInteger(const B: Boolean): Integer;
5011: function StringToBoolean(const Ps: string): Boolean;
5012: function SafeStrToDateTime(const Ps: string): TDateTime;
5013: function SafeStrToDate(const Ps: string): TDateTime; 5014: function SafeStrToTime(const Ps: string): TDateTime;
5015: function StrDelete(const psSub, psMain: string): string;
5016: { returns the fractional value of pcValue} 5017: function TimeOnly(pcValue: TDateTime): TTime;
5018: { returns the integral value of pcValue }
5019: function DateOnly(pcValue: TDateTime): TDate;
5020: type TdtKind = (dtkDateOnly, dtkTimeOnly, dtkDateTime);
5021: const { TDateTime value used to signify Null value}
             NullEquivalentDate: TDateTime = 0.0;
5023: function DateIsNull(const pdtValue: TDateTime; const pdtKind: TdtKind): Boolean;
5024\colon // Replacement for Win32Check to avoid platform specific warnings in D6 5025: function OSCheck(RetVal: Boolean): Boolean;
5026: { Shortens a fully qualified Path name so that it can be drawn with a specified length limit.
              Same as FileCtrl.MinimizeName in functionality (but not implementation). Included here to
5027:
5028:
              not be forced to use FileCtrl unnecessarily }
5029: function MinimizeFileName(const FileName: string; Canvas: TCanvas; MaxLen: Integer): string; 5030: function MinimizeText(const Text: string; Canvas: TCanvas; MaxWidth: Integer): string;
5031: { MinimizeString trunactes long string, S, and appends'...'symbols, if Length of S is more than MaxLen } 5032: function MinimizeString(const S: string; const MaxLen: Integer): string;
5033: procedure RunDll32Internal(Wnd:THandle; const DLLName,FuncName,CmdLine:string;CmdShow:Integer=
           SW_SHOWDEFAULT);
5034: { GetDLLVersion loads DLLName, gets a pointer to DLLVersion function and calls it, returning major and minor version values from the function. Returns False if DLL not loaded or if GetDLLVersion couldn't be
           found. }
5035: function GetDLIVersion(const DLIName: string; var pdwMajor, pdwMinor: Integer): Boolean;
5036: { $ENDIF MSWINDOWS }
5037: procedure ResourceNotFound(ResID: PChar);
5038: function EmptyRect: TRect;
5039: function RectWidth(R: TRect): Integer;
5040: function RectHeight(R: TRect): Integer;
5041: function CompareRect(const R1, R2: TRect): Boolean;
5042: procedure RectNormalize(var R: TRect);
5043: function RectIsSquare(const R: TRect): Boolean;
5044: function RectSquare(var ARect: TRect; AMaxSize: Integer = -1): Boolean;
5045: //If AMaxSize = -1 ,then auto calc Square's max size
5046: { $IFDEF MSWINDOWS }
5047: procedure FreeUnusedOle;
5048: function GetWindowsVersion: string;
5049: function LoadDLL(const LibName: string): THandle;
5050: function RegisterServer(const ModuleName: string): Boolean;
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5051: function UnregisterServer(const ModuleName: string): Boolean;
5052: { $ENDIF MSWINDOWS }
5053: { String routines
        String routines }
5054: function GetEnvVar(const VarName: string): string;
5055: function AnsiUpperFirstChar(const S: string): string; //follow Delphi 2009's example with "Ansi" prefix
5056: function StringToPChar(var S: string): PChar;
5057: function StrPAlloc(const S: string): PChar;
5058: procedure SplitCommandLine(const CmdLine: string; var ExeName, Params: string);
5059: function DropT(const S: string): string;
5060: { Memory routines }
5061: function AllocMemo(Size: Longint): Pointer;
5062: function ReallocMemo(fpBlock: Pointer; Size: Longint): Pointer;
5063: procedure FreeMemo(var fpBlock: Pointer);
5064: function GetMemoSize(fpBlock: Pointer): Longint; 5065: function CompareMem(fpBlock1, fpBlock2: Pointer; Size: Cardinal): Boolean;
5066: { Manipulate huge pointers routines }
5067: procedure HugeInc(var HugePtr: Pointer; Amount: Longint)
5068: procedure HugeDec(var HugePtr: Pointer; Amount: Longint);
5069: function HugeOffset(HugePtr: Pointer; Amount: Longint): Pointer;
5070: procedure HugeMove(Base: Pointer; Dst, Src, Size: Longint);
5071: procedure HMemCpy(DstPtr, SrcPtr: Pointer; Amount: Longint);
5072: function WindowClassName(Wnd: THandle): string;
5073: procedure SwitchToWindow(Wnd: THandle; Restore: Boolean);
5074: procedure ActivateWindow(Wnd: THandle);
5075: procedure ShowWinNoAnimate(Handle: THandle; CmdShow: Integer);
5076: procedure KillMessage(Wnd: THandle; Msg: Cardinal);
5077: { SetWindowTop put window to top without recreating window }
5078: procedure SetWindowTop(const Handle: THandle; const Top: Boolean); 5079: procedure CenterWindow(Wnd: THandle);
5080: function MakeVariant(const Values: array of Variant): Variant;
5081: { Convert dialog units to pixels and backwards }
5082: ($IFDEF MSWINDOWS) 5083: function DialogUnitsToPixelsX(DlgUnits: Word): Word;
5084: function DialogUnitsToPixelsY(DlgUnits: Word): Word;
5085: function PixelsToDialogUnitsX(PixUnits: Word): Word;
5086: function PixelsToDialogUnitsY(PixUnits: Word): Word;
5087: { SENDIF MSWINDOWS }
5088: function GetUniqueFileNameInDir(const Path, FileNameMask: string): string;
5089: { $IFDEF BCB }
5090: function FindPrevInstance(const MainFormClass: ShortString;const ATitle: string): THandle;
5091: function ActivatePrevInstance(const MainFormClass: ShortString;const ATitle: string): Boolean;
5092: { $ELSE }
5093: function FindPrevInstance(const MainFormClass, ATitle: string): THandle;
5094: function ActivatePrevInstance(const MainFormClass, ATitle: string): Boolean;
5095: {$ENDIF BCB}
5096: {$IFDEF MSWINDO
5097: { BrowseForFolderNative displays Browse For Folder dialog }
5098: function BrowseForFolderNative(const Handle: THandle; const Title: string; var Folder: string): Boolean;
5099: { $ENDIF MSWINDOWS
5100: procedure AntiAlias(Clip: TBitmap);
5101: procedure AntiAliasRect(Clip: TBitmap; XOrigin, YOrigin, XFinal, YFinal: Integer);
5102: procedure CopyRectDIBits(ACanvas: TCanvas; const DestRect: TRect;
        ABitmap: TBitmap; const SourceRect: TRect);
5104: function IsTrueType(const FontName: string): Boolean;
5105: // Removes all non-numeric characters from AValue and returns the resulting string
5106: function TextToValText(const AValue: string): string;
5107: Function ExecRegExpr( const ARegExpr, AInputStr : RegExprString) : boolean
5108: Procedure SplitRegExpr( const ARegExpr, AInputStr : RegExprString; APieces : TStrings)
5109: Function ReplaceRegExpr(const ARegExpr,AInputStr, AReplaceStr:RegExprString;AUseSubstitution:bool):RegExprString;
5110: Function QuoteRegExprMetaChars( const AStr : RegExprString) : RegExprString
5111: Function RegExprSubExpressions(const ARegExpr:string; ASubExprs:TStrings; AExtendedSyntax : boolean) :
5112:
5114: Function JExtractYear( ADate : TDateTime) : Word
       Function JExtractMonth( ADate : TDateTime) : Word
       Function JExtractDay( ADate : TDateTime) : Word
5116:
5117:
       Function ExtractHours( ATime : TDateTime) : Word
5118:
       Function ExtractMins( ATime : TDateTime) : Word
       Function ExtractSecs( ATime : TDateTime) : Word
5119:
5120:
       Function ExtractMSecs( ATime : TDateTime) : Word
5121:
       Function FirstOfMonth( ADate : TDateTime) : TDateTime
5122:
       Function GetDayOfNthDOW( Year, Month, DOW, N : Word) : Word
Function GetWeeksInMonth( Year, Month : Word; StartOfWeek : Integer) : Word
5123:
       Procedure IncDOW( var DOW : TTFDayOfWeek; N : Integer)
5124:
5125:
       Procedure IncDays( var ADate : TDateTime; N : Integer)
Procedure IncWeeks( var ADate : TDateTime; N : Integer)
5126:
5127:
       Procedure IncMonths( var ADate : TDateTime; N : Integer)
5128:
       Procedure IncYears( var ADate : TDateTime; N : Integer)
       Function EndOfMonth( ADate : TDateTime) : TDateTime
5130:
5131:
       Function IsFirstOfMonth( ADate : TDateTime) : Boolean
       Function IsEndOfMonth( ADate : TDateTime) : Boolean
Procedure EnsureMonth( Month : Word)
5132:
5133:
       Procedure EnsureDOW( DOW : Word)
5134:
       Function EqualDates( D1, D2 : TDateTime) : Boolean
5135:
5136: Function Lesser( N1, N2 : Integer) : Integer 5137: Function Greater( N1, N2 : Integer) : Integer
                                                 Integer
5138: Function GetDivLength( TotalLength, DivCount, DivNum : Integer) : Integer
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5139:
         Function GetDivNum( TotalLength, DivCount, X : Integer) : Integer
         Function GetDivStart( TotalLength, DivCount, DivNum : Integer) : Integer
5140:
         Function DOWToBorl( ADOW: TTFDayOfWeek): Integer Function BorlToDOW( BorlDOW: Integer): TTFDayOfWeek
5142 .
         Function DateToDOW( ADate : TDateTime) : TTFDayOfWeek
5143:
         Procedure CalcTextPos( HostRect : TRect; var TextLeft, TextTop:Integer; var TextBounds : TRect;
5144:
       AFont:TFont;AAngle: Integer; HAlign : TAlignment; VAlign : TJvTFVAlignment; ATxt : string)
       Procedure DrawAngleText( ACanvas: TCanvas; HostRect: TRect; var TextBounds: TRect; AAngle: Integer; Halign: TAlignment; VAlign: TJvTFVAlignment; ATxt: string)

Function JRectWidth( ARect: TRect): Integer

Function JRectHeight( ARect: TRect): Integer
5147:
         Function JEmptyRect : TRect
5149:
         Function IsClassByName(Obj: TObject; ClassName: string): Boolean
5150:
       procedure SIRegister MSysUtils(CL: TPSPascalCompiler);
5151:
5152:
       begin
         Procedure HideTaskBarButton( hWindow : HWND)
5153:
         Function msLoadStr( ID : Integer) : String
Function msFormat( fmt : String; params : array of const) : String
Function msFileExists( const FileName : String) : Boolean
5154 .
5155:
5156:
         Function msIntToStr( Int : Int64) : String
         Function msStrPas( const Str : PChar) : String
5158:
         Function msRenameFile( const OldName, NewName : String) : Boolean
5159:
         Function CutFileName( s : String) : String
5160:
         Function GetVersionInfo( var VersionString : String) : DWORD
5161:
5162:
         Function FormatTime( t : Cardinal) : String
5163:
         Function msCreateDir( const Dir : string) : Boolean
Function SetAutoRun( NeedAutoRun : Boolean; AppName : String) : Boolean
5164:
         Function SetTreeViewStyle( const hTV : HWND; dwNewStyle : dword) : DWORD
5165:
         Function msStrLen( Str : PChar) : Integer
5166:
5167:
         \textbf{Function} \ \texttt{msDirectoryExists} ( \ \textbf{const} \ \texttt{Directory} \ \colon \ \textbf{String}) \ : \ \texttt{Boolean}
         Function GetFolder( hWnd: hWnd; RootDir: Integer; Caption: String): String
5168:
         Function SetBlendWindow( hWnd : HWND; AlphaBlend : Byte) : LongBool
5169:
         Procedure SetEditWindowProc( hWnd: HWND; Msg: UINT; wPARAM; lParam: LPARAM): LRESULT Procedure SetEditWindProc( hWnd: HWND; ptr: TObject)
5170:
5171:
5172:
         Function GetTextFromFile( Filename : String) : string
5173:
         Function IsTopMost( hWnd : HWND) : Bool // 'LWA_ALPHA','LongWord').SetUInt( $00000002);
Function msStrToIntDef( const s : String; const i : Integer) : Integer
5174:
5175:
         Function msStrToInt( s : String) : Integer
5176:
         Function GetItemText( hDlg : THandle; ID : DWORD) : String
5177:
       end;
5178:
5179:
       procedure SIRegister_ESBMaths2(CL: TPSPascalCompiler);
5180:
       begin
          //TDynFloatArray', 'array of Extended
TDynLWordArray', 'array of LongWord
TDynLIntArray', 'array of LongInt
TDynFloatMatrix', 'array of TDynFloatArray
TDynLWordMatrix', 'array of TDynLWordArray
TDynLIntMatrix', 'array of TDynLIntArray
5181:
5182:
5183:
5184:
5185:
5186:
         Function SquareAll( const X : TDynFloatArray) : TDynFloatArray
5187:
         Function InverseAll( const X : TDynFloatArray) : TDynFloatArray
5188:
         Function LnAll( const X : TDynFloatArray) : TDynFloatArray
5189:
5190:
         Function Log10All( const X : TDynFloatArray) : TDynFloatArray
         Function LinearTransform( const X : TDynFloatArray; Offset, Scale : Extended) : TDynFloatArray
Function AddVectors( const X, Y : TDynFloatArray) : TDynFloatArray
Function SubVectors( const X, Y : TDynFloatArray) : TDynFloatArray
5191:
5192:
5193:
         Function MultVectors( const X, Y : TDynFloatArray) : TDynFloatArray
5194:
5195:
         \textbf{Function} \  \, \texttt{DotProduct}( \  \, \textbf{const} \  \, \texttt{X}, \  \, \texttt{Y} \  \, \texttt{:} \  \, \texttt{TDynFloatArray}) \  \, \texttt{:} \  \, \texttt{Extended}
         Function MNorm( const X : TDynFloatArray) : Extended
5196:
         Function MatrixIsRectangular( const X : TDynFloatMatrix) : Boolean
5197:
5198:
         Procedure MatrixDimensions(const X:TDynFloatMatrix;var Rows,Columns:LongWord;var Rectangular:Boolean;
5199:
         Function MatrixIsSquare( const X : TDynFloatMatrix) : Boolean
               \textbf{Function} \;\; \texttt{MatricesSameDimensions} ( \;\; \textbf{const} \;\; \texttt{X}, \;\; \texttt{Y} \;\; : \;\; \texttt{TDynFloatMatrix}) \;\; : \;\; \texttt{Boolean} 
5200:
         Function Madrices const X, Y: TDynFloatMatrix): TDynFloatMatrix

Procedure AddToMatrix( var X: TDynFloatMatrix; const Y: TDynFloatMatrix)
5201:
         Function SubtractMatrices( const X, Y : TDynFloatMatrix) : TDynFloatMatrix
5203:
5204:
         \textbf{Procedure} \ \ \texttt{SubtractFromMatrix}( \ \textbf{var} \ \texttt{X} \ : \ \texttt{TDynFloatMatrix}; \ \textbf{const} \ \texttt{Y} \ : \ \texttt{TDynFloatMatrix})
5205:
         Function MultiplyMatrixByConst( const X : TDynFloatMatrix; const K : Extended) : TDynFloatMatrix
Procedure MultiplyMatrixByConst2( var X : TDynFloatMatrix; const K : Extended);
5206:
         Function MultiplyMatrices( const X, Y: TDynFloatMatrix): TDynFloatMatrix;
Function TransposeMatrix( const X: TDynFloatMatrix): TDynFloatMatrix;
5207:
5208:
         5209:
5210:
       end;
5211:
       procedure SIRegister_ESBMaths(CL: TPSPascalCompiler);
5212:
5213:
          'ESBMinSingle', 'Single').setExtended( 1.5e-45);
5214:
          ESBMaxSingle','Single').setExtended( 3.4e+38);
'ESBMinDouble','Double').setExtended( 5.0e-324);
5215:
5217:
         'ESBMaxDouble', 'Double').setExtended( 1.7e+308);
5218:
         'ESBMinExtended', 'Extended').setExtended( 3.6e-4951);
          'ESBMaxExtended','Extended').setExtended( 1.1e+4932);
5219:
         'ESBMinCurrency','Currency').SetExtended( - 922337203685477.5807);
5220:
         'ESBMaxCurrency','Currency').SetExtended( 922337203685477.5807);
5221:
         'ESBSqrt2','Extended').setExtended( 1.4142135623730950488);
'ESBSqrt3','Extended').setExtended( 1.7320508075688772935);
'ESBSqrt5','Extended').setExtended( 2.2360679774997896964);
5222:
5223:
5224:
        'ESBSqrt10','Extended').setExtended( 3.1622776601683793320);
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5226:
              'ESBSgrtPi', 'Extended').setExtended( 1.77245385090551602729);
              ESBCbrt2', 'Extended').setExtended( 1.2599210498948731648);
'ESBCbrt3', 'Extended').setExtended( 1.4422495703074083823);
'ESBCbrt10', 'Extended').setExtended( 2.1544346900318837219);
5227:
5229:
5230:
              'ESBCbrt100', 'Extended').setExtended( 4.6415888336127788924);
               ESBCbrtPi','Extended').setExtended( 1.4645918875615232630);
5231:
              'ESBInvSqrt2', 'Extended').setExtended( 1.404591887515232030);
'ESBInvSqrt2', 'Extended').setExtended( 0.70710678118654752440);
'ESBInvSqrt3', 'Extended').setExtended( 0.57735026918962576451);
'ESBInvSqrt5', 'Extended').setExtended( 0.44721359549995793928);
'ESBInvSqrtPi', 'Extended').setExtended( 0.56418958354775628695);
'ESBInvCbrtPi', 'Extended').setExtended( 0.68278406325529568147);
5232:
5233:
5234:
5235:
5236:
              'ESBe', 'Extended').setExtended( 2.7182818284590452354);
'ESBe2', 'Extended').setExtended( 7.3890560989306502272);
'ESBePi', 'Extended').setExtended( 23.140692632779269006);
5237:
5238:
5239:
               'ESBePiOn2','Extended').setExtended( 4.8104773809653516555);
5240:
5241:
                ESBePiOn4', 'Extended').setExtended( 2.1932800507380154566);
              'ESBLn2','Extended').setExtended( 0.69314718055994530942);
5242:
              'ESBLn10','Extended').setExtended( 2.30258509299404568402);
'ESBLnPi','Extended').setExtended( 1.14472988584940017414);
5243 .
5244:
5245:
               ESBLog10Base2','Extended').setExtended( 3.3219280948873623478);
                ESBLog2Base10','Extended').setExtended( 0.30102999566398119521);
5246:
              'ESBLog3Base10','Extended').setExtended( 0.47712125471966243730);
'ESBLogPiBase10','Extended').setExtended( 0.4971498726941339);
'ESBLogEBase10','Extended').setExtended( 0.43429448190325182765);
5247:
5248:
5249:
               ESBPi', 'Extended').setExtended( 3.1415926535897932385);
5250:
5251:
              'ESBInvPi', 'Extended').setExtended( 3.1830988618379067154e-1);
              'ESBTWOP1', 'Extended').setExtended( 6.2831853071795864769);
'ESBThreePi', 'Extended').setExtended( 9.4247779607693797153);
5252:
5253:
              'ESBI', 'Extended').setExtended( 9.424///960/093/9/12/
'ESBPi', 'Extended').setExtended( 9.8696044010893586188);
'ESBPiToE', 'Extended').setExtended( 22.459157718361045473);
5254:
5255:
              'ESBPiOn2','Extended').setExtended( 1.5707963267948966192);
5256:
              'ESBPiOn3', 'Extended').setExtended( 1.0471975511965977462);
5257:
               'ESBPiOn4', 'Extended').setExtended( 0.7853981633974483096);
5258:
               | ESBFT: | Matchine | 
5259:
5260:
              'ESBTwoToPower63', 'Extended').setExtended( 9223372036854775808.0);
'ESBOneRadian', 'Extended').setExtended( 57.295779513082320877);
'ESBOneDegree', 'Extended').setExtended( 1.7453292519943295769E-2);
5261:
5262:
5263:
5264:
                ESBOneMinute',
                                             'Extended').setExtended( 2.9088820866572159615E-4);
5265:
              'ESBOneSecond', 'Extended').setExtended( 4.8481368110953599359E-6);
              'ESBGamma', 'Extended').setExtended( 0.57721566490153286061);
'ESBLnRt2Pi', 'Extended').setExtended( 9.189385332046727E-1);
5266:
5267:
5268:
                //LongWord', 'Cardinal
                TBitList', 'Word
5269:
5270:
             \textbf{Function} \ \texttt{UMul} \ ( \ \textbf{const} \ \texttt{Num1} \ , \ \texttt{Num2} \ : \ \texttt{LongWord}) \ : \ \texttt{LongWord}
5271:
             \textbf{Function} \ \ \texttt{UMulDiv2p32} \ ( \ \ \textbf{const} \ \ \texttt{Num1} \ , \ \ \texttt{Num2} \ : \ \ \texttt{LongWord}) \ : \ \ \texttt{LongWord}
             Function UMulDiv( const Num1, Num2, Divisor : LongWord) : LongWord
Function UMulMod( const Num1, Num2, Modulus : LongWord) : LongWord
5272:
5273:
5274:
             Function SameFloat( const X1, X2 : Extended) : Boolean
             Function FloatIsZero( const X : Extended) : Boolean
Function FloatIsPositive( const X : Extended) : Boolean
5275:
5276:
5277:
              Function FloatIsNegative( const X : Extended) : Boolean
              Procedure IncLim( var B : Byte; const Limit : Byte)
5278:
5279:
             Procedure IncLimSI( var B : ShortInt; const Limit : ShortInt)
             Procedure IncLimW( var B : Word; const Limit : Word)
Procedure IncLimI( var B : Integer; const Limit : Integer)
5280:
5281:
              Procedure IncLimL( var B : LongInt; const Limit : LongInt)
5282:
             Procedure DecLim( var B : Byte; const Limit : Byte)
5283:
             Procedure DecLimSI( var B : ShortInt; const Limit : ShortInt)
Procedure DecLimW( var B : Word; const Limit : Word)
5284:
5285:
             Procedure DecLimI( var B : Integer; const Limit : Integer)
5286:
              Procedure DecLimL( var B : LongInt; const Limit : LongInt)
5287:
             Function MaxB( const B1, B2 : Byte) : Byte
Function MinB( const B1, B2 : Byte) : Byte
5288:
5289:
             Function MaxSI( const B1, B2 : ShortInt) : ShortInt
5290:
             Function MinSI( const B1, B2 : ShortInt) : ShortInt
5291:
5292:
              Function MaxW( const B1, B2 : Word) : Word
             Function MinW( const B1, B2 : Word) : Word
5293:
             Function esbMaxI( const B1, B2 : Integer) : Integer
Function esbMinI( const B1, B2 : Integer) : Integer
Function MaxL( const B1, B2 : LongInt) : LongInt
5294:
5295:
5296:
5297:
             Function MinL( const B1, B2 : LongInt) : LongInt
5298:
             Procedure SwapB( var B1, B2 : Byte)
Procedure SwapSI( var B1, B2 : ShortInt)
5299:
             Procedure SwapW( var B1, B2 : Word)
5300:
              Procedure SwapI( var B1, B2 : SmallInt)
5301:
5302:
             Procedure SwapL( var B1, B2 : LongInt)
             Procedure SwapI32( var B1, B2 : Integer)
5303:
             Procedure SwapC( var B1, B2 : LongWord)
5304:
              Procedure SwapInt64( var X, Y : Int64)
5305:
5306:
             Function esbSign( const B : LongInt) : ShortInt
5307:
             Function Max4Word( const X1, X2, X3, X4 : Word) : Word
             Function Min4Word( const X1, X2, X3, X4 : Word) : Word
5308:
             Function Max3Word( const X1, X2, X3 : Word) : Word
5309:
             Function Min3Word( const X1, X2, X3 : Word) : Word
5310:
             Function MaxBArray( const B : array of Byte) : Byte
Function MaxWArray( const B : array of Word) : Word
Function MaxSIArray( const B : array of ShortInt) : ShortInt
5311:
5312:
5313:
             Function MaxIArray( const B : array of Integer) : Integer
```

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5315:
        Function MaxLArray( const B : array of LongInt) : LongInt
        Function MinBArray( const B : array of Byte) : Byte
5316:
        Function MinWArray( const B : array of Word) : Word
5318:
        Function MinSIArray( const B : array of ShortInt) : ShortInt
5319:
        Function MinIArray( const B : array of Integer) : Integer
        Function MinLArray( const B : array of LongInt) : LongInt
5320:
        Function SumBArray( const B : array of Byte) : Byte
5321:
        Function SumBArray2( const B : array of Byte) : Word
5322:
        Function SumSlArray( const B : array of ShortInt) : ShortInt
Function SumSlArray2( const B : array of ShortInt) : Integer
5323:
5324:
5325:
        Function SumWArray( const B : array of Word) : Word
        Function SumWArray2( const B : array of Word) : LongInt
        Function SumIArray( const B : array of Integer) : Integer
Function SumLArray( const B : array of LongInt) : LongInt
5327:
5328:
        Function SumLWArray(const B : array of LongWord) : LongWord
5329:
5330:
        Function ESBDigits( const X : LongWord) : Byte
        Function BitsHighest( const X : LongWord) : Integer
5331:
5332:
        Function ESBBitsNeeded( const X : LongWord) : Integer
        Function esbGCD( const X, Y : LongWord) : LongWord
Function esbLCM( const X, Y : LongInt) : Int64
5333:
5334:
         //Function esbLCM( const X, Y : LongInt) : LongInt
        Function RelativePrime( const X, Y : LongWord) : Boolean
5336:
5337:
        Function Get87ControlWord : TBitList
        Procedure Set87ControlWord( const CWord : TBitList)
5338:
        Procedure SwapExt( var X, Y : Extended)
Procedure SwapDbl( var X, Y : Double)
5339:
5340:
        Procedure SwapSing( var X, Y : Single)
Function esbSgn( const X : Extended) : ShortInt
Function Distance( const X1, Y1, X2, Y2 : Extended) : Extended
Function ExtMod( const X, Y : Extended) : Extended
5341:
5342:
5343:
5344:
5345:
        Function ExtRem( const X, Y : Extended) : Extended
        Function CompMOD( const X, Y : Comp) : Comp

Procedure Polar2XY( const Rho, Theta : Extended; var X, Y : Extended)

Procedure XY2Polar( const X, Y : Extended; var Rho, Theta : Extended)
5346:
5347:
5348:
        Function DMS2Extended( const Degs, Mins, Secs : Extended) : Extended
5350:
        Procedure Extended2DMS( const X : Extended; var Degs, Mins, Secs : Extended)
5351:
        Function MaxExt( const X, Y : Extended) : Extended
Function MinExt( const X, Y : Extended) : Extended
5352:
5353:
        Function MaxEArray( const B : array of Extended) : Extended
        Function MinEArray( const B : array of Extended) : Extended
5354:
5355:
        Function MaxSArray( const B : array of Single) : Single Function MinSArray( const B : array of Single) : Single
5356:
5357:
        Function MaxCArray( const B : array of Comp) : Comp
5358:
        Function MinCArray( const B : array of Comp) : Comp
5359:
        Function SumSArray( const B : array of Single) : Single
Function SumEArray( const B : array of Extended) : Extended
5360:
        Function SumSqEArray( const B : array of Extended) : Extended
5361:
        Function SumSqDiffEArray( const B : array of Extended; Diff : Extended) : Extended
5362:
5363:
        Function SumXYEArray( const X, Y : array of Extended) : Extended
        Function SumCArray( const B : array of Comp) : Comp
Function FactorialX( A : LongWord) : Extended
5364:
5365:
        Function PermutationX( N, R : LongWord) : Extended
5366:
        Function esbBinomialCoeff( N, R : LongWord) : Extended
        Function IsPositiveEArray( const X : array of Extended) : Boolean Function esbGeometricMean( const X : array of Extended) : Extended
5368:
5369:
        Function esbHarmonicMean( const X : array of Extended) : Extended
5370:
5371:
        Function ESBMean( const X : array of Extended) : Extended
        Function esbSampleVariance( const X : array of Extended) : Extended
5372:
5373:
        Function esbPopulationVariance( const X : array of Extended) : Extended
        Procedure esbSampleVarianceAndMean( const X : array of Extended; var Variance, Mean : Extended)
Procedure esbPopulationVarianceAndMean( const X : array of Extended; var Variance, Mean : Extended)
5374:
5375:
5376:
        Function GetMedian( const SortedX : array of Extended) : Extended
5377:
        Function GetMode( const SortedX : array of Extended; var Mode : Extended) : Boolean
        Procedure GetQuartiles( const SortedX : array of Extended; var Q1, Q3 : Extended)
5378:
5379:
        Function ESBMagnitude( const X : Extended) : Integer
        Function ESBTan( Angle : Extended) : Extended
        Function ESBCot( Angle : Extended) : Extended
5381:
5382:
        Function ESBCosec( const Angle : Extended) : Extended
        Function ESBSec( const Angle : Extended) : Extended
Function ESBArcTan( X, Y : Extended) : Extended
Procedure ESBSinCos( Angle : Extended; var SinX, CosX : Extended)
5383:
5384:
5385:
5386:
        Function ESBArcCos( const X : Extended) : Extended
5387:
        Function ESBArcSin( const X : Extended) : Extended
        Function ESBArcSec( const X : Extended) : Extended
5388:
5389:
        Function ESBArcCosec( const X : Extended) : Extended
        Function ESBLog10( const X : Extended) : Extended
Function ESBLog2( const X : Extended) : Extended
5390:
5391:
        Function ESBLogBase( const X, Base : Extended) : Extended
Function Pow2( const X : Extended) : Extended
5392:
5393:
        Function IntPow( const Base : Extended; const Exponent : LongWord) : Extended Function ESBIntPower( const X : Extended; const N : LongInt) : Extended
5394:
5395:
        Function XtoY( const X, Y : Extended) : Extended
Function esbTenToY( const Y : Extended) : Extended
Function esbTwoToY( const Y : Extended) : Extended
5396:
5397:
5398:
5399:
        Function LogXtoBaseY( const X, Y : Extended) : Extended
5400:
        Function esbISqrt( const I : LongWord) : Longword
        Function ILog2( const I : LongWord) : LongWord
5401:
        Function IGreatestPowerOf2( const N : LongWord) : LongWord
5402:
        Function ESBArCosh( X : Extended) : Extended
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5404:
           Function ESBArSinh( X : Extended) : Extended
            Function ESBArTanh( X : Extended) : Extended
5405:
           Function ESBCosh(X:Extended):Extended
Function ESBSinh(X:Extended):Extended
5407:
           Function ESBTanh( X : Extended) : Extended
5408:
           Function InverseGamma ( const X : Extended) : Extended
5409:
           Function esbGamma( const X : Extended) : Extended
5410:
           Function esbLnGamma( const X : Extended) : Extended Function esbBeta( const X, Y : Extended) : Extended
5411:
5412:
           Function IncompleteBeta( X : Extended; P, O : Extended) : Extended
5413:
5414: end;
5415:
5417: Function Add_uint64_WithCarry( x, y : uint64; var Carry : Boolean) : uint64
5418: Function Add_uint32_WithCarry( x, y : uint32; var Carry : Boolean) : uint32
5419: Function Subtract_uint64_WithBorrow( x, y : uint64; var Borrow : Boolean) : uint64
5420: Function Subtract_uint32_WithBorrow( x, y : uint32; var Borrow : Boolean) : uint32
5421: Function BitCount_8( Value : byte) : integer 5422: Function BitCount_16( Value : uint16) : integer
5423: Function BitCount_32( Value : uint32) : integer
5424: Function BitCount_64( Value : uint64) : integer
5425: Function CountSetBits_64( Value : uint64) : integer TPrimalityTestNoticeProc',
5426: Procedure ( CountPrimalityTests : integer)
           Function gcd(a, b: THugeCardinal): THugeCardinal
Function lcm(a, b: THugeCardinal): THugeCardinal
5427:
5428:
5429:
           Function isCoPrime( a, b : THugeCardinal)
                                                                                      : boolean
           Function isProbablyPrime(p: THugeCardinal;OnProgress: TProgress; var wasAborted: boolean): boolean
5430:
5431:
           \textbf{Function} \ \ \text{hasSmallFactor} ( \ \ \text{p} \ : \ \ \text{THugeCardinal}) \ : \ \ \text{boolean}
           //Function GeneratePrime( NumBits : integer; OnProgress : TProgress; OnPrimalityTest:
5432:
          TPrimalityTestNoticeProc; PassCount: integer; Pool1:TMemoryStreamPool;var Prime: THugeCardinal; var
          NumbersTested: integer) : boolean
           Function Inverse( Prime, Modulus : THugeCardinal) : THugeCardinal
5433:
           Const('StandardExponent', 'LongInt'( 65537);
5434:
5435: //Procedure Compute_RSA_Fundamentals_2Factors(RequiredBitLengthOfN:integer;Fixed_e:uint64;var N,e,d,
          Totient:TProgress;OnPrimalityTest:TPrimalityTestNoticeProc;GeneratePrimePassCount:int;Pool1:TMemoryStreamPo
          Numbers
5436:
           Function Validate RSA Fundamentals (var N, e, d, Totient : ThugeCardinal) : boolean')
5437:
5438: procedure SIRegister_xrtl_math_Integer(CL: TPSPascalCompiler);
5439:
             AddTypeS('TXRTLInteger', 'array of Integer AddClassN(FindClass('TOBJECT'),'EXRTLMathException (FindClass('TOBJECT'),'EXRTLExtendInvalidArgument
5440:
5441:
5442:
              AddClassN(FindClass('TOBJECT'),'EXRTLDivisionByZero
5443:
             AddClassN(FindClass('TOBJECT'),'EXRTLExpInvalidArgument AddClassN(FindClass('TOBJECT'),'EXRTLInvalidRadix
5444:
5445:
              AddClassN(FindClass('TOBJECT'),'EXRTLInvalidRadixDigit
5446:
             AddClassN(FindClass('TOBJECT'), 'EXRTLRootInvalidArgument
5447:
5448:
              'BitsPerByte', 'LongInt'( 8);
5449:
             BitsPerDigit', 'LongInt'( 32);
SignBitMask', 'LongWord( $80000000);
5450:
            Function XRTLAdjustBits( const ABits : Integer) : Integer
5451:
            Function XRTLLength( const AInteger : TXRTLInteger) : Integer
5452:
5453:
            Function XRTLDataBits( const AInteger : TXRTLInteger) : Integer
            Procedure XRTLBitPosition( const BitIndex : Integer; var Index, Mask : Integer)
5454:
            Procedure XRTLBitSet( var AInteger: TXRTLInteger; const BitIndex: Integer)
5455:
5456:
            Procedure XRTLBitReset( var AInteger: TXRTLInteger; const BitIndex: Integer)
            Function XRTLBitGet( const AInteger : TXRTLInteger; const BitIndex : Integer) : Integer
5457:
           Function XRTLBitGetBool( const AInteger: TXRTLInteger; const BitIndex: Integer): Boolean
Function XRTLExtend(const AInteger:TXRTLInteger;ADataBits:Integer;Sign:Int;var AResult:TXRTLInteger):Int;
5458:
5459:
            Function XRTLZeroExtend(const AInteger:TXRTLInteger;ADataBits:Integer; var AResult:TXRTLInteger):Integer;
5460:
5461:
            Function XRTLSignExtend(const AInteger:TXRTLInteger; ADataBits:Integer;var AResult:TXRTLInteger):Integer;
5462:
            \textbf{Function} \ \texttt{XRTLSignStrip} (\textbf{const} \ \texttt{AInteger} : \texttt{TXRTLInteger}; \textbf{var} \ \texttt{AResult} : \texttt{TXRTLInteger}; \textbf{const} \ \texttt{AMinDataBits} : \texttt{Int}) : \texttt{Int}; \texttt{TXRTLInteger}; \texttt{TXRTLInteger};
5463:
            Procedure XRTLNot( const AInteger : TXRTLInteger; var AResult : TXRTLInteger)
           Procedure XRTLOr( const AInteger1, AInteger2 : TXRTLInteger; var AResult : TXRTLInteger)

Procedure XRTLAnd( const AInteger1, AInteger2 : TXRTLInteger; var AResult : TXRTLInteger)

Procedure XRTLXor( const AInteger1, AInteger2 : TXRTLInteger; var AResult : TXRTLInteger)
5464:
5465:
5466:
           Function XRTLSign( const AInteger : TXRTLInteger) : Integer
Procedure XRTLZero( var AInteger : TXRTLInteger)
Procedure XRTLOne( var AInteger : TXRTLInteger)
5467:
5468:
5469:
            Procedure XRTLMOne( var AInteger : TXRTLInteger)
5470:
5471:
            Procedure XRTLTwo( var AInteger : TXRTLInteger)
            \textbf{Function} \ \texttt{XRTLNeg( const AInteger : TXRTLInteger; var } \ \texttt{AResult : TXRTLInteger) : Integer}
5472:
            Function XRTLAbs( const AInteger: TXRTLInteger; var AResult: TXRTLInteger): Integer
5473:
           Procedure XRTLADS( Const A, B, C : Integer; var Sum, Carry : Integer)

Function XRTLAdd( const AInteger1, AInteger2 : TXRTLInteger; var AResult : TXRTLInteger) : Integer;
5474:
5475:
5476:
            Function XRTLAdd1(const AInteger1:TXRTLInteger;const AInteger2:Int64;var AResult:TXRTLInteger):Integer;
           Function XRTLSub( const AInteger1, AInteger2 : TXRTLInteger; var AResult : TXRTLInteger) : Integer;
Function XRTLSub1( const AInteger1:TXRTLInteger; const AInteger2:Int64; var AResult:TXRTLInteger):Integer;
5477:
5478:
           Function XRTLCompare(const AInteger1, AInteger2: TXRTLInteger): Integer;
Function XRTLCompare1(const AInteger1: TXRTLInteger; const AInteger2: Int64): Integer;
5480:
           Function XRTLUMul( const AInteger1, AInteger2 : TXRTLInteger; var AResult : TXRTLInteger) : Integer
5481:
            Function XRTLMulAdd(const AInteger1.AInteger2.AInteger3:TXRTLInteger; var AResult:TXRTLInteger):Integer
5482:
            Function XRTLMul( const AInteger1, AInteger2 : TXRTLInteger; var AResult : TXRTLInteger) : Integer
5483:
            Procedure XRTLDivMod( const AInteger1, AInteger2 : TXRTLInteger; var QResult, RResult : TXRTLInteger)
5484:
           Procedure XRTLSqr( const AInteger: TXRTLInteger; var AResult: TXRTLInteger)

Procedure XRTLSqrt( const AInteger: TXRTLInteger; var AResult: TXRTLInteger)

Procedure XRTLRoot( const AInteger1, AInteger2: TXRTLInteger; var AResult: TXRTLInteger)
5485:
5486:
5487:
           Procedure XRTLRootApprox(const AInteger1, AInteger2: TXRTLInteger; var ALowApproxResult,
          AHighApproxResult:TXRTLInteger)
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5489: Procedure XRTLURootApprox(const AInteger1, AInteger2:TXRTLInteger; var ALowApproxResult,
      AHighApproxResult:TXRTLInteger);
       Procedure XRTLExp( const AInteger1, AInteger2 : TXRTLInteger; var AResult : TXRTLInteger)
Procedure XRTLExpMod( const AInteger1, AInteger2, AInteger3 : TXRTLInteger; var AResult: TXRTLInteger)
5491:
        Procedure XRTLSLBL(const AInteger: TXRTLInteger; const BitCount:Integer; var AResult: TXRTLInteger)
5492:
        Procedure XRTLSABL(const AInteger: TXRTLInteger; const BitCount:Integer; var AResult: TXRTLInteger)
5493:
        Procedure XRTLRCBL(const AInteger: TXRTLInteger; const BitCount:Integer; var AResult: TXRTLInteger)
5494:
        Procedure XRTLSLDL(const AInteger:TXRTLInteger;const DigitCount:Integer; var AResult:TXRTLInteger)
5495:
5496:
        Procedure XRTLSADL(const AInteger: TXRTLInteger; const DigitCount:Integer;var AResult: TXRTLInteger)
5497:
        Procedure XRTLRCDL(const AInteger: TXRTLInteger; const DigitCount: Integer; var AResult: TXRTLInteger)
5498:
        Procedure XRTLSLBR(const AInteger: TXRTLInteger; const BitCount:Integer; var AResult: TXRTLInteger)
        Procedure XRTLSABR(const AInteger: TXRTLInteger; const BitCount:Integer; var AResult: TXRTLInteger)
5499:
5500:
        Procedure XRTLRCBR(const AInteger: TXRTLInteger; const BitCount:Integer; var AResult: TXRTLInteger)
       Procedure XRTLSLDR(const AInteger: TXRTLInteger; const DigitCount:Integer; var AResult: TXRTLInteger)
Procedure XRTLSADR(const AInteger: TXRTLInteger; const DigitCount:Integer; var AResult: TXRTLInteger)
5501:
5502:
5503:
        Procedure XRTLRCDR(const AInteger: TXRTLInteger;const DigitCount:Integer;var AResult: TXRTLInteger)
        Function XRTLToHex( const AInteger: TXRTLInteger; Digits: Integer): string
5504:
5505:
        Function XRTLToBin( const AInteger : TXRTLInteger; Digits : Integer) : string
        Function XRTLToString( const AInteger: TXRTLInteger; Radix: Integer; Digits: Integer): string
5506:
       Procedure XRTLFromHex( const Value : string; var AResult : TXRTLInteger)
Procedure XRTLFromBin( const Value : string; var AResult : TXRTLInteger)
5507:
5508:
        Procedure XRTLFromString( const Value : string; var AResult : TXRTLInteger; Radix : Integer)
5509:
       Procedure XRTLAssign( const AInteger: TXXTLInteger);
Procedure XRTLAssign1( const Value: Integer; var AResult: TXXTLInteger);
Procedure XRTLAssign2( const Value: Integer; var AResult: TXXTLInteger);
5510:
5511:
5512:
5513:
        Procedure XRTLAppend( const ALow, AHigh: TXRTLInteger; var AResult: TXRTLInteger)
5514:
        Procedure XRTLSplit(const AInteger: TXRTLInteger; var ALow, AHigh: TXRTLInteger; LowDigits: Integer)
5515:
        Function XRTLGetMSBitIndex( const AInteger : TXRTLInteger) : Integer
       Procedure XRTLMinMax(const AInteger1, AInteger2 : TXRTLInteger; var AMinResult, AMaxResult: TXRTLInteger)

Procedure XRTLMin( const AInteger1, AInteger2 : TXRTLInteger; var AResult : TXRTLInteger);
5516:
5517:
5518:
        Procedure XRTLMin1(const AInteger1: TXRTLInteger; const AInteger2:Integer; var AResult : TXRTLInteger);
5519:
        Procedure XRTLMax( const AInteger1, AInteger2 : TXRTLInteger; var AResult : TXRTLInteger);
       Procedure XRTLMax1(const AInteger1:TXRTLInteger; const AInteger2:Integer; var AResult:TXRTLInteger);
5520:
       Procedure XRTLGCD( const AInteger1, AInteger2 : TXRTLInteger; var AResult : TXRTLInteger)
Procedure XRTLSwap( var AInteger1, AInteger2 : TXRTLInteger)
5521:
       Procedure XRTLFactorial( const AInteger: TXRTLInteger; var AResult: TXRTLInteger)
Procedure XRTLFactorialMod( const AInteger1, AInteger2: TXRTLInteger; var AResult: TXRTLInteger)
5523:
5524:
5525:
      end;
5526:
      procedure SIRegister_JvXPCoreUtils(CL: TPSPascalCompiler);
5527:
5528: begin
       Function JvXPMethodsEqual (const Method1. Method2: TMethod): Boolean
5529:
       Procedure JvXPDrawLine( const ACanvas : TCanvas; const X1, Y1, X2, Y2 : Integer)
5530:
        Procedure JvXPCreateGradientRect( const AWidth, AHeight: Integer; const StartColor, EndColor: TColor;
       const Colors:TJvXPGradientColors;const Style:TJvXPGradientStyle;const Dithered:Boolean;var Bitmap:TBitmap);
5532:
      Procedure JvXPAdjustBoundRect(const BorderWidth:Byte; const ShowBoundLines:Boolean; const
      BoundLines: TJvXPBoundLines; var Rect : TRect)
5533: Procedure JvXPDrawBoundLines(const ACan:TCanvas;const BoundLines:TJvXPBoundLines;const
      AColor:TColor;const Rect:TRect);
5534:
       Procedure JvXPConvertToGray2( Bitmap : TBitmap)
       Procedure JvXPRenderText( const AParent : TControl; const ACanvas : TCanvas; ACaption : TCaption; const
5535:
      AFont: TFont; const AEnabled, AShowAccelChar: Boolean; var ARect: TRect; AFlags: Integer)
       Procedure JvXPFrame3D(const ACanvas:TCanvas;const Rect:TRect;const TopColor,BottomColor:TColor;const
      Swapped:Boolean);
5537:
      Procedure JvXPColorizeBitmap( Bitmap: TBitmap; const AColor: TColor)
       Procedure JvXPSetDrawFlags(const AAlignment: TAlignment;const AWordWrap: Boolean; var Flags: Integer)
5538:
        Procedure JvXPPlaceText( const AParent: TControl; const ACanvas: TCanvas; const AText: TCaption; const
5539:
      AFont : TFont; const AEnabled, AShowAccelChar: Boolean; const AAlignment: TAlignment; const
      AWordWrap:Boolean; var Rect:TRect)
5540:
      end;
5541:
5542:
5543:
      procedure SIRegister_uwinstr(CL: TPSPascalCompiler);
5544:
      begin
       Function StrDec( S : String) : String
5545:
        Function uIsNumeric( var S : String; var X : Float) : Boolean
5546:
       Function ReadNumFromEdit( Edit : TEdit) : Float
Procedure WriteNumToFile( var F : Text; X : Float)
5547:
5548:
5549:
      end;
5550:
      procedure SIRegister_utexplot(CL: TPSPascalCompiler);
5551:
5552:
      begin
5553:
       Function TeX InitGraphics (FileName: String; PgWidth, PgHeight: Integer; Header: Boolean): Boolean
       Procedure TeX_SetWindow( X1, X2, Y1, Y2 : Integer; GraphBorder : Boolean)
Procedure TeX_LeaveGraphics( Footer : Boolean)
5554:
5555:
        Procedure TeX_SetOxScale( Scale : TScale; OxMin, OxMax, OxStep : Float)
5556:
5557:
        Procedure TeX_SetOyScale( Scale : TScale; OyMin, OyMax, OyStep : Float)
        Procedure TeX_SetGraphTitle( Title : String)
5558:
       Procedure TeX_SetOxTitle( Title : String)
5559:
        Procedure TeX_SetOyTitle( Title : String
5560:
5561:
        Procedure TeX_PlotOxAxis
5562:
       Procedure TeX_PlotOyAxis
       Procedure TeX_PlotGrid( Grid : TGrid)
5563:
        Procedure TeX_WriteGraphTitle
5564:
5565:
        Function TeX_SetMaxCurv( NCurv : Byte) : Boolean
5566:
       Procedure TeX_SetPointParam( CurvIndex, Symbol, Size : Integer)
       Procedure TeX_SetLineParam( CurvIndex, Style : Integer; Width : Float; Smooth : Boolean)

Procedure TeX_SetCurvLegend( CurvIndex : Integer; Legend : String)
5567:
5568:
       Procedure TeX_SetCurvStep( CurvIndex, Step : Integer)
```

```
Procedure TeX_PlotCurve( X, Y : TVector; Lb, Ub, CurvIndex : Integer)
5570:
            Procedure TeX_PlotCurveWithErrorBars( X, Y, S : TVector; Ns, Lb, Ub, CurvIndex : Integer)
5571:
            Procedure TeX_PlotFunc( Func : TFunc; X1, X2 : Float; Npt : Integer; CurvIndex : Integer)
5573 .
            Procedure TeX_WriteLegend( NCurv : Integer; ShowPoints, ShowLines : Boolean)
            Procedure TeX_ConRec( Nx, Ny, Nc : Integer; X, Y, Z : TVector; F : TMatrix)
5574:
5575:
            Function Xcm( X : Float) : Float
            Function Ycm( Y : Float) : Float
5576:
5577:
5578:
5579:
5580: procedure SIRegister_VarRecUtils(CL: TPSPascalCompiler);
5581:
          begin
5582:
             TConstArray',
                                       'array of TVarRec
            Function CopyVarRec( const Item : TVarRec) : TVarRec
5583:
            Function CreateConstArray( const Elements : array of const) : TConstArray
5584:
5585:
            Procedure FinalizeVarRec( var Item : TVarRec)
5586:
            Procedure FinalizeConstArray( var Arr : TConstArray)
5587 .
          end;
5588:
5589: procedure SIRegister_StStrS(CL: TPSPascalCompiler);
5590:
          begin
5591:
            Function HexBS( B : Byte) : ShortString
            Function HexWS( W : Word) : ShortString
Function HexLS( L : LongInt) : ShortString
5592:
5593:
            Function HexPtrS( P : Pointer) : ShortString
5594:
            Function BinaryBS( B : Byte) :
5595:
                                                                     ShortString
5596:
            Function BinaryWS( W : Word) : ShortString
5597:
            Function BinaryLS( L : LongInt) : ShortString
            Function OctalBS( B : Byte) : ShortString
Function OctalWS( W : Word) : ShortString
5598:
5599:
5600:
            Function OctalLS( L : LongInt) : ShortString
            Function Str2Int16S( const S : ShortString; var I : SmallInt) : Boolean
Function Str2WordS( const S : ShortString; var I : Word) : Boolean
5601:
5602:
            Function Str2LongS( const S : ShortString; var I : LongInt) : Boolean
5603:
            Function Str2RealS( const S : ShortString; var R : Double) : Boolean
5604:
            Function Str2RealS( const S : ShortString; var R : Real) : Boolean
5605:
5606:
            Function Str2ExtS( const S : ShortString; var R : Extended) : Boolean
            Function Long2StrS( L : LongInt) : ShortString
5607:
5608:
            Function Real2StrS( R : Double; Width : Byte; Places : ShortInt) : ShortString
            Function Ext2StrS( R : Extended; Width : Byte; Places : ShortInt) : ShortString
5609:
5610:
            Function ValPrepS( const S : ShortString) : ShortString
            Function CharStrS( C : AnsiChar; Len : Cardinal) : ShortString
Function PadChS( const S : ShortString; C : AnsiChar; Len : Cardinal) : ShortString
5611:
5612:
            Function PadS( const S : ShortString; Len : Cardinal) : ShortString
            Function LeftPadChS( const S : ShortString; C : AnsiChar; Len : Cardinal) : ShortString
Function LeftPadS( const S : ShortString; Len : Cardinal) : ShortString
5614:
5615:
            Function TrimLeadS( const S : ShortString) : ShortString
5616:
            Function TrimTrailS( const S : ShortString) : ShortString
5617:
            Function TrimS( const S : ShortString) : ShortString
5618:
            Function TrimSpacesS( const S : ShortString) : ShortString
Function CenterChS( const S : ShortString; C : AnsiChar; Len : Cardinal) : ShortString
5619:
5620:
            Function CenterS( const S : ShortString; Len : Cardinal) : ShortString
5621:
            Function EntabS( const S : ShortString; TabSize : Byte) : ShortString
5622:
5623:
            Function DetabS( const S : ShortString; TabSize : Byte) : ShortString
5624:
            Function ScrambleS( const S, Key : ShortString) : ShortString
Function SubstituteS( const S, FromStr, ToStr : ShortString) : ShortString
5625:
5626:
            Function FilterS( const S, Filters : ShortString) : ShortString
            Function CharExistsS( const S: ShortString; C: AnsiChar): Boolean Function CharCountS( const S: ShortString; C: AnsiChar): Byte Function WordCountS( const S, WordDelims: ShortString): Cardinal
5627:
5628:
5629:
            Function WordPositionS( N : Cardinal; const S, WordDelims : ShortString; var Pos : Cardinal) : Boolean
5630:
            Function ExtractWordS( N : Cardinal; const S, WordDelims : ShortString) : ShortString
            Function AsciiCountS( const S, WordDelims : ShortString; Quote : AnsiChar) : Cardinal
5632:
5633:
            Function AsciiPositionS(N:Cardinal;const S, WordDelims:ShortString;Ouote:AnsiChar;var Pos:Cardinal):Boolean
            Function ExtractAsciiS(N:Cardinal;const S, WordDelims:ShortString;Quote:AnsiChar): ShortString
5634:
5635:
            Procedure WordWrapS(const InSt: ShortString; var OutSt,Overlap: ShortString;
          Margin:Cardinal;PadToMargin:Boolean)
          Function CompStringS( const S1, S2 : ShortString) : Integer
5636:
5637:
            Function CompUCStringS( const S1, S2 : ShortString) : Integer
            Function SoundexS( const S : ShortString) : ShortString
5638:
            Function MakeLetterSetS( const S : ShortString) : Longint
            Procedure BMMakeTableS( const MatchString : ShortString; var BT : BTable)
5640:
            \textbf{Function} \ \ \texttt{BMSearchS}(\textbf{var} \ \ \texttt{Buffer}, \texttt{BufLength}: \texttt{Card}; \textbf{var} \ \ \texttt{BT:BTable}; \textbf{const} \ \ \texttt{MatchString}: \textbf{ShortString}; \textbf{var}; \textbf{va
5641:
          Pos:Cardinal):Bool;
5642:
            Function BMSearchUCS(var Buffer, BufLength: Card; var BT: BTable; const MatchString: ShortString; var
          Pos:Cardinal):Bool;
5643: Function DefaultExtensionS( const Name, Ext : ShortString) : ShortString
            Function ForceExtensionS( const Name, Ext : ShortString) : ShortString
Function JustFilenameS( const PathName : ShortString) : ShortString
5644:
5645:
            Function JustNameS( const PathName : ShortString) : ShortString
5647:
            Function JustExtensionS( const Name : ShortString) : ShortString
           Function JustPathnameS( const PathName : ShortString) : ShortString
Function AddBackSlashS( const DirName : ShortString) : ShortString
5648:
5649:
            Function CleanPathNameS( const PathName : ShortString) : ShortString
5650:
            Function HasExtensionS( const Name : ShortString; var DotPos : Cardinal) : Boolean
5651:
            Function CommaizeS( L : LongInt) : ShortString
Function CommaizeChS( L : Longint; Ch : AnsiChar) : ShortString
5652:
5653:
            Function FloatFormS(const Mask:ShortString;R:TstFloat;const LtCurr,RtCurr:ShortString;Sep,
5654:
          DecPt:Char):ShortString;
```

```
5655: Function LongIntFormS(const Mask:ShortString;L:LongInt;const LtCurr,
          RtCurr:ShortString;Sep:AnsiChar):ShortString;
           Function StrChPosS( const P : ShortString; C : AnsiChar; var Pos : Cardinal) : Boolean
           Function StrStPosS( const P, S: ShortString; var Pos: Cardinal): Boolean
Function StrStCopyS( const S: ShortString; Pos, Count: Cardinal): ShortString
Function StrChInsertS( const S: ShortString; C: AnsiChar; Pos: Cardinal): ShortString
5657:
5658:
5659:
           Function StrStInsertS( const S1, S2 : ShortString; Pos : Cardinal) : ShortString
5660:
           Function StrChDeleteS( const S : ShortString; Pos : Cardinal) : ShortString
5661:
           Function StrStDeleteS( const S : ShortString; Pos, Count : Cardinal) : ShortString
5662:
5663:
           Function ContainsOnlyS( const S, Chars : ShortString; var BadPos : Cardinal) : Boolean
Function ContainsOtherThanS( const S, Chars : ShortString; var BadPos : Cardinal) : Boolean
5664:
           Function CopyLeftS( const S : ShortString; Len : Cardinal) : ShortString
5666:
           Function CopyMidS( const S : ShortString; First, Len : Cardinal) : ShortString
           Function CopyMidS( const S : ShortString; First : Cardinal) : ShortString
Function CopyRightS( const S : ShortString; NumChars : Cardinal) : ShortString
5667:
5668:
5669:
           Function CopyFromNthWordS(const S,WordDelims:string;const AWord:String;N:Card;var
         SubString: ShortString): Bool;
5670:
         Function DeleteFromNthWordS(const S,WordDelims:String;AWord:ShortString;N:Card;var
         SubStr: ShortString): Bool;
5671: Function CopyFromToWordS(const S, WordDelims, Word1, Word2: ShortString; N1, N2: Card; var
         SubString: ShortString): Bool;
           Function DeleteFromToWordS(const S, WordDelims, Wrd1, Wrd2:ShortString; N1, N2:Card; var
         SubString:ShortString):Bool;
5673:
           Function CopyWithinS( const S, Delimiter : ShortString; Strip : Boolean) : ShortString
           Function DeleteWithinS( const S, Delimiter : ShortString) : ShortString
5675:
           Function ExtractTokensS(const S,
          \texttt{Delims:} \textbf{ShortString:} \\ \texttt{QuoteChar:} \\ \texttt{AnsiChar:} \\ \texttt{AllowNulls:} \\ \texttt{Boolean:} \\ \texttt{Tokens:} \\ \texttt{TStrings):} \\ \texttt{Cardinal:} \\ \texttt{Cardinal:} \\ \texttt{Tokens:} \\ \texttt{Tokens:} \\ \texttt{TStrings:} \\ \texttt{Cardinal:} \\ \texttt{Tokens:} \\ \texttt{Tokens:} \\ \texttt{TStrings:} \\ \texttt{Cardinal:} \\ \texttt{Cardinal:}
         Function IsChAlphaS( C : Char) : Boolean
Function IsChNumericS( C : Char; const Numbers : ShortString) : Boolean
5676:
5677:
           Function IsChAlphaNumericS( C : Char; const Numbers : ShortString) : Boolean
5679:
           \textbf{Function} \  \, \texttt{IsStrAlphaS(} \  \, \textbf{const} \  \, \texttt{S} \  \, : \  \, \textbf{Shortstring)} \  \, : \  \, \texttt{Boolean}
5680:
           \textbf{Function} \  \, \texttt{IsStrNumericS}(\  \, \textbf{const} \  \, \texttt{S}, \  \, \texttt{Numbers} \  \, : \  \, \textbf{ShortString}) \  \, : \  \, \texttt{Boolean}
5681:
           Function IsStrAlphaNumericS( const S, Numbers : ShortString) : Boolean
           Function LastWordS( const S, WordDelims, AWord: ShortString; var Position: Cardinal): Boolean
5682:
           Function LastWordAbsS( const S, WordDelims : ShortString; var Position : Cardinal) : Boolean
5684:
           Function LastStringS( const S, AString : ShortString; var Position : Cardinal) : Boolean
5685:
           \textbf{Function} \  \, \texttt{LeftTrimCharsS( const S, Chars : ShortString) : ShortString} \\
           Function KeepCharsS( const S, Chars : ShortString) : ShortString
5686:
           Function RepeatStringS(const RepeatString:ShortString;var Repetitions: Cardinal; MaxLen:
5687:
          Cardinal):ShortString;
5688: Function ReplaceStringS(const S,OldString,NewString:ShortString;N:Cardinal;var
         Replacements:Cardinal):ShortString;
5689: Function ReplaceStringAllS(const S,OldString,NewString:ShortString;var Replacements:Cardinal):ShortString;
           Function ReplaceWordS(const S, WordDelims, OldWord, NewW:SString; N:Cardinal; var
5690:
         Replacements:Cardinal):ShortString
5691: Function ReplaceWordAllS(const S.WordDelims.OldWord.NewWord:ShortString; var
         Replacements:Cardinal):ShortString
5692: Function RightTrimCharsS( const S, Chars : ShortString) : ShortString
5693:
           Function StrWithinS(const S,SearchStr: ShortString;Start:Cardinal;var Position:Cardinal):boolean
5694:
           Function TrimCharsS( const S, Chars : ShortString) : ShortString
5695: Function WordPosS(const S, WordDelims, AWord: ShortString; N: Cardinal; var Position: Cardinal): Boolean
5696: end;
5697:
5698:
5700: Function SignL( L : LongInt) : Integer 5701: Function SignF( F : Extended) : Integer
5702: Function MinWord( A, B : Word) : Word
5703: Function MidWord( W1, W2, W3 : Word) : Word
5703: Function MaxWord( A, B : Word) : Word
5705: Function MinLong( A, B : LongInt) : LongInt
5706: Function MidLong( L1, L2, L3 : LongInt) : LongInt
5707: Function MaxLong( A, B : LongInt) : LongInt
5708: Function MinFloat(F1, F2 : Extended) : Extended
5709: Function Midfloat(F1, F2, F3 : Extended) : Extended
5710: Function MaxFloat(F1, F2 : Extended) : Extended
5711: Function MakeInteger16( H, L : Byte) : SmallInt
5712: Function MakeWordS( H, L : Byte) : Word
5713: Function SwapNibble(B: Byte): Byte
5714: Function SwapWord(L: LongInt): LongInt
5715: Procedure SetFlag( var Flags : Word; FlagMask : Word)
5716: Procedure ClearFlag( var Flags : Word; FlagMask : Word)
5717: Function FlagIsSet(Flags, FlagMask: Word): Boolean 5718: Procedure SetByteFlag( var Flags: Byte; FlagMask: Byte)
5719: Procedure ClearByteFlag( var Flags : Byte; FlagMask :
5720: Function ByteFlagIsSet( Flags, FlagMask : Byte) : Boolean
5721: Procedure SetLongFlag( var Flags : LongInt; FlagMask : LongInt)
5722: Procedure ClearLongFlag( var Flags : LongInt; FlagMask : LongInt)
5723: Function LongFlagIsSet(Flags, FlagMask: LongInt): Boolean
5724: Procedure ExchangeBytes( var I, J : Byte)
5725: Procedure ExchangeWords( var I, J : Word)
5726: Procedure ExchangeLongInts( var I, J : LongInt)
5727: Procedure ExchangeStructs( var I, J, Size : Cardinal)
5728: Procedure FillWord( var Dest, Count : Cardinal; Filler : Word)
5729: Procedure FillStruct( var Dest, Count : Cardinal; var Filler, FillerSize : Cardinal)
5732: Function AccruedInterestMaturity(Issue,Maturity:TStDate;Rate,Par:Extended;Basis: TStBasis): Extended
5733: Function AccruedInterestPeriodic(Issue,Settlement,Maturity:TStDate;Rate,
          Par:Extended;Frequency:TStFrequency; Basis : TStBasis) : Extended
```

```
5734: Function BondDuration( Settlement, Maturity: TStDate; Rate,
         Yield:Ext; Frequency: TStFrequency; Basis: TStBasis): Extended;
         Function BondPrice(Settlement, Maturity: TStDate; Rate, Yield,
         Redemption:Ext;Freq:TStFrequency;Basis:TStBasis): Extended
5736: Function CumulativeInterest( Rate : Extended; NPeriods : Integer; PV : Extended; StartPeriod, EndPeriod :
         Integer; Frequency : TStFrequency; Timing : TStPaymentTime) : Extended
5737: Function CumulativePrincipal( Rate : Extended; NPeriods : Integer; PV : Extended; StartPeriod, EndPeriod :
Integer: Frequency: TStFrequency: Timing: TStPaymentTime): Extended 5738: Function DayCount( Day1, Day2: TStDate; Basis: TStBasis): LongInt
5739: Function DecliningBalance(Cost, Salvage: Extended; Life, Period, Month: Integer): Extended
5740: Function DiscountRate(Settlement, Maturity:TStDate; Price, Redemption: Extended; Basis:TStBasis): Extended;
5741: Function DollarToDecimal(FracDollar: Extended; Fraction: Integer): Extended
5742: Function DollarToDecimalText( DecDollar : Extended) : string
5743: Function DollarToFraction( DecDollar : Extended; Fraction : Integer) : Extended
5744: Function DollarToFractionStr( FracDollar : Extended; Fraction : Integer) : string
5745: Function EffectiveInterestRate( NominalRate : Extended; Frequency : TStFrequency) : Extended
5746: Function FutureValueS(Rate:Extended;NPeriods:Int;Pmt,
         {\tt PV:Extended;Freq:TStFrequency;Timing:TStPaymentTime):Extended;}
5747: Function FutureValueSchedule(Principal: Extended; const Schedule: array of Double): Extended
5748: Function FutureValueSchedule16(Principal: Extended; const Schedule, NRates: Integer): Extended
5749: Function InterestRateS(NPeriods:Int;Pmt,PV,
         FV:Extended;Freq:TStFrequency;Timing:TStPaymentTime;Guess:Extended):Extend;
5750: Function InternalRateOfReturn( const Values : array of Double; Guess : Extended) : Extended
5751: Function InternalRateOfReturn16( const Values, NValues: Integer; Guess: Extended): Extended
5752: Function IsCardValid( const S : string) : Boolean
5753: Function ModifiedDuration(Settlement, Maturity:TStDate; Rate,
         Yield:Extended;Freq:TStFrequency;Basis:TStBasis):Extended;
5754: Function ModifiedIRR(const Values: array of Double; FinanceRate, ReinvestRate: Extended) : Extended
5755: Function ModifiedIRR16(const Values, NValues: Integer; FinanceRate, ReinvestRate: Extended) : Extended
5756: Function NetPresentValueS( Rate : Extended; const Values : array of Double) : Extended
5757: Function NetPresentValue16( Rate : Extended; const Values, NValues : Integer) : Extended
5758: Function NominalInterestRate( EffectRate: Extended; Frequency: TStFrequency): Extended 5759: Function NonperiodicIRR(const Values:array of Double; const Dates:array of TStDate; Guess: Extended): Extended;
5760: Function NonperiodicNPV(Rate:Extended;const Values: array of Double;const Dates:array of TStDate):Extended;
5761: Function Payment( Rate : Extended; NPeriods : Integer; PV, FV : Extended; Frequency : TStFrequency; Timing
          : TStPaymentTime): Extended
5762: \textbf{Function} \ \ \texttt{Periods}(\texttt{Rate}: \texttt{Extended}; \texttt{Pwt}, \texttt{PV}, \texttt{FV}: \texttt{Extended}; \texttt{Frequency}: \texttt{TStFrequency}; \texttt{Timing}: \texttt{TStPaymentTime}): \texttt{Integer}; \texttt{TStPaymentTime}): 
5763: Function PresentValueS( Rate: Extended; NPeriods: Integer; Pmt, FV: Extended; Frequency; TStFrequency;
         Timing: TStPaymentTime): Extended
5764: Function ReceivedAtMaturity(Settlement,Maturity:TStDate;Invest,Discount:Extended;Basis:TStBasis):Extended;
5765: Function RoundToDecimal( Value : Extended; Places : Integer; Bankers : Boolean) : Extended 5766: Function TBillEquivYield( Settlement, Maturity : TStDate; Discount : Extended) : Extended
5768: Function TBillPrice( Settlement, Maturity: TStDate; Discount: Extended): Extended 5768: Function TBillPrice( Settlement, Maturity: TStDate; Discount: Extended): Extended
5769: Function VariableDecliningBalance( Cost, Salvage: Extended; Life: Integer; StartPeriod, EndPeriod, Factor: Extended; NoSwitch: boolean): Extended
5770: Function YieldDiscounted(Settlement, Maturity:TStDate; Price, Redemption: Extended; Basis:TStBasis):Extended;
5771: Function YieldPeriodic(Settlement, Maturity: TStDate; Rate, Price,
         Redemption: Extended; Freq: TStFrequency; Basis: TStBasis): Extended
5772: Function YieldMaturity(Issue, Settlement, Maturity: TStDate; Rate, Price: Extended; Basis: TStBasis): Extended;
5773:
                  5775: Procedure PlanetsPos( JD : Double; var PA : TStPlanetsArray)
5777: Function AveDev( const Data : array of Double) : Double
5778: Function AveDev16( const Data, NData : Integer) : Double
5779: Function Confidence( Alpha, StandardDev : Double; Size : LongInt) : Double
5780: Function Correlation( const Data1, Data2 : array of Double) : Double
5781: Function Correlation16( const Data1, Data2, NData : Integer) : Double
5782: Function Covariance( const Data1, Data2 : array of Double) : Double 5783: Function Covariance16( const Data1, Data2, NData : Integer) : Double
5784: Function DevSq( const Data : array of Double) : Double
5785: Function DevSq16( const Data, NData : Integer) : Double
5786: Procedure Frequency(const Data:array of Double;const Bins:array of Double;var Counts: array of LongInt);
5787: //Procedure Frequency16( const Data, NData: Integer; const Bins, NBins: Integer; var Counts)
5788: Function GeometricMeanS( const Data: array of Double): Double
5789: Function GeometricMean16( const Data, NData : Integer) : Double
5790: Function HarmonicMeanS( const Data : array of Double) : Double
5791: Function HarmonicMean16( const Data, NData: Integer): Double
5792: Function Largest( const Data: array of Double; K: Integer): Double 5793: Function Largest16( const Data, NData: Integer; K: Integer): Double
5794: Function MedianS( const Data : array of Double) : Double
5795: Function Median16( const Data, NData : Integer) : Double
5796: Function Mode( const Data: array of Double): Double 5797: Function Model6( const Data, NData: Integer): Double
5798: Function Percentile( const Data : array of Double; K : Double) : Double
5799: Function Percentile16( const Data, NData : Integer; K : Double) : Double
5800: Function PercentRank( const Data : array of Double; X : Double) : Double
5801: Function PercentRank16( const Data, NData: Integer; X: Double): Double
5802: Function Permutations ( Number, NumberChosen : Integer) : Extended
5803: Function Combinations ( Number, NumberChosen : Integer) : Extended
5804: Function FactorialS( N : Integer) : Extended
5805: Function Rank( Number : Double; const Data : array of Double; Ascending : Boolean) : Integer
5806: Function Rankl6( Number : Double; const Data, NData : Integer; Ascending : Boolean) : Integer
5807: Function Smallest( const Data : array of Double; K : Integer) : Double
5808: Function Smallest16( const Data, NData: Integer; K: Integer): Double
5809: Function TrimMean( const Data: array of Double; Percent: Double): Double 5810: Function TrimMean16( const Data, NData: Integer; Percent: Double): Double
5811: AddTypeS('TStLinEst', 'record B0 : Double; B1 : double; seB0 : double; seB'
```

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5812:
           +'1 : Double; R2 : Double; sigma : Double; SSr: double; SSe: Double; F0 : Double; df : Integer; end
5813: Procedure LinEst(const KnownY:array of Double;const KnownX:array of Double;var
        LF:TStLinEst;ErrorStats:Bool;
5814: Procedure LogEst(const KnownY:array of Double;const KnownX:array of Double;var
        LF:TStLinEst;ErrorStats:Bool;
5815: Function Forecast(X: Double; const KnownY: array of Double; const KnownX: array of Double) : Double
5816: Function ForecastExponential(X:Double;const KnownY:array of Double;const KnownX:array of Double):Double;
5817: Function Intercept( const KnownY : array of Double; const KnownX : array of Double)
5818: Function RSquared( const KnownY : array of Double; const KnownX : array of Double) : Double
5819: Function Slope( const KnownY : array of Double; const KnownX : array of Double) : Double
5820: Function StandardErrorY( const KnownY: array of Double; const KnownX: array of Double): Double
5821: Function BetaDist( X, Alpha, Beta, A, B : Single) : Single
5822: Function BetaInv( Probability, Alpha, Beta, A, B : Single) : Single
5823: Function BinomDist( NumberS, Trials : Integer; ProbabilityS : Single; Cumulative : Boolean) : Single
5824: Function CritBinom( Trials : Integer; ProbabilityS, Alpha : Single) : Integer
5825: Function ChiDist( X : Single; DegreesFreedom : Integer) : Single 5826: Function ChiInv( Probability : Single; DegreesFreedom : Integer) : Single
5827: Function ExponDist( X, Lambda : Single; Cumulative : Boolean) : Single
5828: Function FDist( X : Single; DegreesFreedom1, DegreesFreedom2 : Integer) : Single
5829: Function FInv( Probability : Single; DegreesFreedom1, DegreesFreedom2 : Integer) : Single 5830: Function LogNormDist( X, Mean, StandardDev : Single) : Single) : Single
5831: Function LogInv( Probability, Mean, StandardDev : Single) : Single
5832: Function NormDist( X, Mean, StandardDev : Single; Cumulative : Boolean) : Single
5833: Function NormIntv( Probability, Mean, StandardDev : Single) : Single
5834: Function NormSDist( Z : Single) : Single
5835: Function NormSInv( Probability : Single) : Single
5836: Function NormSInv( Probability : Single) : Single
5836: Function Poisson( X : Integer; Mean : Single; Cumulative : Boolean) : Single
5837: Function TDist( X : Single; DegreesFreedom : Integer; TwoTails : Boolean) : Single
5838: Function TInv( Probability : Single; DegreesFreedom : Integer) : Single
5839: Function Erfc( X : Single) : Single
5840: Function GammaIn( X : Single) : Single

5841: Function LargestSort( const Data : array of Double; K : Integer) : Double

5842: Function SmallestSort( const Data : array of double; K : Integer) : Double
5843:
5844: procedure SIRegister_TStSorter(CL: TPSPascalCompiler);
        Function OptimumHeapToUse( RecLen : Cardinal; NumRecs : LongInt) : LongInt
Function MinimumHeapToUse( RecLen : Cardinal) : LongInt
Function MergeInfo( MaxHeap : LongInt; RecLen : Cardinal; NumRecs : LongInt) : TMergeInfo
Function DefaultMergeName( MergeNum : Integer) : string
5845:
5846:
5847:
         Procedure ArraySort( var A, RecLen, NumRecs : Cardinal; Compare : TUntypedCompareFunc)
5849:
5850:
        procedure STRegister StAstro(CL: TPSPascalCompiler);
5851:
        Function AmountOfSunlight( LD : TStDate; Longitude, Latitude : Double) : TStTime
5852:
         Function FixedRiseSet( LD : TStDate; RA, DC, Longitude, Latitude : Double) : TStRiseSetRec
         Function SunPos( UT : TStDateTimeRec) : TStPosRec
5854:
         Function SunPosPrim( UT : TStDateTimeRec) : TStSunXYZRec
5855:
         Function SunRiseSet( LD : TStDate; Longitude, Latitude : Double) : TStRiseSetRec
5856:
         Function Twilight( LD : TStDate; Longitude, Latitude : Double; TwiType:TStTwilight):TStRiseSetRec Function LunarPhase( UT : TStDateTimeRec) : Double Function MoonPos( UT : TStDateTimeRec) : TStMoonPosRec
5858:
5859:
         Function MoonRiseSet( LD : TStDate; Longitude, Latitude : Double) : TStRiseSetRec
5860:
         Function FirstQuarter( D : TStDate) : TStLunarRecord
5861:
         Function FullMoon( D : TStDate) : TStLunarRecord
5862:
         Function LastQuarter( D : TStDate) : TStLunarRecord
5863:
         Function NewMoon( D : TStDate) : TStLunarRecord
Function NextFirstQuarter( D : TStDate) : TStDateTimeRec
Function NextFullMoon( D : TStDate) : TStDateTimeRec
5864:
5865:
5866:
         Function NextLastQuarter( D : TStDate) : TStDateTimeRec
5867:
5868:
         Function NextNewMoon( D : TStDate) : TStDateTimeRec
         Function PrevFirstQuarter(D: TStDate): TStDateTimeRec
Function PrevFullMoon(D: TStDate): TStDateTimeRec
5869:
5870:
5871:
         Function PrevLastQuarter( D : TStDate) : TStDateTimeRec
5872:
         \textbf{Function} \  \, \texttt{PrevNewMoon(D:TStDate):TStDateTimeRec}
         Function SiderealTime( UT : TStDateTimeRec) : Double
5873:
         Function Solstice(Y, Epoch: Integer; Summer: Boolean): TStDateTimeRec
Function Equinox(Y, Epoch: Integer; Vernal: Boolean): TStDateTimeRec
5874:
         Function SEaster( Y, Epoch : Integer) : TStDate
5876:
         Function DateTimeToAJD( D : TDateTime) : Double
5877:
5878:
         Function HoursMin( RA : Double) : ShortString
Function DegsMin( DC : Double) : ShortString
5879:
         Function AJDToDateTime( D : Double) : TDateTime
5880:
5881:
5882: Procedure SIRegister StDate(CL: TPSPascalCompiler);
5883:
         Function CurrentDate : TStDate
5884:
         Function StValidDate( Day, Month, Year, Epoch : Integer) : Boolean
         Function DMYtoStDate( Day, Month, Year, Epoch : Integer) : TStDate
5885:
5886:
         Procedure StDateToDMY( Julian : TStDate; var Day, Month, Year : Integer)
         Function StIncDate( Julian : TStDate; Days, Months, Years : Integer) : TStDate
5887:
         Function IncDateTrunc( Julian : TStDate; Months, Years : Integer) : TStDate
5888:
         Procedure StDateDiff( Date1, Date2 : TStDate; var Days, Months, Years : Integer)
Function BondDateDiff( Date1, Date2 : TStDate; DayBasis : TStBondDateType) : TStDate
Function WeekOfYear( Julian : TStDate) : Byte
5890:
5891:
         Function AstJulianDate( Julian : TStDate) : Double
Function AstJulianDatetoStDate( AstJulian : Double; Truncate : Boolean) : TStDate
5892:
5893:
         Function AstJulianDatePrim( Year, Month, Date : Integer; UT : TStTime) : Double
5894:
5895:
         Function StDayOfWeek( Julian : TStDate) : TStDayType
         Function DayOfWeekDMY( Day, Month, Year, Epoch : Integer) : TStDayType
Function StIsLeapYear( Year : Integer) : Boolean
5896:
5898: Function StDaysInMonth( Month : Integer; Year, Epoch : Integer) : Integer
```

```
5899:
       Function ResolveEpoch( Year, Epoch : Integer) : Integer
        Function ValidTime( Hours, Minutes, Seconds : Integer) : Boolean
5900:
        Procedure StTimeToHMS( T : TStTime; var Hours, Minutes, Seconds : Byte)
5902:
        Function HMStoStTime( Hours, Minutes, Seconds : Byte) : TStTime
5903:
        Function CurrentTime : TStTime
       Procedure TimeDiff( Time1, Time2 : TStTime; var Hours, Minutes, Seconds : Byte)
Function StIncTime( T : TStTime; Hours, Minutes, Seconds : Byte) : TStTime
5904:
5905:
        Function DecTime( T : TStTime; Hours, Minutes, Seconds : Byte) : TStTime
5906:
       Function RoundToNearestHour( T: TStTime; Truncate: Boolean): TStTime

Function RoundToNearestMinute( const T: TStTime; Truncate: Boolean): TStTime
5907:
5908:
       Procedure DateTimeDiff(const DT1:TStDateTimeRec;var DT2:TStDateTimeRec;var Days:LongInt;var Secs:LongInt
5909:
        Procedure IncDateTime(const DT1:TStDateTimeRec;var DT2:TStDateTimeRec;Days:Integer;Secs:LongInt)
       Function DateTimeToStDate(DT: TDateTime): TStDateFunction DateTimeToStDate(DT: TDateTime): TStTime
5911:
5912:
       Function StDateToDateTime( D : TStDate) : TDateTime
5913:
5914:
        Function StTimeToDateTime( T : TStTime) : TDateTime
        Function Convert2ByteDate( TwoByteDate : Word) : TStDate
5915:
5916 .
       Function Convert4ByteDate( FourByteDate : TStDate) : Word
5917:
5918: Procedure SIRegister_StDateSt(CL: TPSPascalCompiler);
      Function DateStringHMStoAstJD( const Picture, DS : string; H, M, S, Epoch : integer) : Double
       Function MonthToString( const Month : Integer) : string
Function DateStringToStDate( const Picture, S : string; Epoch : Integer) : TStDate
5920:
5921:
       Function DateStringToDMY(const Picture, S:string; Epoch:Integer; var D, M, Y: Integer):Boolean
5922:
       Function StDateToDateString( const Picture : string; const Julian : TStDate; Pack : Boolean):string
5923:
5924:
        Function DayOfWeekToString( const WeekDay : TStDayType) : string
5925:
       Function DMYtoDateString(const Picture:string; Day, Month, Year, Epoch:Integer; Pack:Boolean): string);
       Function CurrentDateString( const Picture : string; Pack : Boolean) : string
Function CurrentTimeString( const Picture : string; Pack : Boolean) : string
5926:
5927:
       Function TimeStringToHMS( const Picture, St : string; var H, M, S : Integer) : Boolean
5928:
5929:
       Function TimeStringToStTime( const Picture, S : string) : TStTime
       Function StTimeToAmPmString( const Picture : string; const T : TStTime; Pack : Boolean) : string
Function StTimeToTimeString( const Picture : string; const T : TStTime; Pack : Boolean) : string
5930:
5931:
       Function DateStringIsBlank( const Picture, S : string) : Boolean
Function InternationalDate( ForceCentury : Boolean) : string
5932:
5933:
5934:
       Function InternationalLongDate( ShortNames : Boolean; ExcludeDOW : Boolean) : string
5935:
       Function InternationalTime( ShowSeconds : Boolean) : string
5936:
       Procedure ResetInternationalInfo
5937:
5938:
      procedure SIRegister_StBase(CL: TPSPascalCompiler);
5939:
       Function DestroyNode( Container: TStContainer; Node: TStNode; OtherData: Pointer): Boolean
       Function AnsiUpperCaseShort32( const S : string) : string
5940:
       Function AnsiCompareTextShort32( const S1, S2 : string) : Integer
Function AnsiCompareStrShort32( const S1, S2 : string) : Integer
5941:
        Function AnsiCompareStrShort32( const S1, S2 : string)
5942:
5943:
        \textbf{Function} \ \ \texttt{HugeCompressRLE}( \ \ \textbf{const} \ \ \texttt{InBuffer}, \ \ \texttt{InLen} \ : \ \ \texttt{Longint}; \ \ \textbf{var} \ \ \texttt{OutBuffer}) \ : \ \ \texttt{Longint}
5944:
       Function HugeDecompressRLE( const InBuffer, InLen : Longint; var OutBuffer,OutLen:LongInt): Longint
       Procedure HugeFillChar( var Dest, Count : Longint; Value : Byte)

Procedure HugeFillStruc( var Dest, Count : Longint; Const Value, Valsize : Cardinal)
5945:
       Function Upcase( C : AnsiChar) : AnsiChar
Function LoCase( C : AnsiChar) : AnsiChar
5947:
5948:
5949:
       Function CompareLetterSets( Set1, Set2 : LongInt) : Cardinal
        Function CompStruct( const S1, S2, Size : Cardinal) : Integer
5950:
        Function Search(const Buffer,BufLength:Cardinal;const Match,MatLength:Cardinal;var Pos:Cardinal):Bool;
5951:
5952:
        \textbf{Function} \ \ \texttt{StSearch}(\textbf{const} \ \ \texttt{Buffer}, \texttt{BufLength}: \texttt{Cardinal}; \textbf{const} \ \ \texttt{Match}, \texttt{MatLength}: \texttt{Cardinal}; \textbf{var} \ \ \texttt{Pos:Cardi}): \texttt{Boolean}
5953:
       Function SearchUC(const Buffer, BufLength: Cardinal; const Match, MatLength: Cardinal; var Pos: Cardi): Boolean
5954:
       Function IsOrInheritsFrom( Root, Candidate : TClass) : boolean
        Procedure RaiseContainerError( Code : longint)
5955:
        Procedure RaiseContainerErrorFmt( Code : Longint; Data : array of const)
5956:
       Function ProductOverflow( A, B : LongInt) : Boolean
Function StNewStr( S : string) : PShortString
Procedure StDisposeStr( PS : PShortString)
5957:
5958:
5959:
        Procedure ValLongInt( S : ShortString; var LI : Longint; var ErrorCode : integer)
5960:
       Procedure ValSmallint( const S : ShortString; var SI : smallint; var ErrorCode : integer)
Procedure ValWord( const S : ShortString; var Wd : word; var ErrorCode : integer)
5961:
5962:
       Procedure RaiseStError( ExceptionClass : EStExceptionClass; Code : LongInt)
5963:
        Procedure RaiseStWin32Error( ExceptionClass : EStExceptionClass; Code : LongInt)
5964:
5965:
        Procedure RaiseStWin32ErrorEx( ExceptionClass: EStExceptionClass; Code: LongInt; Info: string)
5966:
5967: procedure SIRegister_usvd(CL: TPSPascalCompiler);
5968: begin
      Procedure SV_Decomp( A : TMatrix; Lb, Ub1, Ub2 : Integer; S : TVector; V : TMatrix)
5969:
5970:
       Procedure SV_SetZero( S : TVector; Lb, Ub : Integer; Tol : Float)
       Procedure SV_Solve(U:TMatrix; S:TVector;V:TMatrix;B:TVector;Lb,Ub1,Ub2:Integer;X:TVector);
Procedure SV_Approx( U : TMatrix; S : TVector; V : TMatrix; Lb, Ub1, Ub2 : Integer; A : TMatrix)
5971:
5972:
5973: Procedure RKF45(F:TDiffEqs;Neqn:Int;Y,Yp:TVector;var T:Float;Tout,RelErr,AbsErr:Float;var Flag:Int;
5974: end;
5975:
5977: Function IntPowerS( Base : Extended; Exponent : Integer) : Extended
5978: Function PowerS( Base, Exponent : Extended) : Extended
5979: Function StInvCos( X : Double) : Double
5980: Function StInvSin(Y: Double): Double
5981: Function StInvTan2( X, Y : Double) : Double
5982: Function StTan( A : Double) : Double
5983: Procedure DumpException; //unit StExpEng;
5984: Function HexifyBlock( var Buffer, BufferSize : Integer) : string
5985:
```

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5988: Function Adler320fStream( Stream: TStream; CurCrc: LongInt): LongInt
5989: Function Adler320fFile(FileName: AnsiString): LongInt
5990: Function Crc16Prim( var Data, DataSize, CurCrc : Cardinal)
5991: Function Crc16OfStream( Stream: TStream; CurCrc: Cardinal): Cardinal 5992: Function Crc16OfFile( FileName: AnsiString): Cardinal
5993: Function Crc32Prim( var Data, DataSize : Cardinal; CurCrc : LongInt) : LongInt 5994: Function Crc32OfStream( Stream : TStream; CurCrc : LongInt) : LongInt 5995: Function Crc32OfFile( FileName : AnsiString) : LongInt
5996: Function InternetSumPrim( var Data, DataSize, CurCrc : Cardinal) : Cardinal
5997: Function InternetSumOfStream( Stream : TStream; CurCrc : Cardinal) : Cardinal
5998: Function InternetSumOfFile( FileName : AnsiString) : Cardinal
5999: Function Kermitl6Prim( var Data, DataSize, CurCrc : Cardinal) : Cardinal
6000: Function Kermit160fStream( Stream: TStream; CurCrc: Cardinal): Cardinal 6001: Function Kermit160fFile( FileName: AnsiString): Cardinal
6002:
6004: Function AddBcd( const B1, B2 : TbcdS) : TbcdS
6005: Function SubBcd( const B1, B2 : TbcdS) : TbcdS
6006: Function MulBcd( const B1, B2 : TbcdS) : TbcdS
6007: Function DivBcd( const B1, B2 : TbcdS) : TbcdS
6008: Function ModBcd( const B1, B2 : TbcdS)
6009: Function NegBcd( const B : TbcdS) : TbcdS
6010: Function AbsBcd( const B : TbcdS) : TbcdS
6011: Function FracBcd( const B : TbcdS) : TbcdS
6012: Function IntBcd( const B : TbcdS) : TbcdS
6013: Function RoundDigitsBcd( const B : TbcdS; Digits : Cardinal) : TbcdS
6014: Function RoundPlacesBcd( const B : TbcdS; Places : Cardinal) : TbcdS
\begin{array}{lll} \mbox{6015: Function ValBcd( const $S: string) : TbcdS} \\ \mbox{6016: Function LongBcd( $L: LongInt) : TbcdS} \\ \mbox{6017: Function ExtBcd( $E: Extended) : TbcdS} \end{array}
6018: Function ExpBcd( const B : TbcdS) : TbcdS
6019: Function LnBcd( const B : TbcdS) : TbcdS
6020: Function IntPowBcd( const B: TbcdS; E: LongInt): TbcdS
6021: Function PowBcd( const B, E: TbcdS): TbcdS
6022: Function SqrtBcd( const B : TbcdS) : TbcdS
6023: Function CmpBcd( const B1, B2 : TbcdS) : Integer
6024: Function EqDigitsBcd( const B1, B2 : TbcdS; Digits : Cardinal) : Boolean 6025: Function EqPlacesBcd( const B1, B2 : TbcdS; Digits : Cardinal) : Boolean
6026: Function IsIntBcd( const B : TbcdS) : Boolean 6027: Function TruncBcd( const B : TbcdS) : LongInt
6028: Function BcdExt( const B : TbcdS) : Extended
6029: Function RoundBcd( const B : TbcdS) : LongInt
6030: Function StrBcd( const B : TbcdS; Width, Places : Cardinal) : string
6031: Function StrExpBcd( const B : TbcdS; Width : Cardinal) : string
6032: Function FormatBcd( const Format : string; const B : TbcdS) : string 6033: Function StrGeneralBcd( const B : TbcdS) : string
6034: Function FloatFormBcd(const Mask:string;B:TbcdS;const LtCurr,RtCurr:string;Sep,DecPt:AnsiChar):string
6035: Procedure ConvertBcd( const SrcB, SrcSize : Byte; var DestB, DestSize : Byte)
6039: Function StFieldTypeToStr(FieldType: TStSchemaFieldType): AnsiString
6040: Function StStrToFieldType( const S : AnsiString) : TStSchemaFieldType
6041: Function StDeEscape( const EscStr : AnsiString) : Char
6042: Function StDoEscape( Delim : Char) : AnsiString
6043: Function StTrimTrailingChars( const S : AnsiString; Trailer : Char) : AnsiString
6044: Function AnsiHashText( const S : string; Size : Integer) : Integer
6045: Function AnsiHashStr( const S : string; Size : Integer) : Integer
6046: Function AnsiELFHashText( const S : string; Size : Integer) : Integer 6047: Function AnsiELFHashStr( const S : string; Size : Integer) : Integer
           6050:
          with AddClassN(FindClass('TStComponent'),'TStNetConnection') do begin
6051:
            Constructor Create ( AOwner : TComponent)
            Function Connect : DWord
6052:
            Function Disconnect : DWord
            RegisterProperty('Password', 'String', iptrw);
Property('UserName', 'String', iptrw);
6054:
6055:
6056:
            Property('ConnectOptions', 'TStNetConnectOptionsSet', iptrw);
            Property('DisconnectOptions', 'TStNetDisconnectOptionsSet', iptrw);
6057:
            Property('DisconnectOptions', 'ISENEEDIsconne
Property('LocalDevice', 'String', iptrw);
Property('ServerName', 'String', iptrw);
Property('ShareName', 'String', iptrw);
Property('OnConnect', 'TNotifyEvent', iptrw);
6058:
6059:
6060:
6061:
            Property('OnConnectFail', 'TOnConnectFailEvent', iptrw);
Property('OnConnectCancel', 'TOnConnectCancelEvent', iptrw);
6062:
6063:
            Property( 'OnDisconnect', 'Introduced Event', iptrw);
Property('OnDisconnect', 'TNotifyEvent', iptrw);
Property('OnDisconnectFail', 'TOnDisconnectFailEvent', iptrw);
Property('OnDisconnectCancel', 'TOnDisconnectCancelEvent', iptrw);
6064:
6065:
6066:
6068: //******Thread Functions Context of Win API --- more objects in SyncObjs.pas
6069: / /153 unit uPSI_SyncObjs, unit uPSIParallelJobs;
6070: Procedure InitializeCriticalSection( var lpCriticalSection: TRTLCriticalSection)
6071: Procedure EnterCriticalSection( var lpCriticalSection: TRTLCriticalSection)
6072: Procedure LeaveCriticalSection( var lpCriticalSection : TRTLCriticalSection)
\textbf{6073: Function} \  \, \textbf{InitializeCriticalSectionAndSpinCount} \\ \textbf{(var)} \\
       {\tt lpCriticalSection:TRTLCriticalSection;\bar{dwSpinCount:DWORD):BOOL;}
6074: Function SetCriticalSectionSpinCount(var lpCriticalSection:TRTLCriticalSection;dwSpinCount:DWORD):DWORD;
6075: Function TryEnterCriticalSection( var lpCriticalSection: TRTLCriticalSection): BOOL
```

```
6076: Procedure DeleteCriticalSection( var lpCriticalSection: TRTLCriticalSection)
6077: Function GetThreadContext( hThread : THandle; var lpContext : TContext) : BOOL
6078: Function SetThreadContext( hThread : THandle; const lpContext : TContext) : BOOL
6079: Function SuspendThread( hThread: THandle): DWORD 6080: Function ResumeThread( hThread: THandle): DWORD
6081: Function CreateThread2(ThreadFunc: TThreadFunction2; thrid: DWord) : THandle
6082: Function GetCurrentThread : THandle
6083: Procedure ExitThread( dwExitCode : DWORD)
6084: Function TerminateThread( hThread : THandle; dwExitCode : DWORD) : BOOL
6085: Function GetExitCodeThread( hThread : THandle; var lpExitCode : DWORD) : BOOL
6086: Procedure EndThread(ExitCode: Integer);
6087: Function WaitForSingleObject( hHandle : THandle; dwMilliseconds : DWORD) : DWORD
6088: Function MakeProcInstance( Proc : FARPROC; Instance : THandle) : FARPROC
6089: Procedure FreeProcInstance( Proc : FARPROC)
6090: Procedure FreeLibraryAndExitThread( hLibModule : HMODULE; dwExitCode : DWORD)
6091: Function DisableThreadLibraryCalls( hLibModule : HMODULE) : BOOL
6092: Procedure ParallelJob( ASelf : TObject; ATarget : Pointer; AParam : Pointer; ASafeSection : boolean);
6093: Procedure ParallelJob1( ATarget : Pointer; AParam : Pointer; ASafeSection : boolean);
6094: Procedure ParallelJob2(AJobGroup:TJobSGroup;ASelf:TObject;ATarget:Ptr;AParam:Pointer;ASafeSection:bool;
6095: Procedure ParallelJob3( AJobGroup:TJobsGroup;ATarget:Pointer;AParam:Pointer;ASafeSection: boolean);
6096: Function CreateParallelJob(ASelf:TObject;ATarget:Pointer;AParam:Ptr;ASafeSection:bool:TParallelJob;
6097: Function CreateParallelJob1(ATarget:Pointer; AParam:Pointer; ASafeSection : boolean) : TParallelJob;
6098: Function CurrentParallelJobInfo : TParallelJobInfo 6099: Function ObtainParallelJobInfo : TParallelJobInfo
6100:
Function MimeEncodeString( const S : AnsiString) : AnsiString

6102: Function MimeDecodeString( const S : AnsiString) : AnsiString

6103: Function MimeDecodeString( const S : AnsiString) : AnsiString

6104: Procedure MimeEncodeStream( const InputStream : TStream; const OutputStream : TStream)

6105: Procedure MimeDecodeStream( const InputStream : TStream; const OutputStream : TStream)
        Function MimeEncodedSize( const I : Cardinal) : Cardinal
6106:
        Function MimeDecodedSize( const I : Cardinal) : Cardinal
Procedure MimeEncode( var InputBuffer : string; const InputByteCount : Cardinal; var OutputBuffer)
6107:
6108:
        Function MimeDecode(var InputBuffer:string;const InputBytesCount:Cardinal;var OutputBuffer):Cardinal;
6109:
         Function MimeDecodePartial(var InputBuffer:string;const InputBytesCount:Cardinal;var
       OutputBuffer: string; var ByteBuffer : Cardinal; var ByteBufferSpace : Cardinal) : Cardinal
6111:
       Function MimeDecodePartialEnd(var OutputBuf:string;const ByteBuf:Card;const ByteBufferSpace:Card):
       Cardinal;
6112:
6114: Procedure DirectPrint( const Printer, Data : string)
6115:
         Procedure SetPrinterPixelsPerInch
6116:
         Function GetPrinterResolution : TPoint
         Function CharFitsWithinDots( const Text : string; const Dots : Integer) : Integer
6118:
        Procedure PrintMemo( const Memo : TMemo; const Rect : TRect)
6119:
6120:
         6122:
        Function StrChr( lpStart : PChar; wMatch : WORD) : PChar
6123:
        Function StrChrI( lpStart : PChar; wMatch : WORD) : PChar
        Function StrCmpN( lpStr1, lpStr2 : PChar; nChar : Integer) : Integer
6124:
         Function StrCmpNI( lpStr1, lpStr2 : PChar; nChar : Integer) : Integer
6125:
         Function StrCSpn( lpStr_, lpSet : PChar) : Integer
6126:
        Function StrCSpn( lpStr], lpSet : PChar) : Integer
Function StrCSpnI( lpStrl, lpSet : PChar) : Integer
Function StrDup( lpSrch : PChar) : PChar
Function StrFormatByteSize( dw : DWORD; szBuf : PChar; uiBufSize : UINT) : PChar
Function StrFormatKBSize( qdw : Dword; szBuf : PChar; uiBufSize : UINT) : PChar
6127:
6128:
6129:
6130:
        Function StrFromTimeInterval(pszOut: PChar; cchMax:UINT;dwTimeMS:DWORD; digits: Integer): Integer
6131:
6132: Function StrIsIntlEqual( fCaseSens: BOOL; lpString1, lpString2: PChar; nChar: Integer): BOOL 6133: /Function StrNCat( psz1: PChar; psz2: PChar; cchMax: Integer): PChar 6134: Function StrPBrk( psz, pszSet: PChar): PChar
         Function StrRChr( lpStart, lpEnd : PChar; wMatch : WORD) : PChar
6136:
        Function StrRChrI( lpStart, lpEnd : PChar; wMatch : WORD) : PChar
        Function StrRStrI( lpSource, lpLast, lpSrch : PChar) : PChar
Function StrSpn( psz, pszSet : PChar) : Integer
Function StrStr( lpFirst, lpSrch : PChar) : PChar
6137:
6138:
         Function StrStrI( lpFirst, lpSrch : PChar) : PChar
6140:
6141:
        Function StrToInt( lpSrch : PChar) : Integer
        \textbf{Function} \  \, \texttt{StrToIntEx}( \  \, \texttt{pszString} \ : \  \, \texttt{PChar}; \  \, \check{\mathsf{dwFlags}} \ : \  \, \texttt{DWORD}; \  \, \textbf{var} \  \, \texttt{piRet} \ : \  \, \texttt{Integer}) \ : \  \, \texttt{BOOL}
6142:
        Function StrTrim( psz : PChar; pszTrimChars : PChar) : BOOL
Function ChrCmpI( w1, w2 : WORD) : BOOL
6143:
6144:
6145:
         Function ChrCmpIA( w1, w2 : WORD) : BOOL
6146:
        Function ChrCmpIW( w1, w2 : WORD) : BOOL
        Function StrIntlEqN(s1,s2: PChar; nChar: Integer): BOOL
Function StrIntlEqNI(s1,s2: PChar; nChar: Integer): BOOL
6147:
6148:
         Function StrCatBuff( pszDest, pszSrc : PChar; cchDestBuffSize : Integer) : PChar
6149:
6150:
        Function StrCpyNX( psz1 : PChar; psz2 : PChar; cchMax : Integer) : PChar
Function IntlStrEqWorker( fCaseSens : BOOL; lpString1, lpString2 : PChar; nChar : Integer) : BOOL
Function IntlStrEqN( s1, s2 : PChar; nChar : Integer) : BOOL
6151:
6152:
        SZ_CONTENTTYPE_HTMLA', 'String 'text/html
SZ_CONTENTTYPE_HTMLW', 'String 'text/html
6154:
        SZ_CONTENTTYPE_HTML', 'string SZ_CONTENTTYPE_HTMLA);
SZ_CONTENTTYPE_CDFA', 'String 'application/x-cdf
SZ_CONTENTTYPE_CDFW', 'String 'application/x-cdf
6155:
6156:
6157:
         SZ_CONTENTTYPE_CDF', 'string SZ_CONTENTTYPE_CDFA);
        Function PathIsHTMLFile( pszPath : PChar) : BOOL
6159:
        STIF_DEFAULT','LongWord( $00000000);
STIF_SUPPORT_HEX','LongWord( $00000001);
Function StrNCmpI( lpStr1, lpStr2 : PChar; nChar : Integer) : Integer
6160:
6161:
```

```
Function StrNCpy( psz1, psz2 : PChar; cchMax : Integer) : PChar
Function StrCatN( psz1 : PChar; psz2 : PChar; cchMax : Integer) : PChar
6163:
6164:
         Function PathAddBackslash( pszPath : PChar) : PChar

Function PathAddExtension( pszPath : PChar; pszExt : PChar) : BOOL
6165:
6166:
6167:
         Function PathAppend( pszPath : PChar; pMore : PChar) : BOOL
         Function PathBuildRoot( szRoot : PChar; iDrive : Integer) : PChar
6168:
         Function PathCanonicalize( pszBuf : PChar; pszPath : PChar) : BOOL
6169:
         Function PathCombine(szDest: PChar; pszPath: PChar): BOOL

Function PathCombine(szDest: PChar; lpszDir, lpszFile: PChar): PChar

Function PathCompactPath(hDC: HDC; pszPath: PChar; dx: UINT): BOOL

Function PathCompactPathEx(pszOut: PChar; pszSrc: PChar; cchMax: UINT; dwFlags:DWORD): BOOL

Function PathCommonPrefix(pszFile1, pszFile2: PChar; achPath: PChar): Integer
6171:
6172:
6173:
         Function PathFileExists( pszPath : PChar) : BOOL
6174:
         Function PathFindExtension( pszPath : PChar) : PChar
Function PathFindFileName( pszPath : PChar) : PChar
6175:
6176:
         Function PathFindNextComponent( pszPath : PChar) : PChar
6177:
6178:
         Function PathFindOnPath( pszPath : PChar; var ppszOtherDirs : PChar) : BOOL
         Function PathGetArgs( pszPath : PChar) : PChar
6179:
         Function PathFindSuffixArray(pszPath: PChar; const apszSuffix: PChar; iArraySize: Integer): PChar
6180:
         Function PathIsLFNFileSpec( lpName : PChar) : BOOL
6181:
6182:
         Function PathGetCharType( ch : Char) : UINT
         GCT_INVALID', 'LongWord( $0000);
GCT_LFNCHAR', 'LongWord( $0001);
6184:
6185:
         GCT_SHORTCHAR', 'LongWord( $0002);
         GCT_WILD', 'LongWord( $0004);
6186:
         GCT_SEPARATOR', 'LongWord( $0008);
6187:
6188:
         Function PathGetDriveNumber( pszPath : PChar) : Integer
6189:
         Function PathIsDirectory( pszPath : PChar) : BOOL
         Function PathIsDirectoryEmpty( pszPath : PChar) : BOOL
Function PathIsFileSpec( pszPath : PChar) : BOOL
6190:
6191:
6192:
         Function PathIsPrefix( pszPrefix, pszPath : PChar) : BOOL
         Function PathIsRelative( pszPath : PChar) : BOOL
6193:
6194:
         Function PathIsRoot( pszPath : PChar) : BOOL
         Function PathIsSameRoot( pszPath1, pszPath2 : PChar) : BOOL
6195:
         Function PathIsUNC( pszPath : PChar) : BOOL
Function PathIsNetworkPath( pszPath : PChar) : BOOL
6196:
6197:
6198:
         Function PathIsUNCServer( pszPath : PChar) : BOOL
6199:
         Function PathIsUNCServerShare( pszPath : PChar) : BOOL
         Function PathIsContentType( pszPath, pszContentType: PChar): BOOL
Function PathIsURL( pszPath: PChar): BOOL
6200:
6201:
         Function PathMakePretty(pszPath: PChar): BOOL
Function PathMatchSpec(pszFile,pszSpec: PChar): BOOL
6202:
6203:
         Function PathParseIconLocation(pszIconFile: PChar): Integer Procedure PathQuoteSpaces(lpsz: PChar)
6204:
6205:
         6207:
         Procedure PathRemoveArgs( pszPath : PChar)
         \textbf{Function} \hspace{0.1cm} \texttt{PathRemoveBackslash( pszPath : PChar) : PChar}
6208:
         Procedure PathRemoveBlanks( pszPath : PChar)
6209:
6210:
         Procedure PathRemoveExtension( pszPath : PChar)
6211:
         Function PathRemoveFileSpec( pszPath : PChar) : BOOL
         Function PathRenameExtension( pszPath : PChar; pszExt : PChar) : BOOL
Function PathSearchAndQualify( pszPath : PChar; pszBuf : PChar; cchBuf : UINT) : BOOL
Procedure PathSetDlgItemPath( hDlg : HWND; id : Integer; pszPath : PChar)
6212:
6213:
6214:
         Function PathSkipRoot( pszPath : PChar) : PChar
6215:
         Procedure PathStripPath( pszPath : PChar)
6216:
         Function PathStripToRoot(pszPath : PChar) : BOOL Procedure PathUnquoteSpaces(lpsz: PChar)
6217:
6218:
6219:
          Function PathMakeSystemFolder( pszPath : PChar) : BOOL
         Function PathUnmakeSystemFolder( pszPath : PChar) : BOOL
6220:
         Function PathIsSystemFolder( pszPath : PChar; dwAttrb : DWORD) : BOOL
Procedure PathUndecorate( pszPath : PChar)
Function PathUnExpandEnvStrings( pszPath : PChar; pszBuf : PChar; cchBuf : UINT) : BOOL
6221:
6222:
6223:
         URL_SCHEME_INVALID', 'LongInt'( - 1
URL_SCHEME_UNKNOWN', 'LongInt'( 0);
6224:
6225:
         URL_SCHEME_FTP', 'LongInt'(1);
URL_SCHEME_HTTP', 'LongInt'(2);
URL_SCHEME_GOPHER', 'LongInt'(3);
URL_SCHEME_MAILTO', 'LongInt'(4);
6226:
6227:
6229:
         URL_SCHEME_NEWS','LongInt'(5);
URL_SCHEME_NNTP','LongInt'(6);
6230:
6231:
         URL_SCHEME_TELNET', 'LongInt' (7)
URL_SCHEME_WAIS', 'LongInt' (8);
URL_SCHEME_FILE', 'LongInt' (9);
6232:
6233:
6234:
         URL_SCHEME_MK','LongInt'( 10);
URL_SCHEME_HTTPS','LongInt'( 11);
URL_SCHEME_SHELL','LongInt'( 12);
6235:
6236:
6237:
         URL_SCHEME_SNEWS', 'LongInt'( 13);
URL_SCHEME_LOCAL', 'LongInt'( 14);
6238:
6239:
         URL_SCHEME_JAVASCRIPT', 'LongInt'( 15);
URL_SCHEME_VBSCRIPT', 'LongInt'( 16);
6240:
6241:
         URL_SCHEME_ABOUT', 'LongInt'( 17);
URL_SCHEME_RES', 'LongInt'( 18);
6243:
6244:
         URL_SCHEME_MAXVALUE', 'LongInt'( 19);
         URL_SCHEME', 'Integer
URL_PART_NONE', 'LongInt'( 0);
6245:
6246:
         URL_PART_NONE', 'LongInt'('0)',
URL_PART_SCHEME', 'LongInt'('1);
URL_PART_HOSTNAME', 'LongInt'('2);
URL_PART_USERNAME', 'LongInt'('3);
URL_PART_PASSWORD', 'LongInt'('4);
6247:
6248:
6249:
6250:
         URL_PART_PORT', 'LongInt'( 5);
```

```
URL_PART_QUERY','LongInt'( 6);
6252:
           URL_PART', 'DWORD
URLIS_URL', 'LongInt'( 0);
6253:
6255:
           URLIS_OPAQUE', 'LongInt'( 1);
6256:
           URLIS_NOHISTORY','LongInt'(2);
           URLIS_FILEURL','LongInt'( 3);
URLIS_APPLIABLE','LongInt'( 4);
URLIS_DIRECTORY','LongInt'( 5);
6257:
6258:
6259:
           URLIS_HASQUERY', 'LongInt'( 6);
6260:
6261:
           TUrlIs', 'DWORD
           URL_UNESCAPE','LongWord( $10000000);
6262:
           URL_ESCAPE_UNSAFE','LongWord( $20000000);
           URL_PLUGGABLE_PROTOCOL','LongWord( $40000000);
URL_WININET_COMPATIBILITY','LongWord( DWORD ( $80000000 ));
URL_DONT_ESCAPE_EXTRA_INFO','LongWord( $02000000);
6264:
6265:
6266:
           URL_ESCAPE_SPACES_ONLY', 'LongWord( $04000000);
URL_DONT_SIMPLIFY', 'LongWord( $08000000);
6267:
           URL_NO_META', 'longword( URL_DONT_SIMPLIFY);
URL_UNESCAPE_INPLACE', 'LongWord( $00100000);
URL_CONVERT_IF_DOSPATH', 'LongWord( $00200000);
URL_UNESCAPE_HIGH_ANSI_ONLY', 'LongWord( $00400000);
URL_INTERNAL_PATH', 'LongWord( $00800000);
6269:
6270:
6271:
6272:
6273:
           URL_FILE_USE_PATHURL', 'LongWord( $0001000);
URL_ESCAPE_PERCENT', 'LongWord( $0001000);
URL_ESCAPE_SEGMENT_ONLY', 'LongWord( $00002000);
URL_PARTFLAG_KEEPSCHEME', 'LongWord( $00000001);
6274:
6275:
6276:
6277:
6278:
           URL_APPLY_DEFAULT','LongWord( $00000001);
           URL_APPLY_GUESSSCHEME', 'LongWord( $00000002);
URL_APPLY_GUESSFILE', 'LongWord( $00000004);
URL_APPLY_FORCEAPPLY', 'LongWord( $00000008);

Function UrlCompare( psz1, psz2: PChar; fIgnoreSlash: BOOL): Integer
6279:
6280:
6282:
6283:
           Function UrlCombine(pszBase,pszRelative:PChar;pszCombin:PChar;out pcchCombin:DWORD;dwFlags:DWORD):HRESULT;
           \textbf{Function} \  \, \texttt{UrlCanonicalize(pszUrl:PChar;pszCanonicalized:PChar;pschCanonic:DWORD;dwFlags:DWORD):HRESULT;}
6284:
6285:
           Function UrlIsOpaque( pszURL : PChar) : BOOL
            Function UrlIsNoHistory( pszURL : PChar) : BOOL
           Function UrlIsFileUrl( pszURL : PChar) : BOOL
Function UrlIs( pszUrl : PChar; UrlIs : TUrlIs) : BOOL
6287:
6288:
           Function UrlGetLocation(psz1: PChar): PChar
6289:
6290:
           Function UrlUnescape( pszUrl, pszUnescaped : PChar; pcchUnescaped: DWORD; dwFlags : DWORD) : HRESULT
6291:
           Function UrlEscape(pszUrl: PChar; pszEscaped: PChar; pcchEscaped:DWORD; dwFlags: DWORD) : HRESULT
6292:
           Function UrlCreateFromPath(pszPath:PChar; pszUrl: PChar;pcchUrl: DWORD; dwFlags : DWORD) : HRESULT
           Function PathCreateFromUrl(pszUrl:PChar; pszPath:PChar; pcchPath:DWORD; dwFlags : DWORD) : HRESULT
Function UrlHash( pszUrl: PChar; pbHash : BYTE; cbHash : DWORD) : HRESULT
6293:
6294:
           Function UrlGetPart(pszIn: PChar; pszOut: PChar; pcchOut: DWORD; dwPart,dwFlags: DWORD): HRESULT
Function UrlApplyScheme(pszIn: PChar; pszOut: PChar; pcchOut: DWORD; dwPart,dwFlags: DWORD): HRESULT
Function HashData(pbData: BYTE; cbData: DWORD; pbHash: BYTE; cbHash: DWORD): HRESULT
Function UrlEscapeSpaces(pszUrl: PChar; pszEscaped: PChar; pcchEscaped: DWORD): HRESULT
Function UrlUnescapeInPlace(pszUrl: PChar; dwFlags: DWORD): HRESULT
6295:
6296:
6297:
6298:
           Function SHDeleteEmptyKey( hKey: HKEY; pszSubKey: PChar): DWORD

Function SHDeleteKey( hKey: HKEY; pszSubKey: PChar): DWORD

Function SHDeleteValue( hKey: HKEY; pszSubKey; pszValue: PChar): DWORD
6300:
6301:
6302:
         Function SHDeletevalue( nkey: HKEY; pszsubkey, pszvalue: Pcnar): DWORD
Function SHEnumKeyEx( hKey: HKEY; dwIndex: DWORD; pszName: PChar; var pcchName: DWORD): Longint
Function SHEnumValue( hKey: HKEY; dwIndex: DWORD; pszValueName:PChar; var
pcchValueName:DWORD;pdwType:DWORD; pvData: ___Pointer; pcbData: DWORD): Longint
Function SHQueryInfoKey(hKey:HKEY;pcSubKeys,pcchMaxSubKeyLen,pcVal,pcchMaxValueNameLen:DWORD):Longint;
Function SHCopyKey( hkeySrc: HKEY; szSrcSubKey: PChar; hkeyDest: HKEY; fReserved: DWORD): DWORD
6303:
6305:
6306:
            Function SHRegGetPath(hKey:HKEY; pcszSubKey,pcszValue: PChar; pszPath: PChar; dwFlags: DWORD): DWORD
           Function SHRegSetPath( hKey:HKEY; pcszSubKey, pcszValue, pcszPath : PChar; dwFlags : DWORD): DWORD
6308:
           SHREGDEL_DEFAULT','LongWord( $0000000);
SHREGDEL_HKCU','LongWord( $00000001);
SHREGDEL_HKLM','LongWord( $00000010);
6309:
6310:
6311:
6312:
            SHREGDEL_BOTH', 'LongWord( $00000011);
6313:
            SHREGENUM_DEFAULT','LongWord( $00000000);
           SHREGENUM_HKCU','LongWord( $00000001);
SHREGENUM_HKLM','LongWord( $00000010);
6314:
6315:
            SHREGENUM_BOTH', 'LongWord( $00000011);
            SHREGSET_HKCU', 'LongWord( $00000001);
6317:
6318:
           SHREGSET_FORCE_HKCU','LongWord( $00000002);
6319:
           SHREGSET HKLM', 'LongWord( $00000004);
           SHREGSET_FORCE_HKLM', 'LongWord( $0000008);
TSHRegDelflags', 'DWORD
TSHRegEnumFlags', 'DWORD
6320:
6321:
6322:
6323:
           HUSKEY', 'THandle
ASSOCF_INIT_NOREMAPCLSID','LongWord( $00000001);
6324:
           ASSOCF_INIT_NOREMAPCLSID , BongMord( $00000002);
ASSOCF_OPEN_BYEXENAME', LongWord( $00000002);
6325:
6326:
6327:
           ASSOCF_INIT_DEFAULTTOSTAR','LongWord( $00000004);
ASSOCF_INIT_DEFAULTTOFOLDER','LongWord( $00000008);
ASSOCF_NOUSERSETTINGS','LongWord( $00000010);
6328:
6329:
           ASSOCF_NOTRUNCATE','LongWord( $00000020);
ASSOCF_VERIFY','LongWord( $00000040);
6331:
           ASSOCF_REMAPRUNDLL','LongWord($0000080);
ASSOCF_NOFIXUPS','LongWord($00000100);
6332:
6333:
           ASSOCF_IGNOREBASECLASS', 'LongWord( $00000200);
6334:
           ASSOCF', 'DWORD
6335:
           ASSOCSTR_COMMAND', 'LongInt'( 1);
6336:
           ASSOCSTR_EXECUTABLE', 'LongInt'( 2);
6337:
           ASSOCSTR_FRIENDLYDOCNAME','LongInt'(3);
ASSOCSTR_FRIENDLYAPPNAME','LongInt'(4);
6338:
```

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6340: ASSOCSTR NOOPEN', 'LongInt'(5);
        ASSOCSTR_SHELLNEWVALUE', 'LongInt'( 6);
6341:
        ASSOCSTR_DDECOMMAND', 'LongInt'( 7);
ASSOCSTR_DDEIFEXEC', 'LongInt'( 8);
6343:
6344:
        ASSOCSTR_DDEAPPLICATION', 'LongInt'( 9);
        ASSOCSTR_DDETOPIC','LongInt'( 10);
ASSOCSTR_INFOTIP','LongInt'( 11);
6345:
6346:
        ASSOCSTR_MAX', 'LongInt'( 12);
6347:
        ASSOCSTR', 'DWORD
6348:
6349:
        ASSOCKEY_SHELLEXECCLASS', 'LongInt'( 1);
        ASSOCKEY_APP','LongInt'(2);
ASSOCKEY_CLASS','LongInt'(3);
6350:
6351:
        ASSOCKEY_BASECLASS','LongInt'(
ASSOCKEY_MAX','LongInt'(5);
ASSOCKEY', 'DWORD
6352:
6353:
6354:
6355:
        ASSOCDATA_MSIDESCRIPTOR','LongInt'(1);
        ASSOCDATA_NOACTIVATEHANDLER', 'LongInt'(2);
ASSOCDATA_QUERYCLASSSTORE', 'LongInt'(3);
ASSOCDATA_HASPERUSERASSOC', 'LongInt'(4);
6356:
6357:
6358:
6359:
        ASSOCDATA_MAX', 'LongInt'( 5);
        ASSOCDATA', 'DWORD
        ASSOCENUM_NONE', 'LongInt'( 0);
6361:
        ASSOCENUM', 'DWORD SID_IQueryAssociations','String '{c46ca590-3c3f-11d2-bee6-0000f805ca57}
6362:
6363:
6364:
        SHACF_DEFAULT $0000000);
6365:
        SHACF_FILESYSTEM','LongWord( $00000001);
6366:
        SHACF_URLHISTORY','LongWord( $00000002);
        SHACF_URLMRU','LongWord( $00000004);
SHACF_USETAB','LongWord( $00000008);
6367:
6368:
        SHACF_FILESYS_ONLY','LongWord( $00000010);
        SHACF_AUTOSUGGEST_FORCE_ON','LongWord( $1000000);
SHACF_AUTOSUGGEST_FORCE_OFF','LongWord( $2000000);
6370:
6371:
        SHACF_AUTOSDGGESI_FORCE_OFF', LongWord( $4000000);
SHACF_AUTOAPPEND_FORCE_OFF', LongWord( DWORD ( $8000000 ));
6372:
6373:
        Function SHAutoComplete( hwndEdit : HWND; dwFlags : DWORD) : HRESULT
6374:
        Procedure SHSetThreadRef( punk : IUnknown)
6375:
        Procedure SHGetThreadRef( out ppunk : IUnknown)
6376:
        CTF_INSIST','LongWord( $0000001);
CTF_THREAD_REF','LongWord( $00000002);
CTF_PROCESS_REF','LongWord( $00000004);
6377:
6378:
6379:
6380:
        CTF_COINIT','LongWord( $00000008);
        Function SHCreateShellPalette( hdc : HDC) : HPALETTE
6381:
        Procedure ColorRGBToHLS( clrRGB: TColorRef; out pwHue, pwLuminance, pwSaturation: WORD)
6382:
        Function ColorHLSToRGB( wHue, wLuminance, wSaturation : WORD) : TColorRef
6383:
        6384:
6385:
        Function DrawFocusRect(hDC: HDC; const lprc: TRect): BOOL
Function FillRect(hDC: HDC; const lprc: TRect; hbr: HBRUSH): Integer
6386:
6387:
        Function FrameRect( hDC : HDC; const lprc : TRect; hbr : HBRUSH) : Integer Function InvertRect( hDC : HDC; const lprc : TRect) : BOOL
6388:
6389:
        Function SetRect( var lprc: TRect; xLeft, yTop, xRight, yBottom: Integer): BOOL
Function SetRectEmpty( var lprc: TRect): BOOL
6390:
6391:
        Function CopyRect( var lprcDst : TRect; const lprcSrc : TRect) : BOOL
6392:
        Function InflateRect( var lprc: TRect; dx, dy: Integer): BOOL

Function IntersectRect2( var lprcDst: TRect; const lprcSrc1, lprcSrc2: TRect): BOOL

Function SubtractRect( var lprcDst: TRect; const lprcSrc1, lprcSrc2: TRect): BOOL
6393:
6394:
6395:
6396:
        Function InitializeFlatSB( hWnd : HWND) : Bool
6397:
6398:
        Procedure UninitializeFlatSB( hWnd : HWND)
        Function FlatSB_GetScrollProp( p1 : HWND; propIndex : Integer; p3 : PInteger) : Bool
Function FlatSB_SetScrollProp( p1 : HWND; index : Integer; newValue : Integer; p4 : Bool) : Bool
Function GET_APPCOMMAND_LPARAM( lParam : Integer) : Word //of JvWin32
6399:
6400:
6401:
6402:
        \textbf{Function} \ \ \texttt{GET\_DEVICE\_LPARAM} ( \ \ \texttt{lParam} \ : \ \ \texttt{Integer}) \ : \ \ \texttt{Word}
6403:
        Function GET_MOUSEORKEY_LPARAM( lParam : Integer) : Integer
        Function GET_FLAGS_LPARAM( lParam : Integer) : Word
Function GET_KEYSTATE_LPARAM( lParam : Integer) : Word
6404:
6406:
6407:
          ******* 204 unit uPSI ShellAPI;
6408: //
6409: Function DragQueryFile( Drop : HDROP; FileIndex : UINT; FileName : PChar; cb : UINT) : UINT
6410: Function DragQueryPoint( Drop : HDROP; var Point : TPoint) : BOOL
6411: Procedure DragFinish( Drop : HDROP)
6412: Procedure DragAcceptFiles( Wnd : HWND; Accept : BOOL)
6413: Function ShellExecute(hWnd:HWND;Operation,FileName,Parameters,Directory:PChar;ShowCmd:Integer):HINST
6414: Function FindExecutable(FileName, Directory: PChar; Result: PChar): HINST
6415: Function ShellAbout( Wnd : HWND; szApp, szOtherStuff : PChar; Icon : HICON) : Integer
6416: Function DuplicateIcon(hInst: HINST; lpIconPath: PChar; var lpiIcon: Word): HICON
6418: Function Extracticon( hInst : HINST; lpszExeFileName : PChar; nIconIndex : UINT) : HICON
6419: Function SHAppBarMessage ( dwMessage : DWORD; var pData : TAppBarData) : UINT
6420: Function DoEnvironmentSubst( szString : PChar; cbString : UINT) : DWORD
6421: \textbf{Function} \texttt{ ExtractIconEx(lpszFile:PChar;nIconIndex:Int; \textbf{var} \texttt{ phiconLarge,phiconSmall:HICON;nIcons:UINT):UINT;} \\
6422: Procedure SHFreeNameMappings( hNameMappings : THandle)
6423:
6424: DLLVER_PLATFORM_WINDOWS', 'LongWord( $00000001);
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6429:
       DLLVER_QFE_MASK','LongWord( Int64 ( $00000000000FFFF ));
       Function MAKEDLLVERULL( Major, Minor, Build, Qfe : Word) : Int64
6430:
       Function SimpleXMLEncode( const S : string) : string
Procedure SimpleXMLDecode( var S : string; TrimBlanks : Boolean)
6432:
       Function XMLEncode( const S : string) : string
Function XMLDecode( const S : string) : string
6433:
6434:
6435:
       Function EntityEncode( const S : string) : string
       Function EntityDecode( const S : string) : string
6436:
6437:
6438: procedure RIRegister_CPort_Routines(S: TPSExec);
6439:
       Procedure EnumComPorts( Ports : TStrings)
Procedure ListComPorts( Ports : TStrings)
6441:
       Procedure ComPorts( Ports : TStrings) //Alias to Arduino
6442:
       Function GetComPorts: TStringlist;
       Function StrToBaudRate( Str : string) : TBaudRate
6443:
6444:
       Function StrToStopBits(Str : string) : TStopBits
       Function StrToDataBits( Str : string) : TDataBits
6445:
       Function StrToParity(Str: string): TParityBits
Function StrToFlowControl(Str: string): TFlowControl
Function BaudRateToStr(BaudRate: TBaudRate): string
6446:
6447:
6448:
        Function StopBitsToStr( StopBits : TStopBits) : string
6449:
6450:
       Function DataBitsToStr( DataBits : TDataBits) : string
       Function ParityToStr( Parity : TParityBits) : string
Function FlowControlToStr( FlowControl : TFlowControl) : string
6451:
6452:
6453:
       Function ComErrorsToStr( Errors : TComErrors) : String
6454:
6455:
       Function GetMessage( var lpMsg : TMsg; hWnd : HWND; wMsgFilterMin, wMsgFilterMax : UINT) : BOOL
       Function DispatchMessage( const lpMsg : TMsg) : Longint Function TranslateMessage( const lpMsg : TMsg) : BOOL
6456:
6457:
       Function SetMessageQueue( cMessagesMax
                                                     : Integer) : BOOL
6458:
6459:
       Function PeekMessage(var lpMsg:TMsg; hWnd:HWND;wMsgFilterMin,wMsgFilterMax,wRemoveMsg:UINT):BOOL
6460:
       \textbf{Function} \ \ \texttt{GetMessagePos} \ : \ \ \texttt{DWORD}
       Function GetMessageTime : Longint
6461:
       Function GetMessageExtraInfo: Longint
Function GetSpecialFolderPath( const FolderName : string; CanCreate : Boolean) : string
6462:
6463:
6464:
       Procedure JAddToRecentDocs( const Filename : string)
6465:
       Procedure ClearRecentDocs
       Function ExtractIconFromFile( FileName : string; Index : Integer) : HICON
Function CreateShellLink( const AppName, Desc : string; Dest : string) :;
6466:
6467:
                                                                                          : string
       Procedure GetShellLinkInfo( const LinkFile: WideString; var SLI: TShellLinkInfo)

Procedure SetShellLinkInfo( const LinkFile: WideString; const SLI: TShellLinkInfo)
6468:
6469:
       Function RecycleFile( FileToRecycle : string) : Boolean
Function JCopyFile( FromFile, ToDir : string) : Boolean
6470:
6471:
       Function ShellObjectTypeEnumToConst( ShellObjectType: TShellObjectType): UINT
Function ShellObjectTypeConstToEnum( ShellObjectType: UINT): TShellObjectType
6472:
6473:
       Function QueryServiceConfig2A( hService : SC_HANDLE; dwInfoLevel : DWORD; lpBuffer : LPBYTE; cbBufSize :
6474:
      DWORD; var pcbBytesNeeded : DWORD) : BOOL
      Function QueryServiceConfig2W( hService : SC_HANDLE; dwInfoLevel : DWORD; lpBuffer : LPBYTE; cbBufSize :
      DWORD; var pcbBytesNeeded : DWORD) : BOOL
      Function QueryServiceConfig2( hService : SC_HANDLE; dwInfoLevel : DWORD; lpBuffer : LPBYTE; cbBufSize :
      DWORD; var pcbBytesNeeded : DWORD) : BOOL
      Function EnumServicesStatusExA(hSCManager: SC_HANDLE; InfoLevel: SC_ENUM_TYPE; dwServiceType: DWORD;
      dwServiceState: DWORD;lpServices:LPBYTE;cbBufSize:DWORD;var pcbBytesNeeded,lpServicesReturned,
      lpResumeHandle:DWORD;pszGroupName: LP
      Function EnumServicesStatusExW( hSCManager : SC_HANDLE; InfoLevel : SC_ENUM_TYPE; dwServiceType : DWORD; dwServiceState : DWORD; lpServices:LPBYTE; cbBufSize:DWORD; var pcbBytesNeeded,lpServicesReturned,
6478:
      lpResumeHandle:DWORD; pszGroupNam
      Function EnumServicesStatusEx( hSCManager : SC_HANDLE; InfoLevel : SC_ENUM_TYPE; dwServiceType : DWORD;
6479:
       dwServiceState : DWORD;lpServices :LPBYTE;cbBufSize:DWORD; var pcbBytesNeeded,lpServicesReturned,
       lpResumeHandle:DWORD; pszGroupName
      Function ConvertSidToStringSid( sid : PSID; var stringSid : LPWSTR) : BOOL
           ******* unit uPSI_JclPeImage;
6482:
6483:
       Function IsValidPeFile( const FileName : TFileName) : Boolean
6484:
      // Function PeGetNtHeaders( const FileName : TFileName; var NtHeaders : TImageNtHeaders) : Boolean
       Function PeCreateNameHintTable( const FileName : TFileName) : Boolean
6486:
6487:
       Function PeRebaseImage(const ImageName: TFileName; NewBase : DWORD; TimeStamp : DWORD; MaxNewSize :
      DWORD) : TJclRebaseImageInfo
6488:
       Function PeVerifyCheckSum( const FileName : TFileName) : Boolean
        Function PeClearCheckSum( const FileName : TFileName) : Boolean
       Function PeUpdateCheckSum( const FileName : TFileName) : Boolean
6490:
6491:
       Function PeDoesExportFunction(const FileName:TFileName;const
      FuncName: string; Options: TJClSmartCompOptions): Bool;
       Function PelsExportFunctionForwardedEx( const FileName: TFileName; const FunctionName: string; var
      ForwardedName : string; Options : TJclSmartCompOptions) : Boolean
6493: Function PelsExportFunctionForwarded(const FileName:TFileName:const
      FunctionName: string; Options: TJclSmartCompOptions): Bool
6494: Function PeDoesImportFunction( const FileName: TFileName; const FunctionName: string; const LibraryName
        string; Options : TJclSmartCompOptions) : Boolean
6495: Function PeDoesImportLibrary(const FileName:TFileName;const
      LibraryName: string; Recursive: Boolean): Boolean);
      Function PeImportedLibraries( const FileName: TFileName; const LibrariesList: TStrings; Recursive:
6496:
      Boolean; FullPathName : Boolean) : Boolean
       Function PeImportedFunctions(const FileName:TFileName;const FunctionsList:TStrings;const
LibraryName:string: IncludeLibNames: Boolean | Boolean | Function PeExportedFunctions | const FileName: TFileName; const FunctionsList: TStrings): Boolean
6499:
       Function PeExportedNames ( const FileName : TFileName; const FunctionsList : TStrings) : Boolean
       Function PeExportedVariables( const FileName: TFileName; const FunctionsList: TStrings): Boolean
```

```
6501: Function PeresourceKindNames(const FileN:TFileName; ResourceType:TJclPeresourceKind; const
         NamesList:TStrings):Bool
          Function PeBorFormNames( const FileName : TFileName; const NamesList : TStrings) : Boolean
          Function PeBorDependedPackages(const FileName:TFileName;PackagesList:TStrings;FullPathName,
6503:
         Descript:Bool:Bool;
6504:
          Function PeFindMissingImports( const FileName: TFileName; MissingImportsList: TStrings): Boolean;
          Function PeFindMissingImports1( RequiredImportsList, MissingImportsList : TStrings) : Boolean;
Function PeCreateRequiredImportList(const FileName: TFileName; RequiredImportsList: TStrings): Boolean;
6505:
6506:
6507:
           //Function PeMapImgNtHeaders( const BaseAddress : Pointer) : PImageNtHeaders
6508:
           // Function \ PeMapImgLibraryName(\ const\ BaseAddress\ :\ Pointer)\ :\ string
           //Function PeMapImgSections( const NtHeaders : PImageNtHeaders) : PImageSectionHeader 
//Function PeMapImgFindSection( const NtHeaders : PImageNtHeaders; const SectionName : string) :
6509:
6510:
         PImageSectionHeader
6511:
           //Function PeMapImgExportedVariables(const Module: HMODULE; const VariablesList:TStrings):Boolean
6512:
          //Function PeMapImgResolvePackageThunk( Address : Pointer) : Pointer
Function PeMapFindResource(const Module:HMODULE;const ResourceType:PChar;const ResourceName:string):
6513:
6514:
            SIRegister_TJclPeSectionStream(CL);
6515:
            SIRegister_TJclPeMapImgHookItem(CL);
6516:
            SIRegister_TJclPeMapImgHooks(CL);
           //Function PeDbgImgNtHeaders(ProcessHandle:THandle;BaseAddress:Pointer;var
         NtHeaders:TImageNtHeaders):Boolean
6518:
           // Function \ PeDbgImgLibrary Name (Process Handle: THandle; \ Base Address: Pointer; \ var \ Name: string): Boolean \ PeDbgImgLibrary Name (Process Handle: Thandle; \ Base Address: Pointer; \ var \ Name: string): Boolean \ PeDbgImgLibrary Name (Process Handle: Thandle; \ Base Address: Pointer; \ var \ Name: string): Boolean \ PeDbgImgLibrary Name (Process Handle: Thandle; \ Base Address: Pointer; \ var \ Name: string): Boolean \ PeDbgImgLibrary Name (Process Handle: Thandle; \ Base Address: Pointer; \ var \ Name: string): Boolean \ PeDbgImgLibrary Name (Process Handle: Thandle; \ Base Address: Pointer; \ var \ Name: string): Boolean \ PeDbgImgLibrary Name (Process Handle: Thandle: \ Process Handle: \ P
6519:
            Type TJclBorUmSymbolKind','(skData,skFunction,skConstructor,skDestructor,skRTTI,skVTable)
TJclBorUmSymbolModifier', '( smQualified, smLinkProc )
6520:
6521:
            TJclBorUmSymbolModifiers', 'set of TJclBorUmSymbolModifier
6522:
            TJclBorUmDescription', 'record Kind: TJclBorUmSymbolKind; Modifiers: TJclBorUmSymbolModifiers; end
            TJclBorUmResult', '( urOk, urNotMangled, urMicrosoft, urError )
TJclPeUmResult', '( umNotMangled, umBorland, umMicrosoft )
6523:
6524:
          Function PeBorUnmangleName( const Name: string; var Unmangled: string; var Description:
         TJclBorUmDescription; var BasePos : Integer) : TJclBorUmResult;
6526:
          Function PeBorUnmangleName1(const Name:string;var Unmangled:string;var
         Descript: TJclBorUmDescription): TJclBorUmResult;
          Function PeBorUnmangleName2( const Name : string; var Unmangled : string) : TJclBorUmResult;
6527:
           Function PeBorUnmangleName3( const Name : string) : string;
          Function PeIsNameMangled( const Name : string) : TJclPeUmResult
Function PeUnmangleName( const Name : string; var Unmangled : string) : TJclPeUmResult
6529:
6530:
6531:
6532:
         6533:
6534: Function StCopyFile( const SrcPath, DestPath : AnsiString) : Cardinal
          Function CreateTempFile( const aFolder: AnsiString; const aPrefix: AnsiString): AnsiString
Function DeleteVolumeLabel( Drive: Char): Cardinal
6535:
6536:
6537:
           //Procedure EnumerateDirectories(const
         StartDir: AnsiString; FL: TStrings; SubDirs: Bool; IncludeItem: TIncludeItemFunc);
6538:
         //Procedure EnumerateFiles(const StartDir:AnsiString;FL:TStrings;SubDirs:Bool
         IncludeItem:TIncludeItemFunc);
6539: Function FileHandlesLeft( MaxHandles : Cardinal) : Cardinal
6540:
          Function FileMatchesMask( const FileName, FileMask : AnsiString) : Boolean
          Function FileTimeToStDateTime(FileTime: LongInt): TStDateTimeRec
Function FindNthSlash(const Path: AnsiString; n: Integer): Integer
6541:
6542:
          Function FlushOsBuffers( Handle : Integer) : Boolean
6543:
          Function GetCurrentUser : AnsiString
          Function GetDiskClass( Drive : Char) : DiskClass
6545:
6546:
          Function GetDiskInfo(Drive:Char; var ClustersAvail, TotalClusters, BytesPerSector,
         SectorsPerCluster:Cardinal):Bool;
          Function GetDiskSpace(Drive:Char; var UserSpaceAvail:Double; var TotalSpaceAvail:Double; var
         DiskSize:Double):Bool;
6548:
         Function GetDiskSpace(Drive:Char; var UserSpaceAvail:Comp; var TotalSpaceAvail:Comp; var
         DiskSize:Comp):Boolean;
            { index 0 - FreeBytesAvailable, 1 - TotalNumberOfBytes, 2 - TotalNumberOfFreeBytes }
6550:
          Function getDiskSpace2(const path: String; index: integer): int64;
6551:
          Function GetFileCreateDate( const FileName : AnsiString) : TDateTime
6552:
          Function StGetFileLastAccess( const FileName : AnsiString) : TDateTime
          Function GetFileLastModify( const FileName : AnsiString) : TDateTime
6553:
          Function GetHomeFolder( aForceSlash : Boolean) : AnsiString
           Function GetLongPath( const APath : AnsiString) : AnsiString
6555:
6556:
          Function GetMachineName : AnsiString
6557:
          Function GetMediaID( Drive : Char; var MediaIDRec : MediaIDType) : Cardinal
          Function GetParentFolder( const APath : AnsiString; aForceSlash : Boolean) : AnsiString
6558:
          Function GetShortPath( const APath : AnsiString) : AnsiString
6559:
6560:
          Function GetSystemFolder( aForceSlash : Boolean) : AnsiString
          Function GetTempFolder(aForceSlash:boolean): AnsiString
Function StGetWindowsFolder(aForceSlash:boolean): AnsiString
Function GetWorkingFolder(aForceSlash:boolean): AnsiString
6561:
6562:
6563:
           Function GlobalDateTimeToLocal( const UTC : TStDateTimeRec; MinOffset : Integer) : TStDateTimeRec
6564:
6565:
          Function StIsDirectory( const DirName : AnsiString) : Boolean
          Function IsDirectoryEmpty( const S : AnsiString) : Integer Function IsDriveReady( Drive : Char) : Boolean
6566:
6567:
          Function IsFile( const FileName : AnsiString) : Boolean
Function IsFileArchive( const S : AnsiString) : Integer
6568:
6569:
          Function IsFileHidden( const S : AnsiString) : Integer
6570:
          Function IsFileReadOnly( const S : AnsiString) : Integer
6571:
          Function IsFileSystem( const S : AnsiString): Integer
Function LocalDateTimeToGlobal( const DT1 : TStDateTimeRec; MinOffset : Integer) : TStDateTimeRec
6572:
6573:
         Function ReadVolumeLabel( var VolName : AnsiString; Drive : Char) : Cardinal
Function SameFile( const FilePath1, FilePath2 : AnsiString; var ErrorCode : Integer) : Boolean
Function SetMediaID( Drive : Char; var MediaIDRec : MediaIDType) : Cardinal
Procedure SplitPath( const APath : AnsiString; Parts : TStrings)
6574:
6575:
6576:
```

```
6578:
        Function StDateTimeToFileTime( const FileTime : TStDateTimeRec) : LongInt
6579:
        Function StDateTimeToUnixTime( const DT1 : TStDateTimeRec) : Longint
        Function UnixTimeToStDateTime( UnixTime : Longint) : TStDateTimeRec
        Function ValidDrive( Drive : Char) : Boolean
6581:
6582:
        Function WriteVolumeLabel( const VolName : AnsiString; Drive : Char) : Cardinal
6583:
       6584:
6585: Function CreateAccount( const Server, Username, Fullname, Password, Description, Homedir, Script: string; const PasswordNeverExpires: Boolean): Boolean
6586:
       Function CreateLocalAccount( const Username, Fullname, Password, Description, Homedir, Script: string;
       const PasswordNeverExpires : Boolean) : Boolean
       Function DeleteAccount( const Servername, Username: string) : Boolean
6588:
        Function DeleteLocalAccount( Username : string) : Boolean
6589:
        Function CreateLocalGroup( const Server, Groupname, Description : string) : Boolean
        Function CreateGlobalGroup( const Server, Groupname, Description : string) : Boolean
6590:
6591:
        Function DeleteLocalGroup( const Server, Groupname : string) : Boolean
        Function GetLocalGroups( const Server : string; const Groups : TStrings) : Boolean
        Function GetGlobalGroups( const Server : string; const Groups : TStrings) : Boolean Function LocalGroupExists( const Group : string) : Boolean Function GlobalGroupExists( const Server, Group : string) : Boolean
6593:
6594:
6595:
        Function AddAccountToLocalGroup( const Accountname, Groupname : string) : Boolean
        Function LookupGroupName( const Server : string; const RID : TNetWellKnownRID) : string
6597:
6598:
        Procedure ParseAccountName( const QualifiedName : string; var Domain, UserName : string)
        Function IsLocalAccount( const AccountName : string) : Boolean
Function TimeStampInterval( StartStamp, EndStamp : TDateTime) : integer
6599:
6600:
        Function GetRandomString( NumChar : cardinal) : string
6601:
6602:
            6603:
6604: TypeS('TUnitType', '( utSrc, utHead, utRes, utPrj, utOther )
6605: Function cIsWinNT: boolean
       Procedure cFilesFromWildcard(Directory, Mask: string; var Files:TStringList; Subdirs, ShowDirs,
6606:
       Multitasking:Boolean;
6607: Function cExecuteFile( const FileName, Params, DefaultDir: string; ShowCmd: Integer): THandle
6608: Function cRunAndGetOutput(Cmd,WorkDir:string; ErrFunc:TErrFunc; LineOutputFunc:TLineOutputFunc;
       CheckAbortFunc: TCheckAbortFunc; ShowReturnValue: Boolean): string
6609: Function cGetShortName( FileName : string) : string
        Procedure cShowError( Msg : String)
Function cCommaStrToStr( s : string; formatstr : string) : string
6610:
6611:
        Function cIncludeQuoteIfSpaces(s:string): string
Function cIncludeQuoteIfNeeded(s:string): string
6612:
6613:
6614:
        Procedure cLoadFilefromResource( const FileName : string; ms : TMemoryStream)
        Function cValidateFile(const FileName:string; const WorkPath:string;const CheckDirs:boolean):string;
6615:
6616:
        Function cBuildFilter( var value : string; const FLTStyle : TFILTERSET) : boolean;
        Function cBuildFilter1( var value : string; const _filters : array of string) : boolean;
6618:
        Function cCodeInstoStr( s : string) : string
Function cStrtoCodeIns( s : string) : string
6619:
        Procedure cStrtoAttr( var Attr: TSynHighlighterAttributes; Value: string)
Function cAttrtoStr( const Attr: TSynHighlighterAttributes): string
6620:
6622:
        Procedure cStrtoPoint( var pt : TPoint; value : string)
        Function cPointtoStr( const pt : TPoint) : string
Function cListtoStr( const List : TStrings) : string
6623:
6624:
        Function ListtoStr( const List : TStrings) : string
6625:
        Procedure StrtoList( s : string; const List : TStrings; const delimiter : char)
6626:
        Procedure cStrtoList( s : string; const List : TStrings; const delimiter : char)
6627:
6628:
        Function cGetFileTyp( const FileName : string) : TUnitType Function cGetExTyp( const FileName : string) : TExUnitType
6629:
        Procedure cSetPath( Add : string; const UseOriginal : boolean)
6630:
        Function cExpandFileto( const FileName : string; const BasePath : string) : string
6631:
        Function cFileSamePath( const FileName : string; const TestPath : string) : boolean Procedure cCloneMenu( const FromMenu : TMenuItem; ToMenu : TMenuItem)
Function cGetLastPos( const SubStr : string; const S : string) : integer
6632:
6633:
6634:
        Function cGenMakePath( FileName : String) : String;
        Function cGenMakePath2(FileName: String): String
Function cGenMakePath1(FileName: String; EscapeSpaces, EncloseInQuotes: Boolean): String;
6636:
6637:
        Function cGetRealPath( BrokenFileName : String; Directory : String) : String
6638:
        Function cCalcMod( Count : Integer) : Integer
        Function cGetVersionString( FileName : string) : string
6640:
6641:
        \textbf{Function} \ \texttt{cCheckChangeDir}( \ \textbf{var} \ \texttt{Dir} \ \textbf{:} \ \textbf{string}) \ \textbf{:} \ \texttt{boolean}
6642:
        Function cGetAssociatedProgram(const Extension:string; var Filename,Description: string):boolean
        Function cIsNumeric( s : string) : boolean
Procedure StrtoAttr( var Attr : TSynHighlighterAttributes; Value : string)
6643:
6644:
6645:
        Function AttrtoStr( const Attr : TSynHighlighterAttributes) : string
6646:
        \textbf{Function} \ \ \texttt{GetFileTyp}( \ \ \textbf{const} \ \ \texttt{FileName} \ : \ \textbf{string}) \ : \ \ \texttt{TUnitType}
        Function Atoi(const aStr: string): integer
Function Itoa(const aint: integer): string
6647:
6648:
6649:
6650:
6651: procedure SIRegister_cHTTPUtils(CL: TPSPascalCompiler);
6652: begin
          FindClass('TOBJECT'),'EHTTP
6654:
         FindClass('TOBJECT'), 'EHTTPParser
         FindClass('TOBUECT', EMITTED SCT'
//AnsiCharSet', 'set of AnsiChar
AnsiStringArray', 'array of AnsiString
THTTPProtocolEnum', '( hpNone, hpCustom, hpHTTP, hpHTTPS)
THTTPVersionEnum', '( hvNone, hvCustom, hvHTTP10, hvHTTP11)
6655:
6656:
6657:
6658:
6659:
         THTTPVersion', 'record Version : THTTPVersionEnum; Protocol : TH'
          +'TTPProtocolEnum; CustomProtocol : AnsiString; CustomMajVersion : Integer; '+'CustomMinVersion : Integer; end
6660:
6661:
         THTTPHeaderNameEnum', '( hntCustom, hntHost, hntContentType, hnt
```

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6663:
             +'ContentLength, hntContentTransferEncoding, hntContentLocation, hntContentL'
6664:
             +'anguage, hntContentEncoding, hntTransferEncoding, hntDate, hntServer, hntU'
             +'serAgent, hntLocation, hntConnection, hntExpires, hntCacheControl, hntSetC'
6666:
             +'ookie, hntCookie, hntAuthorization, hntVia, hntWarning, hntContentRange, h'
6667:
             +'ntXForwardedFor, hntPragma, hntXPoweredBy, hntWWWAuthenticate, hntLastModi'
            +'fied, hntETag, hntProxyAuthorization, hntReferer, hntAge, hntAcceptRanges,'
+' hntAcceptEncoding, hntAcceptLanguage, hntAcceptCharset, hntIfModifiedSinc'
6668:
6669:
             +'e, hntIfUnmodifiedSince, hntRetryAfter, hntUpgrade, hntStatus, hntProxyCon'
6670:
           +'nection, hntOrigin, hntKeepAlive )
THTTPHeaderName', 'record Value : THTTPHeaderNameEnum; Custom: AnsiString; end
THTTPCustomHeader', 'record FieldName : AnsiString; FieldValue :'
6671:
6672:
6673:
             +' AnsiString; end
6674:
6675:
            //PHTTPCustomHeader', '^THTTPCustomHeader // will not work
           //PHTTPCustomHeader', '^THTTPCustomHeader // WILL NOL WOLK
THTTPContentLengthEnum', '( hcltNone, hcltByteCount )
THTTPContentLength', 'record Value : THTTPContentLengthEnum; ByteCount:Int64; end
//PHTTPContentLength', '^THTTPContentLength // will not work
THTTPContentTypeMajor', '( hctmCustom, hctmText, hctmImage )
THTTPContentTypeEnum', '( hctNone, hctCustomParts, hctCustomStri'
''DA hctTextUstal hctTextAssii hctTextClss. hctTextPlain. hctTextXml, hctTe'
6676:
6677:
6678:
6679:
           THTTPContentTypeEnum', '( hctNone, hctCustomParts, hctCustomStri' +'ng, hctTextHtml, hctTextAscii, hctTextCss, hctTextPlain, hctTextXml, hctTe' +'xtCustom, hctImageJpeg, hctImagePng, hctImageGif, hctImageCustom, hctAppli'
6680:
6681:
6682:
6683:
                cationJSON, hctApplicationOctetStream, hctApplicationJavaScript, hctApplic'
             +'ationCustom, hctAudioCustom, hctVideoCustom)
6684:
           THTTPContentType', 'record Value : THTTPContentTypeEnum; CustomM'
    +'ajor : AnsiString; CustomMinor : AnsiString; Parameters : AnsiStringArray;'
6685:
6686:
                 CustomStr : AnsiString; end
6687:
6688:
           THTTPDateFieldEnum', '( hdNone, hdCustom, hdParts, hdDateTime )
6689:
           THTTPDateField', 'record Value : THTTPDateFieldEnum; DayOfWeek :'
             +' Integer; Day : integer; Month : integer; Year : Integer; Hour : integer; '+'Min : integer; Sec : Integer; TimeZoneGMT : Boolean; CustomTimeZone : Ansi'
6690:
6691:
             +'String; DateTime : TDateTime; Custom : AnsiString; end
6692:
6693:
           THTTPTransferEncodingEnum', '( hteNone, hteCustom, hteChunked )
           THTTPTransferEncoding', 'record Value : THTTPTransferEncodingEnu' +'m; Custom : AnsiString; end
THTTPConnectionFieldEnum', '( hcfNone, hcfCustom, hcfClose, hcfKeepAlive )
THTTPConnectionField', 'record Value : THTTPConnectionFieldEnum;'
6694:
6695:
6696:
6697:
6698:
             +' Custom : AnsiString; end
           THTTPAgeFieldEnum', '( hafNone, hafCustom, hafAge )
THTTPAgeField', 'record Value: THTTPAgeFieldEnum; Age : Int64;Custom:AnsiString; end
6699:
6700:
6701:
           THTTPCacheControlFieldEnum',
                                                      '( hccfNone, hccfDecoded, hccfCustom )
           THTTPCacheControlRequestSubField', '( hccsfNoCache, hccsfNoStore'
6702:
6703:
             +', hccsfMaxAge, hccsfMaxStale, hccsfMinFresh, hccsfNoTransform, hccsfOnlyIfCached )
           THTTPCacheControlResponseSubField', '( hccrfPublic, hccrfPrivate' +', hccrfNoCache, hccrfNoStore, hccrfNoTransform, hccrfMustRevalidate, hccrf' +'ProxyRevalidate, hccrfMaxAge, hccrfSMaxAge)
6704:
6705:
6706:
           THTTPCacheControlField', 'record Value : THTTPCacheControlFieldEnum; end THTTPContentEncodingEnum', '( hceNone, hceCustom, hceIdentity, h' +'ceCompress, hceDeflate, hceExi, hceGzip, hcePack200Gzip )
6707:
6708:
6709:
           THTTPContentEncoding', 'record Value: THTTPContentEncodingEnum; Custom: AnsiString; end;
6710:
           THTTPContentEncodingFieldEnum', '( hcefNone, hcefList )
THTTPContentEncodingField', 'record Value : THTTPContentEncoding'
6711:
6712:
             +'FieldEnum; List : array of THTTPContentEncoding; end
6713:
           THTTPRetryAfterFieldEnum', '( hrafNone, hrafCustom, harfDate, harfSeconds )
6714:
6715:
           THTTPRetryAfterField', 'record Value : THTTPRetryAfterFieldEnum;
           +'Custom: AnsiString; Date: TDateTime; Seconds: Int64; end
THTTPContentRangeFieldEnum', '(hcrfNone, hcrfCustom, hcrfByteRange)
THTTPContentRangeField', 'record Value: THTTPContentRangeFieldE'
6716:
6717:
6718:
             +'num; ByteFirst : Int64; ByteLast : Int64; ByteSize : Int64; Custom : AnsiString; end
6719:
           THTTPSetCookieFieldEnum', '( hscoNone, hscoDecoded, hscoCustom )
THTTPSetCookieCustomField', 'record Name : AnsiString; Value : AnsiString; end
THTTPSetCookieCustomFieldArray', 'array of THTTPSetCookieCustomField
THTTPSetCookieField', 'record Value : THTTPSetCookieFieldEnum; D'
6720:
6721:
6722:
6723:
6724:
             +'omain : AnsiString; Path : AnsiString; Expires : THTTPDateField; MaxAge : '
6725:
             +'Int64; HttpOnly : Boolean; Secure : Boolean; CustomFields : THTTPSetCookie'
6726:
             +'CustomFieldArray; Custom : AnsiString; end
            //PHTTPSetCookieField', '^THTTPSetCookieField // will not work
6727:
           THTTPSetCookieFieldArray', 'array of THTTPSetCookieField
THTTPCookieFieldEnum', '( hcoNone, hcoDecoded, hcoCustom )
THTTPCookieFieldEntry', 'record Name : AnsiString; Value : AnsiString; end
6728:
6729:
6730:
           //PHTTPCookieFieldEntry', '^THTTPCookieFieldEntry', will not work
THTTPCookieFieldEntryArray', 'array of THTTPCookieFieldEntry
6731:
                                                      'array of THTTPCookieFieldEntry
6732:
6733:
           THTTPCookieField', 'record Value : THTTPCookieFieldEnum; Entries'
6734:
             +' : THTTPCookieFieldEntryArray; Custom : AnsiString; end
           THTTPCommonHeaders', 'record TransferEncoding: THTTPTransferEnc' +'oding; ContentType: THTTPContentType; ContentLength: THTTPContentLength;
6735:
6736:
                 Connection: THTTPConnectionField; ProxyConnection: THTTPConnectionField'
6737:
6738:
             +'; Date : THTTPDateField; ContentEncoding : THTTPContentEncodingField; end
6739:
           THTTPCustomHeaders', 'array of THTTPCustomHeader //THTTPFixedHeaders', 'array[THTTPHeaderNameEnum] of AnsiString
6740:
           THTTPFixedHeaders', 'array[0.42] of AnsiString
THTTPMethodEnum', '(hmNone, hmCustom, hmGET, hmPUT, hmPOST, hmC'+'ONNECT, hmHEAD, hmDELETE, hmOPTIONS, hmTRACE)
6741:
6743:
           THTTPMethod', 'record Value : THTTPMethodEnum; Custom : AnsiString; end
6744:
           THTTPRequestStartLine', 'record Method: THTTPMethod; URI: AnsiString; Version: THTTPVersion; end
6745:
                                          'record CommonHeaders : THTTPCommonHeaders;
6746:
           THTTPRequestHeader',
6747:
                 FixedHeaders: THTTPFixedHeaders: CustomHeaders: THTTPCustomHeaders: Coo'
             +'kie: THTTPCookieField; IfModifiedSince:THTTPDateField; IfUnmodifiedSince:THTTPDateField; end
6748:
6749:
            //PHTTPRequestHeader', '^THTTPRequestHeader // will not work
           THTTPRequest', 'record StartLine: THTTPRequestStartLine; Header'
6750:
             +' : THTTPRequestHeader; HeaderComplete : Boolean; HasContent : Boolean; end
```

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6752:
        THTTPResponseStartLineMessage', '( hslmNone, hslmCustom, hslmOK)
        THTTPResponseStartLine', 'record Version: THTTPVersion; Code:
6753:
6754:
            'Integer; Msg : THTTPResponseStartLineMessage; CustomMsg :
6755:
         THTTPResponseHeader', 'record CommonHeaders : THTTPCommonHeaders'
6756:
          +'; FixedHeaders: THTTPFixedHeaders: CustomHeaders: THTTPCustomHeaders: Co'
          +'okies : THTTPSetCookieFieldArray; Expires : THTTPDateField; LastModified :'
6757:
         + THTTPDateField; Age : THTTPAgeField; end
//PHTTPResponseHeader', '^THTTPResponseHeader // will not work
6758:
6759:
        THTTPResponse', 'record StartLine : THTTPResponseStartLine; Head'
6760:
6761:
          +'er : THTTPResponseHeader; HeaderComplete : Boolean; HasContent : Boolean; end
       Function HTTPMessageHasContent( const H : THTTPCommonHeaders) : Boolean
6762:
       Procedure InitHTTPRequest( var A : THTTPRequest)
       Procedure InitHTTPResponse( var A : THTTPResponse)
Procedure ClearHTTPVersion( var A : THTTPVersion)
6764:
6765:
6766:
       Procedure ClearHTTPContentLength( var A : THTTPContentLength)
6767:
       Procedure ClearHTTPContentType( var A : THTTPContentType)
       Procedure ClearHTTPDateField( var A : THTTPDateField)
6768:
       Procedure ClearHTTPTransferEncoding( var A : THTTPTransferEncoding)
Procedure ClearHTTPConnectionField( var A : THTTPConnectionField)
Procedure ClearHTTPAgeField( var A : THTTPAgeField)
6769:
6770:
6771:
       Procedure ClearHTTPContentEncoding( var A : THTTPContentEncoding)
6772:
6773:
       Procedure ClearHTTPContentEncodingField( var A : THTTPContentEncodingField)
       Procedure ClearHTTPContentRangeField( var A : THTTPContentRangeField)
Procedure ClearHTTPSetCookieField( var A : THTTPSetCookieField)
6774:
6775:
       Procedure ClearHTTPCommonHeaders( var A : THTTPCommonHeaders)
6776:
6777:
        //Procedure ClearHTTPFixedHeaders( var A : THTTPFixedHeaders)
       Procedure ClearHTTPCustomHeaders( var A : THTTPCustomHeaders)
Procedure ClearHTTPCustomHeaders( var A : THTTPCustomHeaders)
Procedure ClearHTTPMethod( var A : THTTPMethod)
Procedure ClearHTTPMethod( var A : THTTPMethod)
6778:
6779:
6780:
6781:
6782:
       Procedure ClearHTTPRequestHeader( var A : THTTPRequestHeader)
6783:
       Procedure ClearHTTPRequest( var A : THTTPRequest)
       Procedure ClearHTTPResponseStartLine( var A : THTTPResponseStartLine)
Procedure ClearHTTPResponseHeader( var A : THTTPResponseHeader)
Procedure ClearHTTPResponse( var A : THTTPResponse)
6784:
6785:
6786:
        THTTPStringOption', '( hsoNone )
THTTPStringOptions', 'set of THTTPStringOption
6787:
6788:
        FindClass('TOBJECT'),'TAnsiStringBuilder
6789:
6790:
6791:
       Procedure BuildStrHTTPVersion(const A:THTTPVersion; const B:TAnsiStringBuilder;const
      P:THTTPStringOptions);
       Procedure BuildStrHTTPContentLengthValue(const A: THTTPContentLength; const B: TAnsiStringBuilder; const
6792:
      P : THTTPStringOptions)
      Procedure BuildStrHTTPContentLength( const A : THTTPContentLength; const B : TAnsiStringBuilder; const P
        THTTPStringOptions)
6794: Procedure BuildStrHTTPContentTypeValue( const A : THTTPContentType; const B : TAnsiStringBuilder; const P
        THTTPStringOptions)
      Procedure BuildStrHTTPContentType(const A:THTTPContentType;const B:TAnsiStringBuilder; const
      P:THTTPStringOptions)
6796:
      Procedure BuildStrRFCDateTime( const DOW, Da, Mo, Ye, Ho, Mi, Se : Integer; const TZ : AnsiString; const
      B : TAnsiStringBuilder; const P : THTTPStringOptions)
       Procedure BuildStrHTTPDateFieldValue( const A : THTTPDateField; const B : TAnsiStringBuilder; const P :
      THTTPStringOptions)
      Procedure BuildStrHTTPDateField(const A:THTTPDateField;const B:TAnsiStringBuilder;const
      P:THTTPStringOptions);

Procedure BuildStrHTTPTransferEncodingValue( const A : THTTPTransferEncoding; const B :
      TAnsiStringBuilder; const P : THTTPStringOptions)
6800: Procedure BuildStrHTTPTransferEncoding( const A : THTTPTransferEncoding; const B : TAnsiStringBuilder;
      const P : THTTPStringOptions)
6801:
       Procedure BuildStrHTTPContentRangeField( const A : THTTPContentRangeField; const B : TAnsiStringBuilder;
      const P : THTTPStringOptions)
      Procedure BuildStrHTTPConnectionFieldValue( const A : THTTPConnectionField; const B : TAnsiStringBuilder;
      const P : THTTPStringOptions)
6803: Procedure BuildStrHTTPConnectionField( const A : THTTPConnectionField; const B : TAnsiStringBuilder;
      const P : THTTPStringOptions)
      Procedure BuildStrHTTPAgeField(const A:THTTPAgeField;const B:TAnsiStringBuilder;const
      P:THTTPStringOptions);
6805:
      Procedure BuildStrHTTPContentEncoding( const A : THTTPContentEncoding; const B : TAnsiStringBuilder;
      const P : THTTPStringOptions)
       Procedure BuildStrHTTPContentEncodingField(const A:THTTPContentEncodingField;const
6806:
      B:TAnsiStringBuilder;const P:THTTPStringOptions)
6807: Procedure BuildStrHTTPProxyConnectionField(const A : THTTPConnectionField; const B : TAnsiStringBuilder;
      const P : THTTPStringOptions)
6808: Procedure BuildStrHTTPCommonHeaders ( const A : THTTPCommonHeaders; const B : TAnsiStringBuilder; const P
        THTTPStringOptions)
       Procedure BuildStrHTTPFixedHeaders(const A:THTTPFixedHeaders;const B:TAnsiStrBuilder;const
6809:
      P:THTTPStringOptions)
      Procedure BuildStrHTTPCustomHeaders( const A : THTTPCustomHeaders; const B : TAnsiStringBuilder; const P
6810:
        THTTPStringOptions)
      Procedure BuildStrHTTPSetCookieFieldValue( const A : THTTPSetCookieField; const B : TAnsiStringBuilder;
      const P : THTTPStringOptions)
6812: Procedure BuildStrHTTPCookieFieldValue( const A : THTTPCookieField; const B : TAnsiStringBuilder; const P
        THTTPStringOptions)
6813: Procedure BuildStrHTTPCookieField(const A:THTTPCookieField;const B:TAnsiStringBuilder;const
      P:THTTPStringOptions)
6814: Procedure BuildStrHTTPMethod( const A : THTTPMethod; const B : TAnsiStringBuilder; const P :
      THTTPStringOptions)
      Procedure BuildStrHTTPRequestStartLine( const A : THTTPRequestStartLine; const B : TAnsiStringBuilder;
      const P : THTTPStringOptions)
```

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6816: Procedure BuildStrHTTPRequestHeader(const A:THTTPRequestHeader;const B:TAnsiStringBuilder;const
       P:THTTPStringOptions);
        Procedure BuildStrHTTPRequest( const A : THTTPRequest; const B : TAnsiStringBuilder; const P :
       THTTPStringOptions)
6818: Procedure BuildStrHTTPResponseCookieFieldArray( const A : THTTPSetCookieFieldArray; const B :
       TAnsiStringBuilder; const P : THTTPStringOptions)
6819: Procedure BuildStrHTTPResponseStartLine(const A:THTTPResponseStartLine;const B:TAnsiStrBldr;const P
6820: Procedure BuildStrHTTPResponseHeader(const A:THTTPRespHeader;const B:TAnsiStrBuilder;const
       P:THTTPStringOptions)
6821:
       Procedure BuildStrHTTPResponse(const A:THTTPResponse; const B:TAnsiStringBuilder; const
       P:THTTPStringOptions);
       Function HTTPContentTypeValueToStr( const A : THTTPContentType) : AnsiString
        Function HTTPSetCookieFieldValueToStr( const A : THTTPSetCookieField) : AnsiString Function HTTPCookieFieldValueToStr( const A : THTTPCookieField) : AnsiString
6823:
6824:
        Function HTTPMethodToStr( const A : THTTPMethod) : AnsiString
        Function HTTPRequestToStr( const A : THTTPRequest) : AnsiString
        Function HTTPResponseToStr( const A : THTTPResponse) : AnsiString
Procedure PrepareCookie(var A:THTTPCookieField;const B:THTTPSetCookieFieldArray;const
6827:
6828:
       Domain:AnsiString;const Secure:Bool; THTTPParserHeaderParseFunc', 'Function ( const HeaderName : THTT'
           +PHeaderNameEnum; const HeaderPtr : ____Pointer) : Boolean
6829:
         SIRegister_THTTPParser(CL);
6830:
6831:
         FindClass('TOBJECT'),'THTTPContentDecoder
         THTTPContentDecoderProc', 'Procedure ( const Sender : THTTPContentDecoder)
6832:
         THTTPContentDecoderContentType', '( crctFixedSize, crctChunked, crctUnsized )
THTTPContentDecoderChunkState', '( crcsChunkHeader, crcsContent,'
6833:
6834:
6835:
          +' crcsContentCRLF, crcsTrailer, crcsFinished )
         THTTPContentDecoderLogEvent', 'Procedure ( const Sender : THTTPContentDecoder; const LogMsg : String)
6836:
         SIRegister_THTTPContentDecoder(CL);
6837:
         THTTPContentReaderMechanism', '( hcrmEvent, hcrmString, hcrmStream, hcrmFile )
6839:
         FindClass('TOBJECT'), 'THTTPContentReader
         THTTPContentReaderProc', 'Procedure ( const Sender : THTTPContentReader)
6840:
         THTTPContentReader; const LogMsq:String; const Sender:THTTPContentReader; const LogMsq:String; const
6841:
       LogLevel: Int;
         SIRegister_THTTPContentReader(CL);
6842:
6843:
         THTTPContentWriterMechanism','(hctmEvent, hctmString, hctmStream, hctmFile )
         FindClass('TOBJECT'), 'THTTPContentWriter
THTTPContentWriterLogEvent', 'Procedure (const Sender: THTTPContentWriter; const LogMsg:AnsiString);
6844:
6845:
6846:
         SIRegister_THTTPContentWriter(CL);
6847:
        Procedure SelfTestcHTTPUtils
6848:
       end;
6849:
6850:
6851: procedure SIRegister_cTLSUtils(CL: TPSPascalCompiler);
6852: begin
        'TLSLibraryVersion','String '1.00
6853:
        'TLSError_None','LongInt'( 0);
'TLSError_InvalidBuffer','LongInt'( 1);
6854:
6856:
        'TLSError_InvalidParameter', 'LongInt'( 2);
6857:
        'TLSError InvalidCertificate', 'LongInt'( 3);
6858:
        'TLSError InvalidState', 'LongInt'(4);
        'TLSError_DecodeError','LongInt'(5);
'TLSError_BadProtocol','LongInt'(6);
6859:
6860:
        Function TLSErrorMessage( const TLSError : Integer) : String
6861:
6862:
         SIRegister_ETLSError(CL);
         TTLSProtocolVersion', 'record major : Byte; minor : Byte; end PTLSProtocolVersion', '^TTLSProtocolVersion // will not work
6863:
6864:
        Procedure InitSSLProtocolVersion30( var A : TTLSProtocolVersion)
6865:
6866:
        Procedure InitTLSProtocolVersion10( var A : TTLSProtocolVersion)
        Procedure InitTLSProtocolVersion11( var A : TTLSProtocolVersion)
6867:
        Procedure InitTLSProtocolVersion12( var A : TTLSProtocolVersion)
6868:
        Function IsTLSProtocolVersion( const A, B : TTLSProtocolVersion) : Boolean
6869:
        Function IsSSL2( const A : TTLSProtocolVersion) : Boolean Function IsSSL3( const A : TTLSProtocolVersion) : Boolean
6870:
6871:
        Function IsTLS10( const A : TTLSProtocolVersion) : Boolean
6872:
        Function IsTLS11( const A : TTLSProtocolVersion) : Boolean
6873:
6874:
        Function IsTLS12( const A : TTLSProtocolVersion) : Boolean
        Function IsTLS100rLater( const A : TTLSProtocolVersion) : Boolean
Function IsTLS110rLater( const A : TTLSProtocolVersion) : Boolean
6875:
6876:
        Function IsTLS12OrLater( const A : TTLSProtocolVersion) : Boolean
6877:
        Function IsFutureTLSVersion( const A : TTLSProtocolVersion) : Boolean
6878:
6879:
        \textbf{Function} \  \, \texttt{IsKnownTLSVersion}( \  \, \textbf{const} \  \, \texttt{A} \  \, \texttt{:} \  \, \texttt{TTLSProtocolVersion}) \  \, \texttt{:} \  \, \texttt{Boolean}
6880:
        Function TLSProtocolVersionToStr( const A : TTLSProtocolVersion) : String
Function TLSProtocolVersionName( const A : TTLSProtocolVersion) : String
6881:
6882:
         PTLSRandom',
                          '^TTLSRandom // will not work
        Procedure InitTLSRandom( var Random : TTLSRandom)
6883:
6884:
        \textbf{Function} \  \, \texttt{TLSRandomToStr}( \  \, \textbf{const} \  \, \texttt{Random} \, : \, \, \texttt{TTLSRandom}) \, : \, \, \texttt{AnsiString}
        'TLSSessionIDMaxLen','LongInt'( 32);
Procedure InitTLSSessionID( var SessionID: TTLSSessionID; const A: AnsiString)
6885:
6886:
        Function EncodeTLSSessionID(var Buffer:string;const Size:Int;const SessionID:TTLSSessionID):Int;
6887:
6888:
        Function DecodeTLSSessionID(const Buffer:string;const Size:Int;var SessionID:TTLSSessionID):Int;
         TTLSSignatureAndHashAlgorithm', 'record Hash : TTLSHashAlgorithm' +'; Signature : TTLSSignatureAlgorithm; end
6889:
6890:
        // PTLSSignatureAndHashAlgorithm', '^TTLSSignatureAndHashAlgorithm +'// will not work
6891:
         TTLSSignatureAndHashAlgorithmArray', 'array of TTLSSignatureAndHashAlgorithm
6892:
6893:
         TTLSKeyExchangeAlgorithm', '( tlskeaNone, tlskeaNULL, tlskeaDHE_
         +'DSS, tlskeaDHE_RSA, tlskeaDH_Anon, tlskeaRSA, tlskeaDH_DSS, tlskeaDH_RSA)
TTLSMACAlgorithm', '( tlsmaNone, tlsmaNULL, tlsmaHMAC_MD5, tlsma'
+'HMAC_SHA1, tlsmaHMAC_SHA256, tlsmaHMAC_SHA384, tlsmaHMAC_SHA512)
6894:
6895:
6896:
```

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TTLSMacAlgorithmInfo', 'record Name : AnsiString; DigestSize : I' +'nteger; Supported : Boolean; end
6897:
6898:
        PTLSMacAlgorithmInfo', '^TTLSMacAlgorithmInfo // will not work
'TLS_MAC_MAXDIGESTSIZE', 'LongInt'( 64);
6899:
6900:
         TTLSPRFAlgorithm', '( tlspaSHA256 )
6901:
        Function tlsP_MD5( const Secret, Seed : AnsiString; const Size : Integer) : AnsiString Function tlsP_SHA1( const Secret, Seed : AnsiString; const Size : Integer) : AnsiString
6902:
6903:
        Function tlsP_SHA256( const Secret, Seed : AnsiString; const Size : Integer) : AnsiString
6904:
        Function tlsP_SHA512( const Secret, Seed : AnsiString; const Size : Integer) : AnsiString
6905:
        Function tls10PRF( const Secret, ALabel, Seed : AnsiString; const Size : Integer) : AnsiString Function tls12PRF_SHA256( const Secret, ALabel, Seed : AnsiString; const Size : Integer) : AnsiString Function tls12PRF_SHA512( const Secret, ALabel, Seed : AnsiString; const Size : Integer) : AnsiString
6906:
6907:
6909:
        Function TLSPRF(const ProtoVersion:TTLSProtocolVersion;const Secret,ALabel,Seed:AString;const
       Size:Int):AString;
6910:
      Function tls10KevBlock(const MasterSecret, ServerRandom, ClientRandom; AnsiString; const
       Size:Integer):AnsiString
      Function tls12SHA256KeyBlock(const MasterSecret, ServerRandom, ClientRandom: AnsiString; const
       Size:Int):AnsiString;
6912: Function tls12SHA512KeyBlock(const MasterSecret,ServerRandom,ClientRandom: AnsiString;const
      Size:Int):AnsiString;
        Function TLSKeyBlock(const ProtocolVersion:TTLSProtocolVersion; const MasterSecret, ServerRandom,
       ClientRandom : AnsiString; const Size : Integer) : AnsiString
6914: Function tls10MasterSecret(const PreMasterSecret, ClientRandom, ServerRandom: AnsiString) :AnsiString;
6915:
        Function tls12SHA256MasterSecret(const PreMasterSecret.ClientRandom.ServerRandom:AnsiString):AnsiString;
        Function tls12SHA512MasterSecret(const PreMasterSecret,ClientRandom,ServerRandom:AnsiString): AnsiString;
6916:
        Function TLSMasterSecret( const ProtocolVersion: TTLSProtocolVersion; const PreMasterSecret, ClientRandom
6917:
       ServerRandom:AnsiString) : AnsiString
6918:
         TTLSKeys', 'record KeyBlock : AnsiString; ClientMACKey : AnsiStr'
          +'ing; ServerMACKey: AnsiString; ClientEncKey: AnsiString; ServerEncKey: +'AnsiString; ClientIV: AnsiString; ServerIV: AnsiString; end
6919:
        Procedure GenerateTLSKeys( const ProtocolVersion : TTLSProtocolVersion; const MACKeyBits, CipherKeyBits,
6921:
       IVBits : Integer: const MasterSecret, ServerRandom, ClientRandom : AnsiString: var TLSKeys : TTLSKeys)
      Procedure GenerateFinalTLSKeys(const ProtocolVersion:TTLSProtocolVersion;const IsExportable:Boolean;const
6922:
       ExpandedKeyBits:Integer;const ServerRandom,ClientRandom:AnsiString;var TLSKeys:TTLSKeys)
        'TLS_PLAINTEXT_FRAGMENT_MAXSIZE','LongInt'( 16384 - 1);
'TLS_COMPRESSED_FRAGMENT_MAXSIZE','LongInt'( 16384 + 1024);
6923:
6924:
6925:
        Procedure SelfTestcTLSUtils
6926: end;
6927:
6928:
6929: procedure SIRegister_Reversi(CL: TPSPascalCompiler);
6930: begin
         sPosData', 'record corner : boolean; square2x2 : boolean; edge:boolean; stable : integer; internal :
6931:
       integer; disks : integer; mx : integer; my : integer; end
        // pBoard', '^tBoard // will not work
6932:
        Function rCalculateData( cc : byte; cx, cy : integer) : sPosData
6933:
        Function rCheckMove(color: byte; cx, cy: integer): integer //Function rDoStep(data: pBoard): word
6934:
6936:
        Function winExecAndWait( const sAppPath : string; wVisible : word) : boolean
6937:
      end;
6938:
      procedure SIRegister_IWDBCommon(CL: TPSPascalCompiler);
6939:
6940: begin
      Function InEditMode( ADataset : TDataset) : Boolean
6941:
6942: Function CheckDataSource( ADataSource: TDataSource): Boolean;
6943: Function CheckDataSource(ADataSource: TDataSource; const AFieldName: string; var VField: TField): boolean;
      Function GetFieldText( AField : TField) : String
6945:
      end;
6946:
      procedure SIRegister SortGrid(CL: TPSPascalCompiler);
6947:
6948:
      begin
6949:
         TPrintMode', '( pmPrint, pmPreview, pmPageCount )
         TMyPrintRange', '( prAll, prSelected )
TSortStyle', '( ssAutomatic, ssNormal, ssNumeric, ssNumericExten'
6950:
6951:
         +'ded, ssDateTime, ssTime, ssCustom )
TSortDirection', '( sdAscending, sdDes
6952:
                                 sdAscending, sdDescending )
6953:
6954:
         TSetChecked', 'Procedure ( Sender : TObject; ACol, ARow : integer; State : Boolean)
6955:
         TGetCombobox', 'Procedure ( Sender : TObject; ACol, ARow : integ'
         +'er; var Strs : TStringList; var Width, Height : integer; var Sorted : Boolean)
TSetCombobox', 'Procedure ( Sender : TObject; ACol, ARow : integer; Str : String)
TSetEllipsis', 'Procedure ( Sender : TObject; ACol, ARow : integer)
6956:
6957:
6958:
6959:
         SIRegister_TSortOptions(CL);
6960:
         SIRegister_TPrintOptions(CL);
6961:
         TSortedListEntry'. 'record Str : String; RowNum : integer; SortOption : TSortOptions; end
6962:
         SIRegister_TSortedList(CL);
6963:
         TCellBevelStyle', '( cbNone, cbRaised, cbLowered )
6964:
         TCellBevel', 'record Style: TCellBevelStyle; UpperLeftColor: TColor; LowerRightColor: TColor; end
         TVertAlignment', '( taTopJustify, taBottomJustify, taMiddle )
TFormatOptions', 'record Brush : TBrush; Font : TFont; Alignment'
6965:
6966:
            'Horz : TAlignment; AlignmentVert : TVertAlignment; Bevel : TCellBevel; HideText : Boolean; end
6967:
6968:
         SIRegister_TFontSetting(CL);
6969:
         SIRegister TFontList(CL);
         AddTypeS(TFormatDrawCellEvent', 'Procedure ( Sender : TObject; Col, Row : '
6970:
6971:
          + integer;State:TGridDrawState; var FormatOptions:TFormatOptions;var CheckBox,Combobox,Ellipsis:Bool);
6972:
         TSetFilterEvent', 'Procedure ( ARows : TStrings; var Accept : Boolean)
6973:
         TSearchEvent', 'Procedure ( ARows : TStrings; var Accept : Boolean)
6974:
         TUpdateGridEvent', 'Procedure ( Sender : TObject; ARow : integer)
TSizeChangedEvent', 'Procedure ( Sender : TObject; OldColCount, OldRowCount : integer)
6975:
6976:
         TBeginSortEvent', 'Procedure ( Sender : TObject; var Col : integer)
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6977:
         TEndSortEvent', 'Procedure ( Sender : TObject; Col : integer)
         TGetSortStyleEvent', 'Procedure ( Sender : TObject; Col : intege +'r; var SortStyle : TSortStyle)
6978:
6979:
6980:
         TCellValidateEvent',
                                  'Procedure ( Sender : TObject; ACol, ARow : '
          +' integer; const OldValue : string; var NewValue : String; var Valid : Boolean)
6981:
         SIRegister TSortGrid(CL);
6982:
6983:
        Function ExtendedCompare( const Str1, Str2 : String) : Integer
        Function NormalCompare( const Str1, Str2: String): Integer Function DateTimeCompare( const Str1, Str2: String): Integer
6984:
6985:
        Function NumericCompare( const Str1, Str2: String): Integer Function TimeCompare( const Str1, Str2: String): Integer //Function Compare( Item1, Item2: Pointer): Integer
6986:
6987:
6989:
6990:
       6991:
6992:
        Procedure IBAlloc( var P, OldSize, NewSize : Integer)
        Procedure IBError( ErrMess : TIBClientError; const Args : array of const)
6993:
6994:
        Procedure IBDataBaseError
        Function StatusVector : PISC_STATUS
6995:
        Function StatusVectorArray: PStatusVector
Function CheckStatusVector( ErrorCodes: array of ISC_STATUS): Boolean
6996:
6997:
6998:
        Function StatusVectorAsText : string
        Procedure SetIBDataBaseErrorMessages( Value : TIBDataBaseErrorMessages)
Function GetIBDataBaseErrorMessages : TIBDataBaseErrorMessages
6999:
7000:
7002:
Function CharCount( c : char; const s : string) : integer
Function BoldNamesEqual( const name1, name2 : string) : Boolean
7004:
7005:
        Procedure BoldAppendToStrings(strings: TStrings; const aString: string; const ForceNewLine:Boolean)
7007:
        Function BoldSeparateStringList(strings:TStringList;const Separator,PreString,PostString:String):String
7008:
        Function BoldSeparatedAppend( const S1, S2 : string; const Separator : string) : string
       Function BoldSeparatedAppend(const S1, S2: string, const separator · string, · string
Function BoldTrim(const S: string): string
Function BoldTsPrefix(const S, Prefix: string): Boolean
Function BoldStrEqual(P1, P2: PChar; Len: integer): Boolean
Function BoldStrAnsiEqual(P1, P2: PChar; Len: integer): Boolean
Function BoldAnsiEqual(const S1, S2: string): Boolean
Function BoldStrStringEqual(const S1: string; P2: PChar; Len: integer): Boolean
7009:
7010:
7011:
7012:
7013:
7014:
7015:
        Function BoldCaseIndependentPos( const Substr, S : string) : Integer
7016:
        //Procedure EnumToStrings( aTypeInfo : pTypeInfo; Strings : TStrings)
7017:
        Function CapitalisedToSpaced( Capitalised : String) : String
        Function SpacedToCapitalised( Spaced: String): String
Function BooleanToString( BoolValue: Boolean): String
7018:
7019:
        Function StringToBoolean(StrValue: String): Boolean
7021:
        \textbf{Function} \ \ \texttt{GetUpperLimitForMultiplicity} ( \ \ \textbf{const} \ \ \texttt{Multiplicity} : \ \ \textbf{String}) : \ \ \texttt{Integer}
        Function GetLowerLimitForMultiplicity( const Multiplicity: String): Integer Function StringListToVarArray( List: TStringList): variant Function IsLocalMachine( const Machinename: WideString): Boolean
7022:
7023:
        Function GetComputerNameStr : string
Function TimeStampComp( const Time1, Time2 : TTimeStamp) : Integer
7025:
7026:
7027:
        Function BoldStrToDateFmt(const S:string;const DateFormat:string;const DateSeparatorChar:char):TDateTime
        Function BoldDateToStrFmt(const aDate:TDateTime;DateFormat:string;const DateSeparatorChar:char):String;
7028:
        Function BoldParseFormattedDateList(const value:String;const formats:TStrings;var Date:TDateTime):Boolean;
7029:
        Function BoldParseFormattedDate(const value:String;const formats:array of string; var
7030:
      Date: TDateTime): Boolean;
      Procedure EnsureTrailing( var Str : String; ch : char)
        Function BoldDirectoryExists( const Name : string) : Boolean
        Function BoldForceDirectories( Dir : string) : Boolean
7033:
        Function BoldRootRegistryKey : string
Function GetModuleFileNameAsString( IncludePath : Boolean) : string
Function BoldVariantToStrings( V : OleVariant; Strings : TStrings) : Integer
7034:
7035:
7036:
7037:
        Function LogicalAnd( A, B : Integer) : Boolean
7038:
        record TByHandleFileInformation dwFileAttributes : DWORD; '
7039:
          +'ftCreationTime : TFileTime; ftLastAccessTime : TFileTime; ftLastWriteTime
7040:
          +': TFileTime; dwVolumeSerialNumber : DWORD; nFileSizeHigh : DWORD; nFileSiz'
           +'eLow : DWORD; nNumberOfLinks : DWORD; nFileIndexHigh : DWORD; nFileIndexLow : DWORD; end
7041:
        Function GetFileInformationByHandle(hFile:THandle; var lpFileInformation:TByHandleFileInformation):BOOL;
7042:
7043:
        \textbf{Function} \  \, \texttt{IsFirstInstance} \  \, : \  \, \texttt{Boolean}
        Procedure ActivateFirst( AString : PChar)
7044:
7045:
        Procedure ActivateFirstCommandLine
        function MakeAckPkt(const BlockNumber: Word): string;
7046:
7047:
        procedure SendError(UDPBase:TldUDPBase;APeerIP:string;const APort:Int;const ErrNumber:Word;ErrStr:string;
7048:
        procedure SendError(UDPClient: TIdUDPClient; const ErrNumber: Word; ErrorString: string); overload;
        procedure SendError(UDPBase: TIdUDPBase; APeerIP: string; const APort: Integer; E: Exception); overload;
7049:
7050:
        procedure SendError(UDPClient: TIdUDPClient; E: Exception); overload;
7051:
        function IdStrToWord(const Value: String): Word;
        function IdWordToStr(const Value: Word): WordStr;
7052:
        Function HasInstructionSet( const InstructionSet : TCPUInstructionSet) : Boolean
7053:
        Function CPUFeatures : TCPUFeatures
7054:
7056: procedure SIRegister_xrtl_util_CPUUtils(CL: TPSPascalCompiler);
7057: begin
         AddTypeS('TXRTLBitIndex', 'Integer
7058:
7059:
        Function XRTLSwapBits( Data : Cardinal; BitlIndex, Bit2Index : TXRTLBitIndex) : Cardinal
        Function XRTLBitTest( Data : Cardinal; BitIndex : TXRTLBitIndex) : Boolean
7060:
        Function XRTLBitSet( Data : Cardinal; BitIndex : TXRTLBitIndex) : Cardinal
7061:
7062:
        Function XRTLBitReset( Data : Cardinal; BitIndex : TXRTLBitIndex) : Cardinal
        Function XRTLBitComplement( Data : Cardinal; BitIndex : TXRTLBitIndex) : Cardinal
7063:
        Function XRTLSwapHiLo16( X : Word) : Word
```

```
7065:
         Function XRTLSwapHiLo32( X : Cardinal) : Cardinal
         Function XRTLSwapHiLo64( X : Int64) : Int64
7066:
         Function XRTLROL32( A, S : Cardinal) : Cardinal
7068:
         Function XRTLROR32( A, S : Cardinal) : Cardinal
         Function XRTLROL16( A : Word; S : Cardinal) : Word Function XRTLROR16( A : Word; S : Cardinal) : Word
7069:
7070:
7071:
         Function XRTLROL8( A : Byte; S : Cardinal) : Byte
7072:
         Function XRTLROR8( A : Byte; S : Cardinal) : Byte
7073:
         //Procedure XRTLXorBlock( I1, I2, O1 : PByteArray; Len : integer)
7074:
         //Procedure XRTLIncBlock( P : PByteArray; Len : integer)
Procedure XRTLUMul64( const A, B : Integer; var MulL, MulH : Integer)
7075:
         Function XRTLPopulation( A : Cardinal) : Cardinal
7077: end;
7078:
7079: Function XRTLURLDecode( const ASrc : WideString) : WideString 7080: Function XRTLURLEncode( const ASrc : WideString) : WideString
7081: Function XRTLURINormalize( const AURI : WideString) : WideString
7082: Procedure XRTLURIParse(const AURI:WideString; var VProtocol, VHost, VPath, VDocument, VPort, VBookmark, VUserName,
        VPassword : WideString)
7083: Function XRTLExtractLongPathName(APath: string): string;
7084:
7085: procedure SIRegister_cFundamentUtils(CL: TPSPascalCompiler);
7086: begin
          AddTypeS('Int8', 'ShortInt
7087:
          AddTypeS('Int16', 'SmallInt AddTypeS('Int32', 'LongInt
7088:
7089:
7090:
           AddTypeS('UInt8',
                                    'Byte
          AddTypeS('UInt16', 'Word AddTypeS('UInt32', 'Long'
7091:
7092:
                                      'LongWord
           AddTypeS('UInt64',
7093:
                                      'Int64
          AddTypeS('Word8', 'UInt8
AddTypeS('Word16', 'UInt16
AddTypeS('Word32', 'UInt32
7094:
7095:
7096:
          AddTypeS('Words2', 'UInt32
AddTypeS('Word64', 'UInt64
AddTypeS('LargeInt', 'Int64
AddTypeS('NativeInt', 'Integer
AddTypeS('NativeUInt', 'Cardinal
7097:
7098:
7099:
7100:
          Const('BitsPerByte','LongInt'( 8);
Const('BitsPerWord','LongInt'( 16);
7101:
7102:
           Const('BitsPerLongWord', 'LongInt'( 32);
7103:
         //Const('BitsPerCardinal','LongInt'( BytesPerCardinal * 8);
7104:
         //Const( BitsPerNativeWord', 'LongInt' ( BytesPerNativeWord * 8);
Function MinI( const A, B : Integer) : Integer
7105:
                                                                Integer
7106:
         Function MaxI( const A, B : Integer) : Integer
7107:
7108:
         Function MinC( const A, B : Cardinal) : Cardinal
         Function MaxC( const A, B : Cardinal) : Cardinal
7109:
         Function SumClipI( const A, I : Integer) : Integer
Function SumClipC( const A : Cardinal; const I : Integer) : Cardinal
7110:
7111:
         Function InByteRange( const A : Int64) : Boolean
Function InWordRange( const A : Int64) : Boolean
7112:
7113:
7114:
         Function InLongWordRange( const A : Int64) : Boolean
         Function InShortIntRange( const A : Int64) : Boolean
7115:
         Function InSmallIntRange( const A : Int64) : Boolean
7116:
         Function InLongIntRange( const A : Int64) : Boolean
7117:
          AddTypeS('Bool8', 'ByteBool
AddTypeS('Bool16', 'WordBool
AddTypeS('Bool32', 'LongBool
7118:
7119:
7120:
7121:
           AddTypeS('TCompareResult', '( crLess, crEqual, crGreater, crUndefined )
         AddTypeS('TCompareResultSet', 'set of TCompareResult
Function ReverseCompareResult( const C : TCompareResult) : TCompareResult
7122:
7123:
7124:
         Const('MinSingle','Single').setExtended( 1.5E-45);
7125:
         Const('MaxSingle','Single').setExtended( 3.4E+38);
7126:
         Const('MinDouble','Double').setExtended( 5.0E-324);
7127:
         Const('MaxDouble', 'Double').setExtended( 1.7E+308);
         Const ( MaxExtended', 'Extended').setExtended(3.4E-4932);
Const ('MaxExtended', 'Extended').setExtended(1.1E+4932);
7128:
         Const('MinCurrency','Currency').SetExtended( - 922337203685477.5807);
Const('MaxCurrency','Currency').SetExtended( 922337203685477.5807);
7130:
7131:
         Function MinF( const A, B : Float) : Float
Function MaxF( const A, B : Float) : Float
7132:
7133:
         Function ClipF( const Value : Float; const Low, High : Float) : Float
7134:
7135:
         Function InSingleRange( const A : Float) : Boolean
7136:
         Function InDoubleRange( const A : Float) : Boolean
7137:
         Function InCurrencyRange(const A : Float) : Boolean;
         Function InCurrencyRangel( const A : Int64) : Boolean;
7138:
7139:
         \textbf{Function} \  \, \texttt{FloatExponentBase2(} \  \, \textbf{const} \  \, \texttt{A} \  \, \texttt{:} \  \, \texttt{Extended}; \  \, \textbf{var} \  \, \texttt{Exponent} \  \, \texttt{:} \  \, \texttt{Integer)} \  \, \texttt{:} \  \, \texttt{Boolean}
7140:
         Function FloatExponentBase10( const A : Extended; var Exponent : Integer) : Boolean
         Function FloatIsInfinity( const A : Extended) : Boolean
7141:
         Function FloatIsNaN( const A : Extended) : Boolean
7142:
         Const('SingleCompareDelta','Extended').setExtended( 1.0E-34);
Const('DoubleCompareDelta','Extended').setExtended( 1.0E-280);
7144:
         Const('ExtendedCompareDelta','Extended').setExtended( 1.0E-4400);
Const('DefaultCompareDelta','Extended').SetExtended( 1.0E-34);
7145:
7146:
         Function FloatZero( const A : Float; const CompareDelta : Float) : Boolean
7147:
         Function FloatOne( const A : Float; const CompareDelta : Float) : Boolean
7148:
         Function FloatsEqual( const A, B: Float; const CompareDelta: Float): Boolean
Function FloatsCompare( const A, B: Float; const CompareDelta: Float): Boolean
Function FloatsCompare( const A, B: Float; const CompareDelta: Float): TCompareResult
Const('SingleCompareEpsilon', 'Extended').setExtended( 1.0E-5);
Const('DoubleCompareEpsilon', 'Extended').setExtended( 1.0E-13);
7149:
7150:
7151:
```

```
Const('ExtendedCompareEpsilon','Extended').setExtended( 1.0E-17);
Const('DefaultCompareEpsilon','Extended').setExtended( 1.0E-10);
7153:
7154:
         Function ApproxEqual( const A, B : Extended; const CompareEpsilon : Double) : Boolean
7156:
         Function ApproxCompare( const A, B : Extended; const CompareEpsilon : Double): TCompareResult
7157:
         Function cClearBit( const Value, BitIndex : LongWord) : LongWord
         Function cSetBit( const Value, BitIndex : LongWord) : LongWord
7158:
         Function cIsBitSet( const Value, BitIndex : LongWord) : Boolean
7159:
         Function cToggleBit( const Value, BitIndex : LongWord) : LongWord
7161:
         Function clsHighBitSet( const Value : LongWord) : Boolean
         Function SetBitScanForward( const Value : LongWord) : Integer;
Function SetBitScanForward1( const Value, BitIndex : LongWord) : Integer;
7162:
7163:
         Function SetBitScanReverse( const Value : LongWord) : Integer;
7164:
7165:
         Function SetBitScanReversel( const Value, BitIndex : LongWord) : Integer;
         Function ClearBitScanForward( const Value : LongWord) : Integer;
7166:
         Function ClearBitScanForward1( const Value, BitIndex : LongWord) : Integer;
7167:
7168:
         Function ClearBitScanReverse( const Value : LongWord) : Integer;
         Function ClearBitScanReversel( const Value, BitIndex : LongWord) : Integer;
         Function cReverseBits( const Value : LongWord) : LongWord;
Function cReverseBits( const Value : LongWord; const BitCount : Integer) : LongWord;
7170:
7171:
         Function cSwapEndian( const Value : LongWord) : LongWord
7172:
         Function cTwosComplement( const Value : LongWord) : LongWord
7173:
7174:
         Function RotateLeftBits16( const Value : Word; const Bits : Byte) : Word
         Function RotateLeftBits32( const Value : LongWord; const Bits : Byte) : LongWord Function RotateRightBits16( const Value : Word; const Bits : Byte) : Word
7175:
7176:
         Function RotateRightBits32( const Value : LongWord; const Bits : Byte) : LongWord
7178:
         Function cBitCount( const Value : LongWord) : LongWord
7179:
         Function cIsPowerOfTwo( const Value : LongWord) : Boolean
         Function LowBitMask( const HighBitIndex : LongWord) : LongWord
Function HighBitMask( const LowBitIndex : LongWord) : LongWord
7180:
7181:
         Function RangeBitMask( const LowBitIndex, HighBitIndex : LongWord) : LongWord
7182:
7183:
         Function SetBitRange( const Value: LongWord; const LowBitIndex, HighBitIndex: LongWord) : LongWord
         Function ClearBitRange(const Value: LongWord; const LowBitIndex; HighBitIndex: LongWord) : LongWord
7184:
         Function ToggleBitRange(const Value:LongWord; const LowBitIndex, HighBitIndex: LongWord) : LongWord
7185:
7186:
         Function IsBitRangeSet(const Value: LongWord; const LowBitIndex, HighBitIndex : LongWord) : Boolean
         Function IsBitRangeClear(const Value: LongWord; const LowBitIndex, HighBitIndex: LongWord): Boolean
       // AddTypeS('CharSet', 'set of AnsiChar
AddTypeS('CharSet', 'set of Char
AddTypeS('AnsiCharSet', 'TCharSet
7188:
7189:
7190:
          AddTypeS('ByteSet', 'set of Byte AddTypeS('AnsiChar', 'Char
7191:
7192:
7193:
           // Function AsCharSet( const C : array of AnsiChar) : CharSet
         Function AsByteSet( const C : array of Byte) : ByteSet
Procedure ComplementChar( var C : CharSet; const Ch : Char)
7194:
7195:
7196:
         Procedure ClearCharSet( var C : CharSet)
7197:
         Procedure FillCharSet( var C : CharSet)
7198:
         Procedure ComplementCharSet( var C : CharSet)
         Procedure AssignCharSet( var DestSet : CharSet; const SourceSet : CharSet)

Procedure Union( var DestSet : CharSet; const SourceSet : CharSet)
7199:
7201:
         Procedure Difference( var DestSet : CharSet; const SourceSet : CharSet)
7202:
         Procedure Intersection( var DestSet : CharSet; const SourceSet : CharSet)
         Procedure XORCharSet( var DestSet : CharSet; const SourceSet : CharSet)
7203:
         Function IsSubSet( const A, B : CharSet) : Boolean
7204:
         Function IsEqual( const A, B : CharSet) : Boolean
Function IsEqual( const A, B : CharSet) : Boolean
Function IsEmpty( const C : CharSet) : Boolean
Function IsComplete( const C : CharSet) : Boolean
Function cCharCount( const C : CharSet) : Integer
7205:
7206:
7207:
7208:
7209:
         Procedure ConvertCaseInsensitive( var C : CharSet)
         Function CaseInsensitiveCharSet( const C : CharSet) : CharSet
7210:
         Function IntRangeLength( const Low, High: Integer) : Int64
Function IntRangeAdjacent( const Low1, High1, Low2, High2 : Integer) : Boolean
Function IntRangeOverlap( const Low1, High1, Low2, High2 : Integer) : Boolean
7211:
7212:
7213:
7214:
         Function IntRangeHasElement( const Low, High, Element : Integer) : Boolean
7215:
         \textbf{Function} \  \, \texttt{IntRangeIncludeElement} ( \  \, \textbf{var} \  \, \texttt{Low}, \  \, \texttt{High} \  \, : \  \, \texttt{Integer}; \  \, \textbf{const} \  \, \texttt{Element} \  \, : \  \, \texttt{Integer}) \  \, : \  \, \texttt{Boolean}
7216:
         \textbf{Function} \  \, \texttt{IntRangeIncludeElementRange} (\textbf{var} \  \, \texttt{Low}, \texttt{High}: \texttt{Integer}; \textbf{const} \  \, \texttt{LowElement}, \texttt{HighElement}: \texttt{Integer}): \texttt{Boolean} \\
         Function CardRangeLength( const Low, High: Cardinal): Int64

Function CardRangeAdjacent( const Low1, High1, Low2, High2: Cardinal): Boolean
7217:
7218:
         Function CardRangeOverlap( const Low1, High1, Low2, High2 : Cardinal) : Boolean
7219:
7220:
         \textbf{Function} \  \, \texttt{CardRangeHasElement} \, ( \  \, \textbf{const} \  \, \texttt{Low}, \  \, \texttt{High}, \  \, \texttt{Element} \, : \, \, \texttt{Cardinal}) \  \, : \, \, \texttt{Boolean}
         Function CardRangeIncludeElement( var Low, High : Cardinal; const Element : Cardinal) : Boolean
Function CardRangeIncludeElementRange(var Low, High: Card; const LowElement, HighElement: Card): Boolean;
7221:
7222:
          AddTypeS('UnicodeChar', 'WideChar
7223:
7224:
         Function Compare( const I1, I2 : Boolean) : TCompareResult;
         Function Compare1( const I1, I2 : Integer) : TCompareResult;
Function Compare2( const I1, I2 : Int64) : TCompareResult;
7225:
7226:
         Function Compare3( const I1, I2 : Extended) : TCompareResult;
7227:
         Function CompareA( const I1, I2 : AnsiString) : TCompareResult
7228:
7229:
         Function CompareW( const I1, I2 : WideString) : TCompareResult
         Function cSgn( const A : LongInt) : Integer;
Function cSgn1( const A : Int64) : Integer;
7230:
7231:
         Function cSgn2( const A : Extended) : Integer;
7233:
         AddTypeS('TConvertResult', '( convertOK, convertFormatError, convertOverflow )
         Function AnsiCharToInt( const A : AnsiChar) : Integer
Function WideCharToInt( const A : WideChar) : Integer
7234:
7235:
         Function CharToInt( const A : Char) : Integer
7236:
         Function IntToAnsiChar( const A : Integer) : AnsiChar
Function IntToWideChar( const A : Integer) : WideChar
7237:
7238:
         Function IntToChar( const A : Integer) : Char
7239:
         Function IsHexMansiChar( const Ch : AnsiChar) : Boolean
Function IsHexWideChar( const Ch : WideChar) : Boolean
7240:
```

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7242:
         Function IsHexChar( const Ch : Char) : Boolean
7243:
         Function HexAnsiCharToInt( const A : AnsiChar) : Integer
         Function HexWideCharToInt( const A : WideChar) : Integer
7245 .
         Function HexCharToInt( const A : Char) : Integer
         Function IntToUpperHexAnsiChar( const A : Integer) : AnsiChar
7246:
         Function IntToUpperHexWideChar( const A : Integer) : WideChar
7247:
         Function IntToUpperHexChar( const A : Integer) : Char
7248:
         Function IntToLowerHexAnsiChar( const A : Integer) : AnsiChar
Function IntToLowerHexWideChar( const A : Integer) : WideChar
7249:
7250:
7251:
         Function IntToLowerHexChar( const A : Integer) : Char
         Function IntToStringA( const A : Int64) : AnsiString
Function IntToStringW( const A : Int64) : WideString
7252:
7254:
         Function IntToString( const A : Int64) : String
         Function UIntToStringA( const A : NativeUInt) : AnsiString
Function UIntToStringW( const A : NativeUInt) : WideString
7255:
7256:
7257:
         Function UIntToString( const A : NativeUInt) : String
         Function LongWordToStrA( const A : LongWord; const Digits : Integer) : AnsiString
7258:
7259 .
         Function LongWordToStrW( const A : LongWord; const Digits : Integer) : WideString
         Function LongWordToStrU( const A : LongWord; const Digits : Integer) : WideString
7260:
         Function LongWordToStr( const A : LongWord; const Digits : Integer) : String
7261:
         Function LongWordToHexA(const A:LongWord;const Digits:Integer;const UpperCase:Boolean):AnsiString;
7262:
         Function LongWordToHexW(const A:LongWord;const Digits:Integer;const UpperCase:Boolean):WideString;
7263:
         Function LongWordToHex( const A : LongWord; const Digits : Integer; const UpperCase:Boolean):String
Function LongWordToOctA( const A : LongWord; const Digits : Integer) : AnsiString
Function LongWordToOctW( const A : LongWord; const Digits : Integer) : WideString
7264:
7265:
7266:
7267:
         Function LongWordToOct( const A : LongWord; const Digits : Integer) : String
7268:
         Function LongWordToBinA( const A : LongWord; const Digits : Integer) : AnsiString Function LongWordToBinW( const A : LongWord; const Digits : Integer) : WideString
7269:
         Function LongWordToBin( const A : LongWord; const Digits : Integer) : String
7270:
         Function TryStringToInt64A( const S : AnsiString; out A : Int64) : Boolean
7271:
7272:
         Function TryStringToInt64W( const S : WideString; out A : Int64) : Boolean
         Function TryStringToInt64( const S : String; out A : Int64) : Boolean
Function StringToInt64DefA( const S : AnsiString; const Default : Int64) : Int64
Function StringToInt64DefW( const S : WideString; const Default : Int64) : Int64
7273:
7274:
7275:
         Function StringToInt64Def( const S : String; const Default : Int64) : Int64
7276:
         Function StringToInt64A( const S : AnsiString) : Int64
Function StringToInt64W( const S : WideString) : Int64
7277:
7278:
7279:
         Function StringToInt64( const S : String) : Int64
         Function TryStringToIntA( const S : AnsiString; out A : Integer) : Boolean Function TryStringToIntW( const S : WideString; out A : Integer) : Boolean
7280:
7281:
7282:
         \textbf{Function} \  \, \texttt{TryStringToInt}( \  \, \textbf{const} \  \, \texttt{S} \  \, \textbf{:} \  \, \textbf{String}; \  \, \textbf{out} \  \, \texttt{A} \  \, \textbf{:} \  \, \texttt{Integer}) \  \, \textbf{:} \  \, \texttt{Boolean}
         Function StringToIntDefA( const S: AnsiString; const Default : Integer) : Integer Function StringToIntDefW( const S: WideString; const Default : Integer) : Integer
7283:
7284:
         Function StringToIntDef( const S : String; const Default : Integer) : Integer
7285:
         Function StringToIntA( const S : AnsiString) : Integer
Function StringToIntW( const S : WideString) : Integer
7286:
7287:
         Function StringToInt( const S : String) : Integer
Function TryStringToLongWordA( const S : AnsiString; out A : LongWord) : Boolean
7288:
7289:
7290:
         Function TryStringToLongWordW( const S : WideString; out A : LongWord) : Boolean
         Function TryStringToLongWord( const S : String; out A : LongWord) : Boolean
Function StringToLongWordA( const S : AnsiString) : LongWord
7291:
7292:
         Function StringToLongWordW( const S : WideString) : LongWord
7293:
         Function StringToLongWord( const S : String) : LongWord
7294:
         Function HexToUIntA( const S : AnsiString) : NativeUInt
Function HexToUIntW( const S : WideString) : NativeUInt
Function HexToUInt( const S : String) : NativeUInt
7295:
7296:
7297:
         Function TryHexToLongWordA( const S : AnsiString; out A : LongWord) : Boolean
Function TryHexToLongWordW( const S : WideString; out A : LongWord) : Boolean
7298:
7299:
7300:
         \textbf{Function} \  \, \texttt{TryHexToLongWord( const S : String; out A : LongWord) : Boolean}
         Function HexToLongWordA( const S : AnsiString) : LongWord
Function HexToLongWordW( const S : WideString) : LongWord
7301:
7302:
7303:
         Function HexToLongWord( const S : String) : LongWord
         Function TryOctToLongWordA( const S : AnsiString; out A : LongWord) : Boolean Function TryOctToLongWordW( const S : WideString; out A : LongWord) : Boolean
7304:
7305:
         Function TryOctToLongWord( const S : String; out A : LongWord) : Boolean
7306:
         Function OctToLongWordA( const S : AnsiString) : LongWord
         Function OctToLongWordW( const S : WideString) : LongWord
7308:
7309:
         \textbf{Function} \ \texttt{OctToLongWord}( \ \textbf{const} \ \texttt{S} \ : \ \textbf{String}) \ : \ \texttt{LongWord}
         Function TryBinToLongWordA( const S : AnsiString; out A : LongWord) : Boolean Function TryBinToLongWordW( const S : WideString; out A : LongWord) : Boolean
7310:
7311:
         Function TryBinToLongWord( const S : String; out A : LongWord) : Boolean
7312:
7313:
         \textbf{Function} \  \, \texttt{BinToLongWordA}(\  \, \textbf{const} \  \, \texttt{S} \  \, \texttt{:} \  \, \texttt{AnsiString}) \  \, \texttt{:} \  \, \texttt{LongWord}
7314:
         Function BinToLongWordW( const S : WideString) : LongWord
         Function BinToLongWord( const S : String) : LongWord
7315:
         Function FloatToStringA( const A : Extended) : AnsiString
7316:
         Function FloatToStringW( const A : Extended) : WideString
7317:
7318:
         Function FloatToString( const A : Extended) : String
         Function TryStringToFloatA( const A : AnsiString; out B : Extended) : Boolean Function TryStringToFloatW( const A : WideString; out B : Extended) : Boolean
7319:
7320:
         Function TryStringToFloat( const A : String; out B : Extended) : Boolean
         Function StringToFloatA( const A : AnsiString) : Extended Function StringToFloatW( const A : WideString) : Extended
7322:
7323:
7324:
         Function StringToFloat( const A : String) : Extended
         Function StringToFloatDefA( const A : AnsiString; const Default : Extended) : Extended
7325:
         Function StringToFloatDefW( const A : WideString; const Default : Extended) : Extended
7326:
7327:
         \textbf{Function} \  \, \texttt{StringToFloatDef( const A : String; const Default : Extended) : Extended}
        Function EncodeBase64(const S,Alphabet:AnsiString; const Pad:Boolean; const PadMultiple:Integer; const
7328:
       PadChar: AnsiChar) : AnsiString
7329: Function DecodeBase64( const S, Alphabet : AnsiString; const PadSet : CharSet) : AnsiString
```

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7330:
         unit uPSI cFundamentUtils;
         Const 'b64_MIMEBase64', 'Str').String('ABCDEFGHIJKLMNOPQRSTUVWXYZabcdefghijklmnopqrstuvwxyz0123456789+/
7331:
         7333:
         Const('CCHARSET','Stringb64_XXEncode);
Const('CHEXSET','String'0123456789ABCDEF
7334:
7335:
         Const('HEXDIGITS','String'0123456789ABCDEF
7336:
         Const('HEXDIGITS','String'0123456789ABCDEF';
StHexDigits : array[0..$F] of Char = '0123456789ABCDEF';
Const('DIGISET','String'0123456789
Const('LETTERSET','String'ABCDEFGHIJKLMNOPQRSTUVWXYZ'
Const('DIGISET2','TCharset').SetSet('0123456789'
7337:
7338:
7339:
7340:
         Const('LETTERSET2','TCharset').SetSet('ABCDEFGHIJKLMNOPQRSTUVWXYZ'
7341:
7342:
         Const('HEXSET2','TCharset').SetSET('0123456789ABCDEF');
         Const('NUMBERSET','TCharset').SetSet('0123456789');
Const('NUMBERS','String'0123456789');
Const('LETTERS','String'ABCDEFGHIJKLMNOPQRSTUVWXYZ');
7343:
7344:
7345:
         Function CharSetToStr( const C : CharSet) : AnsiString
Function StrToCharSet( const S : AnsiString) : CharSet
7346:
7347 .
         Function MIMEBase64Decode( const S : AnsiString) : AnsiString
Function MIMEBase64Encode( const S : AnsiString) : AnsiString
7348:
7349:
         Function UUDecode( const S : AnsiString) : AnsiString
Function XXDecode( const S : AnsiString) : AnsiString
7350:
7351:
7352:
         Function BytesToHex( const P : array of Byte; const UpperCase : Boolean) : AnsiString
         Function InterfaceToStrA( const I : IInterface) : AnsiString
Function InterfaceToStrW( const I : IInterface) : WideString
7353:
7354:
7355:
         Function InterfaceToStr( const I : IInterface) : String
7356:
         Function ObjectClassName( const O : TObject) : String
         Function ClassClassName( const C : TClass) : String
Function ObjectToStr( const O : TObject) : String
7357:
7358:
         Function ObjectToString( const O : TObject) : String
         Function CharSetToStr( const C : CharSet) : AnsiString
7360:
         Function StrToCharSet( const S : AnsiString) : CharSet
7361:
7362: Function HashStrA(const S : AnsiString; const Index : Integer; const Count: Integer; const
       AsciiCaseSensitive : Boolean; const Slots : LongWord) : LongWord
7363: Function HashStrW(const S:WideString;const Index:Integer;const Count:Integer;const
       AsciiCaseSensitive:Boolean; const Slots:LongWord) : LongWord
7364: Function HashStr(const S : String; const Index : Integer; const Count : Integer; const AsciiCaseSensitive : Boolean; const Slots : LongWord) : LongWord
        Function HashLongWord( const I : Integer; const Slots : LongWord) : LongWord
Function HashLongWord( const I : LongWord; const Slots : LongWord) : LongWord
7366:
7367:
         Const('Bytes1KB','LongInt'( 1024);
          SIRegister_IInterface(CL);
7368:
         Procedure SelfTestCFundamentUtils
7369:
7370:
7371: Function CreateSchedule : IJclSchedule
7372: Function NullStamp : TTimeStamp
7373: Function CompareTimeStamps(const Stamp1, Stamp2: TTimeStamp): Int64
7374: Function EqualTimeStamps (const Stamp1, Stamp2: TrimeStamp): Boolean 7375: Function IsNullTimeStamp (const Stamp: TrimeStamp): Boolean
7376:
7377: procedure SIRegister_uwinplot(CL: TPSPascalCompiler);
7378: begin
7379: AddTypeS('TFunc', 'function(X : Float) : Float;
7380: Function InitGraphics( Width, Height: Integer): Boolean
7381: Procedure SetWindow( Canvas: TCanvas; X1, X2, Y1, Y2: Integer; GraphBorder: Boolean)
7382: Procedure SetOxScale( Scale: TScale; OxMin, OxMax, OxStep: Float)
7383: Procedure SetOyScale( Scale: TScale; OyMin, OyMax, OyStep: Float)
7384: Procedure GetOxScale( var Scale : TScale; var OxMin, OxMax, OxStep : Float)
7385: Procedure GetOyScale( var Scale: TScale; var OyMin, OyMax, OyStep: Float) 7386: Procedure SetGraphTitle( Title: String)
7387: Procedure SetOxTitle( Title : String
7388: Procedure SetOyTitle( Title : String
7389: Function GetGraphTitle : String
7390: Function GetOxTitle : String
7391: Function GetOyTitle : String
7392: Procedure PlotOxAxis( Canvas : TCanvas)
7393: Procedure PlotOyAxis( Canvas : TCanvas)
7394: Procedure PlotGrid( Canvas : TCanvas; Grid : TGrid)
7395: Procedure WriteGraphTitle( Canvas : TCanvas)
7396: Function SetMaxCurv( NCurv : Byte) : Boolean
7397: Procedure SetPointParam( CurvIndex, Symbol, Size : Integer; Color : TColor)
7398: Procedure SetLineParam( CurvIndex : Integer; Style : TPenStyle; Width : Integer; Color : TColor)
7399: Procedure SetCurvLegend( CurvIndex : Integer; Legend : String)
7400: Procedure SetCurvStep( CurvIndex, Step : Integer)
7401: Function GetMaxCurv : Byte
7402: Procedure GetPointParam( CurvIndex : Integer; var Symbol, Size : Integer; var Color : TColor)
7403: Procedure GetLineParam(CurvIndex:Integer; var Style:TPenStyle; var Width:Integer; var Color:TColor);
7404: Function GetCurvLegend( CurvIndex : Integer) : String
7405: Function GetCurvStep( CurvIndex : Integer) : Integer
7406: Procedure PlotPoint (Canvas: TCanvas; X, Y: Float; CurvIndex: Integer)
7407: Procedure PlotCurve (Canvas: TCanvas; X, Y: TVector; Lb, Ub, CurvIndex: Integer)
7408: Procedure PlotCurveWithErrorBars(Canvas: TCanvas; X,Y,S: TVector; Ns,Lb,Ub,CurvIndex:Integer)
7409: Procedure PlotFunc(Canvas: TCanvas; Func: TFunc; Xmin,Xmax: Float; Npt,CurvIndex: Integer)
7410: Procedure WriteLegend( Canvas: TCanvas; NCurv: Integer; ShowPoints, ShowLines: Boolean)
7411: Procedure ConRec( Canvas : TCanvas; Nx, Ny, Nc : Integer; X, Y, Z : TVector; F : TMatrix)
7412: Function Xpixel( X : Float) : Integer
7413: Function Ypixel( Y : Float) : Integer
7414: Function Xuser( X : Integer) : Float
7415: Function Yuser( Y : Integer) : Float
```

```
7416: end;
7417:
7418: Procedure FFT( NumSamples : Integer; InArray, OutArray : TCompVector)
7419: Procedure IFFT( NumSamples : Integer; InArray, OutArray : TCompVector)
7420: Procedure FFT_Integer( NumSamples : Integer; RealIn, ImagIn : TIntVector; OutArray : TCompVector)
7421: Procedure FFT Integer Cleanup
7422: Procedure CalcFrequency(NumSamples,FrequencyIndex: Integer;InArray: TCompVector;var FT : Complex)
7423: //unit uPSI JclStreams;
7424: Function StreamSeek( Stream: TStream; const Offset: Int64; const Origin: TSeekOrigin): Int64
7425: Function StreamCopy( Source : TStream; Dest : TStream; BufferSize : Integer) : Int64
7426: Function CompareStreams( A, B : TStream; BufferSize : Integer) : Boolean
7427: Function JCompareFiles( const FileA, FileB: TFileName; BufferSize: Integer): Boolean
7428:
7429: procedure SIRegister FmxUtils(CL: TPSPascalCompiler);
7430: begin
7431: FindClass('TOBJECT'), 'EInvalidDest
      FindClass('TOBJECT'),'EFCantMove
7432:
7433:
      Procedure fmxCopyFile( const FileName, DestName : string)
7434: Procedure fmxMoveFile( const FileName, DestName : string)
7435:
      Function fmxGetFileSize( const FileName : string) : LongInt
       Function fmxFileDateTime( const FileName : string) :
                                                             TDateTime
      Function fmxHasAttr( const FileName : string; Attr : Word) : Boolean
7437:
7438: Function fmxExecuteFile( const FileName, Params, DefaultDir: string; ShowCmd: Integer):THandle;
7439: end;
7440:
7441:
     procedure SIRegister_FindFileIter(CL: TPSPascalCompiler);
7442: begin
7443: STRegister TFindFileTterator(CL);
7444:
      Function CreateFindFile(const Path:string; IncludeAttr:Integer;out iffi:IFindFileIterator):Bool;
7445: end;
7446:
7447: procedure SIRegister PCharUtils(CL: TPSPascalCompiler);
7448: begin
7449: Function SkipWhite(cp: PChar): PChar
       Function ReadStringDoubleQuotedMaybe( cp : PChar; var AStr : string) : PChar
7450:
      Function ReadStringSingleQuotedMaybe( cp : PChar; var AStr : string) : PChar
7451:
7452: Function ReadIdent( cp : PChar; var ident : string) : PChar
7453:
     end;
7454:
7455: procedure SIRegister_JclStrHashMap(CL: TPSPascalCompiler);
7456: begin
       SIRegister TStringHashMapTraits(CL);
7457:
7458:
       Function CaseSensitiveTraits : TStringHashMapTraits
       Function CaseInsensitiveTraits : TStringHashMapTraits
7459:
7460:
       THashNode', 'record Str : string; Ptr : Pointer; Left : PHashNod'
7461:
         +'e; Right : PHashNode; end
        //PHashArray', '^THashArray // will not work
7462:
       SIRegister_TStringHashMap(CL);
7463:
7464:
      THashValue',
                    'Cardinal
      Function StrHash( const s : string) : THashValue
7465:
7466:
      Function TextHash( const s : string) : THashValue
       Function DataHash( var AValue, ASize : Cardinal) : THashValue
7467:
       Function Iterate_FreeObjects( AUserData : Pointer; const AStr : string; var AData : Pointer) : Boolean
7468:
7469:
      Function Iterate_Dispose( AUserData : Pointer; const AStr : string; var AData : Pointer) : Boolean
7470:
      Function Iterate_FreeMem( AUserData : Pointer; const AStr : string; var AData : Pointer) : Boolean
       SIRegister_TCaseSensitiveTraits(CL);
7471:
7472:
       SIRegister_TCaseInsensitiveTraits(CL);
7473:
7474:
7476: Function uExpo( X : Float) : Float
7477:
      Function uExp2( X : Float) : Float
7478:
      Function uExp10( X : Float) : Float
7479:
      Function uLog( X : Float) : Float
      Function uLog2( X : Float) : Float
7480:
      Function uLog10( X : Float) : Float
       Function uLogA( X, A : Float) : Float
7482:
7483:
      \textbf{Function} \  \, \texttt{uIntPower(X:Float;N:Integer):Float}
7484:
      Function uPower( X, Y : Float) : Float
      Function SgnGamma( X : Float) : Integer
Function Stirling( X : Float) : Float
7485:
7486:
7487:
      Function StirLog( X : Float) : Float
      Function Gamma( X : Float) : Float
7488:
7489:
      Function InGamma( X : Float) : Float
      Function DiGamma( X : Float) : Float
7490:
7491:
      Function TriGamma( X : Float) : Float
7492:
      Function IGamma( X : Float) : Float
      Function JGamma( X : Float) : Float
7493:
      Function InvGamma( X : Float) : Float
7494:
7495: Function Erf( X : Float) : Float
7496: Function Erfc( X : Float) : Float
7497: Function Correl(X, Y : TVector; Lb, Ub : Integer) : Float;
7498: { Correlation coefficient between samples X and Y } 7499: function DBeta(A, B, X : Float) : Float;
7500: { Density of Beta distribution with parameters A and B }
7501: Function LambertW( X : Float; UBranch, Offset : Boolean) : Float
7502: Function Beta(X, Y : Float) : Float
7503: Function Binomial( N, K : Integer) : Float
7504: Function PBinom( N : Integer; P : Float; K : Integer) : Float
```

```
7505: Procedure Cholesky( A, L : TMatrix; Lb, Ub : Integer)
7506: Procedure LU_Decomp( A : TMatrix; Lb, Ub : Integer)
7507: Procedure LU_Solve( A : TMatrix; B : TVector; Lb, Ub : Integer; X : TVector)
7508: Function DNorm( X : Float) : Float
7509:
7510: function DGamma(A, B, X : Float) : Float;
7511: { Density of Gamma distribution with parameters A and B } 7512: function DKhi2(Nu : Integer; X : Float) : Float;
7513: { Density of Khi-2 distribution with Nu d.o.f.
7514: function DStudent(Nu : Integer; X : Float) : Float;
7515: { Density of Student distribution with Nu d.o.f. }
7516: function DSnedecor(Nul, Nu2: Integer; X: Float): Float;
7517: { Density of Fisher-Snedecor distribution with Nu1 and Nu2 d.o.f. }
7518: function IBeta(A, B, X : Float) : Float;
7519: { Incomplete Beta function}
7520: function Correl(X, Y : TVector; Lb, Ub : Integer) : Float;
7521:
7522: procedure SIRegister_unlfit(CL: TPSPascalCompiler);
7523: begin
7524:
          Procedure SetOptAlgo( Algo : TOptAlgo)
          procedure SetOptAlgo(Algo : TOptAlgo);
7526:
7527:
             Sets the optimization algorithm according to Algo, which must be
7528:
             NL_MARQ, NL_SIMP, NL_BFGS, NL_SA, NL_GA. Default is NL_MARQ
7529:
7530:
           Function GetOptAlgo : TOptAlgo
7531:
           Procedure SetMaxParam( N : Byte)
7532:
           Function GetMaxParam : Bvte
           Procedure SetParamBounds( I : Byte; ParamMin, ParamMax : Float)
7533:
           Procedure GetParamBounds( I : Byte; var ParamMin, ParamMax : Float)
7535:
           \textbf{Function} \ \ \texttt{NullParam}(\ \ \texttt{B} \ : \ \ \texttt{TVector}; \ \ \texttt{Lb} \,, \ \ \texttt{Ub} \ : \ \ \texttt{Integer}) \ : \ \ \texttt{Boolean}
7536: Procedure NLFit( RegFunc : TRegFunc : TDerivProc : TDerivProc : X, Y : TVector; Lb, Ub : Integer; MaxIter :
          Integer; Tol : Float; B : TVector; FirstPar, LastPar : Integer; V : TMatrix)
           Procedure WNLFit( RegFunc : TRegFunc; DerivProc : TDerivProc; X, Y, S : TVector; Lb, Ub:Integer;
7537:
MaxIter:Integer;Tol: Float; B: TVector; FirstPar, LastPar: Integer; V: TMatrix)
7538: Procedure SetMCFile(FileName: String)
7539: \quad \textbf{Procedure} \quad \texttt{SimFit} (\texttt{RegFunc:TRegFunc;X,Y}:\texttt{TVector;Lb}, \texttt{Ub:Integer;B:TVector;FirstPar}, \texttt{LastPar:Integer;V:TMatrix;FirstPar}, \texttt{LastPar:Integer;V:TMatrix;FirstPar;V:TMatrix;FirstPar;V:TMatrix;FirstPar;V:TMatrix;FirstPar;V:TMatrix;FirstPar;V:TMatrix;FirstPar;V:TMatrix;FirstPar;V:TMatrix;FirstPar;V:TMatrix;FirstPar;V:TMatrix;FirstPar;V:TMatrix;FirstPar;V:TMatrix;FirstPar;V:TMatrix;FirstPar;V:TMatrix;FirstPar;V:TMatrix;First
           Procedure WSimFit(RegFunc:TRegFunc; X,Y,S:TVector;Lb,Ub:Integer;B:TVector;FirstPar,
7540:
          LastPar:Integer;V:TMatrix);
7541: end;
7542:
7543:
7544: procedure SIRegister_usimplex(CL: TPSPascalCompiler);
7545: begin
7546:
           Procedure SaveSimplex( FileName : string)
           Procedure Simplex(Func:TFuncNVar; X:TVector;Lb,Ub:Integer; MaxIter:Integer;Tol:Float; var F_min:Float);
7547:
7548: end;
7549: (*--
7550:
          procedure SIRegister_uregtest(CL: TPSPascalCompiler);
7551: begin
7552: Procedure RegTest(Y,Ycalc: TVector;LbY,UbY:Integer;V:TMatrix;LbV,UbV:Integer;var Test:TRegTest)
           Procedure WRegTest(Y,Ycalc,S:TVector;LbY,UbY:Integer;V:TMatrix;LbV,UbV:Integer;var Test:TRegTest);
7553:
7554:
7555:
7556: procedure SIRegister_ustrings(CL: TPSPascalCompiler);
7557: begin
7558:
           Function LTrim( S : String) : String
           Function RTrim( S : String) : String
7559:
7560:
           Function uTrim( S : String) : String
           Function StrChar( N : Byte; C : Char) : string
Function RFill( S : String; L : Byte) : String
7561:
7562:
7563:
            Function LFill( S : String; L : Byte)
                                                                              : String
7564:
           Function CFill( S : String; L : Byte) : String
           Function Replace(S: String; C1, C2: Char): String
Function Extract(S: String; var Index: Byte; Delim: Char): String
Procedure Parse(S: String; Delim: Char; Field: TStrVector; var N: Byte)
7565:
7566:
            Procedure SetFormat( NumLength, MaxDec : Integer; FloatPoint, NSZero : Boolean)
7568:
           Function FloatStr( X : Float) : String
Function IntStr( N : LongInt) : String
Function uCompStr( Z : Complex) : String
7569:
7570:
7571:
7572: end;
7573:
7574: procedure SIRegister_uhyper(CL: TPSPascalCompiler);
7575: begin
7576: Function uSinh( X : Float) : Float
7577:
            Function uCosh( X : Float) : Float
7578:
           Function uTanh( X : Float) : Float
           Function uArcSinh( X : Float) : Float
7579:
           Function uArcCosh( X : Float) : Float
7580:
           Function ArcTanh( X : Float) : Float
7581:
7582: Procedure SinhCosh( X : Float; var SinhX, CoshX : Float)
7583: end;
7584:
7585: procedure SIRegister_urandom(CL: TPSPascalCompiler);
7586: begin
7587: type RNG_Type =
7588:
              (RNG_MWC,
                                       { Multiply-With-Carry }
               RNG_MT,
                                        { Mersenne Twister }
{ Universal Virtual Array Generator }
7589:
7590:
               RNG UVAG);
```

```
7591:
       Procedure SetRNG( RNG : RNG_Type)
       Procedure InitGen( Seed : RNG_IntType)
7592:
       Procedure SRand( Seed : RNG_IntType)
7594 .
       Function IRanGen : RNG_IntType
7595:
       Function IRanGen31 : RNG IntType
       Function RanGen1 : Float
7596:
       Function RanGen2 : Float
7597:
       Function RanGen3 : Float
7598:
7599: Function RanGen53: Float
7600: end;
7601:
7602: // Optimization by Simulated Annealing
7603: procedure SIRegister_usimann(CL: TPSPascalCompiler);
7604: begin
7605: Procedure InitSAParams( NT, NS, NCycles : Integer; RT : Float)
7606: Procedure SA_CreateLogFile( FileName : String)
       Procedure SimAnn(Func: TFuncNVar; X, Xmin, Xmax: TVector; Lb, Ub: Integer; var F_min: Float);
7607:
7608: end;
7609:
7610: procedure SIRegister_uranuvag(CL: TPSPascalCompiler);
7611: begin
7612: Procedure InitUVAGbyString( KeyPhrase : string)
7613: Procedure InitUVAG( Seed: RNG_IntType)
7614: Function IRanUVAG: RNG_IntType
7615: end;
7616:
7617: procedure SIRegister_ugenalg(CL: TPSPascalCompiler);
7618: begin
       Procedure InitGAParams( NP, NG : Integer; SR, MR, HR : Float)
7619:
       Procedure GA_CreateLogFile( LogFileName : String)
       Procedure GenAlg(Func: TFuncNVar; X, Xmin, Xmax: TVector; Lb, Ub: Integer; var F_min: Float);
7621:
7622: end;
7623:
7624: TVector', 'array of Float
      procedure SIRegister_uqsort(CL: TPSPascalCompiler);
7626: begin
7627: Procedure QSort( X : TVector; Lb, Ub : Integer)
7628: Procedure DQSort( X : TVector; Lb, Ub : Integer)
7629: end;
7630:
7631: procedure SIRegister_uinterv(CL: TPSPascalCompiler);
7632: begin
7633: Procedure Interval( X1, X2 : Float; MinDiv, MaxDiv : Integer; var Min, Max, Step : Float)
       Procedure AutoScale(X: TVector; Lb, Ub : Integer; Scale : TScale; var XMin, XMax, XStep:Float)
7635: end;
7636:
7637: procedure SIRegister D2XXUnit(CL: TPSPascalCompiler);
7638: begin
7639:
        FT_Result', 'Integer //TDWordptr', '^DWord // will not work
7640:
         TFT_Program_Data', 'record Signature1 : DWord; Signature2 : DWor'
d; Version : DWord; VendorID : Word; ProductID : Word; Manufacturer : PCha
7641:
7642:
          r; ManufacturerID : PChar; Description : PChar; SerialNumber : PChar; MaxP
7643:
7644:
          ower : Word; PnP : Word; SelfPowered : Word; RemoteWakeup : Word; Rev4 : B'
          yte; IsoIn : Byte; IsoOut : Byte; PullDownEnable : Byte; SerNumEnable : Byte; USBVersionEnable : Byte; USBVersion : Word; Rev5 : Byte; IsoInA : Byte;
7645:
7646:
          ; IsoInB : Byte; IsoOutA : Byte; IsoOutB : Byte; PullDownEnable5 : Byte; S'
7647:
          erNumEnable5 : Byte; USBVersionEnable5 : Byte; USBVersion5 : Word; AlsHigh'
7648:
          Current : Byte; BIsHighCurrent : Byte; IFAIsFifo : Byte; IFAIsFifoTar : Byte; IFAIsFastSer : Byte; AIsVCP : Byte; IFBIsFifo : Byte; IFBIsFifoTar : Byte; IFBIsFastSer : Byte; BIsVCP : Byte; UseExtOsc : Byte; HighDriveIOs : '
7649:
7650:
7651:
7652:
          Byte; EndpointSize : Byte; PullDownEnableR : Byte; SerNumEnableR : Byte; I'
7653:
          nvertTXD : Byte; InvertRXD : Byte; InvertRTS : Byte; InvertCTS : Byte; Inv
          ertDTR : Byte; InvertDSR : Byte; InvertDCD : Byte; InvertRI : Byte; Cbus0 ': Byte; Cbus1 : Byte; Cbus2 : Byte; Cbus3 : Byte; Cbus4 : Byte; RIsVCP : B'
7654:
7655:
          yte; end
7656:
7657: end;
7658:
7659:
7661: procedure SIRegister_TJvPaintFX(CL: TPSPascalCompiler);
7662: begin
7663:
         //with RegClassS(CL,'TComponent', 'TJvPaintFX') do
         with AddClassN(FindClass('TComponent'),'TJvPaintFX') do begin
7664:
           Procedure Solarize( const Src : TBitmap; var Dst : TBitmap; Amount : Integer)
7665:
            Procedure Posterize( const Src : TBitmap; var Dst : TBitmap; Amount : Integer)
7666:
           Procedure Blend( const Src1, Src2 : TBitmap; var Dst : TBitmap; Amount : Single)
Procedure Blend2( const Src1, Src2 : TBitmap; var Dst : TBitmap; Amount : Single)
Procedure ExtractColor( const Dst : TBitmap; AColor : TColor)
7667:
7668:
7669:
           Procedure ExcludeColor( const Dst : TBitmap; AColor : TColor)
7671:
           Procedure Turn( Src, Dst : TBitmap)
           Procedure TurnRight( Src, Dst : TBitmap)
Procedure HeightMap( const Dst : TBitmap; Amount : Integer)
7672:
7673:
7674:
           Procedure TexturizeTile( const Dst : TBitmap; Amount : Integer)
            Procedure TexturizeOverlap( const Dst : TBitmap; Amount : Integer)
7675:
           Procedure RippleRandom( const Dst : TBitmap; Amount : Integer)
Procedure RippleTooth( const Dst : TBitmap; Amount : Integer)
7676:
7677:
7678:
           Procedure RippleTriangle( const Dst : TBitmap; Amount : Integer)
           Procedure Triangles( const Dst : TBitmap; Amount : Integer)
```

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7680:
           Procedure DrawMandelJulia(const Dst: TBitmap; x0,y0,x1,y1:Single; Niter:Integer; Mandel:Boolean)
7681:
           Procedure FilterXBlue( const Dst : TBitmap; Min, Max : Integer)
            Procedure FilterXGreen( const Dst : TBitmap; Min, Max : Integer)
7682:
7683:
            Procedure FilterXRed( const Dst : TBitmap; Min, Max : Integer)
           Procedure FilterBlue( const Dst : TBitmap; Min, Max : Integer)
7684:
           Procedure FilterGreen( const Dst : TBitmap; Min, Max : Integer)
7685:
           Procedure FilterRed( const Dst : TBitmap; Min, Max : Integer)
7686:
            Procedure Emboss( var Bmp : TBitmap)
7687:
           Procedure Plasma( Src1, Src2, Dst : TBitmap; Scale, Turbulence : Single)
7688:
           Procedure Shake( Src, Dst : TBitmap; Factor : Single)
7689:
           Procedure ShakeDown( Src, Dst : TBitmap; Factor : Single)
Procedure KeepBlue( const Dst : TBitmap; Factor : Single)
7690:
7692:
           Procedure KeepGreen( const Dst : TBitmap; Factor : Single)
           Procedure KeepRed( const Dst : TBitmap; Factor : Single)
Procedure Mandelbrot( const Dst : TBitmap; Factor : Integer)
7693:
7694:
7695:
           Procedure MaskMandelbrot( const Dst : TBitmap; Factor : Integer)
           Procedure FoldRight( Src1, Src2, Dst : TBitmap; Amount : Single)
7696:
           Procedure QuartoOpaque( Src, Dst : TBitmap)
Procedure SemiOpaque( Src, Dst : TBitmap)
7697 :
7698:
7699:
           Procedure ShadowDownLeft( const Dst : TBitmap)
            Procedure ShadowDownRight( const Dst : TBitmap)
7700:
7701:
           Procedure ShadowUpLeft( const Dst : TBitmap)
7702:
           Procedure ShadowUpRight( const Dst : TBitmap)
7703:
           Procedure Darkness (const Dst : TBitmap; Amount : Integer)
           Procedure Trace( const Dst : TBitmap; Intensity : Integer)
7705:
            Procedure FlipRight( const Dst : TBitmap)
7706:
           Procedure FlipDown( const Dst : TBitmap)
           Procedure SpotLight( const Dst : TBitmap; Amount : Integer; Spot : TRect)
Procedure SplitLight( const Dst : TBitmap; Amount : Integer)
7707:
7708:
           Procedure MakeSeamlessClip( var Dst : TBitmap; Seam : Integer)
7709:
           Procedure Wave( const Dst : TBitmap; Amount, Inference, Style : Integer)
Procedure Mosaic( const Bm : TBitmap; Size : Integer)
Procedure SmoothRotate( var Src, Dst : TBitmap; CX, CY : Integer; Angle : Single)
7710:
7711:
7712:
7713:
           Procedure SmoothResize( var Src, Dst : TBitmap)
           Procedure Twist( var Bmp, Dst : TBitmap; Amount : Integer)
7714:
           Procedure SplitBlur( const Dst : TBitmap; Amount : Integer)
7715:
           Procedure GaussianBlur( const Dst : TBitmap; Amount : Integer)
Procedure Smooth( const Dst : TBitmap; Weight : Integer)
7716:
7717:
7718:
           Procedure GrayScale( const Dst : TBitmap)
           Procedure AddColorNoise( const Dst : TBitmap; Amount : Integer)

Procedure AddMonoNoise( const Dst : TBitmap; Amount : Integer)
7719:
7720:
           Procedure Contrast (const Dst : TBitmap; Amount : Integer)
Procedure Lightness (const Dst : TBitmap; Amount : Integer)
7721:
7722:
            Procedure Saturation( const Dst : TBitmap; Amount : Integer)
7723:
7724:
           Procedure Spray( const Dst : TBitmap; Amount : Integer)
7725:
           Procedure AntiAlias( const Dst : TBitmap)
           Procedure AntiAliasRect( const Dst : TBitmap; XOrigin, YOrigin, XFinal, YFinal : Integer)
7726:
           Procedure SmoothPoint( const Dst : TBitmap; XK, YK : Integer)
7728:
           Procedure FishEye( var Bmp, Dst : TBitmap; Amount : Single)
           Procedure Marble( const Src : TBitmap; var Dst : TBitmap; Scale : Single; Turbulence : Integer)

Procedure Marble2( const Src : TBitmap; var Dst : TBitmap; Scale : Single; Turbulence: Integer)
7729:
7730:
7731:
           Procedure Marble3( const Src : TBitmap; var Dst : TBitmap; Scale : Single; Turbulence: Integer)
7732:
           Procedure Marble4( const Src : TBitmap; var Dst : TBitmap; Scale : Single; Turbulence: Integer)
7733:
           Procedure Marble5( const Src : TBitmap; var Dst : TBitmap; Scale : Single; Turbulence: Integer)
7734:
           Procedure Marble6( const Src : TBitmap; var Dst : TBitmap; Scale : Single; Turbulence: Integer)
7735:
           Procedure Marble7( const Src : TBitmap; var Dst : TBitmap; Scale : Single; Turbulence:
                                                                                                                    Integer)
           Procedure Marble8( const Src : TBitmap; var Dst : TBitmap; Scale : Single; Turbulence: Integer)
7736:
7737:
           Procedure SqueezeHor( Src, Dst : TBitmap; Amount : Integer; Style : TLightBrush)
           Procedure SplitRound( Src, Dst : TBitmap; Amount : Integer; Style : TLightBrush)
Procedure Tile( Src, Dst : TBitmap; Amount : Integer)
7738:
7739:
           Procedure Stretch( Src, Dst : TBitmap; Filter : TFilterProc; AWidth : Single)
7740:
7741:
            Procedure Grow( Src1, Src2, Dst : TBitmap; Amount : Single; X, Y : Integer
7742:
           Procedure Invert( Src : TBitmap)
           Procedure MirrorRight( Src : TBitmap)
Procedure MirrorDown( Src : TBitmap)
7743:
7744:
7745:
         end;
7746:
7747:
7748:
7749: procedure SIRegister JvPaintFX(CL: TPSPascalCompiler);
7750:
7751:
         AddTypeS('TLightBrush', '( lbBrightness, lbContrast, lbSaturation, lbFishe'
7752:
          +'ye, lbrotate, lbtwist, lbrimple, mbHor, mbTop, mbBottom, mbDiamond, mbWast'
+'e, mbRound, mbRound2, mbSplitRound, mbSplitWaste )
7753:
         SIRegister_TJvPaintFX(CL);
7754:
7755:
       Function SplineFilter( Value : Single) : Single
7756:
       Function BellFilter( Value : Single) : Single
       Function TriangleFilter( Value : Single) : Single
7757:
       Function BoxFilter( Value : Single) : Single
7758:
       Function HermiteFilter( Value : Single) : Single
Function Lanczos3Filter( Value : Single) : Single
7760:
       Function MitchellFilter( Value : Single) : Single
7761:
7762: end;
7763:
7764:
7765: (*----
7766: procedure SIRegister_Chart(CL: TPSPascalCompiler);
7767: begin
      'TeeMsg_DefaultFunctionName','String 'TeeFunction
```

```
7769:
           TeeMsq DefaultSeriesName', 'String 'Series
           TeeMsg_DefaultTeeFlesName', String 'Series'
TeeMsg_DefaultToolName', 'String 'ChartTool
ChartComponentPalette', 'String 'TeeChart
TeeMaxLegendColumns', LongInt'( 2);
TeeDefaultLegendSymbolWidth', 'LongInt'( 20);
7770:
7771:
7772 •
7773:
            TeeTitleFootDistance,LongInt(5);
7774:
7775:
             SIRegister_TCustomChartWall(CL);
              SIRegister_TChartWall(CL);
7776:
              SIRegister_TChartLegendGradient(CL);
7777:
             TLegendStyle', '( lsAuto, lsSeries, lsValues, lsLastValues, lsSeriesGroups )
TLegendAlignment', '( laLeft, laRight, laTop, laBottom )
FindClass('TOBJECT'),'LegendException
7778:
7779:
7780:
7781:
              TOnGetLegendText', 'Procedure ( Sender : TCustomAxisPanel; Legen'
              rollectLegendrext, Froedure (Sender : ItastomaxisFaher, Legendrext : String)
+ 'dStyle : TLegendStyle; Index : Integer; var LegendText : String)
FindClass('TOBJECT'),'TCustomChartLegend
7782:
7783:
7784:
              TLegendSymbolSize',
                                                  '( lcsPercent, lcsPixels
              TLegendSymbolPosition', '( spLeft, spRight )
7785:
              TSymbolDrawEvent', 'Procedure(Sender:TObject;Series:TChartSeries;ValueIndex:Integer;R:TRect);
TSymbolCalcHeight', 'Function : Integer
7786:
7787:
7788:
              SIRegister_TLegendSymbol(CL);
              SIRegister_TTeeCustomShapePosition(CL);
7789:
7790:
              TCheckBoxesStyle', '( cbsCheck, cbsRadio )
7791:
              SIRegister_TLegendTitle(CL);
7792:
              SIRegister TLegendItem(CL);
7793:
              SIRegister_TLegendItems(CL);
              TLegendCalcSize', 'Procedure ( Sender : TCustomChartLegend; var ASize : Integer) FindClass('TOBJECT'), 'TCustomChart
7794:
7795:
7796:
              SIRegister TCustomChartLegend(CL);
7797:
              SIRegister_TChartLegend(CL);
              SIRegister_TChartTitle(CL);
7798:
7799:
              SIRegister_TChartFootTitle(CL);
             TChartClick', 'Procedure ( Sender : TCustomChart; Button : TMous'
+'eButton; Shift : TShiftState; X, Y : Integer)
7800:
7801:
              TChartClickAxis', 'Procedure ( Sender : TCustomChart; Axis : TCh
7802:
                ChartClickSeries', 'Procedure ( Sender : TCustomChart; Series : '

ChartClickSeries', 'Procedure ( Sender : TCustomChart; Series : '
7803:
7804:
              TChartClickSeries',
7805:
               + TChartSeries; \ ValueIndex : Integer; \ Button: \ TMouseButton; \ Shift: TShiftState; X,Y:Integer) \\
7806:
              TChartClickTitle', 'Procedure ( Sender : TCustomChart; ATitle :
7807:
                +'TChartTitle; Button : TMouseButton; Shift : TShiftState; X,
                                                                                                                              Y : Integer)
             TaxisSavedScales', 'record Auto: Boolean; AutoMin: Boolean; AutoMin: Boolean; AutoMin: Boolean; Min: Double; Max: Double; end
7808:
7809:
7810:
7811:
7812:
              TAllAxisSavedScales', 'array of TAxisSavedScales
              SIRegister_TChartBackWall(CL);
7813:
7814:
              SIRegister TChartRightWall(CL);
              SIRegister_TChartBottomWall(CL);
7815:
              SIRegister_TChartLeftWall(CL);
7816:
              SIRegister_TChartWalls(CL);
7817:
7818:
              TChartAllowScrollEvent', 'Procedure(Sender:TChartAxis;var AMin,AMax:Double;var AllowScroll:Boolean);
7819:
              SIRegister TCustomChart(CL);
7820:
              SIRegister_TChart(CL);
              SIRegister_TTeeSeriesTypes(CL);
7821:
7822:
              SIRegister_TTeeToolTypes(CL);
7823:
              SIRegister_TTeeDragObject(CL);
7824:
              SIRegister TColorPalettes(CL);
7825:
            Procedure RegisterTeeSeries(ASeriesClass:TChartSeriesClass;ADescription,
          AGalleryPage:PString;ANumGallerySeries:Integer;
7826: Procedure RegisterTeeSeries1( ASeriesClass: TChartSeriesClass; ADescription: PString); 7827: Procedure RegisterTeeFunction(AFunctClass:TTeeFunctionClass; ADescription,
          AGalleryPage:PString;ANumGallerySeries: Int;
         Procedure RegisterTeeBasicFunction( AFunctionClass: TTeeFunctionClass: ADescription: PString)
           \textbf{Procedure} \ \texttt{RegisterTeeSeriesFunction(ASeriesClass: TChartSeriesClass; AFunctionClass: TTeeFunctionClass; and the transfer of the trans
7829:
          ADescription, AGalleryPage : PString; ANumGallerySeries : Integer; ASubIndex : Integer)
7830:
           Procedure UnRegisterTeeSeries( const ASeriesList : array of TChartSeriesClass)
            Procedure UnRegisterTeeFunctions( const AFunctionList : array of TTeeFunctionClass)
           Procedure AssignSeries( var OldSeries, NewSeries: TChartSeries)

Function CreateNewTeeFunction( ASeries: TChartSeries; AClass: TTeeFunctionClass): TTeeFunction

Function CreateNewSeries( AOwner: TComponent; AChart: TCustomAxisPanel; AClass: TChartSeriesClass;
7832:
7833:
7834:
         AFunctionClass: TTeeFunctionClass): TChartSeries
Function CloneChartSeries( ASeries: TChartSeries): TChartSeries;
7835:
7836:
           Function CloneChartSeries1( ASeries : TChartSeries; AChart : TCustomAxisPanel) : TChartSeries;
           Function CloneChartSeries2(ASeries:TChartSeries;AOwner:TComponent;AChart:TCustomAxisPanel):TChartSeries;;
Function CloneChartTool(ATool: TTeeCustomTool; AOwner: TComponent): TTeeCustomTool
7837:
7838:
           Function ChangeSeriesType( var ASeries : TChartSeries; NewType : TChartSeriesClass) : TChartSeries Procedure ChangeAllSeriesType( AChart : TCustomChart; AClass : TChartSeriesClass)
7839:
7840:
7841:
            \textbf{Function} \ \ \texttt{GetNewSeriesName} \ ( \ \ \texttt{AOwner} \ : \ \ \texttt{TComponentName} \ ) \ : \ \ \texttt{TComponentName}
           Procedure RegisterTeeTools( const ATools : array of TTeeCustomToolClass)

Procedure UnregisterTeeTools( const ATools : array of TTeeCustomToolClass)
7842:
7843:
            Function GetGallerySeriesName( ASeries : TChartSeries) : String
7845:
           Procedure PaintSeriesLegend(ASeries:TChartSeries; ACanvas:TCanvas; const R:TRect; ReferenceChart:
          TCustomChart);
7846:
             SIRegister TChartTheme(CL);
              //TChartThemeClass', 'class of TChartTheme
7847:
              //TCanvasClass', 'class of TCanvas3D
7848:
           Function SeriesNameOrIndex( ASeries : TCustomChartSeries) : String
Function SeriesTitleOrName( ASeries : TCustomChartSeries) : String
7849:
7850:
           Procedure FillSeriesItems( AItems: TStrings; AList: TCustomSeriesList; UseTitles: Boolean)
7851:
           Procedure ShowMessageUser( const S : String)
```

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7853:
            Function HasNoMandatoryValues( ASeries : TChartSeries) : Boolean
7854:
             Function HasLabels ( ASeries : TChartSeries) : Boolean
             Function HasColors ( ASeries : TChartSeries)
                                                                                                       Boolean
7856
             Function SeriesGuessContents( ASeries : TChartSeries) : TeeFormatFlag
            Procedure TeeDrawBitmapEditor( Canvas: TCanvas; Element: TCustomChartElement; Left, Top: Integer)
7857:
7858: end;
7859:
7860:
7861: procedure SIRegister_TeeProcs(CL: TPSPascalCompiler);
7862: begin
            //'TeeFormBorderStyle',' bsNone);
7863:
               SIRegister_TMetafile(CL);
7865:
               'TeeDefVerticalMargin','LongInt'( 4);
             'TeeDefHorizMargin','LongInt'( 3);
'crTeeHand','LongInt'( TCursor ( 2020 ));
7866:
7867:
7868:
              'TeeMsg_TeeHand','String 'crTeeHand
             'TeeNormalPrintDetail','LongInt'( 0);
7869:
7870 .
              'TeeHighPrintDetail', 'LongInt'( - 100);
              'TeeDefault_PrintMargin', 'LongInt'( 15);
'MaxDefaultColors','LongInt'( 19);
7871:
7872:
               TDateTimeStep', '(dtOneMicroSecond, dtOneMillisecond, dtOneSeco'
7873:
7874:
7875:
                 +'nd, dtFiveSeconds, dtTenSeconds, dtFifteenSeconds, dtThirtySeconds, dtOneM'
                 +'innte, dtFiveMeinutes, dtTenMinutes, dtFifteenMeinutes, dtThirtyMinutes, dtDi
+'neHour, dtTwoHours, dtSixHours, dtTwelveHours, dtOneDay, dtTwoDays, dtThre'
7876:
7878:
                 +'eDays, dtOneWeek, dtHalfMonth, dtOneMonth, dtTwoMonths, dtThreeMonths, dtF'
7879:
                 +'ourMonths, dtSixMonths, dtOneYear, dtNone )
               SIRegister_TCustomPanelNoCaption(CL);
FindClass('TOBJECT'),'TCustomTeePanel
SIRegister_TZoomPanning(CL);
7880:
7881:
7883:
               SIRegister_TTeeEvent(CL);
7884:
                //SIRegister_TTeeEventListeners(CL);
7885:
               TTeeMouseEventKind', '( meDown, meUp, meMove )
               SIRegister_TTeeMouseEvent(CL);
7886:
               SIRegister_TCustomTeePanel(CL);
7888:
               //TChartGradient', 'TTeeGradient
7889:
                //TChartGradientClass', 'class of TChartGradient
7890:
               TPanningMode', '( pmNone, pmHorizontal, pmVertical, pmBoth )
7891:
               SIRegister_TTeeZoomPen(CL);
7892:
               SIRegister_TTeeZoomBrush(CL);
               7893:
7894:
7895:
7896:
7897:
7898:
               //TChartBrushClass', 'class of TChartBrush
SIRegister_TTeeCustomShapeBrushPen(CL);
7899:
               TChartObjectShapeStyle', '( fosRectangle, fosRoundRectangle, fosEllipse )
TTextFormat', '( ttfNormal, ttfHtml )
SIRegister_TTeeCustomShape(CL);
7901:
7902:
7903:
7904:
               SIRegister_TTeeShape(CL);
               SIRegister_TTeeExportData(CL);
7905:
7906:
             Function TeeStr( const Num : Integer) : String
7907:
            Function DateTimeDefaultFormat( const AStep : Double) : String
Function TEEDaysInMonth( Year, Month : Word) : Word
7908:
             Function FindDateTimeStep( const StepValue : Double) : TDateTimeStep
7909:
            Function Principater Intestep (const astervature : Double) : Double

Function NextDateTimeStep (const Astep : Double) : Double

Function PointInLine (const P : TPoint; const px, py, qx, qy : Integer) : Boolean;

Function PointInLine (const P, FromPoint, ToPoint : TPoint) : Boolean;

Function PointInLine (const P, FromPoint, ToPoint: TPoint) : Boolean;
7910:
7911:
7912:
7913:
7914:
             Function PointInLine3( const P : TPoint; const px, py, qx, qy, TolerancePixels:Integer):Boolean;
7915:
             Function PointInPolygon( const P: TPoint; const Poly: array of TPoint): Boolean

Function PointInTriangle( const P, P0, P1, P2: TPoint): Boolean;

Function PointInTriangle( const P: TPoint; X0, X1, Y0, Y1: Integer): Boolean;

Function PointInHorizTriangle( const P: TPoint; Y0, Y1, X0, X1: Integer): Boolean;
7916:
7917:
7919:
            Function PointInEllipse( const P : TPoint; const Rect : TRect) : Boolean;
Function PointInEllipsel( const P: TPoint; Left, Top, Right, Bottom : Integer) : Boolean;
7920:
7921:
            Function DelphiToLocalFormat( const Format : String) : String
Function LocalToDelphiFormat( const Format : String) : String
7922:
7923:
7924:
             Procedure TEEEnableControls(Enable: Boolean; const ControlArray : array of TControl)
7925:
             \textbf{Function} \ \ \texttt{TeeRoundDate}(\textbf{const} \ \ \texttt{ADate} : \ \ \texttt{TDateTime}; \ \ \texttt{AStep} : \ \ \texttt{TDateTimeStep}) : \ \ \texttt{TDateTime}(\textbf{const}) : \ \ \texttt{TDateTime}(
            Procedure TeeDateTimeIncrement(IsDateTime:Boolean;Increment:Boolean;var Value:Double;const
7926:
           AnIncrement:Double; tmpWhichDateTime:TDateTimeStep)
7927 .
               TTeeSortCompare', 'Function ( a, b : Integer) : Integer
7928:
               TTeeSortSwap', 'Procedure (a, b: Integer)
            Procedure TeeSort(StartIndex,EndIndex:Integer;CompareFunc:TTeeSortCompare;SwapFunc:TTeeSortSwap);
7929:
             Function TeeGetUniqueName( AOwner : TComponent; const AStartName : String) : string
7930:
             Function TeeExtractField( St : String; Index : Integer) : String;
             Function TeeExtractField1(St: String; Index: Integer; const Separator: String): String;
7932:
            Function TeeNumFields( St : String) : Integer;
7933:
            Function TecNumFields1( const St, Separator : String) : Integer;

Procedure TeeGetBitmapEditor( AObject : TObject; var Bitmap : TBitmap)
7934:
7935:
             Procedure TeeLoadBitmap( Bitmap: TBitmap; const Name1, Name2: String)
7936:
7937:
             // TColorArray', 'array of TColor
            Function GetDefaultColor( const Index : Integer) : TColor
7938:
7939:
            Procedure SetDefaultColorPalette;
            Procedure SetDefaultColorPalette1( const Palette : array of TColor);
```

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7941:
        'TeeCheckBoxSize', 'LongInt'( 11);
7942:
        Procedure TeeDrawCheckBox(x,y:Integer;Canvas:TCanvas;Checked:Boolean;ABackColor:TColor;CheckBox:Boolean);
        Function TEEStrToFloatDef( const S : string; const Default : Extended) : Extended
7944 .
        \textbf{Function} \  \, \texttt{TryStrToFloat(} \  \, \textbf{const} \  \, \texttt{S} \  \, \textbf{:} \  \, \textbf{String;} \  \, \textbf{var} \  \, \texttt{Value} \  \, \textbf{:} \  \, \texttt{Double)} \  \, \textbf{:} \  \, \texttt{Boolean}
        Function CrossingLines( const X1, Y1, X2, Y2, X3, Y3, X4, Y4 : Double; out x, y : Double) : Boolean
7945:
        Procedure TeeTranslateControl( AControl: TControl);
Procedure TeeTranslateControl1( AControl: TControl; const ExcludeChilds: array of TControl);
7946:
7947:
        Function ReplaceChar( const AString: String; const Search: Char; const Replace: Char)
7948:
        //Procedure RectToFourPoints (const ARect: TRect; const Angle: Double; var P: TFourPoints)
Function TeeAntiAlias (Panel: TCustomTeePanel; ChartRect: Boolean): TBitmap
7949:
7950:
        //Procedure DrawBevel(Canvas:TTeeCanvas;Bevel:TPanelBevel;var R:TRect;Width:Integer;Round:Integer);
7951:
        //Function ScreenRatio( ACanvas : TCanvas3D) : Double
7953:
        Function TeeReadBoolOption( const AKey : String; DefaultValue : Boolean) : Boolean
        Procedure TeeSaveBoolOption( const AKey : String; Value : Boolean)
Function TeeReadIntegerOption( const AKey : String; DefaultValue : Integer) : Integer
7954:
7955:
7956:
        Procedure TeeSaveIntegerOption( const AKey : String; Value : Integer)
        Function TeeReadStringOption( const AKey, DefaultValue : String) : String
7957:
7958 .
        Procedure TeeSaveStringOption( const AKey, Value : String)
7959:
        Function TeeDefaultXMLEncoding : String
7960:
        Procedure ConvertTextToXML( Stream : TStream; XMLHeader : Boolean)
7961:
          TeeWindowHandle', 'Integer
        Procedure TeeGotoURL( Handle : TeeWindowHandle; const URL : String)
7962:
        Procedure HtmlTextOut( ACanvas : TCanvas; x, y : Integer; Text : String)
Function HtmlTextExtent( ACanvas : TCanvas; const Text : String) : TSize
7963:
7964:
7965:
      end;
7966:
7967:
7968: using mXBDEUtils
7969:
7970: Procedure SetAlias( aAlias, aDirectory : String)
        Procedure CheckRegistryEntry(Reg:TRegistry:const Path, Value:String:const Default,
7971:
       Desired: Variant; Size: Byte);
7972: Function GetFileVersionNumber( const FileName : String) : TVersionNo
        Procedure SetBDE( aPath, aNode, aValue : String)
        function RestartDialog(Wnd: HWnd; Reason: PChar; Flags: Integer): Integer; stdcall;
7974:
7975:
        \textbf{Function} \ \ \texttt{GetSystemDirectory}( \ \ \texttt{lpBuffer} \ : \ \textbf{string}; \ \ \texttt{uSize} \ : \ \ \texttt{UINT}) \ : \ \ \texttt{UINT}
7976:
        Function GetSystemDirectoryW( lpBuffer : pchar; uSize : UINT) : UINT
        Function GetTempPath( nBufferLength : DWORD; lpBuffer : string) : DWORD
7977:
        Function GetWindowsDirectoryW( nBufferLength : DWORD; lpBuffer : string)
7979:
        Function GetTempFileName(lpPathName,lpPrefixString:string;uUnique:UINT;lpTempFileName:string):UINT;
7980:
7981:
7982: procedure SIRegister_cDateTime(CL: TPSPascalCompiler);
7983:
       begin
7984: AddClassN(FindClass('TOBJECT'), 'EDateTime
7985: Function DatePart( const D : TDateTime) : Integer
7986: Function TimePart( const D : TDateTime) : Double
7987: Function Century( const D : TDateTime) : Word
7988: Function Year( const D : TDateTime) : Word
7989: Function Month( const D : TDateTime) : Word
7990: Function Day( const D : TDateTime) : Word
7991: Function Hour( const D : TDateTime) : Word
7992: Function Minute( const D : TDateTime) : Word
7993: Function Second( const D : TDateTime) : Word
7994: Function Millisecond( const D : TDateTime) : Word
7995: ('OneDay','Extended').setExtended( 1.0);
7996: ('OneHour','Extended').SetExtended( OneDay / 24);
7997: ('OneMinute', 'Extended').SetExtended(OneHour / 60);
7998:
       ('OneSecond','Extended').SetExtended(OneMinute / 60);
7999: ('OneMillisecond','Extended').SetExtended( OneSecond / 1000);
8000: ('OneWeek','Extended').SetExtended( OneDay * 7);
8001:
        'HoursPerDay', 'Extended').SetExtended( 24);
8002: ('MinutesPerHour','Extended').SetExtended( 60);
8003: ('SecondsPerMinute','Extended').SetExtended( 60);
8004: Procedure SetYear( var D : TDateTime; const Year : Word)
8005: Procedure SetMonth( var D : TDateTime; const Month : Word)
8006: Procedure SetDay( var D : TDateTime; const Day : Word)
8007: Procedure SetHour( var D : TDateTime; const Hour : Word)
8008: Procedure SetMinute( var D : TDateTime; const Minute : Word) 8009: Procedure SetSecond( var D : TDateTime; const Second : Word)
8010: Procedure SetMillisecond( var D : TDateTime; const Milliseconds : Word)
8011: Function IsEqual( const D1, D2: TDateTime): Boolean;
8012: Function IsEqual1( const D1: TDateTime; const Ye, Mo, Da: Word):Boolean;
8013: Function IsEqual2( const D1: TDateTime; const Ho, Mi, Se, ms: Word):Boolean;
8014: Function IsAM( const D : TDateTime) : Boolean 8015: Function IsPM( const D : TDateTime) : Boolean
8016: Function IsMidnight( const D : TDateTime) : Boolean
8017: Function IsNoon( const D : TDateTime) : Boolean
8018: Function IsSunday( const D : TDateTime) : Boolean
8019: Function IsMonday( const D : TDateTime) : Boolean
8020: Function IsTuesday( const D : TDateTime) : Boolean
8021: Function IsWedneday( const D : TDateTime) : Boolean 8022: Function IsThursday( const D : TDateTime) : Boolean
8023: Function IsFriday( const D : TDateTime) : Boolean
8024: Function IsSaturday( const D : TDateTime) : Boolean
8025: Function IsWeekend( const D : TDateTime) : Boolean
8026: Function Noon( const D : TDateTime) : TDateTime
8027: Function Midnight (const D : TDateTime) : TDateTime
8028: Function FirstDayOfMonth( const D : TDateTime) : TDateTime
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8029: Function LastDayOfMonth( const D : TDateTime) : TDateTime
8030: Function NextWorkday( const D : TDateTime) : TDateTime
8031: Function PreviousWorkday( const D : TDateTime) : TDateTime
8032: Function FirstDayOfYear( const D : TDateTime) : TDateTime
8033: Function LastDayOfYear( const D : TDateTime) : TDateTime
8034: Function EasterSunday( const Year : Word) : TDateTime 8035: Function GoodFriday( const Year : Word) : TDateTime
8036: Function AddMilliseconds( const D : TDateTime; const N : Int64) : TDateTime
8037: Function AddSeconds( const D : TDateTime; const N : Int64) : TDateTime 8038: Function AddMinutes( const D : TDateTime; const N : Integer) : TDateTime
8039: Function AddHours( const D : TDateTime; const N : Integer) : TDateTime
8040: Function AddDays( const D : TDateTime; const N : Integer) : TDateTime
8041: Function AddWeeks( const D : TDateTime; const N : Integer) : TDateTime
8042: Function AddMonths( const D : TDateTime; const N : Integer) : TDateTime
8043: Function AddYears( const D : TDateTime; const N : Integer) : TDateTime
8044: Function DayOfYear( const Ye, Mo, Da : Word) : Integer
8045: Function DayOfYear( const D : TDateTime) : Integer
8046: Function DaysInMonth( const Ye, Mo : Word) : Integer 8047: Function DaysInMonth( const D : TDateTime) : Integer
8048: Function DaysInYear( const Ye : Word) : Integer
8049: Function DaysInYearDate( const D : TDateTime) : Integer
8050: Function WeekNumber( const D : TDateTime) : Integer
8051: Function ISOFirstWeekOfYear( const Ye : Word) : TDateTime
8052: Procedure ISOWeekNumber( const D : TDateTime; var WeekNumber, WeekYear : Word)
8053: Function DiffMilliseconds( const D1, D2 : TDateTime) : Int64
8054: Function DiffSeconds( const D1, D2 : TDateTime) : Integer
8055: Function DiffMinutes( const D1, D2 : TDateTime) : Integer
8056: Function DiffHours( const D1, D2 : TDateTime) : Integer
8057: Function DiffDays( const D1, D2 : TDateTime) : Integer
8058: Function DiffWeeks( const D1, D2 : TDateTime) : Integer
8059: Function DiffMonths( const D1, D2 : TDateTime) : Integer
8060: Function DiffYears( const D1, D2 : TDateTime) : Integer
8061: Function GMTBias : Integer
8062: Function GMTTimeToLocalTime( const D : TDateTime) : TDateTime
8063: Function LocalTimeToGMTTime( const D : TDateTime) : TDateTime
8064: Function NowAsGMTTime : TDateTime
8065: Function DateTimeToISO8601String( const D : TDateTime) : AnsiString
8066: Function ISO8601StringToTime( const D : AnsiString) : TDateTime
8067: Function ISO8601StringAsDateTime( const D : AnsiString) : TDateTime
8068: Function DateTimeToANSI( const D : TDateTime) : Integer
8069: Function ANSIToDateTime( const Julian : Integer) : TDateTime
8070: Function DateTimeToISOInteger( const D : TDateTime) : Integer
8071: Function DateTimeToISOString( const D : TDateTime) : AnsiString
8072: Function ISOIntegerToDateTime( const ISOInteger : Integer) : TDateTime
8073: Function TwoDigitRadix2000YearToYear( const Y : Integer) : Integer
8074: Function DateTimeAsElapsedTime(const D:TDateTime; const IncludeMilliseconds:Boolean):AnsiString
8075: Function UnixTimeToDateTime( const UnixTime : LongWord) : TDateTime
8076: Function DateTimeToUnixTime( const D : TDateTime) : LongWord
8077: Function EnglishShortDayOfWeekStrA( const DayOfWeek : Integer)
8078: Function EnglishShortDayOfWeekStrU( const DayOfWeek : Integer) : UnicodeString
8079: Function EnglishLongDayOfWeekStrA( const DayOfWeek : Integer) : AnsiString
8080: Function EnglishLongDayOfWeekStrU( const DayOfWeek : Integer)
                                                                              : UnicodeString
8081: Function EnglishShortMonthStrA( const Month : Integer) : AnsiString
8082: Function EnglishShortMonthStrU( const Month : Integer) : UnicodeString
8083: Function EnglishLongMonthStrA( const Month : Integer) : AnsiString 8084: Function EnglishLongMonthStrU( const Month : Integer) : UnicodeString
8085: Function EnglishShortDayOfWeekA( const S : AnsiString) : Integer
8086: Function EnglishShortDayOfWeekU( const S : UnicodeString) : Integer
8087: Function EnglishLongDayOfWeekA( const S : AnsiString) : Integer 8088: Function EnglishLongDayOfWeekU( const S : UnicodeString) : Integer
8089: Function EnglishShortMonthA( const S : AnsiString) : Integer
8090: Function EnglishShortMonthU( const S : UnicodeString) : Integer
8091: Function EnglishLongMonthA( const S : AnsiString) : Integer
8092: Function EnglishLongMonthU( const S : UnicodeString) : Integer
8093: Function RFC850DayOfWeekA( const S : AnsiString) : Integer 8094: Function RFC850DayOfWeekU( const S : UnicodeString) : Integer
8095: Function RFC1123DayOfWeekA( const S : AnsiString) : Integer 8096: Function RFC1123DayOfWeekU( const S : UnicodeString) : Integer
8097: Function RFCMonthA( const S : AnsiString) : Word 8098: Function RFCMonthU( const S : UnicodeString) : Word
8099: Function GMTTimeToRFC1123TimeA( const D : TDateTime; const IncludeSeconds:Boolean) : AnsiString
8100: Function GMTTimeToRFC1123TimeU( const D : TDateTime; const IncludeSeconds:Boolean) : UnicodeString
8101: Function GMTDateTimeToRFC1123DateTimeA(const D: TDateTime; const IncludeDayOfWeek:Bool):AnsiString;
8102: Function GMTDateTimeToRFC1123DateTimeU(const D:TDateTime;const IncludeDayOfWeek:Bool):UnicodeString;
8103: Function DateTimeToRFCDateTimeA( const D : TDateTime) : AnsiString
8104: Function DateTimeToRFCDateTimeU( const D : TDateTime) : UnicodeString
8105: Function NowAsRFCDateTimeA : AnsiString 8106: Function NowAsRFCDateTimeU : UnicodeString
8107: Function RFCDateTimeToGMTDateTime( const S : AnsiString) : TDateTime
8108: Function RFCDateTimeToDateTime( const S : AnsiString) : TDateTime
8109: Function RFCTimeZoneToGMTBias( const Zone : AnsiString) : Integer
8110: Function TimePeriodStr( const D : TDateTime) : AnsiString
8111: Procedure SelfTest
8112: end;
8114: Function PathHasDriveLetterA( const Path : AnsiString) : Boolean
8115: Function PathHasDriveLetter( const Path : String) : Boolean 8116: Function PathIsDriveLetterA( const Path : AnsiString) : Boolean
8117: Function PathIsDriveLetter( const Path : String) : Boolean
```

```
8118: Function PathIsDriveRootA( const Path : AnsiString) : Boolean
8119: Function PathIsDriveRoot( const Path : String) : Boolean
8120: Function PathIsRootA( const Path : AnsiString)
8121: Function PathIsRoot( const Path : String) : Boolean
8122: Function PathIsUNCPathA( const Path : AnsiString) : Boolean
8123: Function PathIsUNCPath( const Path : String) : Boolean
8124: Function PathIsAbsoluteA( const Path : AnsiString) : Boolean
8125: Function PathIsAbsolute( const Path : String) : Boolean
8126: Function PathIsDirectoryA( const Path : AnsiString) : Boolean
8127: Function PathIsDirectory( const Path : String) : Boolean
8128: Function PathInclSuffixA( const Path : AnsiString; const PathSep : Char) : AnsiString
8129: Function PathInclSuffix( const Path : String; const PathSep : Char) : String
8130: Function PathExclSuffixA( const Path : AnsiString; const PathSep : Char) : AnsiString
8131: Function PathExclSuffix( const Path : String; const PathSep : Char) : String 8132: Procedure PathEnsureSuffixA( var Path : AnsiString; const PathSep : Char)
8133: Procedure PathEnsureSuffix( var Path : String; const PathSep : Char)
8134: Procedure PathEnsureNoSuffixA( var Path : AnsiString; const PathSep : Char)
8135: Procedure PathEnsureNoSuffix( var Path : String; const PathSep : Char)
8136: //Function PathCanonicalA( const Path : AnsiString; const PathSep : Char) : AnsiString
8137: Function PathCanonical( const Path : String; const PathSep : Char) : String
8138: Function PathExpandA(const Path:AnsiString;const BasePath:AnsiString;const PathSep:Char):AnsiString
8139: Function PathExpand( const Path : String; const BasePath : String; const PathSep : Char) : String
8140: Function PathLeftElementA( const Path : AnsiString; const PathSep : Char) : AnsiString
8141: Function PathLeftElement( const Path : String; const PathSep : Char) : String
8142: Procedure PathSplitLeftElementA(const Path:AString; var LeftElement,RightPath:AString; const PathSep:Char);
8143: Procedure PathSplitLeftElement(const Path:String; var LeftElement,RightPath: String;const PathSep:Char);
8144: Procedure DecodeFilePathA(const FilePath:AnsiString; var Path,FileName:AnsiString; const PathSep:Char;
8145: Procedure DecodeFilePath( const FilePath: String; var Path, FileName: String; const PathSep: Char) 8146: Function FileNameValidA( const FileName: AnsiString): AnsiString 8147: Function FileNameValid( const FileName: String): String
8148: Function FilePathA(const FileName,Path:AnsiString;const BasePath:AnsiStr;const PathSep:Char):AnsiString;
8149: Function FilePath(const FileName, Path: String;const BasePath: String;const PathSep : Char) : String
8150: Function DirectoryExpandA(const Path:AnsiString;const BasePath:AnsiString;const PathSep:Char):AnsiString
8151: Function DirectoryExpand(const Path: String; const BasePath: String; const PathSep : Char) : String
8152: Function UnixPathToWinPath( const Path : AnsiString) : AnsiString 8153: Function WinPathToUnixPath( const Path : AnsiString) : AnsiString
8154: Procedure CCopyFile( const FileName, DestName : String) 8155: Procedure CMoveFile( const FileName, DestName : String)
8156: Function CDeleteFiles( const FileMask : String) : Boolean
8157: Function FileSeekEx(const FHandle:TFileHandle;const FileOffset:Int64; const FilePos:TFileSeekPos):Int64;
8158: Procedure FileCloseEx( const FileHandle : TFileHandle)
8159: Function FileExistsA( const FileName : AnsiString) : Boolean
8160: Function CFileExists( const FileName : String) : Boolean
        Function CFileGetSize( const FileName : String) : Int64
8162: Function FileGetDateTime( const FileName : String) : TDateTime 8163: Function FileGetDateTime2( const FileName : String) : TDateTime
8164: Function FileIsReadOnly( const FileName : String) : Boolean
8165: Procedure FileDeleteEx( const FileName : String)
8166: Procedure FileRenameEx( const OldFileName, NewFileName :
                                                                               String)
8167: Function ReadFileStrA( const FileName:AnsiString; const FileSharing: TFileSharing; const FileCreationMode : TFileCreationMode; const FileOpenWait : PFileOpenWait) : AnsiString
8168: Function DirectoryEntryExists( const Name : String) : Boolean
8169: Function DirectoryEntrySize( const Name : String) : Int64
8170: Function CDirectoryExists( const DirectoryName : String) : Boolean
8171: Function DirectoryGetDateTime( const DirectoryName : String) : TDateTime
8172: Procedure CDirectoryCreate( const DirectoryName : String)
8173: Function GetFirstFileNameMatching( const FileMask : String) : String
8174: Function DirEntryGetAttr( const FileName : AnsiString) : Integer
8175: Function DirEntryIsDirectory( const FileName : AnsiString) : Boolean 8176: Function FileHasAttr( const FileName : String; const Attr : Word) : Boolean 8177: AddTypeS('TLogicalDriveType', '( DriveRemovable, DriveFixed, DriveRemote,
           +'DriveCDRom, DriveRamDisk, DriveTypeUnknown )
8179: Function DriveIsValid( const Drive: Char): Boolean
8180: Function DriveGetType( const Path: AnsiString): TLogicalDriveType
8181: Function DriveFreeSpace( const Path: AnsiString): Int64
8183: procedure SIRegister cTimers(CL: TPSPascalCompiler);
8184: begin
8185: AddClassN(FindClass('TOBJECT'),'ETimers
8186: Const('TickFrequency','LongInt'( 1000);Function GetTick: LongWord 8187: Function TickDelta( const D1, D2: LongWord): Integer
8188: Function TickDeltaW( const D1, D2 : LongWord) : LongWord
        AddTypeS('THPTimer',
8189:
                                   'Int64
8190: Procedure StartTimer( var Timer : THPTimer)
8191: Procedure StopTimer( var Timer : THPTimer)
8192: Procedure ResumeTimer( var StoppedTimer: THPTimer)
8193: Procedure InitStoppedTimer( var Timer: THPTimer)
8194: Procedure InitElapsedTimer( var Timer: THPTimer; const Milliseconds: Integer)
8195: Function MillisecondsElapsed( const Timer: THPTimer; const TimerRunning : Boolean) : Integer
8196: Function MicrosecondsElapsed( const Timer: THPTimer; const TimerRunning : Boolean) : Int64
8197: Procedure WaitMicroseconds ( const MicroSeconds : Integer)
8198: Function GetHighPrecisionFrequency : Int64
8199: Function GetHighPrecisionTimerOverhead : Int64
8200: Procedure AdjustTimerForOverhead( var StoppedTimer: THPTimer; const Overhead: Int64)
8201: Procedure SelfTestCTimer
8202: end;
8203:
8204: procedure SIRegister_cRandom(CL: TPSPascalCompiler);
```

```
8206:
                Function RandomSeed : LongWord
                Procedure AddEntropy( const Value : LongWord)
8207:
                 Function RandomUniform : LongWord;
8209:
                 Function RandomUniform1( const N : Integer) : Integer;
8210:
                Function RandomBoolean : Boolean
                Function RandomByte : Byte
8211:
8212:
                Function RandomByteNonZero : Byte
8213:
                 Function RandomWord : Word
                 Function RandomInt64 : Int64;
8214:
8215:
                Function RandomInt641( const N : Int64) : Int64;
8216:
                 Function RandomHex( const Digits : Integer) : String
                 Function RandomFloat : Extended
8217:
8218:
                 Function RandomAlphaStr( const Length : Integer) : AnsiString
                Function RandomPseudoWord( const Length : Integer) : AnsiString
8219:
                Function RandomPassword(const MinL, MaxLength: Int; const CaseSens, UseSymbols, UseNumbers: Bool): AnsiString;
8220:
                Function mwcRandomLongWord : LongWord
Function urnRandomLongWord : LongWord
8221:
8222:
                Function moaRandomFloat : Extended Function mwcRandomFloat : Extended
8222.
8224:
                Function RandomNormalF : Extended
8225:
                Procedure SelfTestCRandom
8227:
8228:
8229: procedure SIRegister SynEditMiscProcs(CL: TPSPascalCompiler);
8230: begin
                // PIntArray', '^TIntArray // will not work
Addtypes('TConvertTabsProc','function(const Line:AnsiString; TabWidth: integer):AnsiString
Addtypes('TConvertTabsProcEx','function(const Line:AnsiString; TabWidth: integer;var HasTabs: boolean):
8231:
8232:
8233:
              AnsiString
              Function synMax(x, y: integer): integer
                Function synMin(x, y : integer) : integer
Function synMin(x, mi, ma : integer) : integer
8235:
8236:
8237:
                Procedure synSwapInt( var 1, r : integer)
                Function symMaxPoint( const Pl, P2 : TPoint) : TPoint
Function symMinPoint( const Pl, P2 : TPoint) : TPoint
8238:
8239:
8240:
                 //Function synGetIntArray( Count : Cardinal; InitialValue : integer) : PIntArray
                Procedure synInternalFillRect( dc : HDC; const rcPaint : TRect)

Function synGetBestConvertTabsProc( TabWidth : integer) : TConvertTabsProc
8241:
8242:
                Function synConvertTabs( const Line : AnsiString; TabWidth : integer) : AnsiString
Function synGetBestConvertTabsProcEx( TabWidth : integer) : TConvertTabsProcEx
8243:
8244:
8245:
                 \textbf{Function} \  \, \text{synConvertTabsEx}(\textbf{const} \  \, \text{Line:AnsiString}; \textbf{TabWidth:integer}; \  \, \textbf{var} \  \, \text{HasTabs:boolean}) : \textbf{AnsiString}; \textbf{TabWidth:integer}; \  \, \textbf{var} \  \, \text{HasTabs:boolean}) : \textbf{AnsiString}; \textbf{TabWidth:integer}; \  \, \textbf{var} \  \, \textbf{HasTabs:boolean}) : \textbf{AnsiString}; \textbf{TabWidth:integer}; \  \, \textbf{var} \  \, \textbf{HasTabs:boolean}) : \textbf{AnsiString}; \textbf{TabWidth:integer}; \  \, \textbf{Var} \  \, \textbf{HasTabs:boolean}) : \textbf{AnsiString}; \textbf{TabWidth:integer}; \  \, \textbf{Var} \  \, \textbf{HasTabs:boolean}) : \textbf{AnsiString}; \textbf{TabWidth:integer}; \  \, \textbf{Var} \  \, \textbf{HasTabs:boolean}; \textbf{AnsiString}; \textbf{TabWidth:integer}; \  \, \textbf{Var} \  \, \textbf{HasTabs:boolean}; \textbf{AnsiString}; \textbf{TabWidth:integer}; \textbf{Var} \  \, \textbf{HasTabs:boolean}; \textbf{AnsiString}; \textbf{TabWidth:integer}; \textbf{Var} \  \, \textbf{HasTabs:boolean}; \textbf{AnsiString}; \textbf{AnsiStrin
                Function synGetExpandedLength( const aStr : string; aTabWidth : integer) : integer
Function synCharIndex2CaretPos( Index, TabWidth : integer; const Line : string) : integer
8246:
8247:
                 Function synCaretPos2CharIndex(Position, TabWidth:int; const Line: string; var InsideTabChar:boolean):int;
8249:
                 \textbf{Function} \  \, \text{synStrScanForCharInSet} \\ (\textbf{const} \  \, \text{Line:} \textbf{string}; \textbf{Start:} \\ \text{integer}; \textbf{AChars:} \\ \textbf{TSynIdentChars}) \\ : \text{integer}; \textbf{AChars:} \\ \textbf{TSynIdentChars}) \\ : \textbf{TSynIdentChars} \\ \text{TSynIdentChars} \\ \text{TSynIdentChars
8250:
                Function synStrRScanForCharInSet(const Line:string;Start:integer;AChars:TSynIdentChars):integer;
                   TStringType', '( stNone, stHalfNumAlpha, stHalfSymbol, stHalfKat' +'akana,stWideNumAlpha,stWideSymbol,stWideKatakana,stHiragana,stIdeograph,stControl,stKashida )
8251:
8252:
8253:
                  ('C3_NONSPACING','LongInt'(1);
8254:
                  'C3_DIACRITIC','LongInt'( 2);
'C3_VOWELMARK','LongInt'( 4);
8255:
                  ('C3_SYMBOL', 'LongInt'( 8);
8256:
                    'C3_KATAKANA', 'LongWord( $0010);
8257:
                    'C3_HIRAGANA','LongWord( $0020);
'C3_HALFWIDTH','LongWord( $0040);
'C3_FULLWIDTH','LongWord( $0080);
8258:
8259:
8260:
                    'C3_IDEOGRAPH', 'LongWord( $0100);
8261:
                    'C3_KASHIDA','LongWord( $0200);
8262:
                   ('C3_LEXICAL','LongWord( $0400);
('C3 ALPHA','LongWord( $8000);
8263:
8264:
                  ('C3_NOTAPPLICABLE','LongInt'( 0);
8265:
8266:
                 Function synStrScanForMultiByteChar( const Line : string; Start : Integer) : Integer
8267:
                Function synStrRScanForMultiByteChar( const Line : string; Start : Integer) : Integer
8268:
                Function synIsStringType( Value : Word) : TStringType
                Function synGetEOL( Line : PChar) : PChar
8269:
                Function synEncodeString( s : string) : string
Function synDecodeString( s : string) : string
8270:
8271:
8272:
                Procedure synFreeAndNil( var Obj: TObject)
8273:
                 Procedure synAssert( Expr : Boolean)
                Function synLastDelimiter( const Delimiters, S : string) : Integer
8274:
8275:
                   TReplaceFlag', '( rfReplaceAll, rfIgnoreCase )
8276:
                   TReplaceFlags', 'set of TReplaceFlag )
8277:
                \begin{tabular}{ll} Function & synStringReplace(const S, OldPattern, NewPattern : string; Flags: TReplaceFlags) : string & Function & synGetRValue( RGBValue : TColor) : byte \\ \end{tabular}
8278:
                 Function synGetGValue( RGBValue : TColor) : byte
8279:
                 Function synGetBValue( RGBValue : TColor)
8280:
                                                                                                                          : byte
                 Function synRGB(r, g, b : Byte) : Cardinal
8281:
                       THighlighterAttriProc', 'Function ( Highlighter : TSynCustomHigh'
/ +'lighter; Attri:TSynHighlighterAttributes;UniqueAttriName:string;Params array of Pointer):Boolean;
8282: //
8283:
8284:
                  //Function synEnumHighlighterAttris( Highlighter : TSynCustomHighlighter; SkipDuplicates : Boolean;
HighlighterAttriProc: THighlighterAttriProc; Params: array of Pointer): Boolean 8285: Function synCalcFCS( const ABuf, ABufSize: Cardinal): Word
                Procedure synSynDrawGradient(const ACanvas:TCanvas:const AStartColor,
8286:
              AEndColor:TColor;ASteps:integer;const ARect : TRect; const AHorizontal : boolean)
8287: end;
8288:
                 Function GET_APPCOMMAND_LPARAM( lParam : LPARAM) : WORD
8289:
8290:
                 Function GET_DEVICE_LPARAM( lParam : LPARAM) : WORD
                 Function GET_KEYSTATE_LPARAM( lParam : LPARAM) : WORD
```

```
8292:
8293: procedure SIRegister_synautil(CL: TPSPascalCompiler);
8294: begin
8295:
        Function STimeZoneBias : integer
        Function TimeZone : string
8296:
        Function Rfc822DateTime( t : TDateTime) : string
8297:
        Function CDateTime( t : TDateTime) : string
8298:
        Function SimpleDateTime( t : TDateTime) : string
Function AnsiCDateTime( t : TDateTime) : string
8299:
8300:
        Function GetMonthNumber( Value : String) : integer
Function GetTimeFromStr( Value : string) : TDateTime
8301:
8302:
        Function GetDateMDYFromStr( Value : string) : TDateTime
8304:
        Function DecodeRfcDateTime( Value : string) : TDateTime
        Function GetUTTime : TDateTime
8305:
        Function SetUTTime( Newdt : TDateTime) : Boolean
8306:
8307:
        Function SGetTick : LongWord
        Function STickDelta( TickOld, TickNew : LongWord) : LongWord
8308:
        Function CodeInt( Value : Word) : Ansistring
Function DecodeInt( const Value : Ansistring; Index : Integer) : Word
Function CodeLongInt( Value : LongInt) : Ansistring
8309:
8310:
8311:
        Function DecodeLongInt( const Value : Ansistring; Index : Integer) : LongInt
8312:
        Function DumpStr( const Buffer : Ansistring) : string
8313:
8314:
        Function DumpExStr( const Buffer : Ansistring) : string
        Procedure Dump( const Buffer : AnsiString; DumpFile : string)
Procedure DumpEx( const Buffer : AnsiString; DumpFile : string)
8315:
8316:
8317:
        Function TrimSPLeft( const S : string) : string
8318:
        Function TrimSPRight( const S : string) : string
        Function TrimSP( const S : string) : string
Function SeparateLeft( const Value, Delimiter : string) : string
8319:
8320:
        Function SeparateRight( const Value, Delimiter : string) : string
8321:
8322:
        Function SGetParameter( const Value, Parameter : string) : string
8323:
        Procedure ParseParametersEx( Value, Delimiter : string; const Parameters : TStrings)
8324:
        Procedure ParseParameters ( Value : string; const Parameters : TStrings)
8325:
        Function IndexByBegin( Value : string; const List : TStrings) : integer
        Function GetEmailAddr( const Value : string) : string
8326:
8327:
        Function GetEmailDesc( Value : string) : string
        Function CStrToHex( const Value : Ansistring) : string
Function CIntToBin( Value : Integer; Digits : Byte) : string
8328:
8329:
8330:
        Function CBinToInt( const Value : string) : Integer
        Function ParseURL( URL : string; var Prot, User, Pass, Host, Port, Path, Para:string):string
8331:
8332:
        Function CReplaceString( Value, Search, Replace : AnsiString) : AnsiString
        Function CRPosEx( const Sub, Value : string; From : integer) : Integer
Function CRPos( const Sub, Value : String) : Integer
8333:
8334:
        Function FetchBin( var Value : string; const Delimiter : string) : string
8335:
        Function CFetch( var Value : string; const Delimiter : string) : string
Function FetchEx( var Value : string; const Delimiter, Quotation : string) : string
8336:
8337:
        Function IsBinaryString( const Value : AnsiString) : Boolean
8338:
        Function PosCRLF( const Value : AnsiString; var Terminator : AnsiString) : integer
8339:
8340:
        Procedure StringsTrim( const value : TStrings)
        Function PosFrom( const SubStr, Value : String; From : integer) : integer
Function IncPoint( const p : ___pointer; Value : integer) : ___pointer
Function GetBetween( const PairBegin, PairEnd, Value : string) : string
8341:
8342:
8343:
        Function CCountOfChar( const Value : string; aChr : char) : integer
8344:
8345:
        Function UnquoteStr( const Value : string; Quote : Char) : string
        Function QuoteStr( const Value : string; Quote : Char) : string
Procedure HeadersToList( const Value : TStrings)
Procedure ListToHeaders( const Value : TStrings)
8346:
8347:
8348:
        Function SwapBytes( Value : integer) : integer
8349:
8350:
        Function ReadStrFromStream( const Stream : TStream; len : integer) : AnsiString
Procedure WriteStrToStream( const Stream : TStream; Value : AnsiString)
8351:
        Function GetTempFile( const Dir, prefix : AnsiString) : AnsiString
8352:
8353:
        Function CPadString( const Value : AnsiString; len : integer; Pad : AnsiChar): AnsiString
8354:
        Function CXorString( Indata1, Indata2 : AnsiString) : AnsiString
        Function NormalizeHeader( Value : TStrings; var Index : Integer) : string
8355:
8356: end;
       procedure SIRegister_StCRC(CL: TPSPascalCompiler);
8358:
8359: begin
       ('CrcBufSize','LongInt'( 2048);
8360:
        Function Adler32Prim( var Data, DataSize : Cardinal; CurCrc : LongInt) : LongInt
8361:
        Function Adler32OfStream( Stream : TStream; CurCrc : LongInt) : LongInt
8362:
8363:
        Function Adler320fFile(FileName : AnsiString) : LongInt
        Function Crc16Prim( var Data, DataSize, CurCrc : Cardinal) : Cardinal
8364:
        Function Crc16OfStream( Stream: TStream; CurCrc: Cardinal): Cardinal Function Crc16OfFile( FileName: AnsiString): Cardinal
8365:
8366:
        Function Crc32Prim( var Data, DataSize : Cardinal; CurCrc : LongInt) : LongInt
8367:
        Function Crc32OfStream( Stream : TStream; CurCrc : LongInt) : LongInt
Function Crc32OfFile( FileName : AnsiString) : LongInt
Function InternetSumPrim( var Data, DataSize, CurCrc : Cardinal) : Cardinal
8368:
8369:
8370:
        Function InternetSumOfStream( Stream: TStream; CurCrc: Cardinal): Cardinal Function InternetSumOfFile( FileName: AnsiString): Cardinal
8372:
        Function Kermit16Prim( var Data, DataSize, CurCrc : Cardinal) : Cardinal
8373:
        Function Kermit160fStream( Stream: TStream; CurCrc: Cardinal) : Cardinal Function Kermit160fFile( FileName : AnsiString) : Cardinal
8374:
8376: end;
8377:
8378: procedure SIRegister_ComObj(cl: TPSPascalCompiler);
8379: begin
8380: function CreateOleObject(const ClassName: String): IDispatch;
```

```
8381:
       function GetActiveOleObject(const ClassName: String): IDispatch;
       function ProgIDToClassID(const ProgID: string): TGUID;
8382:
8383:
       function ClassIDToProgID(const ClassID: TGUID): string
       function CreateClassID: string;
8384:
8385:
       function CreateGUIDString: string;
       function CreateGUIDID: string;
8386:
8387:
       procedure OleError(ErrorCode: longint)
       procedure OleCheck(Result: HResult);
8388:
8389:
      end;
8390:
       Function xCreateOleObject( const ClassName : string) : Variant //or IDispatch
8391:
8392:
       Function xGetActiveOleObject( const ClassName : string) : Variant
8393:
       //Function DllGetClassObject( const CLSID : TCLSID; const IID : TIID; var Obj) : HResult
8394:
       Function DllCanUnloadNow : HResult
       Function DllRegisterServer : HResult
8395:
8396:
       Function DllUnregisterServer : HResult
8397:
       Function VarFromInterface( Unknown : IUnknown) : Variant
       Function VarToInterface( const V : Variant) : IDispatch
Function VarToAutoObject( const V : Variant) : TAutoObject
8398:
8399:
8400:
       //Procedure
      DispInvoke(Dispatch:IDispatch;CallDesc:PCallDesc;DispIDs:PDispIDList;Params:Pointer;Res:PVariant);
8401:
       //Procedure DispInvokeError( Status : HResult; const ExcepInfo : TExcepInfo)
8402:
       Procedure OleError( ErrorCode : HResult)
       Procedure OleCheck( Result : HResult)
8403:
       Function StringToClassID( const S: string) : TCLSID
Function ClassIDToString( const ClassID : TCLSID) : string
8404:
8405:
8406:
       Function xProgIDToClassID( const ProgID : string) : TCLSID
       Function xClassIDToProgID( const ClassID : TCLSID) : string
8407:
       Function xWideCompareStr( const S1, S2 : WideString) : Integer
Function xWideSameStr( const S1, S2 : WideString) : Boolean
8408:
8410:
       Function xGUIDToString( const ClassID : TGUID) : string
       Function xStringToGUID( const S : string) : TGUID
Function xGetModuleName( Module : HMODULE) : string
8411:
8412:
       Function xAcquireExceptionObject : TObject
8413:
       Function xIfThen( AValue : Boolean; const ATrue : Integer; const AFalse : Integer) : Integer
8414:
       Function xUtf8Encode( const WS : WideString) : UTF8String Function xUtf8Decode( const S : UTF8String) : WideString
8415:
8416:
       Function xExcludeTrailingPathDelimiter( const S : string) : string
8417:
       Function xIncludeTrailingPathDelimiter( const S : string) : string
8418:
       Function XRTLHandleCOMException : HResult
8419:
8420:
       Procedure XRTLCheckArgument( Flag : Boolean)
8421:
       //Procedure XRTLCheckOutArgument( out Arg)
8422:
       Procedure XRTLInterfaceConnect(const Source:IUnknown;const IID:TIID;const Sink:IUnknown;var
      Connection:Longint)
8423:
      Procedure XRTLInterfaceDisconnect(const Source: IUnknown; const IID:TIID; var Connection : Longint)
       \textbf{Function} \ \texttt{XRTLRegisterActiveObject}(\textbf{const} \ \texttt{Unk}: \texttt{IUnknown}; \texttt{ClassID}: \texttt{TCLSID}; \texttt{Flags}: \texttt{DWORD}; \textbf{var} \} \\
8424:
      RegisterCookie:Int):HResult
8425: Function XRTLUnRegisterActiveObject( var RegisterCookie : Integer) : HResult
8426:
       //Function XRTLGetActiveObject( ClassID : TCLSID; RIID : TIID; out Obj) : HResult
8427: Procedure XRTLEnumActiveObjects( Strings: TStrings)
8428: {\tt function} XRTLDefaultCategoryManager: IUnknown;
8429: function
                  XRTLIsCategoryEmpty(CatID: TGUID: const CategoryManager: IUnknown = nil): Boolean;
      // ICatRegister helper functions
8431: function XRTLCreateComponentCategory(CatID: TGUID; CatDescription: WideString;
                                                   LocaleID: TLCID = LOCALE_USER_DEFAULT;
8432:
                                                   const CategoryManager: IUnknown = nil): HResult;
8433:
8434: function XRTLRemoveComponentCategory(CatID: TGUID; CatDescription: WideString;
                                                   LocaleID: TLCID = LOCALE_USER_DEFAULT;
8435:
8436: const CategoryManager: IUnknown = nil): HResult;
8437: function XRTLRegisterCLSIDInCategory(ClassID: TGUID; CatID: TGUID;
                                                   const CategoryManager: IUnknown = nil): HResult;
8438:
                 XRTLUnRegisterCLSIDInCategory(ClassID: TGUID; CatID: TGUID;
8439: function
8440:
                                                     const CategoryManager: IUnknown = nil): HResult;
8441: // ICatInformation helper functions
                  XRTLGetCategoryDescription(CatID: TGUID; var CatDescription: WideString;
8442: function
                                                  LocaleID: TLCID = LOCALE_USER_DEFAULT;
8443:
8444:
                                                  const CategoryManager: IUnknown = nil): HResult;
8445: function
                 XRTLGetCategoryList(Strings: TStrings; LocaleID: TLCID = LOCALE_USER_DEFAULT;
                                         const CategoryManager: IUnknown = nil): HResult;
8446:
8447: function XRTLGetCategoryCLSIDList(CatID: TGUID; Strings: TStrings; 8448: const CategoryManager: IUnknown = nil): HResult;
8449: function XRTLGetCategoryProgIDList(CatID: TGUID; Strings: TStrings;
8450:
                                                const CategoryManager: IUnknown = nil): HResult;
8451: function XRTLFetch(var AInput: WideString; const ADelim: WideString = '
8452:
                           const ADelete: Boolean = True): WideString;
8453: function XRTLRPos(const ASub, AIn: WideString; AStart: Integer = -1): Integer; 8454: Function XRTLGetVariantAsString( const Value : Variant) : string 8455: Function XRTLDateTimeToTimeZoneTime( DT : TDateTime; TimeZone : TXRTLTimeZone) : TDateTime
8456: Function XRTLGetTimeZones : TXRTLTimeZones
8457: Function XFileTimeToDateTime( FileTime : TFileTime) : TDateTime
8458: Function DateTimeToFileTime( DateTime : TDateTime) : TFileTime
8459: Function GMTNow : TDateTime
8460: Function GMTToLocalTime( GMT : TDateTime) : TDateTime
8461: Function LocalTimeToGMT( LocalTime : TDateTime) : TDateTime
8462: Procedure XRTLNotImplemented
8463: Procedure XRTLRaiseError( E : Exception)
8464: Procedure XRTLInvalidOperation( ClassName:string; OperationName:string; Description: string)
8465:
8466:
```

```
8467: procedure SIRegister xrtl util Value(CL: TPSPascalCompiler);
8468: begin
          SIRegister_IXRTLValue(CL);
8470:
         SIRegister_TXRTLValue(CL);
          //AddTypeS('PXRTLValueArray', '^TXRTLValueArray // will not work AddTypeS('TXRTLValueArray', 'array of IXRTLValue
8471:
8472: AddTypeS('TXRTLValueArray', 'array of IXRTLValue 8473: Function XRTLValue( const AValue : Cardinal) : IXRTLValue;
8474: Function XRTLSetValue( const IValue : IXRTLValue; const AValue : Cardinal) : Cardinal;
8475: Function XRTLGetAsCardinal( const IValue : IXRTLValue) : Cardinal
8476: Function XRTLGetAsCardinalDef( const IValue : IXRTLValue; const DefValue : Cardinal) : Cardinal 8477: Function XRTLValue( const AValue : Integer) : IXRTLValue;
8478: Function XRTLSetValue1 (const IValue : IXRTLValue; const AValue : Integer) : Integer;
8479: Function XRTLGetAsInteger( const IValue : IXRTLValue) : Integer
8480: Function XRTLGetAsIntegerDef( const IValue : IXRTLValue; const DefValue : Integer) : Integer 8481: Function XRTLValue2( const AValue : Int64) : IXRTLValue;
8482: Function XRTLSetValue2( const IValue : IXRTLValue; const AValue : Int64) : Int64;
8483: Function XRTLGetAsInt64( const IValue : IXRTLValue) : Int64
8484: Function XRTLGetAsInt64Def( const IValue : IXRTLValue; const DefValue : Int64) : Int64
8485: Function XRTLValue3( const AValue : Single) : IXRTLValue;
8486: Function XRTLSetValue3( const IValue : IXRTLValue; const AValue : Single) : Single;
8487: Function XRTLGetAsSingle( const IValue : IXRTLValue) : Single
8488: Function XRTLGetAsSingleDef( const IValue : IXRTLValue; const DefValue : Single) : Single
8489: Function XRTLValue4( const AValue : Double) : IXRTLValue;
8490: Function XRTLSetValue4( const IValue : IXRTLValue; const AValue : Double) : Double; 8491: Function XRTLGetAsDouble( const IValue : IXRTLValue) : Double
8492: Function XRTLGetAsDoubleDef( const IValue : IXRTLValue; const DefValue : Double) : Double
8493: Function XRTLValue5( const AValue : Extended) : IXRTLValue;
8494: Function XRTLSetValue5( const IValue : IXRTLValue; const AValue : Extended) : Extended;
8495: Function XRTLGetAsExtended( const IValue : IXRTLValue) : Extended
8496: Function XRTLGetAsExtendedDef( const IValue : IXRTLValue; const DefValue : Extended) : Extended
8497: Function XRTLValue6( const AValue : IInterface) : IXRTLValue;
8498: Function XRTLSetValue6( const IValue : IXRTLValue; const AValue : IInterface) : IInterface;
8499: Function XRTLGetAsInterface( const IValue : IXRTLValue) : IInterface;
8500: //Function XRTLGetAsInterface1( const IValue : IXRTLValue; out Obj) : IInterface;
8501: Function XRTLGetAsInterfaceDef( const IValue : IXRTLValue; const DefValue : IInterface) : IInterface;
8502: Function XRTLValue7( const AValue : WideString) : IXRTLValue;
8503: Function XRTLSetValue? (const IValue : IXRTLValue; const AValue : WideString) : WideString; 8504: Function XRTLGetAsWideString (const IValue : IXRTLValue) : WideString
8505: Function XRTLGetAsWideStringDef( const IValue : IXRTLValue; const DefValue : WideString) : WideString
8506: Function XRTLValue8( const AValue : TObject; const AOwnValue : Boolean) : IXRTLValue;
8507: Function XRTLSetValue8( const IValue : TXRTLValue; const AValue : TObject) : TObject;
8508: Function XRTLGetAsObject( const IValue : IXRTLValue; const ADetachOwnership : Boolean) : TObject;
8509: Function XRTLGetAsobjectDef(const IValue:IXRTLValue; const DefValue:TObject; const
       ADetachOwnership:Boolean):TObject;
8510: //Function XRTLValue9( const AValue : __Pointer) : IXRTLValue;
8511: //Function XRTLSetValue9( const IValue : IXRTLValue; const AValue : __Pointer) : __Pointer;
8512: //Function XRTLGetAsPointer( const IValue : IXRTLValue) : __Pointer
8513: //Function XRTLGetAsPointerDef( const IValue : IXRTLValue; const DefValue : __Pointer
8514: Function XRTLValueV( const AValue : Variant) : IXRTLValue;
8515: Function XRTLSetValueV( const IValue : IXRTLValue; const AValue : Variant) : Variant; 8516: Function XRTLGetAsVariant( const IValue : IXRTLValue) : Variant
8517: Function XRTLGetAsVariantDef( const IValue : IXRTLValue; const DefValue : Variant) : Variant
8518: Function XRTLValue10( const AValue : Currency) : IXRTLValue;
8519: Function XRTLSetValue10( const IValue : IXRTLValue; const AValue : Currency) : Currency;
8520: Function XRTLGetAsCurrency( const IValue : IXRTLValue) : Currency
8521: Function XRTLGetAsCurrencyDef( const IValue : IXRTLValue; const DefValue : Currency) : Currency
8522: Function XRTLValue11( const AValue : Comp) : IXRTLValue;
8523: Function XRTLSetValue1( const IValue: IXRTLValue; const AValue: Comp): Comp;
8524: Function XRTLGetAsComp( const IValue: IXRTLValue): Comp
8525: Function XRTLGetAsCompDef( const IValue: IXRTLValue; const DefValue: Comp): Comp
8526: Function XRTLValue12( const AValue : TClass) : IXRTLValue;
8527: Function XRTLSetValue12( const IValue : IXRTLValue; const AValue : TClass) : TClass; 8528: Function XRTLGetAsClass( const IValue : IXRTLValue) : TClass
8529: Function XRTLGetAsClassDef( const IValue : IXRTLValue; const DefValue : TClass) : TClass
8530: Function XRTLValue13( const AValue : TGUID) : IXRTLValue;
8531: Function XRTLSetValue13( const IValue : IXRTLValue; const AValue : TGUID) : TGUID; 8532: Function XRTLGetAsGUID( const IValue : IXRTLValue) : TGUID
8533: Function XRTLGetAsGUIDDef( const IValue : IXRTLValue; const DefValue : TGUID) : TGUID
8534: Function XRTLValue14( const AValue : Boolean) : IXRTLValue;
8536: Function XRTLSetValue14( const IValue : IXRTLValue; const AValue : Boolean) : Boolean; 8536: Function XRTLGetAsBoolean( const IValue : IXRTLValue) : Boolean
8537: Function XRTLGetAsBooleanDef( const IValue: IXRTLValue: const DefValue: Boolean) : Boolean
8538: end:
8539:
8541:
        Function Color32( WinColor : TColor) : TColor32;
Function Color321( R, G, B : Byte; A : Byte) : TColor32;
8542:
8543:
        Function Color322( Index : Byte; var Palette : TPalette32) : TColor32;
8544:
        Function Gray32( Intensity : Byte; Alpha : Byte) : TColor32
Function WinColor( Color32 : TColor32) : TColor
8546:
        Function ArrayOfColor32( Colors: array of TColor32): TArrayOfColor32
Procedure Color32ToRGB( Color32: TColor32; var R, G, B: Byte)
8547:
8548:
        Procedure Color32ToRGBA( Color32 : TColor32; var R, G, B, A : Byte)
8549:
        Function Color32Components(R, G, B, A : Boolean) : TColor32Components
Function RedComponent(Color32 : TColor32) : Integer
8551:
        Function GreenComponent( Color32 : TColor32) : Integer
Function BlueComponent( Color32 : TColor32) : Integer
8552:
8553:
        Function AlphaComponent(Color32: TColor32): Integer
```

```
Function Intensity( Color32 : TColor32) : Integer
8555:
         Function SetAlpha( Color32 : TColor32; NewAlpha : Integer) : TColor32
8556:
         Procedure RGBtoHSL( RGB : TColor32; out H, S, L : Single);
8558 .
8559:
         Function HSLtoRGB1( H, S, L : Integer) : TColor32;
         Procedure RGBtoHSL1( RGB : TColor32; out H, S, L : Byte);
Function WinPalette( const P : TPalette32) : HPALETTE
8560:
8561:
         Function FloatPoint( X, Y : Single) : TFloatPoint;
8562:
         Function FloatPoint1 (const P : TPoint) : TFloatPoint;
Function FloatPoint2 (const FXP : TFixedPoint) : TFloatPoint;
8563:
8564:
         Function FixedPoint( X, Y : Integer) : TFixedPoint;
Function FixedPoint1( X, Y : Single) : TFixedPoint;
8565:
         Function FixedPoint2( const P : TPoint) : TFixedPoint;
Function FixedPoint3( const FP : TFloatPoint) : TFixedPoint;
AddTypeS('TRectRounding', '( rrClosest, rrOutside, rrInside )
Function MakeRect( const L, T, R, B : Integer) : TRect;
8567:
8568:
8569:
         Function MakeRect1( const FR : TFloatRect; Rounding : TRectRounding) : TRect;
8571:
         Function MakeRect2( const FXR : TRect; Rounding : TRectRounding) : TRect;
Function GFixedRect( const L, T, R, B : TFixed) : TRect;
Function FixedRect1( const ARect : TRect) : TRect;
8572:
8573:
8574:
          Function FixedRect2( const FR : TFloatRect) : TRect;
8575:
8576:
         Function GFloatRect( const L, T, R, B : TFloat) : TFloatRect;
         Function FloatRect1( const ARect : Trect) : TFloatRect;
Function FloatRect2( const FXR : Trect) : TFloatRect;
8577:
8578:
         Function GIntersectRect( out Dst : TRect; const R1, R2 : TRect) : Boolean;
8579:
8580:
         Function IntersectRect1( out Dst : TFloatRect; const FR1, FR2 : TFloatRect) : Boolean;
8581:
         Function GUnionRect( out Rect : TRect; const R1, R2 : TRect) : Boolean;
Function UnionRect1( out Rect : TFloatRect; const R1, R2 : TFloatRect) : Boolean;
Function GEqualRect( const R1, R2 : TRect) : Boolean;
8582:
8583:
         Function EqualRect1( const R1, R2 : TFloatRect) : Boolean;
8585:
         Procedure GInflateRect( var R : TRect; Dx, Dy : Integer);
         Procedure InflateRect1( var FR : TFloatRect; Dx, Dy : TFloat);
8586:
         Procedure GOffsetRect( var R : TRect; Dx, Dy : Integer);
Procedure OffsetRect1( var FR : TFloatRect; Dx, Dy : TFloat);
8587:
8588:
          Function IsRectEmpty( const R : TRect) : Boolean;
         Function IsRectEmpty1( const FR : TFloatRect) : Boolean;
Function GPtInRect( const R : TRect; const P : TPoint) : Boolean;
Function PtInRect1( const R : TFloatRect; const P : TPoint) : Boolean;
8590:
8591:
8592:
         Function PtInRect2( const R : TRect; const P : TFloatPoint) : Boolean;
Function PtInRect3( const R : TFloatRect; const P : TFloatPoint) : Boolean;
8593:
8594:
         Function EqualRectSize( const R1, R2 : TRect) : Boolean;
Function EqualRectSize1( const R1, R2 : TFloatRect) : Boolean;
Function MessageBeep( uType : UINT) : BOOL
8595:
8596:
8597:
         Function ShowCursor( bShow : BOOL) : Integer
8598:
         Function SetCursorPos( X, Y : Integer) : BOOL
Function SetCursor( hCursor : HICON) : HCURSOR
Function GetCursorPos( var lpPoint : TPoint) : BOOL
//Function ClipCursor( lpRect : PRect) : BOOL
8599:
8600:
8601:
         Function GetClipCursor( var lpRect : TRect) : BOOL
8603:
         Function GetCursor: HCURSOR

Function CreateCaret( hWnd: HWND; hBitmap: HBITMAP; nWidth, nHeight: Integer): BOOL
8604:
8605:
         Function GetCaretBlinkTime : UINT
8606:
         Function SetCaretBlinkTime( uMSeconds : UINT) : BOOL
8607:
8608:
         Function DestroyCaret : BOOL
         Function HideCaret( hWnd : HWND) : BOOL
Function ShowCaret( hWnd : HWND) : BOOL
8609:
8610:
8611:
          Function SetCaretPos( X, Y : Integer) : BOOL
         Function GetCaretPos( var lpPoint : TPoint) : BOOL
8612:
         Function ClientToScreen( hWnd : HWND; var lpPoint : TPoint) : BOOL
Function ScreenToClient( hWnd : HWND; var lpPoint : TPoint) : BOOL
8613:
8614:
         Function MapWindowPoints(hWndFrom,hWndTo:HWND; var lpPoints, cPoints: UINT): Integer
8615:
8616:
          Function WindowFromPoint( Point : TPoint) : HWND
8617:
         Function ChildWindowFromPoint( hWndParent : HWND; Point : TPoint) : HWND
8618:
8619:
8620: procedure SIRegister_GR32_Math(CL: TPSPascalCompiler);
8621:
        begin
8622:
        Function FixedFloor( A : TFixed) : Integer
8623:
         \textbf{Function} \  \, \texttt{FixedCeil(A:TFixed):Integer}
         Function FixedMul( A, B : TFixed) : TFixed
8624:
         Function FixedDiv( A, B : TFixed) : TFixed
8625:
8626:
         Function OneOver( Value : TFixed) : TFixed
         Function FixedRound( A : TFixed) : Integer
8627:
         Function FixedSgr( Value : TFixed) : TFixed
8628:
8629:
         Function FixedSqrtLP( Value : TFixed) : TFixed
         Function FixedSqrtHP( Value : TFixed) : TFixed
8630:
         Function FixedCombine( W, X, Y : TFixed) : TFixed
Procedure GRSinCos( const Theta : TFloat; out Sin, Cos : TFloat);
Procedure GRSinCos1( const Theta, Radius : Single; out Sin, Cos : Single);
8631:
8632:
8633:
         Function GRHypot( const X, Y : TFloat) : TFloat;
Function Hypotl( const X, Y : Integer) : Integer;
8634:
8635:
         Function FastSqrt( const Value : TFloat) : TFloat
8636:
         Function FastSqrtBab1( const Value : TFloat) : TFloat
Function FastSqrtBab2( const Value : TFloat) : TFloat
8637:
8638:
         Function FastInvSqrt( const Value : Single) : Single;
8639:
         Function MulDiv( Multiplicand, Multiplier, Divisor : Integer) : Integer
Function GRIsPowerOf2( Value : Integer) : Boolean
Function PrevPowerOf2( Value : Integer) : Integer
8640:
8641:
8642:
         Function NextPowerOf2( Value : Integer) : Integer
```

```
8644:
        Function Average( A, B : Integer) : Integer
Function GRSign( Value : Integer) : Integer
8645:
        Function FloatMod(x, y : Double) : Double
8647:
8648:
       procedure SIRegister GR32 LowLevel(CL: TPSPascalCompiler);
8649:
8650:
       begin
        Function Clamp( const Value : Integer) : Integer;
8651:
8652:
        Procedure GRFillWord( var X, Count : Cardinal; Value : Longword)
8653:
        Function StackAlloc( Size : Integer) : Pointer
        Procedure StackFree( P : Pointer)
8654:
        Procedure Swap( var A, B : Pointer);
8656:
        Procedure Swap1( var A, B : Integer);
        Procedure Swap2( var A, B : TFixed);
8657:
8658:
        Procedure Swap3( var A, B : TColor32);
8659:
        Procedure TestSwap( var A, B : Integer);
        Procedure TestSwap1( var A, B : TFixed);
8660:
        Function TestClip( var A, B : Integer; const Size : Integer) : Boolean;
Function TestClip1( var A, B : Integer; const Start, Stop : Integer) : Boolean;
Function GRConstrain( const Value, Lo, Hi : Integer) : Integer;
8661:
8662:
8663:
        Function Constrain1( const Value, Lo, Hi : Single) : Single;
        Function SwapConstrain( const Value:Integer; Constrain1,Constrain2:Integer) : Integer
8665:
        Function GRMin( const A, B, C : Integer) : Integer;
Function GRMax( const A, B, C : Integer) : Integer;
8666:
8667:
        Function Clamp( Value, Max : Integer) : Integer;
8668:
        Function Clamp1( Value, Min, Max : Integer) : Integer;
8669:
8670:
        Function Wrap( Value, Max : Integer) : Integer;
8671:
        Function Wrap1( Value, Min, Max : Integer) : Integer;
8672:
        Function Wrap3( Value, Max : Single) : Single;
        Function WrapPow2( Value, Max : Integer) : Integer;
8673:
8674:
        Function WrapPow21( Value, Min, Max : Integer) : Integer;
        Function Mirror( Value, Max : Integer) : Integer;
Function Mirror1( Value, Min, Max : Integer) : Integer;
8675:
8676:
        Function MirrorPow2( Value, Max : Integer) : Integer;
Function MirrorPow21( Value, Min, Max : Integer) : Integer;
8677:
8678:
8679:
        Function GetOptimalWrap( Max : Integer) : TWrapProc;
        Function GetOptimalWrap1( Min, Max : Integer) : TWrapProcEx;
Function GetOptimalMirror( Max : Integer) : TWrapProc;
8680:
8681:
8682:
        Function GetOptimalMirror1( Min, Max : Integer) : TWrapProcEx;
        Function GetWrapProc( WrapMode : TWrapMode) : TWrapProc;
Function GetWrapProc1( WrapMode : TWrapMode; Max : Integer) : TWrapProc;
8683:
8684:
        Function GetWrapProcEx( WrapMode : TWrapMode) : TWrapProcEx;
8685:
        Function GetWrapProcEx1( WrapMode : TWrapMode; Min, Max : Integer):TWrapProcEx;
8686:
        Function Div255( Value : Cardinal) : Cardinal
8688:
        Function SAR_4( Value : Integer) : Integer
8689:
        Function SAR 8( Value : Integer) : Integer
        Function SAR_9( Value : Integer) : Integer
8690:
        Function SAR_11( Value : Integer)
8691:
                                                   : Integer
8692:
        Function SAR_12( Value : Integer)
8693:
        Function SAR 13( Value : Integer) : Integer
8694:
        Function SAR 14( Value : Integer) : Integer
8695:
        Function SAR_15( Value : Integer) : Integer
        Function SAR_16( Value : Integer) : Integer
8696:
8697:
        Function ColorSwap( WinColor : TColor) : TColor32
8698: end;
8699:
8700: procedure SIRegister_GR32_Filters(CL: TPSPascalCompiler);
8701: begin
       AddTypeS('TLogicalOperator', '( loXOR, loAND, loOR )

Procedure CopyComponents( Dst, Src : TCustomBitmap32; Components : TColor32Components);

Procedure CopyComponents1(Dst:TCustomBmap32;DstX,
8702:
8703:
8704:
       DstY:Int;Src:TCustomBmap32;SrcRect:TRect;Components:TColor32Comp;
8705.
        Procedure AlphaToGrayscale( Dst, Src : TCustomBitmap32)
8706:
        Procedure ColorToGrayscale( Dst, Src : TCustomBitmap32; PreserveAlpha : Boolean)
8707:
        Procedure IntensityToAlpha( Dst, Src : TCustomBitmap32)
        Procedure Invert( Dst, Src : TCustomBitmap32; Components : TColor32Components)
8708:
        Procedure InvertRGB( Dst, Src : TCustomBitmap32)
8709:
        Procedure ApplyLUT( Dst, Src : TCustomBitmap32; const LUT : TLUT8; PreserveAlpha : Boolean)
Procedure ChromaKey( ABitmap : TCustomBitmap32; TrColor : TColor32)
8710:
8711:
        Procedure Chromatey( Abrumap : Icustomapia, Icolor : Icolors2; Function CreateBitmask( Components : TColor32Components) : TColor32

Procedure ApplyBitmask(Dst: TCustomBitmap32; DstX,DstY:Integer; Src:TCustomBitmap32; SrcRect : TRect;
8712:
8713:
       Bitmask : TColor32; LogicalOperator : TLogicalOperator);
8714:
       Procedure
       {\tt ApplyBitmask1(ABitmap:TCustomBitmap32;ARect:TRect;Bitmask:TColor32;LogicalOperator:TLogicalOperator);} \\
        Procedure CheckParams( Dst, Src : TCustomBitmap32; ResizeDst : Boolean)
8716: end;
8717:
8718:
8719: procedure SIRegister_JclNTFS(CL: TPSPascalCompiler);
       begin
8721:
         AddClassN(FindClass('TOBJECT'), 'EJclNtfsError
        AddTypeS('TFileCompressionState', '(fcNoCompression, fcDefaultCompression, fcLZNT1Compression)
Function NtfsGetCompression(const FileName: string; var State: Short): Boolean;
Function NtfsGetCompression1(const FileName: string): TFileCompressionState;
8722:
8723:
8724:
        Function NtfsSetCompression( const FileName : string; const State : Short) : Boolean
8725:
8726:
        Procedure NtfsSetFileCompression( const FileName : string; const State : TFileCompressionState)
        Procedure NtfsSetDirectoryTreeCompression(const Directory: string; const State: TFileCompressionState)
Procedure NtfsSetDefaultFileCompression(const Directory: string; const State:TFileCompressionState)
8727:
8728:
        Procedure NtfsSetPathCompression(const Path:string;const State:TFileCompressionState;Recursive:Boolean;
```

```
8730:
          //AddTypeS('TNtfsAllocRanges', 'record Entries : Integer; Data : PFileAlloca' //+'tedRangeBuffer; MoreData : Boolean; end
8731:
         Function NtfsSetSparse( const FileName : string) : Boolean
        Function NtfsZeroDataByHandle( const Handle: THandle; const First, Last: Int64): Boolean Function NtfsZeroDataByName( const FileName: string; const First, Last: Int64): Boolean
8733:
8734:
8735:
         //Function NtfsOueryAllocRanges(const FileName:string;Offset,Count:Int64;var
       Ranges:TNtfsAllocRanges):Boolean;
         //Function NtfsGetAllocRangeEntry( const Ranges : TNtfsAllocRanges
8736:
        Index:Integer):TFileAllocatedRangeBuffer
       Function NtfsSparseStreamsSupported( const Volume : string) : Boolean
Function NtfsGetSparse( const FileName : string) : Boolean
Function NtfsDeleteReparsePoint( const FileName : string; ReparseTag : DWORD) : Boolean
8738:
8740:
         Function NtfsSetReparsePoint( const FileName : string; var ReparseData, Size : Longword) : Boolean
        //Function NtfsGetReparsePoint(const FileName:string; var ReparseData:TReparseGuidDataBuffer):Boolean Function NtfsGetReparseTag( const Path : string; var Tag : DWORD) : Boolean
8741:
8742:
8743:
         Function NtfsReparsePointsSupported( const Volume : string) : Boolean
         Function NtfsFileHasReparsePoint( const Path : string) : Boolean
8744:
8745 .
         \textbf{Function} \  \, \texttt{NtfsIsFolderMountPoint} ( \  \, \textbf{const} \  \, \texttt{Path} \  \, : \  \, \textbf{string}) \  \, : \  \, \texttt{Boolean}
         Function NtfsMountDeviceAsDrive( const Device : string; Drive : Char) : Boolean
8746:
8747:
        Function NtfsMountVolume ( const Volume : Char; const MountPoint : string) : Boolean
8748:
          AddTypeS('TOpLock',
                                        olExclusive, olReadOnly, olBatch, olFilter
         Function NtfsOpLockAckClosePending( Handle: THandle: Overlapped: TOverlapped): Boolean
8749:
8750:
         \textbf{Function} \  \, \texttt{NtfsOpLockBreakAckNo2( Handle : THandle; Overlapped : Toverlapped) : Boolean} \\
         Function NtfsOpLockBreakAcknowledge( Handle : THandle; Overlapped : TOverlapped) : Boolean
8751:
         Function NtfsOpLockBreakNotify( Handle : THandle; Overlapped : TOverlapped) : Boolean
8752:
8753:
         Function NtfsRequestOpLock( Handle : THandle; Kind : TOpLock; Overlapped : TOverlapped) : Boolean
8754:
         \textbf{Function } \texttt{NtfsCreateJunctionPoint}( \textbf{ const } \texttt{Source}, \texttt{ Destination } : \textbf{ string}) : \texttt{Boolean}
        Function NtfsDeleteJunctionPoint( const Source : string) : Boolean
Function NtfsGetJunctionPointDestination( const Source : string; var Destination : string) : Boolean
8755:
8756:
          AddTypeS('TStreamId', '( siInvalid, siStandard, siExtendedAttribute, siSec'
8757:
            +'urity, siAlternate, siHardLink, siProperty, siObjectIdentifier, siReparsePoints, siSparseFile )
8758:
          AddTypeS('TStreamIds', 'set of TStreamId
8759:
          AddTypeS('TInternalFindStreamData', 'record FileHandle : THandle; Context '
8760:
          +': __Pointer; StreamIds: TStreamIds; end
AddTypeS('TFindStreamData', 'record internal: TInternalFindStreamData; At'
8761:
8762:
8763:
           +'tributes : DWORD; StreamID : TStreamId; Name : WideString; Size : Int64; end
8764:
         Function NtfsFindFirstStream(const FileName:string;StreamIds:TStreamIds;var Data:TFindStreamData):Boolean;
        Function NtfsFindNextStream( var Data : TFindStreamData) : Boolean
Function NtfsFindStreamClose( var Data : TFindStreamData) : Boolean
8765:
8766:
8767:
         Function NtfsCreateHardLink( const LinkFileName, ExistingFileName : string) : Boolean
        AddTypeS('TNtfsHardLinkInfo', 'record LinkCount : Cardinal; FileIndex : Int64; end
Function NtfsGetHardLinkInfo( const FileName : string; var Info : TNtfsHardLinkInfo) : Boolean
Function NtfsFindHardLinks(const Path:string; const FileIndexHigh, FileIndexLow:Cardinal; const
8768:
8769:
8770:
       List:TStrings):Bool;
        \textbf{Function} \  \, \texttt{NtfsDeleteHardLinks} ( \  \, \textbf{const} \  \, \texttt{FileName} \  \, : \  \, \textbf{string}) \  \, : \  \, \texttt{Boolean}
        Function JclAppInstances: TJclAppInstances;
Function JclAppInstances1( const UniqueAppIdGuidStr : string) : TJclAppInstances;
8772:
8773:
         Function ReadMessageCheck( var Message: TMessage; const IgnoredOriginatorWnd: HWND) : TJclAppInstDataKind
        Procedure ReadMessageData( const Message: TMessage; var Data: __Pointer; var Size: Integer)
Procedure ReadMessageString( const Message: TMessage; var S: string)
Procedure ReadMessageStrings( const Message: TMessage; const Strings: TStrings)
8775:
8776:
8777:
8778:
8779:
8780:
8781:
       procedure SIRegister_JclGraphics(CL: TPSPascalCompiler);
8782:
       begin
          FindClass('TOBJECT'),'EJclGraphicsError
8783:
          TDynDynIntegerArrayArray', 'array of TDynIntegerArray
TDynPointArray', 'array of TPoint
8784:
8785:
          TDynDynPointArrayArray', 'array of TDynDointArray
TPointF', 'record X : Single; Y : Single; end
8786:
8787:
          TDynPointArrayF', 'array of TPointF
8788:
          TDrawMode2', '( dmOpaque, dmBlend )
8789:
          TStretchFilter2', '( sfNearest, sfLinear, sfSpline )
TConversionKind', '( ckRed, ckGreen, ckBlue, ckAlpha, ckUniformRGB, ckWeightedRGB )
TResamplingFilter', '( rfBox, rfTriangle, rfHermite, rfBell, rfSpline, rfLanczos3, rfMitchell )
8790:
8791:
8792:
8793:
          TMatrix3d', 'record array[0..2,0..2] of extended end
8794:
          TDynDynPointArrayArrayF', 'array of TDynPointArrayF
          TScanLine', 'array of Integer
TScanLines', 'array of TScanLi
8795:
                            'array of TScanLine
8796:
8797:
          TColorChannel', '( ccRed, ccGreen, ccBlue, ccAlpha )
8798:
          TGradientDirection', '( gdVertical, gdHorizontal )
          TPolyFillMode', '( fmAlternate, fmWinding )
TJclRegionCombineOperator', '( coAnd, coDiff, coOr, coXor )
8799:
8800:
          TJclRegionKind', '( rkNull, rkSimple, rkComplex, rkError )
8801:
8802:
8803:
          SIRegister_TJclDesktopCanvas(CL);
          FindClass('TOBJECT'),'TJclRegion
SIRegister_TJclRegionInfo(CL);
8804:
8805:
          SIRegister_TJclRegion(CL);
8806:
8807:
          SIRegister_TJclThreadPersistent(CL);
8808:
          SIRegister_TJclCustomMap(CL);
          SIRegister_TJclBitmap32(CL);
8809:
8810:
          SIRegister_TJclByteMap(CL);
          SIRegister_TJclTransformation(CL);
8811:
8812:
          SIRegister TJclLinearTransformation(CL);
8813:
        Procedure Stretch (NewWidth.
       NewHeight:Card;Filter:TResamplingFilter;Radius:Single;Source:TGraphic;Target:TBitmap);
8814: Procedure Stretch1(NewWidth,NewHeight:Cardinal;Filter:TResamplingFilter;Radius:Single;Bitmap:TBitmap);
```

```
Procedure DrawBitmap( DC : HDC; Bitmap : HBitMap; X, Y, Width, Height : Integer)
Function GetAntialiasedBitmap( const Bitmap : TBitmap) : TBitmap
8815:
8816:
        Procedure BitmapToJPeg( const FileName : string)
8818:
        Procedure JPegToBitmap( const FileName : string)
        Function ExtractIconCount( const FileName : string) : Integer
Function BitmapToIconJ( Bitmap : HBITMAP; cx, cy : Integer) : HICON
Function IconToBitmapJ( Icon : HICON) : HBITMAP
8819:
8820:
8821:
8822:
       BlockTransfer(Dst:TJclBitmap32;DstX:Int;DstY:Int;Src:TJclBitmap32;SrcRect:TRect;CombineOp:TDrawMode)
       Procedure StretchTransfer(Dst:TJclBitmap32;
       DstRect:TRect;Src:TJclBitmap32;SrcRect:TRect;StretchFilter:TStretchFilter; CombineOp : TDrawMode)
       Procedure Transform( Dst, Src : TJclBitmap32; SrcRect : TRect; Transformation : TJclTransformation)
        Procedure SetBorderTransparent( ABitmap : TJclBitmap32; ARect : TRect)
Function FillGradient(DC:HDC; ARect:TRect; ColorCount:Integer; StartColor,EndColor:TColor;ADirection :
8825:
8826:
       TGradientDirection) : Boolean;
        Function CreateRegionFromBitmap(Bitmap: TBitmap; RegionColor:TColor;
       RegionBitmapMode: TJclRegionBitmapMode): HRGN
       Procedure ScreenShot( bm : TBitmap; Left, Top, Width, Height : Integer; Window : HWND);
Procedure ScreenShot1( bm : TBitmap);
8828.
8829:
        Procedure PolyLineTS( Bitmap : TJclBitmap32; const Points : TDynPointArray; Color : TColor32)
8830:
        Procedure PolyLineAS( Bitmap : TJclBitmap32; const Points : TDynPointArray; Color : TColor32
        Procedure PolyLineFS( Bitmap : TJclBitmap32; const Points : TDynPointArrayF; Color : TColor32)
8832:
        Procedure PolygonTS( Bitmap : TJclBitmap32; const Points : TDynPointArray; Color : TColor32)
Procedure PolygonAS( Bitmap : TJclBitmap32; const Points : TDynPointArray; Color : TColor32)
8833:
8834:
        Procedure PolygonFS( Bitmap : TJclBitmap32; const Points : TDynPointArrayF; Color : TColor32)
8835:
8836:
        Procedure PolyPolygonTS(Bitmap:TJclBitmap32;const Points:TDynDynPointArrayArray;Color:TColor32);
8837:
        Procedure PolyPolygonAS(Bitmap:TJclBitmap32;const Points:TDynDynPointArrayArray;Color:TColor32);
8838:
        Procedure PolyPolygonFS(Bitmap:TJclBitmap32;const Points:TDynDynPointArrayArrayF;Color:TColor32);
        Procedure AlphaToGrayscale(Dst, Src : TJclBitmap32)
Procedure IntensityToAlpha(Dst, Src : TJclBitmap32)
8839:
8841:
        Procedure Invert( Dst, Src : TJclBitmap32)
        Procedure InvertRGB( Dst, Src : TJclBitmap32)
8842:
        Procedure ColorToGrayscale( Dst, Src : TJclBitmap32)
8843:
        Procedure ApplyLUT( Dst, Src : TJclBitmap32; const LUT : TLUT8)
8844:
        Procedure SetGamma ( Gamma : Single)
8845:
8846:
       end;
8847:
8848:
8849:
       procedure SIRegister_JclSynch(CL: TPSPascalCompiler);
8850:
8851:
        Function LockedAdd( var Target : Integer; Value : Integer) : Integer
        Function LockedCompareExchange( var Target : Integer; Exch, Comp : Integer) : Integer;
Function LockedCompareExchange( var Target : ___Pointer; Exch, Comp : ___Pointer) : Pointer) : Pointer) : Pointer;
8852:
                                                                                                    ___Pointer) : Pointer;
8853:
        Function LockedDec( var Target : Integer) : Integer
8855:
        \textbf{Function} \  \, \texttt{LockedExchange( var Target : Integer; Value : Integer) : Integer}
        Function LockedExchangeAdd( var Target : Integer; Value : Integer) : Integer
Function LockedExchangeDec( var Target : Integer) : Integer
8856:
8857:
        Function LockedExchangeInc( var Target : Integer) : Integer
8859:
        Function LockedExchangeSub( var Target : Integer; Value : Integer) : Integer
8860:
        Function LockedInc( var Target : Integer) : Integer
Function LockedSub( var Target : Integer; Value : Integer) : Integer
8861:
         TJclWaitResult', '( wrAbandoned, wrError, wrIoCompletion, wrSignaled, wrTimeout )
8862:
          SIRegister_TJclDispatcherObject(CL);
        Function WaitForMultipleObjects(const Objects:array of
8864:
       TJclDispatcherObject; WaitAll: Bool; TimeOut: Cardinal): Cardinal;
       Function WaitAlertableForMultipleObjects(const Objects : array of TJclDispatcherObject; WaitAll:Bool;
8865:
       TimeOut : Cardinal):Cardinal
8866:
         SIRegister_TJclCriticalSection(CL);
8867:
          SIRegister_TJclCriticalSectionEx(CL);
          SIRegister_TJclEvent(CL);
8868:
8869:
          SIRegister_TJclWaitableTimer(CL);
8870:
          SIRegister_TJclSemaphore(CL);
8871:
          SIRegister_TJclMutex(CL);
         TOptexSharedInfo', ''TOptexSharedInfo // will not work
TOptexSharedInfo', 'record SpinCount:Int; LockCount: Int; ThreadId:Longword; RecursionCount:Int; end
8872:
8873:
8874:
          SIRegister_TJclOptex(CL);
         TMrewPreferred', '( mpReaders, mpWriters, mpEqual )
TMrewThreadInfo', 'record ThreadId : Longword; RecursionCount: Integer; Reader : Boolean; end
8875:
8876:
          TMrewThreadInfoArray', 'array of TMrewThreadInfo
8877:
8878:
          SIRegister_TJclMultiReadExclusiveWrite(CL);
         TMetSectSharedInfo', 'TMetSectSharedInfo // will not work
TMetSectSharedInfo', 'record Initialized : LongBool; SpinLock : '
8879:
8880:
         +'Longint; ThreadsWaiting: Longint; AvailableCount: Longint; MaximumCount: Longint; end PMeteredSection', '^TMeteredSection // will not work
8881:
8882:
                                'record Event : THandle; FileMap : THandle; SharedInfo : PMetSectSharedInfo; end
8883:
          TMeteredSection',
          SIRegister_TJclMeteredSection(CL);
8884:
         TEventInfo', 'record EventType : Longint; Signaled : LongBool; end
TMutexInfo', 'record SignalState : Longint; Owned : Boolean; Abandoned : Boolean; end
8885:
8886:
         TSemaphoreCounts', 'record CurrentCount: Longint; MaximumCount: Longint; end
8887:
        TTimerInfo', 'record Remaining: TLargeInteque; Signaled: LongBool; end

Function QueryCriticalSection( CS: TJclCriticalSection; var Info: TRTLCriticalSection): Boolean
8888:
8889:
        Function QueryEvent( Handle : THandle; var Info : TEventInfo) : Boolean Function QueryMutex( Handle : THandle; var Info : TMutexInfo) : Boolean
8890:
8891:
        Function QuerySemaphore( Handle : THandle: var Info : TSemaphoreCounts) : Boolean
8892:
        Function QueryTimer( Handle : THandle; var Info : TTimerInfo) : Boolean
8893:
         FindClass('TOBJECT'), 'EJclWin32HandleObjectError
FindClass('TOBJECT'), 'EJclDispatcherObjectError
FindClass('TOBJECT'), 'EJclCriticalSectionError
8894:
8895:
8896:
         FindClass('TOBJECT'),'EJclEventError
```

```
8898:
        FindClass('TOBJECT'), 'EJclWaitableTimerError
        FindClass('TOBJECT'), 'EJclSemaphoreError
FindClass('TOBJECT'), 'EJclMutexError
8899:
8900:
8901 .
        FindClass('TOBJECT'),'EJclMeteredSectionError
8902: end;
8903:
8904:
       8905:
8906: Procedure SetCurrentPrinterAsDefault
8907: Function CurrentPrinterName : string
8908: Function mCurrentPrinterPaperSize : string
8909: Procedure UseDefaultPrinter
8910:
8911: procedure SIRegisterTSTREAM(Cl: TPSPascalCompiler);
8912: begin
8913:
        with FindClass('TOBJECT'), 'TStream') do begin
8914:
           IsAbstract := True;
8915
          //RegisterMethod('Function Read( var Buffer, Count : Longint) : Longint
          /// RegisterMethod('Function Write( const Buffer, Count : Longint) : Longint function Read(Buffer:String;Count:LongInt):LongInt
8916:
8917:
           function Write(Buffer:String;Count:LongInt):LongInt
8918:
8919:
           function ReadString(Buffer:String;Count:LongInt):LongInt
                                                                              //FileStream
8920:
           \textbf{function} \ \texttt{WriteString}(\texttt{Buffer:} \textbf{String}; \texttt{Count:} \texttt{LongInt}) : \texttt{LongInt}
8921:
           function ReadInt(Buffer:integer;Count:LongInt):LongInt
           function WriteInt(Buffer:integer;Count:LongInt):LongInt
8922:
8923:
           function ReadByteArray(Buffer:TByteArray;Count:LongInt):LongInt');
8924:
           function WriteByteArray(Buffer:TByteArray;Count:LongInt):LongInt');
8925:
8926:
           procedure ReadAB(Buffer: TByteArray;Count:LongInt)
          procedure WriteAB(Buffer: TByteArray;Count:LongInt)
8927:
8928:
           procedure ReadABD(Buffer: TByteDynArray;Count:LongInt)
8929:
           procedure WriteABD(Buffer: TByteDynArray;Count:LongInt)
8930:
           procedure ReadAC(Buffer: TCharArray;Count:LongInt)
          procedure WriteAC(Buffer: TcharArray;Count:LongInt)
procedure ReadACD(Buffer: TCharDynArray;Count:LongInt)
8931:
8932:
8933:
           procedure WriteACD(Buffer: TCharDynArray;Count:LongInt)
8934:
8935:
           function Seek(Offset:LongInt;Origin:Word):LongInt
8936:
           procedure ReadBuffer(Buffer:String;Count:LongInt)
8937:
           procedure WriteBuffer(Buffer:String;Count:LongInt)
8938:
           procedure ReadBufferInt(Buffer:Integer;Count:LongInt)');
           procedure WriteBufferInt(Buffer:Integer;Count:LongInt)');
8939:
8940:
           procedure ReadBufferFloat(Buffer:Double;Count:LongInt)');
8941:
           Procedure WriteBufferFloat(Buffer:Double;Count:LongInt)');
8942:
           procedure ReadBufferAB(Buffer: TByteArray;Count:LongInt)
8943:
          procedure WriteBufferAB(Buffer: TByteArray;Count:LongInt)
procedure ReadBufferABD(Buffer: TByteDynArray;Count:LongInt)
8944:
8946:
           procedure WriteBufferABD(Buffer: TByteDynArray;Count:LongInt)
           procedure ReadBufferAW(Buffer: TWordArray;Count:LongInt)
procedure WriteBufferAW(Buffer: TWordArray;Count:LongInt
8947:
8948:
8949:
           procedure ReadBufferAWD(Buffer: TWordDynArray;Count:LongInt)
           procedure WriteBufferAWD(Buffer: TWordDynArray;Count:LongInt)
8950:
           procedure ReadBufferAW(Buffer: TWordArray;Count:LongInt)
procedure WriteBufferAW(Buffer: TWordArray;Count:LongInt)
8951:
8952:
           procedure ReadBufferAC(Buffer: TCharArray;Count:LongInt)
8953:
           procedure WriteBufferAC(Buffer: TCharArray;Count:LongInt)
8954:
8955:
           procedure ReadBufferACD(Buffer: TCharDynArray;Count:LongInt)
8956:
           procedure WriteBufferACD(Buffer: TCharDynArray;Count:LongInt)
8957:
8958:
           procedure ReadBufferP(Buffer: PChar;Count:LongInt)
8959:
           procedure WriteBufferP(Buffer: PChar;Count:LongInt)
8960:
           procedure ReadBufferO(Buffer: TObject;Count:LongInt)');
           procedure WriteBufferO(Buffer: TObject;Count:LongInt)');
8961:
8962:
           //READBUFFERAC
8963:
           function InstanceSize: Longint
8964:
           Procedure FixupResourceHeader( FixupInfo : Integer)
8965:
           Procedure ReadResHeader
8966:
            ($IFDEF DELPHI4UP)
8967:
           function CopyFrom(Source:TStream;Count:Int64):LongInt
8968:
8969:
8970:
           function CopyFrom(Source:TStream;Count:Integer):LongInt
8971:
8972:
           RegisterProperty('Position', 'LongInt', iptrw);
8973:
           RegisterProperty('Size', 'LongInt', iptrw);
8974:
        end;
8975: end;
8976:
8977:
8978: {
        Unit DMATH - Interface for DMATH.DLL
8979:
8980:
8981: // see more docs/dmath_manual.pdf
8982:
8983: Function InitEval : Integer
8984: Procedure SetVariable( VarName : Char; Value : Float)
8985: Procedure SetFunction( FuncName : String; Wrapper : TWrapper)
8986: Function Eval( ExpressionString : String) : Float
```

```
8987:
8988: unit dmath; //types are in built, others are external in DLL
8989: interface
899n:
8991: uses
        StdCtrls, Graphics;
8992:
8993:
       <u>$ENDIF}</u>
8994: {
8995:
        Types and constants
8996:
         _____
8997:
      {$i types.inc}
8998: {
8999:
        Error handling
9000:
9001: procedure SetErrCode(ErrCode: Integer); external 'dmath';
9002:
       { Sets the error code }
9003: function DefaultVal(ErrCode : Integer; DefVal : Float) : Float; external 'dmath';
9004: { Sets error code and default function value }
9005: function MathErr : Integer; external 'dmath';
9006: { Returns the error code }
9007: {
9008:
        Dynamic arrays
9009:
9010: procedure SetAutoInit(AutoInit : Boolean); external 'dmath';
9011: { Sets the auto-initialization of arrays }
9012: procedure DimVector(var V : TVector; Ub : Integer); external 'dmath';
9013: { Creates floating point vector V[0..Ub] }
9014: procedure DimIntVector(var V : TIntVector; Ub : Integer); external 'dmath';
9015: { Creates integer vector V[0..Ub] }
9016: procedure DimCompVector(var V : TCompVector; Ub : Integer); external 'dmath';
9017: { Creates complex vector V[0..Ub] }
9018: procedure DimBoolVector(var V : TBoolVector; Ub : Integer); external 'dmath';
9019: { Creates boolean vector V[0..Ub] }
9020: procedure DimStrVector(var V : TStrVector; Ub : Integer); external 'dmath';
9021: { Creates string vector V[0..Ub] }
9022: procedure DimMatrix(var A: TMatrix; Ub1, Ub2: Integer); external 'dmath';
9023: { Creates floating point matrix A[0..Ub1, 0..Ub2] }
9024: procedure DimIntMatrix(var A : TIntMatrix; Ub1, Ub2 : Integer); external 'dmath';
9025: { Creates integer matrix A[0..Ub1, 0..Ub2] }
9026: procedure DimCompMatrix(var A : TCompMatrix; Ub1, Ub2 : Integer); external 'dmath';
9027: { Creates complex matrix A[0..Ub1, 0..Ub2] }
9028: procedure DimBoolMatrix(var A : TBoolMatrix; Ub1, Ub2 : Integer); external 'dmath';
9029: { Creates boolean matrix A[0..Ub1, 0..Ub2] }
9030: procedure DimStrMatrix(var A : TStrMatrix; Ubl, Ub2 : Integer); external 'dmath';
9033:
        Minimum, maximum, sign and exchange
9034:
9035: function FMin(X, Y : Float) : Float; external 'dmath';
9036: { Minimum of 2 reals }
9037: function FMax(X, Y : Float) : Float; external 'dmath';
9038: { Maximum of 2 reals }
9039: function IMin(X, Y : Integer) : Integer; external 'dmath';
9040: { Minimum of 2 integers }
9041: function IMax(X, Y : Integer) : Integer; external 'dmath';
9042: { Maximum of 2 integers } 9043: function Sgn(X : Float) : Integer; external 'dmath';
9044: { Sign (returns 1 if X = 0) }
9045: function Sgn0(X : Float) : Integer; external 'dmath';
9046: { Sign (returns 0 if X = 0) }
9047: function DSgn(A, B : Float) : Float; external 'dmath';
9048: { Sgn(B) * |A| }
9049: procedure FSwap(var X, Y : Float); external 'dmath';
9050: { Exchange 2 reals }
9051: procedure ISwap(var X, Y : Integer); external 'dmath';
9052: { Exchange 2 integers } 9053: { -----
9054:
        Rounding functions
9055:
9056: function RoundN(X : Float; N : Integer) : Float; external 'dmath';
9057:
      { Rounds X to N decimal places }
9058: function Ceil(X : Float) : Integer; external 'dmath';
9059:
      { Ceiling function }
9060: function Floor(X : Float) : Integer; external 'dmath';
9061: { Floor function }
9062: {
9063:
        Logarithms, exponentials and power
9064:
9065: function Expo(X : Float) : Float; external 'dmath';
9066: { Exponential
9067: function Exp2(X : Float) : Float; external 'dmath';
9068: { 2^X }
9069: function Expl0(X : Float) : Float; external 'dmath';
9070: { 10^X }
9071: function Log(X : Float) : Float; external 'dmath';
9072: { Natural log }
9073: function Log2(X : Float) : Float; external 'dmath';
9074: { Log, base 2
9075: function Log10(X : Float) : Float; external 'dmath';
```

```
9076: { Decimal log }
9077: function LogA(X, A : Float) : Float; external 'dmath';
9078: { Log, base A }
9079: function IntPower(X : Float; N : Integer) : Float; external 'dmath';
9080: { X^N }
9081: function Power(X, Y : Float) : Float; external 'dmath';
9082: { X^Y, X >= 0 }
9083: { -----
9084:
        Trigonometric functions
9085:
9086: function Pythag(X, Y : Float) : Float; external 'dmath';
9087: { Sqrt(X^2 + Y^2)
9088: function FixAngle(Theta : Float) : Float; external 'dmath';
9089: { Set Theta in -Pi..Pi }
9090: function Tan(X : Float) : Float; external 'dmath';
9091: { Tangent }
9092: function ArcSin(X : Float) : Float; external 'dmath';
9093: { Arc sinus }
9094: function ArcCos(X : Float) : Float; external 'dmath';
9095: { Arc cosinus }
9096: function ArcTan2(Y, X : Float) : Float; external 'dmath';
9097: { Angle (Ox, OM) with M(X,Y) } 9098: {
9099:
        Hyperbolic functions
9100:
9101: function Sinh(X : Float) : Float; external 'dmath';
9102: { Hyperbolic sine }
9103: function Cosh(X : Float) : Float; external 'dmath';
9104: { Hyperbolic cosine }
9105: function Tanh(X : Float) : Float; external 'dmath';
9106: { Hyperbolic tangent }
9107: function ArcSinh(X : Float) : Float; external 'dmath';
9108: { Inverse hyperbolic sine }
9109: function ArcCosh(X : Float) : Float; external 'dmath';
9110: { Inverse hyperbolic cosine }
9111: function ArcTanh(X : Float) : Float; external 'dmath';
9112: { Inverse hyperbolic tangent }
9113: procedure SinhCosh(X : Float; var SinhX, CoshX : Float); external 'dmath';
9114: { Sinh & Cosh }
9115: { -----
9116:
        Gamma function and related functions
9117:
9118: function Fact(N : Integer) : Float; external 'dmath';
9119: { Factorial }
9120: function SgnGamma(X : Float) : Integer; external 'dmath';
9121: { Sign of Gamma function }
9122: function Gamma(X : Float) : Float; external 'dmath';
9123: { Gamma function }
9124: \hat{\textbf{function}} LnGamma(\hat{\textbf{X}}: Float) : Float; \hat{\textbf{external}} 'dmath';
9125: { Logarithm of Gamma function }
9126: function Stirling(X : Float) : Float; external 'dmath';
9127:
      { Stirling's formula for the Gamma function }
9128: function StirLog(X : Float) : Float; external 'dmath';
9129: { Approximate Ln(Gamma) by Stirling's formula, for X >= 13 }
9130: function DiGamma(X : Float ) : Float; external 'dmath';
9131: { Digamma function }
9132: function TriGamma(X : Float ) : Float; external 'dmath';
9133: { Trigamma function }
9134: function IGamma(A, X : Float) : Float; external 'dmath';
9135: { Incomplete Gamma function}
9136: function JGamma(A, X : Float) : Float; external 'dmath';
9137: { Complement of incomplete Gamma function }
9138: function InvGamma(A, P : Float) : Float; external 'dmath';
9139: { Inverse of incomplete Gamma function }
9140: function Erf(X : Float) : Float; external 'dmath';
9141: { Error function }
9142: function Erfc(X : Float) : Float; external 'dmath';
9143: { Complement of error function } 9144: { -----
9145:
        Beta function and related functions
9146:
9147: function Beta(X, Y : Float) : Float; external 'dmath';
9148: { Beta function }
9149: function IBeta(A, B, X : Float) : Float; external 'dmath';
9150:
      { Incomplete Beta function }
9151: function InvBeta(A, B, Y : Float) : Float; external 'dmath';
9152: { Inverse of incomplete Beta function }
9153: {
                            ______
9154:
        Lambert's function
9155:
9156: function LambertW(X : Float; UBranch, Offset : Boolean) : Float; external 'dmath';
9157:
        Binomial distribution
9158:
9159:
9160: function Binomial(N, K : Integer) : Float; external 'dmath';
9161: { Binomial coefficient C(N,K) } 9162: function PBinom(N : Integer; P : Float; K : Integer) : Float; external 'dmath';
9163: { Probability of binomial distribution }
9164: function FBinom(N : Integer; P : Float; K : Integer) : Float; external 'dmath';
```

```
9165: { Cumulative probability for binomial distrib. }
9166: {
9167:
        Poisson distribution
9168:
9169: function PPoisson(Mu : Float; K : Integer) : Float; external 'dmath';
      { Probability of Poisson distribution }
9170:
      function FPoisson(Mu : Float; K : Integer) : Float; external 'dmath';
9171:
        Cumulative probability for Poisson distrib. }
9172:
9173:
9174:
        Exponential distribution
9175:
9176: function DExpo(A, X : Float) : Float; external 'dmath';
9177:
      { Density of exponential distribution with parameter A }
9178: function FExpo(A, X : Float) : Float; external 'dmath';
      { Cumulative probability function for exponential dist. with parameter A }
9179:
9180:
                                     -----
9181:
        Standard normal distribution
9182:
9183: function DNorm(X : Float) : Float; external 'dmath';
9184:
      { Density of standard normal distribution }
      function FNorm(X : Float) : Float; external 'dmath';
      { Cumulative probability for standard normal distrib. }
9186:
9187: function PNorm(X : Float) : Float; external 'dmath';
9188: { Prob(|U| > X) for standard normal distrib. } 9189: function InvNorm(P : Float) : Float; external 'dmath';
9190: { Inverse of standard normal distribution }
9191: {
9192:
        Student's distribution
9193:
9194: function DStudent(Nu : Integer; X : Float) : Float; external 'dmath';
9195: { Density of Student distribution with Nu d.o.f. }
9196: function FStudent(Nu : Integer; X : Float) : Float; external 'dmath';
9197: { Cumulative probability for Student distrib. with Nu d.o.f. }
9198: function PStudent(Nu : Integer; X : Float) : Float; external 'dmath';
9199: { Prob(|t| > X) for Student distrib. with Nu d.o.f. }
9200: function InvStudent(Nu : Integer; P : Float) : Float; external 'dmath';
9201: { Inverse of Student's t-distribution function }
9202: {
9203:
       Khi-2 distribution
9204:
9205: function DKhi2(Nu : Integer; X : Float) : Float; external 'dmath';
9206: { Density of Khi-2 distribution with Nu d.o.f. } 9207: function FKhi2(Nu : Integer; X : Float) : Float; external 'dmath';
9208: { Cumulative prob. for Khi-2 distrib. with Nu d.o.f. }
9209: function PKhi2(Nu : Integer; X : Float) : Float; external 'dmath';
9210: { Prob(Khi2 > X) for Khi-2 distrib. with Nu d.o.f. }
9211: function InvKhi2(Nu : Integer; P : Float) : Float; external 'dmath';
9212: { Inverse of Khi-2 distribution function }
9213: {
9214:
        Fisher-Snedecor distribution
9215:
9216: function DSnedecor(Nu1, Nu2 : Integer; X : Float) : Float; external 'dmath';
      { Density of Fisher-Snedecor distribution with Nu1 and Nu2 d.o.f. }
9217:
9218: function FSnedecor(Nul, Nu2 : Integer; X : Float) : Float; external 'dmath';
9219:
      { Cumulative prob. for Fisher-Snedecor distrib. with Nu1 and Nu2 d.o.f. }
9220: function PSnedecor(Nul, Nu2: Integer; X: Float): Float; external 'dmath';
      { Prob(F > X) for Fisher-Snedecor distrib. with Nu1 and Nu2 d.o.f. }
9222: function InvSnedecor(Nu1, Nu2 : Integer; P : Float) : Float; external 'dmath';
9223: { Inverse of Snedecor's F-distribution function }
9224:
9225:
       Beta distribution
9226:
9227: function DBeta(A, B, X : Float) : Float; external 'dmath';
9228: { Density of Beta distribution with parameters A and B }
9229: function FBeta(A, B, X : Float) : Float; external 'dmath';
      { Cumulative probability for Beta distrib. with param. A and B }
9231:
9232:
        Gamma distribution
9233:
9234: function DGamma(A, B, X : Float) : Float; external 'dmath';
9235:
      { Density of Gamma distribution with parameters A and B }
9236:
      function FGamma(A, B, X : Float) : Float; external 'dmath';
9237:
       Cumulative probability for Gamma distrib. with param. A and B }
9238:
9239:
        Expression evaluation
9240:
9241: function InitEval : Integer; external 'dmath';
9242: { Initializes built-in functions and returns their number } 9243: function Eval(ExpressionString: String): Float; external 'dmath';
9244: { Evaluates an expression at run-time }
9245: procedure SetVariable(VarName : Char; Value : Float); external 'dmath';
9246: { Assigns a value to a variable }
9247: procedure SetFunction(FuncName: String; Wrapper: TWrapper); external 'dmath';
9248: \{ Adds a function to the parser \}
9249: {
9250:
        Matrices and linear equations
9251:
                  -----}
9252: procedure GaussJordan(A
                                           : TMatrix;
                             Lb, Ub1, Ub2 : Integer;
```

```
9254:
                                           : Float); external 'dmath';
                              var Det
9255: { Transforms a matrix according to the Gauss-Jordan method }
9256: procedure LinEq(A : TMatrix;
           B Lb, Ub : Integer;
9257:
9258:
                      var Det : Float); external 'dmath';
9259:
9260: { Solves a linear system according to the Gauss-Jordan method }
9261: procedure Cholesky(A, L : TMatrix; Lb, Ub : Integer); external 'dmath';
9262: { Cholesky factorization of a positive definite symmetric matrix }
9263: procedure LU_Decomp(A : TMatrix; Lb, Ub : Integer); external 'dmath';
9264: { LU decomposition ; 9265: procedure LU_Solve(A : TMatrix; B : TVector;
                       B : TVector,
Lb, Ub : Integer;
9267:
                          X : TVector); external 'dmath';
9268:
9269: { Solution of linear system from LU decomposition }
                                          : TMatrix;
9270: procedure QR_Decomp(A
9271 .
                           Lb, Ub1, Ub2 : Integer;
                                          : TMatrix); external 'dmath';
9272:
                            R
9273: { OR decomposition }
                                  : TMatrix;
9274: procedure QR_Solve(Q, R
9275:
                                        : TVector;
9276:
                           Lb, Ub1, Ub2 : Integer;
                                        : TVector); external 'dmath';
9277:
                           X
9278: { Solution of linear system from QR decomposition }
9279: procedure SV_Decomp(A
                                          : TMatrix;
9280:
                          Lb, Ub1, Ub2 : Integer;
9281:
                            S
                                          : TVector:
9282:
                            V
                                          : TMatrix); external 'dmath';
9283: { Singular value decomposition }
                               : Tvector;
9284: procedure SV_SetZero(S
                        Lb, Ub : Integer;
9285:
                             Tol : Float); external 'dmath';
9286:
9287: { Set lowest singular values to zero }
9288: procedure SV_Solve(U
                                         : TMatrix;
9289:
                           S
                                         : TVector;
9290:
                           7.7
                                         : TMatrix;
9291:
                                         : TVector;
                           В
9292:
                           Lb, Ub1, Ub2 : Integer;
9293:
                                        : TVector); external 'dmath';
                           Х
9294: { Solution of linear system from SVD }
9295: procedure SV_Approx(U
                                          : TMatrix;
                                          : TVector;
9296:
                            S
9297:
                                          : TMatrix;
9298:
                            Lb, Ub1, Ub2 : Integer;
                                         : TMatrix); external 'dmath';
9299:
                            Δ
9300: { Matrix approximation from SVD }
9301: procedure EigenVals(A : TMatrix; 9302: Lb, Ub : Integer;
9303:
                            Lambda : TCompVector); external 'dmath';
9304: { Eigenvalues of L : TMatrix. 9305: procedure EigenVect(A : TMatrix. Lb, Ub : Integer;
9304: { Eigenvalues of a general square matrix }
                                  : TMatrix;
9307:
                            Lambda : TCompVector;
9308:
                           V
                                   : TMatrix); external 'dmath';
9309: { Eigenvalues and eigenvectors of a general square matrix }
9310: procedure EigenSym(A : TMatrix; 9311: Lb, Ub : Integer;
                          Lambda : TVector;
V : TMatrix); external 'dmath';
9312:
9313:
9314: { Eigenvalues and eigenvectors of a symmetric matrix (SVD method) }
                                          : TMatrix;
9315: procedure Jacobi(A
9316:
                        Lb, Ub, MaxIter : Integer;
                                 : Float;
: TVector;
9317:
                        Tol
                        Lambda
9318:
                                          : TMatrix); external 'dmath';
9319:
9320:
      { Eigenvalues and eigenvectors of a symmetric matrix (Jacobi method) }
9321: {
9322:
        Optimization
9323:
                                                    : TFunc;
9324: procedure MinBrack(Func
9325: Val A, E, E, E, 9326: { Brackets a minimum of a function }

7.335578h/Func : TFunc;
                          var A, B, C, Fa, Fb, Fc : Float); external 'dmath';
                                            : Float;
9328:
                            A, B
9329:
                             MaxIter
                                             : Integer;
                                             : Float;
9330:
                             Tol
                            var Xmin, Ymin : Float); external 'dmath';
9331:
9332: { Minimization of a function of one variable (golden search) }
                                   : TFuncNVar;
9333: procedure LinMin(Func
                        X, DeltaX : TVector;
9334:
9335:
                        Lb, Ub : Integer;
                                    : Float;
9336:
                        var R
9337:
                        MaxIter
                                  : Integer;
                                   : Float;
9338:
                         Tol
                        var F_min : Float); external 'dmath';
9339:
9340: { Minimization of a function of several variables along a line }
                       (Func : TFuncNVar;
HessGrad : THessGrad;
9341: procedure Newton (Func
```

```
9343:
                                     : TVector;
9344:
                          Lb, Ub
                                    : Integer;
                          MaxIter
                                    : Integer;
                          Tol
9346:
                                     : Float;
9347:
                          var F_min : Float;
                                 : TVector;
9348:
                          G
                          H_inv
9349:
                                       TMatrix;
                                   : Float); external 'dmath';
                          var Det
9350:
9351:
       \{ Minimization of a function of several variables (Newton's method) \}
9352: procedure SaveNewton(FileName : string); external 'dmath';
9353: { Save Newton iterations in a file } 9354: procedure Marquardt(Func : TFun
                             (Func : TFuncNVar;
HessGrad : THessGrad;
9355:
9356:
                             X
                                         : TVector;
                             Lb, Ub
                                         : Integer;
9357:
9358:
                             MaxIter
                                        : Integer;
9359:
                             Tol
                                        : Float;
9360:
                             var F_min : Float;
                                     : TVector;
                             G
H_inv
9361:
9362:
                                        : TMatrix;
9363: var Det : Float); external 'dmath';
9364: { Minimization of a function of several variables (Marquardt's method) }
9365: procedure SaveMarquardt(FileName : string); external 'dmath'; 9366: { Save Marquardt iterations in a file }
                       (Func : TFuncNVar;
Gradient : TGradient;
9367: procedure BFGS(Func
9368:
9369:
                       X
Lb, Ub
                                  : TVector;
9370:
                                   : Integer;
9371:
                       MaxIter
                                  : Integer;
                                  : Float;
9372:
                       Tol
9373:
                       var F_min : Float;
                              : TVector;
                       G
H_inv
9374:
                                  : TMatrix); external 'dmath';
9375:
9376: { Minimization of a function of several variables (BFGS method) }
9377: procedure SaveBFGS(FileName : string); external 'dmath';
9378: { Save BFGS iterations in a file }
9379: procedure Simplex(Func : TFunchVar; 9380: X : TVector;
9381:
                           Lb. Ub
                                      : Integer;
9382:
                           MaxIter
                                     : Integer;
9383:
                           Tol
                                      : Float;
                           var F min : Float); external 'dmath';
9384:
9385: { Minimization of a function of several variables (Simplex) }
9386: procedure SaveSimplex(FileName : string); external 'dmath';
9389:
        Nonlinear equations
9390:
9391: procedure RootBrack(Func : TFunc;
9392: var X, Y, FX, FY : Float); external 'dmath';
9393: { Brackets a root of function Func between X and Y }
9394: procedure Bisect(Func : TFunc;
9395: var X, Y : Float;
                          MaxIter : Integer;
Tol : Float;
var F : Float); external 'dmath';
9396:
9397:
9398:
9399: { Bisection method }
9400: procedure Secant (Func
                                   : TFunc;
9401:
                          var X, Y : Float;
                          MaxIter : Integer;
Tol : Float;
9402:
                         Tol : Float;
var F : Float); external 'dmath';
9403:
9404:
9405: { Secant method }
9406: procedure NewtEq(Func, Deriv : TFunc;
                                    ._v · TFunc;
: Float;
                          var X
9407:
                          MaxIter
                                       : Integer;
9408:
9409:
                          Tol
                                       : Float;
                          var F
9410:
                                       : Float); external 'dmath';
9411: { Newton-Raphson method for a single nonlinear equation }
9412: procedure NewtEqs(Equations : TEquations; 9413: Jacobian : TJacobian;
9414:
                           X, F
                                      : TVector;
                           Lb, Ub
9415:
                                      : Integer;
9416:
                           MaxIter
                                      : Integer;
9417:
                           Tol
                                      : Float); external 'dmath';
9418: { Newton-Raphson method for a system of nonlinear equations }
9419: procedure Broyden(Equations: TEquations;
                                      : TVector;
                          X, F
Lb, Ub
9420:
9421:
                                      : Integer;
                           MaxIter
                                      : Integer;
                                    : Integer;
: Float); external 'dmath';
9423:
                           Tol
9424: { Broyden's method for a system of nonlinear equations }
9425: {
9426:
        Polynomials and rational fractions
Coef : TVector;
9429:
                      Deg : Integer) : Float; external 'dmath';
9430:
9431: { Evaluates a polynomial }
```

```
9432: function RFrac(X
                                   : Float;
                      Coef : TVector;
Deg1, Deg2 : Integer) : Float; external 'dmath';
9433:
9434:
9435: { Evaluates a rational fraction }
9436: function RootPol1(A, B : Float; 9437: var X : Float) : Integer; external 'dmath';
9438: { Solves the linear equation A + B * X = 0 }
9439: function RootPol2(Coef: TVector; 9440: Z: TCompVector): Integer; external 'dmath';
9441:
       { Solves a quadratic equation }
9442: function RootPol3(Coef : TVector;
9443: Z : TCompVector) : Integer; external 'dmath';
9444: { Solves a cubic equation }
9445: function RootPol4(Coef: TVector; 9446: Z: TCompVector): Integer; external 'dmath';
9447: { Solves a quartic equation }
9448: function RootPol(Coef : TVector;
                       Deg : Integer;
Z : TCompVec
9449:
                               : TCompVector) : Integer; external 'dmath';
9450:
9451: { Solves a polynomial equation }
9452: function SetRealRoots(Deg : Integer;
9453: Z : TCompVector;
9454:
                               Tol : Float) : Integer; external 'dmath';
9455: { Set the imaginary part of a root to zero }
9456: procedure SortRoots(Deg : Integer;
9457: Z : TCompVector); external 'dmath';
9458: { Sorts the roots of a polynomial }
9459: {
9460:
        Numerical integration and differential equations
9461:
9462: function TrapInt(X, Y : TVector; N : Integer) : Float; external 'dmath';
9463:
       { Integration by trapezoidal rule }
9464: function GausLeg(Func : TFunc; A, B : Float) : Float; external 'dmath';
9465: { Integral from A to B }
9466: function GausLeg0(Func : TFunc; B : Float) : Float; external 'dmath';
9467: { Integral from 0 to B }
9468: function Convol(Func1, Func2 : TFunc; T : Float) : Float; external 'dmath';
9469: { Convolution product at time T }
9470: procedure ConvTrap(Func1,Func2:TFunc; T,Y:TVector; N:Integer);external 'dmath';
9471: { Convolution by trapezoidal rule }
                                                : TDiffEqs;
9472: procedure RKF45(F
                        Nean
9473:
                                                : Integer;
9474:
                                                : TVector;
                        gY, Yp
9475:
                         var T
9476:
                        Tout, RelErr, AbsErr : Float;
                                                : Integer); external 'dmath';
9477:
                        var Flag
9478: { Integration of a system of differential equations }
9480:
        Fast Fourier Transform
9481:
                                            _____}
9482: procedure FFT(NumSamples : Integer;
                      InArray, OutArray : TCompVector); external 'dmath';
9483:
9484: { Fast Fourier Transform }
                                        : Integer;
9485: procedure IFFT(NumSamples
9486: InArray, OutArray : TCompVector); external 'dmath';
9487: { Inverse Fast Fourier Transform }
9488: procedure FFT_Integer(NumSamples : Integer;
                             RealIn, ImagIn : TIntVector;
9489:
9490: OutArray : TCom
9491: { Fast Fourier Transform for integer data }
                                             : TCompVector); external 'dmath';
9492: procedure FFT_Integer_Cleanup; external 'dmath';
9493: { Clear memory after a call to FFT_Integer }
9494: procedure CalcFrequency(NumSamples,
9495:
                                 FrequencyIndex : Integer;
                                           : TCompVector;
: Complex); external 'dmath';
9496:
                                 InArray
                                 var FFT
9497:
9498: { Direct computation of Fourier transform }
9499: {
9500:
        Random numbers
9501:
9502: procedure SetRNG(RNG : RNG_Type); external 'dmath';
9503: { Select generator }
9504: procedure InitGen(Seed : RNG_IntType); external 'dmath';
9505: { Initialize generator }
9506: function IRanGen : RNG_IntType; external 'dmath';
9507: { 32-bit random integer in [-2^31 .. 2^31 - 1] }
9508: function IRanGen31 : RNG_IntType; external 'dmath';
9509: { 31-bit random integer in [0 .. 2^31 - 1] }
9510: function RanGen1 : Float; external 'dmath';
9511: { 32-bit random real in [0,1] }
9512: function RanGen2 : Float; external 'dmath';
9513: { 32-bit random real in [0,1) }
9514: function RanGen3 : Float; external 'dmath';
9515: { 32-bit random real in (0,1) }
9516: function RanGen53 : Float; external 'dmath';
9517: { 53-bit random real in [0,1) }
9518: procedure InitMWC(Seed : RNG_IntType); external 'dmath';
9519: { Initializes the 'Multiply with carry' random number generator } 9520: function IRanMWC: RNG_IntType; external 'dmath';
```

```
9521: { Returns a 32 bit random number in [-2^31; 2^31-1] } 9522: procedure InitMT(Seed : RNG_IntType); external 'dmath'
9523: { Initializes Mersenne Twister generator with a seed }
                                            : array of RNG_LongType;
9524: procedure InitMTbyArray(InitKey
                                KeyLength : Word); external 'dmath';
9525:
9526: { Initialize MT generator with an array InitKey[0..(KeyLength - 1)] } 9527: function IRanMT: RNG_IntType; external 'dmath';
9528: { Random integer from MT generator }
9529: procedure InitUVAGbyString(KeyPhrase : string); external 'dmath';
9530: { Initializes the UVAG generator with a string }
9531: procedure InitUVAG(Seed : RNG_IntType); external 'dmath';
9532: { Initializes the UVAG generator with an integer }
9533: function IRanUVAG : RNG_IntType; external 'dmath';
9534: { Random integer from UVAG generator } 9535: function RanGaussStd : Float; external 'dmath';
9536: { Random number from standard normal distribution }
9537: function RanGauss(Mu, Sigma : Float) : Float; external 'dmath';
9538: { Random number from normal distrib. with mean Mu and S. D. Sigma }
                                : TVector; L
9539: procedure RanMult(M
                                                      : TMatrix;
                        Lb, Ub : Integer;
9540:
                                  : TVector); external 'dmath';
                          Х
9542: { Random vector from multinormal distribution (correlated) }
9543: procedure RanMultIndep(M, S : TVector; 9544: Lb, Ub : Integer;
9545:
                                Х
                                      : TVector); external 'dmath';
9546: { Random vector from multinormal distribution (uncorrelated)
9547: procedure InitMHParams(NCycles, MaxSim, SavedSim : Integer); external 'dmath';
9548: { Initializes Metropolis-Hastings parameters }
9549: procedure GetMHParams(var NCycles, MaxSim,SavedSim:Integer); external 'dmath';
9550: { Returns Metropolis-Hastings parameters }
9551: procedure Hastings(Func
                                         TFuncNVar;
                                       : Float;
9552:
                           т
9553:
                           X
                                       : TVector;
                                       : TMatrix;
9554:
                            Lb, Ub
9555:
                                       : Integer
9556:
                            Xmat
                                       : TMatrix;
9557:
                           X min
                                       : TVector;
                           var F_min : Float); external 'dmath';
9558:
9559: { Simulation of a probability density function by Metropolis-Hastings
9560: procedure InitSAParams(NT, NS, NCycles : Integer; RT : Float); external 'dmath';
9561: { Initializes Simulated Annealing parameters }
9562: procedure SA_CreateLogFile(FileName : String); external 'dmath';
9563: { Initializes log file }
                                        : TFuncNVar;
9564: procedure SimAnn(Func
                         X, Xmin, Xmax : TVector;
9565:
                         Lb, Ub : Integer;
var F_min : Float); external 'dmath';
9566:
9567:
9568: { Minimization of a function of several var. by simulated annealing }
9569: procedure InitGAParams(NP, NG : Integer; SR, MR, HR : Float); external 'dmath';
9570: { Initializes Genetic Algorithm parameters }
9571: procedure GA_CreateLogFile(FileName : String); external 'dmath';
9572: { Initializes log file }
9573: procedure GenAlg(Func
9574:
                         X, Xmin, Xmax : TVector;
                                     : Integer;
: Float); external 'dmath';
9575:
                         Lb, Ub
9576:
                         var F min
      { Minimization of a function of several var. by genetic algorithm }
9577:
9578: {
9579:
9580:
9581: function Mean(X: TVector; Lb, Ub: Integer): Float; external 'dmath';
       { Mean of sample X }
9583: function Min(X: TVector; Lb, Ub: Integer): Float; external 'dmath';
9584: { Minimum of sample X }
9585: function Max(X: TVector; Lb, Ub: Integer): Float; external 'dmath';
9586: { Maximum of sample X }
9587: function Median(X: TVector; Lb, Ub: Integer; Sorted: Boolean): Float; external 'dmath';
9588: { Median of sample X }
9589: function StDev(X : TVector; Lb, Ub : Integer; M : Float) : Float; external 'dmath';
9590: { Standard deviation estimated from sample X }
9591: function StDevP(X: TVector; Lb, Ub: Integer; M: Float): Float; external 'dmath';
9592: { Standard deviation of population }
9593: function Correl(X, Y: TVector; Lb, Ub: Integer): Float; external 'dmath'; 9594: { Correlation coefficient }
9595: function Skewness(X : TVector; Lb, Ub : Integer; M, Sigma: Float): Float; external 'dmath';
9596: { Skewness of sample X }
9597: function Kurtosis(X : TVector; Lb, Ub : Integer; M,Sigma: Float): Float; external 'dmath';
9598: { Kurtosis of sample X }
9599: procedure QSort(X : TVector; Lb, Ub : Integer); external 'dmath';
9600: { Quick sort (ascending order) }
9601: procedure DQSort(X : TVector; Lb, Ub : Integer); external 'dmath';
9602: { Quick sort (descending order) }
9603: procedure Interval(X1, X2
                                                 : Float;
                           MinDiv, MaxDiv
9604:
                                                : Integer;
                            var Min, Max, Step : Float); external 'dmath';
9605:
9606: { Determines an interval for a set of values }
9607: procedure AutoScale(X: TVector; Lb, Ub: Integer; Scale: TScale; 9608: var XMin, XMax, XStep: Float); external 'dmath'; 9609: { Finds an appropriate scale for plotting the data in X[Lb..Ub] }
```

```
9610: procedure StudIndep(N1, N2
                                            : Integer;
                            M1, M2, S1, S2 : Float;
9611:
                                      : Float;
: Integer); external 'dmath';
                            var T
                            var DoF
9613:
9614: { Student t-test for independent samples }
9615: procedure StudPaired(X, Y : TVector; 9616: Lb, Ub : Integer;
                                      : Integer;
                              var T
9617:
                             var DoF : Integer); external 'dmath';
9618: 
9619: { Student t-test for paired samples }

2.0751/Me : Integer;
                                            : TIntVector;
9622:
                         M, S
                         var V_f, V_r, F : Float;
var DoF_f, DoF_r : Integer); external 'dmath';
9623:
9624:
9625: { One-way analysis of variance } 9626: procedure AnOVa2(NA, NB, Nobs : Integer;
                         M, S : TMatrix;
V, F : TVector;
9627:
9628:
                                       : TIntVector); external 'dmath';
9629:
                         DoF
9630: { Two-way analysis of variance } 9631: procedure Snedecor(N1, N2
                                           : Integer;
9632:
                           S1, S2
                                           : Float;
9633:
                           var F
                                            : Float;
                           var DoF1, DoF2 : Integer); external 'dmath';
9634:
9635: { Snedecor's F-test (comparison of two variances) }
9636: procedure Bartlett(Ns
                               : Integer;
: TIntVector;
9637:
                           N
9638:
                           S
                                     : TVector;
                           var Khi2 : Float;
9640:
                           var DoF : Integer); external 'dmath';
9641: { Bartlett's test (comparison of several variances) }
9642: procedure Mann_Whitney(N1, N2 : Integer; 9643: X1, X2 : TVector;
                               X1, X2 : TVector;
var U, Eps : Float); external 'dmath';
9645: { Mann-Whitney test}
9646: procedure Wilcoxon(X, Y
                                       : TVector;
                           Lb, Ub : Integer;
var Ndiff : Integer;
                           Lb, Ub
9647:
9648:
                           var T, Eps : Float); external 'dmath';
9649:
9650: { Wilcoxon test }
9651: procedure Kruskal_Wallis(Ns
                                           : Integer;
                                          : TIntVector;
9652:
                                 N
9653:
                                          : TMatrix;
9654:
                                  var H
                                          : Float;
                                  var DoF : Integer); external 'dmath';
9655:
9656: { Kruskal-Wallis test }
                                         : Integer;
9657: procedure Khi2_Conform(N_cls
9658:
                               {\tt N\_estim}
                                         : Integer;
                               0bs
9659:
                                         : TIntVector;
9660:
                               Calc
                                         : TVector;
                               var Khi2 : Float;
9661:
                               var DoF : Integer); external 'dmath';
9663: { Khi-2 test for conformity }
                                       : Integer;
9664: procedure Khi2_Indep(N_lin
                                       : Integer;
9665:
                            N col
9666:
                             0bs
                                        : TIntMatrix;
9667:
                             var Khi2 : Float;
9668:
                             var DoF : Integer); external 'dmath';
9669: { Khi-2 test for independence }
9670: procedure Woolf_Conform(N_cls
                                         : Integer;
                                N_estim : Integer;
9672:
                                 Obs : TIntVector;
9673:
                                Calc
                                          : TVector;
9674:
                                var G
                                          : Float;
                                var DoF : Integer); external 'dmath';
9676: { Woolf's test for conformity }
                                     : Integer;
: Integer;
9677: procedure Woolf_Indep(N_lin
9678:
                              N_col
9679:
                              Obs
                                       : TIntMatrix;
                              var G : Float;
9680:
9681:
                              var DoF : Integer); external 'dmath';
9682: { Woolf's test for independence }
9683: procedure DimStatClassVector(var C : TStatClassVector;
                                      Ub
                                            : Integer); external 'dmath';
9684:
9685: { Allocates an array of statistical classes: C[0..Ub] }
                          (X : TVector;
Lb, Ub : Integer;
9686: procedure Distrib(X
9687:
                          A, B, H : Float;
9688:
                                   : TStatClassVector); external 'dmath';
9689:
9690: { Distributes an array X[Lb..Ub] into statistical classes }
9691: { ---
9692:
        Linear / polynomial regression
9693:
9694: procedure LinFit(X, Y
                                : TVector;
9695:
                         Lb, Ub : Integer;
                              : TVector;
: TMatrix); external 'dmath';
9696:
                         В
9697:
9698: { Linear regression : Y = B(0) + B(1) * X }
```

```
9699: procedure WLinFit(X, Y, S : TVector;
9700:
                         Lb, Ub : Integer;
                                 : TVector;
                         В
9702:
                         V
                                 : TMatrix); external 'dmath';
9703: { Weighted linear regression : Y = B(0) + B(1) * X }
9704: procedure SVDLinFit(X, Y : TVector; 9705: Lb, Ub : Integer;
9706:
                           SVDTol : Float;
9707:
                           B : TVector;
                                  : TMatrix); external 'dmath';
9708:
                           V
9709:
      { Unweighted linear regression by singular value decomposition }
9710: procedure WSVDLinFit(X, Y, S : TVector;
9711:
                            Lb, Ub : Integer;
                            SVDTol : Float;
9712:
9713:
                                     : TVector;
                            В
9714:
                                     : TMatrix); external 'dmath';
9715: { Weighted linear regression by singular value decomposition }
9716: procedure MulFit(X
                                      : TMatrix;
                        Y
                                      : TVector;
9717:
9718:
                        Lb, Ub, Nvar : Integer;
9719:
                        ConsTerm
                                        Boolean
9720:
                        В
                                     : TVector;
9721:
                        7.7
                                      : TMatrix); external 'dmath';
9722: { Multiple linear regression by Gauss-Jordan method }
9723: procedure WMulFit(X : TMatrix; 9724: Y, S : TVector;
                                         TMatrix;
9725:
                         Lb, Ub, Nvar : Integer;
                                    : Boolean;
9726:
                         ConsTerm
9727:
                                       : TVector;
                         В
9728:
                         V
                                       : TMatrix); external 'dmath';
9729: { Weighted multiple linear regression by Gauss-Jordan method }
                           : TMatrix;
9730: procedure SVDFit(X
9731:
                        Υ
                                      : TVector;
9732:
                        Lb, Ub, Nvar : Integer;
                                        Boolean
9733:
                        ConsTerm
                                     : Float;
                        SVDTol
9734:
9735:
                        В
                                      : TVector;
9736:
                        V
                                      : TMatrix); external 'dmath';
9738: procedure WSVDFit(X
Y, S
9737: { Multiple linear regression by singular value decomposition }
                                         TMatrix;
                                       : TVector;
                         Lb. Ub. Nvar : Integer;
9740:
9741:
                                         Boolean;
                         ConsTerm
9742:
                         SVDTol
                                       : Float;
9743:
                         В
                                       : TVector;
                                      : TMatrix); external 'dmath';
9744:
                         V
9745: { Weighted multiple linear regression by singular value decomposition }
9746: procedure PolFit(X, Y
                                   : TVector;
9747:
                        Lb, Ub, Deg : Integer;
9748:
                        В
                                    : TVector;
                                    : TMatrix); external 'dmath';
9749:
                        V
9750: { Polynomial regression by Gauss-Jordan method } 9751: procedure WPolFit(X, Y, S : TVector;
                         Lb, Ub, Deg : Integer;
9752:
9753:
                         В
                            : TVector;
: TMatrix); external 'dmath';
                         V
9754:
9755: { Weighted polynomial regression by Gauss-Jordan method }
9756: procedure SVDPolFit(X, Y :
                                          TVector;
9757:
                           Lb, Ub, Deg : Integer;
                           SVDTol : Float;
B : TVector;
9758:
9759:
9760:
                           V
                                        : TMatrix); external 'dmath';
9761: { Unweighted polynomial regression by singular value decomposition }
9762: procedure WSVDPolFit(X, Y, S : TVector; 9763: Lb, Ub, Deg : Integer;
                            SVDTol
9764:
                                           Float;
9765:
                                         : TVector;
                            В
9766:
                            V
                                         : TMatrix); external 'dmath';
9767: { Weighted polynomial regression by singular value decomposition }
9768: procedure RegTest(Y, Ycalc : TVector; 9769: LbY, UbY : Integer;
9770:
                         7.7
                                  : TMatrix;
                         LbV, UbV : Integer;
9771:
                         var Test : TRegTest); external 'dmath';
9772:
9773: { Test of unweighted regression }
9774: procedure WRegTest(Y, Ycalc, S: TVector;
9775:
                          LbY, UbY
                                      : Integer;
                                       : TMatrix;
9776:
                          V
                          LbV, UbV
9777:
                                       : Integer;
9778:
                          var Test
                                       : TRegTest); external 'dmath';
9779:
      { Test of weighted regression }
9780: {
9781:
        Nonlinear regression
9782:
9783: procedure SetOptAlgo(Algo : TOptAlgo); external 'dmath';
9784: { Sets the optimization algorithm for nonlinear regression }
9785: function GetOptAlgo: TOptAlgo; external 'dmath';
9786: { Returns the optimization algorithm }
9787: procedure SetMaxParam(N : Byte); external 'dmath';
```

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9788: { Sets the maximum number of regression parameters for nonlinear regression }
9789: function GetMaxParam : Byte; external 'dmath';
9790: { Returns the maximum number of regression parameters for nonlinear regression }
9791: procedure SetParamBounds(I : Byte; ParamMin, ParamMax : Float); external 'dmath';
9792: { Sets the bounds on the I-th regression parameter }
9793: procedure GetParamBounds(I : Byte; var ParamMin, ParamMax:Float); external 'dmath';
9794: { Returns the bounds on the I-th regression parameter }
9795: procedure NLFit(RegFunc
                                 : TRegFunc;
                       DerivProc : TDerivProc;
9796:
9797:
                       X, Y
                                  : TVector;
                       Lb, Ub
9798:
                                  : Integer;
                       MaxIter
9799:
                                  : Integer;
9800:
                       Tol
                                  : Float;
9801:
                       В
                                  : TVector;
                       FirstPar,
9802:
9803:
                       LastPar
                                 : Integer;
                                 : TMatrix); external 'dmath';
9804:
9805: { Unweighted nonlinear regression }
                        (RegFunc : TRegFunc;
DerivProc : TDerivPro
9806: procedure WNLFit(RegFunc
9807:
                                     TDerivProc;
9808:
                        X, Y, S
9809:
                        Lb, Ub
                                   : Integer;
9810:
                        MaxIter
                                   : Integer;
9811:
                                   : Float;
                        Tol
9812:
                                     TVector
9813:
                        FirstPar,
9814:
                        LastPar : Integer;
                                   : TMatrix); external 'dmath';
9815:
                        V
9816: { Weighted nonlinear regression }
9817: procedure SetMCFile(FileName : String); external 'dmath';
9818:
      { Set file for saving MCMC simulations }
9819: procedure SimFit(RegFunc
                                   : TRegFunc;
9820:
                                   : TVector;
                        X. Y
9821:
                        Lb, Ub
                                   : Integer;
9822:
                        В
                                   : TVector
9823:
                        FirstPar,
                        LastPar : Integer;
9824:
                        V
                                   : TMatrix); external 'dmath';
9825:
9826: { Simulation of unweighted nonlinear regression by MCMC }
9827: procedure WSimFit(RegFunc
                                   : TRegFunc;
9828:
                         X, Y, S
Lb, Ub
                                    : TVector;
9829:
                                    : Integer;
9830:
                                    : TVector;
                         В
                         FirstPar,
9831:
                         LastPar : Integer;
9832:
                                    : TMatrix); external 'dmath';
9833:
                         V
      { Simulation of weighted nonlinear regression by MCMC }
9834:
9835:
9836:
        Nonlinear regression models
9837:
                                                     ______}
9838: procedure FracFit(X, Y
                                     : TVector;
                         Lb, Ub
9839:
                                       Integer;
                         Deg1, Deg2:
9840:
                                       Integer
9841:
                         ConsTerm
                                       Boolean;
9842:
                         MaxIter
                                     : Integer;
                                     : Float;
9843:
                         Tol
9844:
                         В
                                       TVector;
9845:
                         V
                                     : TMatrix); external 'dmath';
9846: { Unweighted fit of rational fraction } 9847: procedure WFracFit(X, Y, S : TVector 9848: Lb, Ub : Integer
                                      : TVector; : Integer;
                                        Integer;
                          Deg1, Deg2 :
9849:
                                        Integer;
9850:
                          ConsTerm
                                        Boolean;
9851:
                          MaxIter
                                      : Integer;
9852:
                          Tol
                                      : Float;
                           В
                                      : TVector
9854:
                          ٦7
                                      : TMatrix); external 'dmath';
9855: { Weighted fit of rational fraction }
9856:
9857: function FracFit_Func(X : Float; B : TVector) : Float; external 'dmath';
9858: { Returns the value of the rational fraction at point X }
9859: procedure ExpFit(X, Y
                                      : TVector;
                        Lb, Ub, Nexp : Integer;
9860:
9861:
                        ConsTerm
                                     : Boolean;
9862:
                        MaxIter
                                      : Integer;
9863:
                        Tol
                                      : Float;
9864:
                        В
                                      : TVector;
                                      : TMatrix); external 'dmath';
9865:
                        V
9866: { Unweighted fit of sum of exponentials }
9867: procedure WExpFit(X, Y, S
                                         TVector
9868:
                         Lb, Ub, Nexp : Integer;
9869:
                         ConsTerm
                                       : Boolean;
9870:
                                       : Integer;
                         MaxIter
9871:
                         Tol
                                       : Float;
9872:
                         В
                                       : TVector
9873:
                         V
                                       : TMatrix); external 'dmath';
9874: { Weighted fit of sum of exponentials }
9875: function ExpFit_Func(X : Float; B : TVector) : Float; external 'dmath';
9876: { Returns the value of the regression function at point X }
```

```
9877: procedure IncExpFit(X, Y
                                      : TVector;
9878:
                            Lb, Ub
                                     : Integer;
                             ConsTerm : Boolean;
9880:
                            MaxIter : Integer;
9881:
                            Tol
                                       : Float;
9882:
                                       : TVector;
                            В
9883:
                                        TMatrix); external 'dmath';
9884: { Unweighted fit of model of increasing exponential }
9885: procedure WIncExpFit(X, Y, S : TVector;
9886:
                             Lb. Ub
                                       : Integer;
9887:
                              ConsTerm : Boolean;
                              MaxIter : Integer;
9889:
                              Tol
                                       : Float;
9890:
                              B
                                        : TVector;
9891:
                             V
                                       : TMatrix); external 'dmath';
9892: { Weighted fit of increasing exponential } 9893: function IncExpFit_Func(X : Float; B : TVector) : Float; external 'dmath';
9894: { Returns the value of the regression function at point X }
9895: procedure ExpLinFit(X, Y 9896: Lb, Ub
                                    : TVector;
: Integer;
                            MaxIter : Integer;
9897:
9898:
                            Tol
                                     : Float;
                                     : TVector;
9899:
                            В
9900:
                            V
                                     : TMatrix); external 'dmath';
9901: { Unweighted fit of the "exponential + linear" model }
9902: procedure WExpLinFit(X, Y, S : TVector;
9903:
                              Lb, Ub : Integer;
9904:
                              MaxIter : Integer;
9905:
                                       : Float;
                              Tol
9906:
                              В
                                       : TVector;
9907:
                             V
                                      : TMatrix); external 'dmath';
9908: { Weighted fit of the "exponential + linear" model }
9909:
9910: function ExpLinFit_Func(X : Float; B : TVector) : Float; external 'dmath';
9911: { Returns the value of the regression function at point X }
                          (X, Y : TVector;
Lb, Ub : Integer;
9912: procedure MichFit(X, Y
9913:
9914:
                          MaxIter : Integer;
9915:
                          Tol
                                   : Float;
9916:
                          В
                                   : TVector;
9917:
                          7.7
                                   : TMatrix); external 'dmath';
9918: { Unweighted fit of Michaelis equation }
9919: procedure WMichFit(X, Y, S : TVector; 9920: Lb, Ub : Integer;
9921:
                           MaxIter : Integer;
9922:
                           Tol
                                    : Float:
9923:
                                      TVector;
                           В
                                    : TMatrix); external 'dmath';
9925: { Weighted fit of Michaelis equation }
9926: function MichFit_Func(X : Float; B : TVector) : Float; external 'dmath';
9927: { Returns the value of the Michaelis equation at point X }
9928: procedure MintFit(X, Y : TVector; 9929: Lb, Ub : Integer;
9930:
                          MintVar : TMintVar;
                          Fit_S0 : Boolean;
9931:
                          MaxIter : Integer;
9932:
9933:
                          Tol
                                   : Float;
9934:
                          В
                                   : TVector;
9935:
                          ٦,7
                                   : TMatrix); external 'dmath';
9936: { Unweighted fit of the integrated Michaelis equation }
9937: procedure WMintFit(X, Y, S : TVector;
9938:
                           Lb, Ub : Integer;
9939:
                           MintVar :
                                      TMintVar;
9940:
                           Fit SO :
                                      Boolean;
9941:
                           MaxIter :
                                      Integer
9942:
                           Tol
                                      Float;
9943:
                           В
                                    : TVector;
9944:
                           V
                                    : TMatrix); external 'dmath';
9945:
      { Weighted fit of the integrated Michaelis equation }
9946: function MintFit_Func(X : Float; B : TVector) : Float; external 'dmath';
9947: { Returns the value of the integrated Michaelis equation at point X }
9948: procedure HillFit(X, Y : TVector; 9949: Lb, Ub : Integer;
9950:
                          MaxIter : Integer;
9951:
                          Tol
                                  : Float;
9952:
                          В
                                   : TVector;
9953:
                          ٦,7
                                   : TMatrix); external 'dmath';
      { Unweighted fit of Hill equation }
9954:
9955: procedure WHillFit(X, Y, S : TVector; 9956:

Lb, Ub : Integer;
                           MaxIter : Integer;
9957:
9958:
                           Tol
                                    : Float;
9959:
                                      TVector;
                           В
9960:
                                    : TMatrix); external 'dmath';
9961: { Weighted fit of Hill equation }
9962: function HillFit_Func(X : Float; B : TVector) : Float; external 'dmath';
9963: { Returns the value of the Hill equation at point X }
9964: procedure LogiFit(X, Y
                                   : TVector;
                          Lb, Ub
```

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9966:
                            ConsTerm : Boolean;
 9967:
                            General : Boolean;
 9968:
                            MaxIter :
                                         Integer;
                            Tol
 9969:
                                       : Float;
 9970:
                            В
                                      : TVector;
 9971:
                                       : TMatrix); external 'dmath';
                            V
 9972: { Unweighted fit of logistic function }
 9973: procedure WLogiFit(X, Y, S : TVector; 9974: Lb, Ub : Integer;
 9975:
                             ConsTerm : Boolean;
                             General : Boolean;
MaxIter : Integer;
 9976:
 9977:
 9978:
                              Tol
                                        : Float;
                             B
V
                                        : TVector;
: TMatrix); external 'dmath';
 9979:
 9980:
 9981: { Weighted fit of logistic function } 9982: function LogiFit_Func(X : Float; B : TVector) : Float; external 'dmath';
 9983: { Returns the value of the logistic function at point X } 9984: procedure PKFit(X, Y : TVector; 9985: Lb, Ub : Integer;
 9986:
                          MaxIter : Integer;
                                 : Float;
: TVector;
 9987:
                          Tol
                          В
 9988:
                          V
                                   : TMatrix); external 'dmath';
 9989:
 9990: { Unweighted fit of the acid-base titration curve }
 9991: procedure WPKFit(X, Y, S : TVector;
 9992:
                           Lb, Ub : Integer;
 9993:
                           MaxIter : Integer;
 9994:
                                    : Float;
                           Tol
                                    : TVector;
 9995:
                           В
 9996:
                           V
                                    : TMatrix); external 'dmath';
 9997: { Weighted fit of the acid-base titration curve }
9998: function PKFit_Func(X : Float; B : TVector) : Float; external 'dmath';
 9999: { Returns the value of the acid-base titration function at point X }
                           (X, Y : TVector;
Lb, Ub : Integer;
10000: procedure PowFit(X, Y
10001:
10002:
                           MaxIter : Integer;
10003:
                                    : Float;
                           Tol
10004:
                                    : TVector;
                           В
10005:
                                    : TMatrix); external 'dmath';
10006: { Unweighted fit of power function }
10007: procedure WPowFit(X, Y, S : TVector; 10008: Lb, Ub : Integer;
                            MaxIter : Integer;
10009:
10010:
                            Tol
                                     : Float;
                                     : TVector;
                            В
10011:
                            V
                                      : TMatrix); external 'dmath';
10012:
10013: { Weighted fit of power function }
10014:
10015: function PowFit_Func(X : Float; B : TVector) : Float; external 'dmath';
10016: { Returns the value of the power function at point X }
10010: { Returns the value of the power rank
10017: procedure GammaFit(X, Y : TVector;
10018: Lb, Ub : Integer;
                                         TVector;
10019:
                              MaxIter : Integer;
                             Tol
10020:
                                      : Float;
                                      : TVector;
10021:
                             В
10022:
                                       : TMatrix); external 'dmath';
10023: { Unweighted fit of gamma distribution function }
10024: procedure WGammaFit(X, Y, S : TVector; 10025: Lb, Ub : Integer;
10026:
                               MaxIter : Integer;
10027:
                               Tol
                                       : Float;
                              В
10028:
                                        : TVector;
                                       : TMatrix); external 'dmath';
10029:
                              V
10030: { Weighted fit of gamma distribution function }
10031: function GammaFit_Func(X: Float; B: TVector): Float; external 'dmath';
       \{ Returns the value of the gamma distribution function at point X \}
10032:
10033: {
10034:
         Principal component analysis
10035:
10036: procedure VecMean(X
                                           : TMatrix;
10037:
                          Lb, Ub, Nvar : Integer;
10038:
                            M
                                           : TVector); external 'dmath';
10039: { Computes the mean vector M from matrix X }
10040: procedure VecSD(X
                                         : TMatrix;
                        Lb, Ub, Nvar : Integer;
10041:
                                      : TVector); external 'dmath';
10042:
                          M, S
10043: { Computes the vector of standard deviations S from matrix X }
10044: procedure MatVarCov(X
                                            : TMatrix;
                               Lb, Ub, Nvar : Integer;
10045:
                                          : TVector;
: TMatrix); external 'dmath';
10046:
                              М
10047:
                              V
10048: { Computes the variance-covariance matrix V from matrix X }
10049: procedure MatCorrel(V : TMatrix;
                            Nvar : Integer;
10050:
10051:
                              R : TMatrix); external 'dmath';
10052: { Computes the correlation matrix R from the var-cov matrix V }
                      A(R : TMatrix;
Nvar : Integer;
10053: procedure PCA(R
```

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10055:
                         Lambda : TVector;
10056:
                        C, Rc : TMatrix); external 'dmath';
10057: { Performs a principal component analysis of the correlation matrix R }
                                              : TMatrix;
10058: procedure ScaleVar(X
                               Lb, Ub, Nvar : Integer;
10059:
10060:
                               M, S : TVector;
10061:
                                                : TMatrix); external 'dmath';
                               7.
10062: { Scales a set of variables by subtracting means and dividing by SD's }
                                              : TMatrix;
10063: procedure PrinFac(Z
              Lb, Ub, Nvar : Integer;
10064:
                              C, F
                                              : TMatrix); external 'dmath';
10065:
10066: { Computes principal factors }
10067: { ------
        Strings
10068:
10069:
10070: function LTrim(S : String) : String; external 'dmath';
10071: { Removes leading blanks }
10072: function RTrim(S : String) : String; external 'dmath';
10073: { Removes trailing blanks }
10074: function Trim(S : String) : String; external 'dmath';
10075: { Removes leading and trailing blanks }
10076: function StrChar(N : Byte; C : Char) : String; external 'dmath';
10077: { Returns a string made of character C repeated N times }
10078: function RFill(S: String; L: Byte): String; external 'dmath';
10079: { Completes string S with trailing blanks for a total length L }
10080: function LFill(S : String; L : Byte) : String; external 'dmath'
10081: { Completes string S with leading blanks for a total length L }
10082: function CFill(S : String; L : Byte) : String; external 'dmath'; 10083: { Centers string S on a total length L }
10084: function Replace(S : String; C1, C2 : Char) : String; external 'dmath';
10085: { Replaces in string S all the occurences of C1 by C2 }
10086: function Extract(S: String; var Index: Byte; Delim: Char): String; external 'dmath';
10087: { Extracts a field from a string }
10088: procedure Parse(S : String; Delim: Char; Field: TStrVector; var N: Byte); external 'dmath';
10089: { Parses a string into its constitutive fields }
10090: procedure SetFormat(NumLength, MaxDec:Integer; FloatPoint, NSZero:Bool); external 'dmath';
10091: { Sets the numeric format }
10092: function FloatStr(X : Float) : String; external 'dmath';
10093: { Converts a real to a string according to the numeric format }
10094: function IntStr(N : LongInt) : String; external 'dmath';
10095: { Converts an integer to a string }
10096: function CompStr(Z : Complex) : String; external 'dmath'; 10097: { Converts a complex number to a string }
10098: { $IFDEF DELPHI }
10099: function StrDec(S : String) : String; external 'dmath';
10100: { Set decimal separator to the symbol defined in SysUtils } 10101: function IsNumeric(var S : String; var X : Float) : Boolean; external 'dmath';
10102: { Test if a string represents a number and returns it in X }
10103: function ReadNumFromEdit(Edit : TEdit) : Float; external 'dmath';
10104: { Reads a floating point number from an Edit control }
10105: procedure WriteNumToFile(var F : Text; X : Float); external 'dmath';
        { Writes a floating point number in a text file } 

{ ENDIF }
10106:
10107:
10108: {
10109:
          BGI / Delphi graphics
10110:
10111: function InitGraphics
10112: [$IFDEF DELPHI]
10113: (Width, Height: Integer): Boolean;
10114: (SELSE)
10115: (Pilot, Mode: Integer; BGIPath: String): Boolean; {$ENDIF} external 'dmath';
10116: { Enters graphic mode }
10116: { Efficis graphic mode; }
10117: procedure SetWindow({$:IFDEF DELPHI}Canvas: TCanvas;{$:ENDIF}
10118: X1, X2, Y1, Y2: Integer; GraphBorder:Boolean); external 'dmath';
10119: { Sets the graphic window }
10120: procedure SetOxScale(Scale
                                  OxMin, OxMax, OxStep : Float); external 'dmath';
10121:
10122: { Sets the scale on the Ox axis }
10123: procedure SetOyScale(Scale
                                                           : TScale;
                                 OyMin, OyMax, OyStep : Float); external 'dmath';
10124:
10125: { Sets the scale on the Oy axis }
10126: procedure GetOxScale(var Scale
                                                                 : TScale;
                                 var OxMin, OxMax, OxStep : Float); external 'dmath';
10127:
10128: { Returns the scale on the Ox axis }
10129: procedure GetOyScale(var Scale
                                                                 : TScale;
                                 var OyMin, OyMax, OyStep : Float); external 'dmath';
10130:
10131: { Returns the scale on the Oy axis }
10132: procedure SetGraphTitle(Title: String); external 'dmath'; { Sets the title for the graph }
10133: procedure SetOxTitle(Title: String); external 'dmath'; { Sets the title for the Ox axis } 10134: procedure SetOyTitle(Title: String); external 'dmath'; { Sets the title for the Oy axis }
10135: function GetGraphTitle: String; external 'dmath'; { Returns the title for the graph } 10136: function GetOxTitle: String; external 'dmath'; { Returns the title for the Ox axis } 10137: function GetOyTitle: String; external 'dmath'; { Returns the title for the Oy axis }
10138: {$IFNDEF DELPHI
10139: procedure SetTitleFont(FontIndex, Width, Height : Integer); external 'dmath';
10140: { Sets the font for the main graph title }
10141: procedure SetOxFont(FontIndex, Width, Height: Integer); external 'dmath'; 10142: { Sets the font for the Ox axis (title and labels) } 10143: procedure SetOyFont(FontIndex, Width, Height: Integer); external 'dmath';
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10144: { Sets the font for the Oy axis (title and labels) }
10145: procedure SetLgdFont(FontIndex, Width, Height : Integer); external 'dmath';
 10146: { Sets the font for the legends }
                procedure SetClipping(Clip : Boolean); external 'dmath';
10147:
10148: { Determines whether drawings are clipped at the current viewport
10149:
                    boundaries, according to the value of the Boolean parameter Clip }
10150: { SENDIF }
 10151: procedure PlotOxAxis($IFDEF DELPHI)(Canvas : TCanvas)($ENDIF); external 'dmath';
10152: { Plots the horizontal axis }
10153: procedure PlotOyAxis($IFDEF DELPHI)(Canvas : TCanvas)($ENDIF); external 'dmath';
10154: { Plots the vertical axis }
10154: { Plots the vertical axis }
10155: procedure PlotGrid([{SIFDEF DELPHI}]Canvas:TCanvas;[{SENDIF}] Grid:TGrid); external 'dmath';
10156: { Plots a grid on the graph }
10157: procedure WriteGraphTitle [{SIFDEF DELPHI}](Canvas: TCanvas)[{SENDIF}]; external 'dmath';
10157: [SENDIF] | Procedure WriteGraphTitle | SIFDEF DELPHI] | Canvas | SENDIF]; external 'dmath';
10158: [SENDIF] | Procedure WriteGraphTitle | SIFDEF DELPHI] | Canvas | SENDIF] | Output | Canvas | Canvas | SENDIF] | Output | Canvas | Can
10158: { Writes the title of the graph }
10159: procedure SetMaxCurv(NCurv : Byte); external 'dmath';
 10160: { Sets the maximum number of curves and re-initializes their parameters }
10161: procedure SetPointParam
10162: {SIFDEF DELPHI}
10163: (CurvIndex, Symbol, Size : Integer; Color : TColor);
10164: {$ELSE}
10165: (CurvIndex, Symbol, Size, Color: Integer); {$ENDIF} external 'dmath';
10166: { Sets the point parameters for curve # CurvIndex
 10167: procedure SetLineParam
10168: {SIFDEF DELPHI}
10169: (CurvIndex : Integer; Style : TPenStyle; Width : Integer; Color : TColor);
10170: { $ELSE }
10171: (CurvIndex, Style, Width, Color : Integer); {$ENDIF} external 'dmath';
 10172: { Sets the line parameters for curve # CurvIndex }
 10173: procedure SetCurvLegend(CurvIndex : Integer; Legend : String); external 'dmath';
 10174: { Sets the legend for curve # CurvIndex
10175: procedure SetCurvStep(CurvIndex, Step : Integer); external 'dmath'; 10176: { Sets the step for curve # CurvIndex }
10177: function GetMaxCurv : Byte; external 'dmath'; { Returns the maximum number of curves }
 10178: procedure GetPointParam
10179: {$IFDEF DELPHI}
10180: (CurvIndex : Integer; var Symbol, Size : Integer; var Color : TColor);
10181: {$ELSE}
 10182: (CurvIndex : Integer; var Symbol, Size, Color : Integer); { SENDIF } external 'dmath';
 10183: { Returns the point parameters for curve # CurvIndex }
10184: procedure GetLineParam
10185: {$IFDEF DELPHI}
10186: (CurvIndex : Integer; var Style : TPenStyle; var Width : Integer; var Color : TColor);
10188: (CurvIndex: Integer; var Style, Width, Color: Integer); ($ENDIF) external 'dmath';
10189: { Returns the line parameters for curve # CurvIndex }
10190: function GetCurvLegend(CurvIndex : Integer) : String; external 'dmath';
10191: { Returns the legend for curve # CurvIndex }
 10192: function GetCurvStep(CurvIndex : Integer) : Integer; external 'dmath';
10193: { Returns the step for curve # CurvIndex }
10194: {$IFDEF DELPHI}
10195: procedure PlotPoint(Canvas
                                                                               : TCanvas;
: Float; CurvIndex : Integer); external 'dmath';
                                                          X, Y
10197: {$ELSE}
10198: procedure PlotPoint(Xp, Yp, CurvIndex : Integer); external 'dmath';
10199: {$ENDIF}
10200: { Plots a point on the screen }
10201: procedure PlotCurve({$IFDEF DELPHI}Canvas : TCanvas;{$ENDIF}
                                                                                                   : TVector;
: Integer); external 'dmath';
10202:
                                                          Lb, Ub, CurvIndex
10203:
 10204: { Plots a curve }
10205: procedure PlotCurveWithErrorBars([$IFDEF DELPHI]|Canvas : TCanvas: [$ENDIF]|
10206: X, Y, S : TVector;
                                                                                         Ns, Lb, Ub, CurvIndex : Integer); external 'dmath';
10207:
10208: { Plots a curve with error bars }
 10209: procedure PlotFunc({$iFDEF DELPHI}Canvas: TCanvas;{$ENDIF}
                                                           Func
 10210:
                                                          Xmin, Xmax
10211:
                                                                                                          : Float;
                                                          ($IFDEF DELPHI)
CurvIndex : Integer; {$ENDIF}
(*SENDIF*)
CurvIndex : Integer; *external 'dmath';
10212:
 10213:
10214: { Plots a function }
10215: procedure WriteLegend({$IFDEF DELPHI}Canvas: TCanvas;{$ENDIF}
                                                           NCurv
10216:
                                                                                                                 : Integer:
                                                                ShowPoints, ShowLines : Boolean); external 'dmath';
10217:
10218: { Writes the legends for the plotted curves }
10219: procedure ConRec({$IFDEF DELPHI}Canvas : TCanvas;{$ENDIF}
10220: Nx, Ny, Nc : Integer;
                                                                                                       : Integer;
: TVector;
                                                      X, Y, Z
10221:
                                                                                                       : TMatrix); external 'dmath';
10222:
                                                      F
 10223: { Contour plot }
10223: { Contour Pict }
10224: function Xpixel(X : Float):Integer; external 'dmath'; {Converts user abscissa X to screen coordinate 10225: function Ypixel(Y : Float):Integer; external 'dmath'; {Converts user ordinate Y to screen coordinate 10226: function Xuser(X : Integer):Float; external 'dmath'; {Converts screen coordinate X to user abscissa 10227: function Yuser(Y : Integer):Float; external 'dmath'; {Converts screen coordinate Y to user ordinate Y to user ordin
 10228: {$IFNDEF DELPHI}
10229: procedure LeaveGraphics; external 'dmath';
10230: { Quits graphic mode } 10231: {$ENDIF} 10232: {
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10233: LaTeX graphics
10234:
10235: function TeX_InitGraphics(FileName : String; PgWidth, PgHeight : Integer; 10236: Header : Boolean) : Boolean; external 'dmath';
10237: { Initializes the LaTeX file }
10238: procedure TeX_SetWindow(X1, X2, Y1, Y2 : Integer; GraphBorder : Boolean); external 'dmath'; 10239: { Sets the graphic window }
10240: procedure TeX_LeaveGraphics(Footer : Boolean); external 'dmath'; { Close the LaTeX file
10241: procedure TeX_SetOxScale(Scale : TScale; OxMin, OxMax, OxStep : Float); external 'dmath';
10242: { Sets the scale on the Ox axis }
10243: procedure TeX_SetOyScale(Scale : '
                                                TScale; OyMin, OyMax, OyStep : Float); external 'dmath';
10244: { Sets the scale on the Oy axis }
10245: procedure TeX_SetGraphTitle(Title: String); external 'dmath'; { Sets the title for the graph }
10246: procedure TeX_SetOxTitle(Title: String); external 'dmath'; { Sets the title for the Ox axis } 10247: procedure TeX_SetOyTitle(Title: String); external 'dmath'; { Sets the title for the Oy axis }
10248: procedure TeX_PlotOxAxis; external 'dmath'; { Plots the horizontal axis } 10249: procedure TeX_PlotOyAxis; external 'dmath'; { Plots the vertical axis }
10250: procedure TeX_PlotGrid(Grid : TGrid); external 'dmath'; { Plots a grid on the graph } 10251: procedure TeX_WriteGraphTitle; external 'dmath'; Writes the title of the graph } 10252: procedure TeX_SetMaxCurv(NCurv : Byte); external 'dmath';
10253: { Sets the maximum number of curves and re-initializes their parameters }
10254: procedure TeX_SetPointParam(CurvIndex, Symbol, Size : Integer); external 'dmath';
10255: { Sets the point parameters for curve # CurvIndex } 10256: procedure TeX_SetLineParam(CurvIndex, Style : Integer;
                                        Width: Float; Smooth: Boolean); external 'dmath';
10258: { Sets the line parameters for curve # CurvIndex }
10259: procedure TeX_SetCurvLegend(CurvIndex : Integer; Legend : String); external 'dmath';
10260: { Sets the legend for curve # CurvIndex }
10261: procedure TeX_SetCurvStep(CurvIndex, Step : Integer); external 'dmath';
10262: { Sets the step for curve # CurvIndex }
10263: procedure TeX_PlotCurve(X, Y : TVector; Lb, Ub, CurvIndex : Integer); external 'dmath';
10264: { Plots a curve }
10265: procedure TeX_PlotCurveWithErrorBars(X, Y, S : TVector;
10266:
                                                    Ns, Lb, Ub, CurvIndex : Integer); external 'dmath';
10267: { Plots a curve with error bars }
10268: procedure TeX_PlotFunc(Func : TFunc; X1, X2 : Float;
10269:
                                   Npt : Integer; CurvIndex : Integer); external 'dmath';
10270: { Plots a function }
10271: procedure TeX_WriteLegend(NCurv : Integer; ShowPoints, ShowLines : Boolean); external 'dmath';
10272: { Writes the legends for the plotted curves }
10273: procedure TeX_ConRec(Nx, Ny, Nc : Integer; X, Y, Z : TVector; F : TMatrix); external 'dmath';
10274: { Contour plot }
10275: function Xcm(X : Float) : Float; external 'dmath'; { Converts user coordinate X to cm }
10276: function Ycm(Y : Float) : Float; external 'dmath'; { Converts user coordinate Y to cm }
10277:
10279: Function RawUTF8ToPDFString( const Value : RawUTF8) : PDFString
         Function _DateTimeToPdfDate( ADate : TDateTime) : TPdfDate
10281:
         Function _PdfDateToDateTime( const AText : TPdfDate) : TDateTime
10282:
         Function PdfRect( Left, Top, Right, Bottom : Single) : TPdfRect;
10283:
         Function PdfRect1( const Box : TPdfBox) : TPdfRect;
         Function PdfBox( Left, Top, Width, Height : Single) : TPdfBox
10284:
         //Function _GetCharCount( Text : PAnsiChar) : integer
10285:
         //Procedure L2R( W : PWideChar; L : integer)
Function PdfCoord( MM : single) : integer
Function CurrentPrinterPaperSize : TPDFPaperSize
10286:
10287:
10288:
10289:
         Function CurrentPrinterRes : TPoint
         Procedure GDICommentBookmark( MetaHandle : HDC; const aBookmarkName : RawUTF8)
10290:
         Procedure GDICommentOutline( MetaHandle : HDC; const aTitle : RawUTF8; aLevel : Integer)
Procedure GDICommentLink( MetaHandle:HDC; const aBookmarkName:RawUTF8; const aRect : TRect)
10291:
10292:
10293:
         Const('Usp10','String 'usp10.dll
10294:
          AddTypeS('TScriptState_enum', '( r0, r1, r2, r3, r4, fOverrideDirection, fInhibitSymSwap,
            'fCharShape, fDigitSubstitute,fInhibitLigate,fDisplayZWG, fArabicNumContext, fGcpClusters )
10295:
          10296:
10297: //***
10298:
10299: procedure SIRegister PMrand(CL: TPSPascalCompiler); //ParkMiller
10300: begin
10301: Procedure PMrandomize( I : word)
         Function PMrandom : longint
10302:
         Function Rrand : extended
10303:
10304:
         \textbf{Function} \  \, \texttt{Irand( N : word) : word}
10305: Function Brand( P : extended) : boolean 10306: Function Nrand : extended
10307: end;
10308:
10309: procedure SIRegister_Spring_Cryptography_Utils(CL: TPSPascalCompiler);
10310: begin
10311: Function Endian(x:LongWord): LongWord
           Function Endian64( x : Int64) : Int64
          Function spRol( x : LongWord; y : Byte) : LongWord
Function spRor( x : LongWord; y : Byte) : LongWord
10313:
10314:
          Function Ror64( x : Int64; y : Byte) : Int64
10315:
10316: end;
10317:
10318: procedure SIRegister_MapReader(CL: TPSPascalCompiler);
10319: begin
10320: Procedure ClearModules
10321: Procedure ReadMapFile(Fname: string)
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10322: Function AddressInfo( Address : dword) : string
10323:
        end;
10325:
        procedure SIRegister_LibTar(CL: TPSPascalCompiler);
10326:
        begin
10327:
          TTarPermission', '( tpReadByOwner, tpWriteByOwner, tpExecuteByOw
10328:
           +'ner, tpReadByGroup, tpWriteByGroup, tpExecuteByGroup, tpReadByOther, tpWri'
            +'teByOther, tpExecuteByOther
10329:
10330:
          TTarPermissions', 'set of TTarPermission
10331:
          TFileType', '( ftNormal, ftLink, ftSymbolicLink, ftCharacter, ft'
            +'Block, ftDirectory, ftFifo, ftContiguous, ftDumpDir, ftMultiVolume, ftVolumeHeader;
10332:
           TTarMode', '( tmSetUid, tmSetGid, tmSaveText )
          TTarModes', 'set of TTarMode
TTarDirRec', 'record Name: STRING; Size: INT64; DateTime: TDa'
+'teTime; Permissions: TTarPermissions; FileType: TFileType; LinkName: ST'
10334:
10335:
10336:
10337:
            +'RING; UID : INTEGER; GID : INTEGER; UserName : STRING; GroupName : STRING;'
            +' ChecksumOK : BOOLEAN; Mode : TTarModes; Magic : STRING; MajorDevNo : INTE'
10338:
10339:
            +'GER; MinorDevNo : INTEGER; FilePos : INT64; end
          SIRegister_TTarArchive(CL);
10340:
10341:
          SIRegister_TTarWriter(CL);
         Function PermissionString( Permissions : TTarPermissions) : STRING
10342:
10343:
         Function ConvertFilename (Filename : STRING) : STRING
         Function FileTimeGMT( FileName : STRING) : TDateTime;
Function FileTimeGMT1( SearchRec : TSearchRec) : TDateTime;
Procedure ClearDirRec( var DirRec : TTarDirRec)
10344:
10345:
10346:
10347: end;
10348:
10349:
10351: procedure SIRegister_TlHelp32(CL: TPSPascalCompiler);
10352: begin
10353:
         Const ('MAX MODIJLE NAME32', 'LongInt' ( 255);
         Function CreateToolhelp32Snapshot( dwFlags, th32ProcessID : DWORD) : THandle
10354:
         Const('TH32CS_SNAPHEAPLIST','LongWord( $00000001);
Const('TH32CS_SNAPPROCESS','LongWord').SetUInt( $00000002);
10355:
10357:
         Const('TH32CS_SNAPTHREAD','LongWord').SetUInt( $00000004);
10358:
         Const('TH32CS_SNAPMODULE','LongWord').SetUInt( $00000008);
         Const('TH32CS_INHERIT','LongWord').SetUInt( $80000000);
10359:
10360:
           tagHEAPLIST32','record dwSize:DWORD;th32ProcessID:DWORD;th32HeapID:DWORD;dwFlags:DWORD;end';
          AddTypeS('HEAPLIST32', 'tagHEAPLIST32' AddTypeS('THeapList32', 'tagHEAPLIST32')
10361:
10362:
         Const('HF32_DEFAULT','LongInt'( 1);
Const('HF32_SHARED','LongInt'( 2);
10363:
10364:
         Function Heap32ListFirst( hSnapshot : THandle; var lphl : THeapList32) : BOOL
10365:
10366:
         \textbf{Function} \ \ \texttt{Heap32ListNext(} \ \ \texttt{hSnapshot} \ : \ \ \texttt{THandle;} \ \ \textbf{var} \ \ \texttt{lphl} \ : \ \ \texttt{THeapList32)} \ : \ \ \texttt{BOOL}
         AddTypeS('tagHEAPENTRY32', 'record dwSize : DWORD; hHandle : THandle; dwAd'
10367:
           +'dress : DWORD; dwBlockSize : DWORD; dwFlags : DWORD; dwLockCount : DWORD;
10368:
            +'dwResvd : DWORD; th32ProcessID : DWORD; th32HeapID : DWORD; end
10369:
          AddTypeS('HEAPENTRY32', 'tagHEAPENTRY32' AddTypeS('THeapEntry32', 'tagHEAPENTRY32')
10370:
10371:
         Const('LF32_FIXED','LongWord').SetUInt( $00000001);
Const('LF32_FREE','LongWord').SetUInt( $00000002);
10372:
10373:
10374:
         Const('LF32_MOVEABLE','LongWord').SetUInt( $00000004);
         Function Heap32First( var lphe : THeapEntry32; th32ProcessID, th32HeapID : DWORD) : BOOL Function Heap32Next( var lphe : THeapEntry32) : BOOL
10375:
10376:
10377:
         DWORD; var lpNumberOfBytesRead : DWORD) : BOOL
          AddTypeS('tagTHREADENTRY32', 'record dwSize : DWORD; cntUsage : DWORD; th3'
10378:
10379:
           +'2ThreadID : DWORD; th32OwnerProcessID : DWORD; tpBasePri : Longint; tpDelt'
          +'aPri : Longint; dwFlags : DWORD; end
AddTypeS('THREADENTRY32', 'tagTHREADENTRY32
AddTypeS('TThreadEntry32', 'tagTHREADENTRY32
10380:
10381:
10382:
         Function Thread32First( hSnapshot : THandle; var lpte : TThreadEntry32) : BOOL
Function Thread32Next( hSnapshot : THandle; var lpte : TThreadEntry32) : BOOL
10383:
10384:
10385:
        end;
         Const('EW_RESTARTWINDOWS','LongWord').SetUInt( $0042);
10386:
         Const('EW_EXEDOTSYSTEM','LongWord( $0043);
Const('EW_EXITANDEXECAPP','LongWord( $0044);
Const('ENDSESSION_LOGOFF','LongWord').SetUInt( DWORD ( $80000000 ));
10388:
10389:
         Const('EWX_LOGOFF','LongInt'( 0);
Const('EWX_SHUTDOWN','LongInt'( 1);
Const('EWX_REBOOT','LongInt'( 2);
10390:
10391:
10392:
         Const('EWX_FORCE','LongInt'( 4);
Const('EWX_POWEROFF','LongInt'( 8);
Const('EWX_FORCEIFHUNG','LongWord').SetUInt( $10);
10393:
10394:
10395:
10396:
         Function GET_APPCOMMAND_LPARAM( const lParam : LongInt) : Shortint
10397:
         Function GET_DEVICE_LPARAM( const lParam : LongInt) : Word
10398:
         Function GET_MOUSEORKEY_LPARAM( const lParam : LongInt) : Word
10399:
         Function GET_FLAGS_LPARAM( const lParam : LongInt) : Word
         Function GET_KEYSTATE_LPARAM( const lParam : LongInt) : Word
10400:
         Function GetWindowWord( hWnd : HWND; nIndex : Integer) : Word
Function SetWindowWord( hWnd : HWND; nIndex : Integer; wNewWord : Word) : Word
10402:
         Function GetWindowLong( hWnd : HWND; nIndex : Integer) : Longint
10403:
         Function SetWindowLong( hWnd : HWND; nIndex : Integer; dwNewLong : Longint) : Longint
10404:
10405:
         Function GetClassWord( hWnd : HWND; nIndex : Integer) : Word
         Function SetClassWord( hWnd : HWND; nIndex : Integer; wNewWord : Word) : Word
10406:
10407:
         Function GetClassLong( hWnd : HWND; nIndex : Integer) : DWORD
         Function SetClassLong( hWnd : HWND; nIndex : Integer; dwNewLong : Longint) : DWORD
10408:
10409: Function GetDesktopWindow : HWND
10410: Function GetParent( hWnd : HWND) : HWND
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10411:
                 Function SetParent( hWndChild, hWndNewParent : HWND) : HWND
10412:
                  Function GetTopWindow( hWnd : HWND) : HWND
                  Function GetNextWindow( hWnd : HWND; uCmd : UINT) : HWND
10414:
                  Function GetWindow( hWnd : HWND; uCmd : UINT) : HWND
10415:
                   //Delphi DFM
                 Function LoadDFMFile2Strings(const AFile:string; AStrings:TStrings; var WasText:boolean):integer
10416:
10417:
                 Function SaveStrings2DFMFile( AStrings : TStrings; const AFile : string) : integer
                 procedure GetHighlighters(AOwner: TComponent; AHighlighters: TStringList; AppendToList: boolean); function GetHighlightersFilter(AHighlighters: TStringList): string;
10418:
10419:
10420:
                  \textbf{function} \ \ \texttt{GetHighlighterFromFileExt} ( \texttt{AHighlighters: TStringList}; \texttt{Extension: string}) : \texttt{TSynCustomHighlighter}; \\ \textbf{TStringList}; \texttt{Extension: string}) : \texttt{TStringList}; \\ \textbf{TStringList}; \texttt{Extension: string}) : \texttt{TStringList}; \\ \textbf{TStringList}; \\ \textbf{TStringList}
                 Function ShowOwnedPopups( hWnd : HWND; fShow : BOOL) : BOOL
10421:
                  Function OpenIcon( hWnd : HWND) : BOOL
10423:
                 Function CloseWindow( hWnd : HWND) : BOOL
                 Function MoveWindow( hWnd : HWND; X, Y, nWidth, nHeight : Integer; bRepaint : BOOL) : BOOL
Function SetWindowPos(hWnd: HWND; hWndInsertAfter: HWND; X,Y,cx,cy : Integer; uFlags : UINT) : BOOL
10424:
10425:
10426:
                  Function IsWindowVisible( hWnd : HWND) : BOOL
                  Function IsIconic( hWnd : HWND) : BOOL
10427:
                 Function AnyPopup : BOOL
Function BringWindowToTop( hWnd : HWND) : BOOL
10428:
10429:
10430:
                 Function IsZoomed( hWnd : HWND) : BOOL
                  Function IsWindow( hWnd : HWND) : BOOL
10431:
10432:
                 Function IsMenu( hMenu : HMENU) : BOOL
10433:
                 \textbf{Function} \  \, \texttt{IsChild(} \  \, \texttt{hWndParent,} \  \, \texttt{hWnd} \  \, \texttt{:} \  \, \texttt{HWND)} \  \, \texttt{:} \  \, \texttt{BOOL}
                 Function DestroyWindow( hWnd : HWND) : BOOL
10434:
10435:
                 Function ShowWindow( hWnd : HWND; nCmdShow : Integer) : BOOL
10436:
                  Function AnimateWindow( hWnd : HWND; dwTime : DWORD; dwFlags : DWORD) : BOOL
10437:
                 Function ShowWindowAsync( hWnd : HWND; nCmdShow : Integer) : BOOL
10438:
                 Function FlashWindow( hWnd : HWND; bInvert : BOOL) : BOOL
10439:
                 Function IsWindowUnicode( hWnd : HWND) : BOOL
                 Function EnableWindow( hWnd : HWND; bEnable : BOOL) : BOOL
10441:
                 Function IsWindowEnabled( hWnd : HWND) : BOOL
10442:
10443: procedure SIRegister IDECmdLine(CL: TPSPascalCompiler);
10444: begin
                 const('ShowSetupDialogOptLong','String '--setup
10445:
                 PrimaryConfPathOptLong', 'String '--primary-config-path=
PrimaryConfPathOptShort', 'String '--pep=
SecondaryConfPathOptLong', 'String '--secondary-config-path=
SecondaryConfPathOptShort', 'String '--sep=
10446:
10447:
10448:
10449:
                 NoSplashScreenOptLong', 'String '--no-splash-screen
NoSplashScreenOptShort', 'String '--nsc
StartedByStartLazarusOpt', 'String '--started-by-startlazarus
10450:
10451:
10452:
                  SkipLastProjectOpt', 'String '--skip-last-project
10453:
                  DebugLogOpt','String '--debug-log=
10454:
10455:
                 DebugLogOptEnable','String '--debug-enable=
                 LanguageOpt','String '--language=
LazarusDirOpt','String '--lazarusdir=
10456:
10457:
                 Procedure ParseCommandLine(aCmdLineParams:TStrings;out IDEPid:Int;out ShowSplashScreen:boolean);
                 Function GetCommandLineParameters( aCmdLineParams : TStrings; isStartLazarus:Boolean) : string
Function ExtractPrimaryConfigPath( aCmdLineParams : TStrings) : string
10459:
10460:
10461:
                 Function IsHelpRequested : Boolean
                 Function IsVersionRequested : boolean
10462:
                  Function GetLanguageSpecified : string
10463:
10464:
                 Function ParamIsOption( ParamIndex : integer; const Option : string) : boolean
                 Function ParamIsOptionPlusValue(ParamIndex:integer;const Option:string;out AValue:string):bool;
10465:
                 Procedure ParseNoGuiCmdLineParams
10466:
                 Function ExtractCmdLineFilenames : TStrings
10467:
10468: end;
10469:
10470:
10471: procedure SIRegister_LazFileUtils(CL: TPSPascalCompiler);
10472:
               begin
10473:
                 Function CompareFilenames (const Filename1, Filename2 : string) : integer
10474:
                 Function CompareFilenamesIgnoreCase( const Filename1, Filename2 : string) : integer
                 Function CompareFileExt( const Filename, Ext: string; CaseSensitive: boolean): integer;
Function CompareFileExt1( const Filename, Ext: string): integer;
10475:
                  Function CompareFilenameStarts( const Filename1, Filename2 : string) : integer
10477:
10478:
                 \textbf{Function} \ \texttt{CompareFilenames} \ (\texttt{Filename1:PChar}; \texttt{Len1:integer}; \ \ \texttt{Filename2:PChar}; \texttt{Len2:integer}) : \texttt{integer}; \ \ \texttt{Filename2:PChar}; \texttt{Len2:integer}) : \texttt{integer}; \ \ \texttt{Filename3:PChar}; \texttt{Len2:integer}) : \texttt{Integer}; \ \ \texttt{Filename3:PChar}; \texttt{Len3:integer}; \ \ \texttt{Filename3:PChar}; \texttt{Len3:integer}; \ \ \texttt{Filename3:PChar}; \texttt{Len3:integer}; \ \ \texttt{Filename3:PChar}; \texttt{Len3:integer}; \ \ \texttt{Len3:integer}; \ \
10479:
                 Function CompareFilenamesP( Filename1, Filename2 : PChar; IgnoreCase : boolean) : integer
Function DirPathExists( DirectoryName : string) : boolean
10480:
                  Function DirectoryIsWritable( const DirectoryName : string) : boolean
10481:
10482:
                 Function ExtractFileNameOnly( const AFilename : string) : string
10483:
                 Function FilenameIsAbsolute( const TheFilename : string) : boolean
10484:
                 Function FilenameIsWinAbsolute( const TheFilename : string) : boolean
                  Function FilenameIsUnixAbsolute( const TheFilename : string) : boolean
10485:
10486:
                  Function ForceDirectory( DirectoryName : string) : boolean
10487:
                  Procedure CheckIfFileIsExecutable( const AFilename : string)
                 Procedure CheckIfFileIsSymlink( const AFilename : string)
Function FileIsText( const AFilename : string) : boolean
10488:
10489:
                  Function FileIsText2( const AFilename : string; out FileReadable : boolean) : boolean
                 Function FilenameIsTrimmed( const TheFilename : string) : boolean
Function FilenameIsTrimmed2( StartPos : PChar; NameLen : integer) : boolean
10491:
10492:
10493:
                 Function TrimFilename ( const AFilename : string) : string
                  Function ResolveDots( const AFilename : string) : string
10494:
                  Procedure ForcePathDelims( var FileName : string)
10495:
10496:
                 Function GetForcedPathDelims( const FileName : string) : String
                 Function CleanAndExpandFilename( const Filename: string): string
Function CleanAndExpandDirectory( const Filename: string): string
10497:
10498:
10499: Function TrimAndExpandFilename( const Filename: string; const BaseDir: string): string
```

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10500:
                       Function TrimAndExpandDirectory( const Filename : string; const BaseDir : string) : string
                        Function TryCreateRelativePath(const Dest,Source:String; UsePointDirectory:bool;
10501:
                    AlwaysRequireSharedBaseFolder : Boolean; out RelPath : String) : Boolean
10502:
                       Function CreateRelativePath( const Filename, BaseDirectory: string; UsePointDirectory: boolean;
                     AlwaysRequireSharedBaseFolder: Boolean) : string
                       Function FileIsInPath( const Filename, Path: string): boolean Function AppendPathDelim( const Path: string): string Function ChompPathDelim( const Path: string): string
10503:
10504:
 10505:
10506:
                        Function CreateAbsoluteSearchPath( const SearchPath, BaseDirectory : string) : string
10507:
                       \textbf{Function} \ \texttt{CreateRelativeSearchPath} ( \ \textbf{const} \ \ \texttt{SearchPath}, \ \ \texttt{BaseDirectory} : \ \textbf{string}) : \ \textbf{string})
                        Function MinimizeSearchPath( const SearchPath: string) : string
 10508:
                        Function FindPathInSearchPath(APath:PChar;APathLen:int;SearchPath:PChar;SearchPathLen:int):PChar;
 10510:
                        (*Function FileExistsUTF8( const Filename : string) : boolean
                       Function FileAgeUTF8( const FileName : string) : Longint
Function DirectoryExistsUTF8( const Directory : string) : Boolean
Function ExpandFileNameUTF8( const FileName : string; BaseDir : string) : string
Function FindFirstUTF8(const Path:string; Attr: Longint; out Rslt : TSearchRec) : Longint
10511:
10512:
 10513:
 10514:
 10515:
                       Function FindNextUTF8( var Rslt : TSearchRec) : Longint
                      Procedure FindCloseUTF8( var F : TSearchmec)
Function FileSetDateUTF8( const FileName : String; Age : Longint) : Longint
Function FileGetAttrUTF8( const FileName : String) : Longint
Function FileSetAttrUTF8( const Filename : String; Attr : longint) : Longint
10516:
10517:
 10518:
 10519:
10520:
                       {\tt Function\ DeleteFileUTF8(\ const\ FileName\ :\ String)\ :\ Boolean}
                       Function RenameFileUTF8( const OldName, NewName : String) : Boolean
Function FileSearchUTF8( const Name, DirList : String; ImplicitCurrentDir : Boolean) : String
 10521:
 10522:
 10523:
                       Function FileIsReadOnlyUTF8( const FileName : String) : Boolean
10524:
                       Function GetCurrentDirUTF8 : String
10525:
                       Function SetCurrentDirUTF8( const NewDir : String) : Boolean
 10526:
                       Function CreateDirUTF8( const NewDir : String) : Boolean Function RemoveDirUTF8( const Dir : String) : Boolean
                       Function ForceDirectoriesUTF8( const Dir : string) : Boolean
 10528:
                       Function FileOpenUTF8( const FileName : string; Mode : Integer) : THandle Function FileCreateUTF8( const FileName : string) : THandle;
10529:
10530:
10531:
                       Function FileCreateUTF81( const FileName : string; Rights : Cardinal) : THandle;
                        Function FileCreateUtf82( const FileName : String; ShareMode : Integer; Rights : Cardinal) : THandle;
10533:
                       Function FileSizeUtf8( const Filename : string) : int64
                       Function GetFileDescription( const AFilename : string) : string
Function GetAppConfigDirUTF8( Global : Boolean; Create : boolean) : string
Function GetAppConfigFileUTF8( Global : Boolean; SubDir : boolean; CreateDir : boolean) : string
10534:
 10535:
 10536:
 10537:
                        Function GetTempFileNameUTF8( const Dir, Prefix : String) : String*)
10538:
                       Function IsUNCPath( const Path : String) : Boolean
                       Function ExtractUNCVolume(const Path: String): String
Function ExtractFileRoot(FileName: String): String
10539:
 10540:
                        Function GetDarwinSystemFilename(Filename: string): string
 10541:
 10542:
                       Procedure SplitCmdLineParams( const Params: string; ParamList: TStrings; ReadBackslash: boolean)
10543:
                       Function StrToCmdLineParam( const Param : string) : string
                       Function MergeCmdLineParams( ParamList : TStrings) : string
10544:
                        Procedure InvalidateFileStateCache( const Filename : string)
 10546:
                        \textbf{Function} \ \ \texttt{FindAllFiles}(\textbf{const} \ \ \texttt{SearchPath}: \textbf{String}; \texttt{SearchMask}: \textbf{String}; \texttt{SearchSubDirs}: \texttt{Boolean}) : \texttt{TStringList}); \\ \textbf{FindAllFiles}(\textbf{const} \ \ \texttt{SearchPath}: \textbf{String}; \texttt{SearchMask}: \textbf{String}; \texttt{String}; \texttt{SearchMask}: \textbf{String}; \texttt{String}; \texttt
10547:
                       Function FindAllDirectories( const SearchPath : string; SearchSubDirs : Boolean) : TStringList
10548:
                       Function ReadFileToString( const Filename : string) : string
 10549:
                        type
                           TCopyFileFlag = ( cffOverwriteFile,
 10550:
                          cffCreateDestDirectory, cffPreserveTime );
TCopyFileFlags = set of TCopyFileFlag;*)
10551:
10552:
                           TCopyFileFlag', '(cffOverwriteFile, cffCreateDestDirectory, cffPreserveTime)
 10553:
                           TCopyFileFlags', 'set of TCopyFileFlag
 10554:
 10555:
                          Function CopyDirTree( const SourceDir, TargetDir: string: Flags: TCopyFileFlags): Boolean
10556: end;
 10557:
 10558: procedure SIRegister_lazMasks(CL: TPSPascalCompiler);
 10559: begin
 10560:
                          TMaskCharType', '( mcChar, mcCharSet, mcAnyChar, mcAnyText )
10561:
                          SIRegister_TMask(CL);
                          SIRegister TParseStringList(CL);
 10562:
                          SIRegister_TMaskList(CL);
 10564:
                       Function MatchesMask( const FileName, Mask : String; const CaseSensitive : Boolean) : Boolean
10565:
                       \textbf{Function} \ \texttt{MatchesWindowsMask} ( \ \textbf{const} \ \texttt{FileName} \ , \ \texttt{Mask} \ : \ \textbf{String} \ ; \ \textbf{const} \ \texttt{CaseSensitive} \ : \ \texttt{Boolean}) \ : \ \texttt{Bool} \ ; \ \texttt{Bool} \ ; \ \texttt{IndexSupplementary} \ ; \ \texttt{Boolean} \ ) \ : \ \texttt{Boolean} \ ; \ \texttt{Boolean} \ ) \ : \ \texttt{Boolean} \ ; \ \texttt{Boolean} \ ) \ : \ \texttt{Boolean} \ ; \ \texttt{Boolean} \ ) \ : \ \texttt{Boolean} \ ; \ \texttt{Boolean} \ ) \ : \ \texttt{Boolean} \ ; \ \texttt{Boolean} \ ) \ : \ \texttt{Boolean
                       Function MatchesMaskList(const FileName, Mask:String;Separator:Char;const CaseSensitive:Boolean):Bool;
10566:
 10567:
                       Function MatchesWindowsMaskList(const FileName, Mask:String; Separat:Char; const CaseSensitive:Bool):Bool;
 10568: end;
10569:
10570: procedure SIRegister_JvShellHook(CL: TPSPascalCompiler);
10571: begin
                            //PShellHookInfo', '^TShellHookInfo // will not work
 10572:
                           TShellHookInfo', 'record hwnd : THandle; rc : TRect; end SHELLHOOKINFO', 'TShellHookInfo
 10573:
10574:
                          SHELLHOOK INFO!
                          SHELLHOOKINFO', 'ISNEITHOOKINFO
LPSHELLHOOKINFO', 'PShellHookInfo
TJvShellHookEvent', 'Procedure ( Sender : TObject; var Msg : TMessage)
10575:
10576:
                           SIRegister_TJvShellHook(CL);
10578:
                       Function InitJvShellHooks : Boolean
10579:
                       Procedure UnInitJvShellHooks
 10580: end;
10581:
 10582:
                    procedure SIRegister_JvExControls(CL: TPSPascalCompiler);
10583: begin
                          TDlgCode', '( dcWantAllKeys, dcWantArrows, dcWantChars, dcButton'
10584:
 10585:
                               +', dcHasSetSel, dcWantTab, dcNative )
                          TDlgCodes', 'set of TDlgCode
```

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10587:
          'dcWantMessage',' dcWantAllKevs);
10588:
           SIRegister_IJvExControl(CL);
           SIRegister_IJvDenySubClassing(CL);
10590:
           SIRegister_TStructPtrMessage(CL);
         Procedure SetDotNetFrameColors( FocusedColor, UnfocusedColor: TColor)

Procedure DrawDotNetControl( Control: TWinControl; AColor: TColor; InControl: Boolean);

Procedure DrawDotNetControl1( DC: HDC; R: TRect; AColor: TColor; UseFocusedColor: Boolean);
10591:
10592:
10593:
10594:
          Procedure HandleDotNetHighlighting(Control:TWinControl;const Msg:TMessage;MouseOver:Boolean;Color:TColor);
         Function CreateWMMessage( Msg : Integer; WParam : Integer; LParam : Longint) : TMessage; Function CreateWMMessage( Msg : Integer; WParam : Integer; LParam : TControl) : TMessage;
10595:
10596:
         Function SmallPointToLong( const Pt : TSmallPoint) : Longint
Function ShiftStateToKeyData( Shift : TShiftState) : Longint
10597:
10598:
10599:
         Function GetFocusedControl( AControl : TControl) : TWinControl
         Function DlgcToDlgCodes( Value : Longint) : TDlgCodes
Function DlgCodesToDlgc( Value : TDlgCodes) : Longint
10600:
10601:
10602:
          Procedure GetHintColor( var HintInfo: THintInfo; AControl: TControl; HintColor: TColor)
          \textbf{Function} \  \, \texttt{DispatchIsDesignMsg} \, ( \  \, \texttt{Control} \, : \, \, \texttt{TControl} \, ; \, \, \textbf{var} \, \, \texttt{Msg} \, : \, \, \texttt{TMessage}) \, : \, \, \texttt{Boolean} \, \,
10603:
10604:
           SIRegister_TJvExControl(CL);
           SIRegister_TJvExWinControl(CL);
10605:
10606:
           SIRegister_TJvExCustomControl(CL);
10607:
           SIRegister_TJvExGraphicControl(CL);
10608:
           SIRegister_TJvExHintWindow(CL);
10609:
           SIRegister_TJvExPubGraphicControl(CL);
10610: end;
10611:
10612:
10613: procedure SIRegister_EncdDecd(CL: TPSPascalCompiler);
10614: begin
10615:
         Procedure EncodeStream( Input, Output : TStream)
         Procedure DecodeStream( Input, Output : TStream)
         Function EncodeString1( const Input : string) : string
10617:
10618: Function DecodeString1( const Input : string) : string
10619: end;
10620:
10621:
10622: procedure SIRegister_SockAppReg(CL: TPSPascalCompiler);
10623: begin
10624:
          SIRegister_TWebAppRegInfo(CL);
10625:
           SIRegister_TWebAppRegList(CL);
         Procedure GetRegisteredWebApps( AList : TWebAppRegList)
10626:
10627:
         Procedure RegisterWebApp( const AFileName, AProgID : string)
         Procedure UnregisterWebApp( const AProgID : string)
10628:
         Function FindRegisteredWebApp( const AProgID : string) : string
10629:
         Function CreateRegistry( InitializeNewFile : Boolean) : TCustomIniFile
10630:
          'sUDPPort','String 'UDPPort
10631:
10632: end;
10633:
10634: procedure SIRegister_PJEnvVars(CL: TPSPascalCompiler);
10635:
        begin
10636:
         // TStringDynArray', 'array of string
10637:
         Function GetEnvVarValue( const VarName : string) : string
         Function SetEnvVarValue( const VarName, VarValue : string) : Integer
10638:
         Function DeleteEnvVar( const VarName : string) : Integer
10639:
         Function CreateEnvBlock(const NewEnv:TStrings;const IncludeCurrent:Bool;const Buffer:string;const
10640:
        BufSize:Int):Int;
10641: Function ExpandEnvVars( const Str : string) : string
10642: Function GetAllEnvVars( const Vars : TStrings) : Int.
                                                                      Integer
         Procedure GetAllEnvVarNames( const Names : TStrings)
10643:
10644:
          Function GetAllEnvVarNames1 : TStringDynArray;
10645:
         Function EnvBlockSize : Integer
10646:
          TPJEnvVarsEnum', 'Procedure ( const VarName : string; Data : TObject)
10647:
           SIRegister_TPJEnvVarsEnumerator(CL);
10648:
           SIRegister_TPJEnvVars(CL);
          FindClass('TOBJECT'),'EPJEnvVars
FindClass('TOBJECT'),'EPJEnvVars
10649:
10650:
10651:
          //Procedure Register
10652:
        end;
10653:
10654: (*---
10655: procedure SIRegister PJConsoleApp(CL: TPSPascalCompiler);
10656: begin
10657:
          'cOneSecInMS','LongInt'( 1000);
10658:
         //'cDefTimeSlice','LongInt'( 50);
//'cDefMaxExecTime',' cOneMinInMS);
10659:
           'cAppErrorMask','LongInt'( 1 shl 29);
10660:
         Function IsApplicationError( const ErrCode : LongWord) : Boolean
10661:
         TPJConsoleAppPriority', '(cpDefault, cpHigh, cpNormal, cpIdle, cpRealTime)
TPJConsoleColors', 'record Foreground: TPJConsoleColor; Background:TPJConsoleColor; end;
Function MakeConsoleColors( const AForeground, ABackground: TPJConsoleColor):TPJConsoleColors;
Function MakeConsoleColors1( const AForeground, ABackground: TColor): TPJConsoleColors;
10662:
10663:
10664:
          Function MakeConsoleColors2( const AForeground, ABackground : TAlphaColor) : TPJConsoleColors;
10666:
         Function MakeSize( const ACX, ACY : LongInt) : TSize
10667:
10668:
           SIRegister_TPJCustomConsoleApp(CL);
10669:
           SIRegister_TPJConsoleApp(CL);
10670: end;
10671:
10672: procedure SIRegister_ip_misc(CL: TPSPascalCompiler);
10673: begin
10674: INVALID_IP_ADDRESS', 'LongWord').SetUInt( $ffffffff);
```

```
10675:
          t encoding', '( uuencode, base64, mime )
10676:
         Function internet_date( date : TDateTime) : string
          Function lookup_hostname( const hostname : string) : longint
         Function my_hostname : string
10678:
10679:
         Function my_ip_address : longint
         Function ip2string( ip_address : longint) : string
Function resolve_hostname( ip : longint) : string
10680:
10681:
          Function address_from( const s : string; count :
                                                                        integer) : string
10682:
         Function encode_base64( data : TStream) : TStringList
10683:
10684:
         Function decode_base64( source : TStringList) : TMemoryStream
         Function posn( const s, t : string; count : integer) : integer
Function poscn( c : char; const s : string; n : integer) : integer
10685:
10687:
         Function filename_of( const s : string) : string
10688:
          // {\it Function trim(consts:string):string}
10689:
         //Procedure setlength( var s : string; l : byte) Function TimeZoneBias : longint
10690:
         Function eight2seven_quoteprint( const s : string) : string
10691:
10692:
         Function eight2seven_german( const s : string) : string
         Function seven2eight_quoteprint( const s : string) : string end;
type in_addr', 'record s_bytes : array[1..4] of byte; end;
10693:
10694:
10695:
         Function socketerror : cint
10696:
         Function fpsocket( domain : cint; xtype : cint; protocol : cint) : cint
         Function fprecv( s : cint; buf : __pointer; len : size_t; flags : cint) : ssize_t
Function fpsend( s : cint; msg : __pointer; len : size_t; flags : cint) : ssize_t
10697:
10698:
         //Function fpbind( s : cint; addrx : psockaddr; addrlen : tsocklen) : cint Function fplisten( s : cint; backlog : cint) : cint
10699:
10700:
         //Function fpaccept( s : cint; addrx : psockaddr; addrlen : plongint) : cint
//Function fpconnect( s : cint; name : psockaddr; namelen : tsocklen) : cint
//Function fpgetsockname( s : cint; name : psockaddr; namelen : psocklen) : cint
Function NetAddrToStr( Entry : in_addr) : String
10701:
10702:
10703:
10704:
         Function HostAddrToStr( Entry : in_addr) : String
Function StrToHostAddr( IP : String) : in_addr
Function StrToNetAddr( IP : String) : in_addr
10705:
10706:
10707:
         SOL_SOCKET','LongWord').SetUInt( $ffff);
10708:
          cint8', 'shortint
10709:
          cuint8', 'byte
cchar', 'cint8
cschar', 'cint8
10710:
10711:
10712:
10713:
           cuchar'
                      'cuint8
10714:
           cint16
                      'smallint
10715:
           cuint16', 'word
cshort', 'cint16
          cshort', 'cintle
cshort', 'cintle
cahort', 'cintle
10716:
10717:
          cushort', 'cuinti
                       'cuint16
10718:
10719:
10720:
           cuint32', 'longword
          cint', 'cint32
csint', 'cint32
10721:
          cuint', 'cuint32
csigned', 'cint
cunsigned', 'cuint
10723:
10724:
10725:
10726:
           cint64', 'int64
           clonglong', 'cint64 cslonglong', 'cint64
10727:
10728:
           cbool', 'longbool
10729:
10730:
           cfloat
           cfloat', 'single
cdouble', 'double
10731:
10732:
           clongdouble', 'extended
10733:
10734: procedure SIRegister uLkJSON(CL: TPSPascalCompiler);
10735: begin
           TlkJSONtypes','(jsBase,jsNumber,jsString,jsBoolean,jsNull,jsList,jsObject)
10736:
10737:
           SIRegister_TlkJSONdotnetclass(CL);
10738:
           SIRegister TlkJSONbase(CL);
10739:
           SIRegister_TlkJSONnumber(CL);
10740:
           SIRegister_TlkJSONstring(CL);
10741:
           SIRegister_TlkJSONboolean(CL);
           SIRegister TlkJSONnull(CI);
10742:
10743:
           TlkJSONFuncEnum', 'Procedure ( ElName : string; Elem : TlkJSONba
10744:
             +'se; data : TObject; var Continue : Boolean)
           SIRegister_TlkJSONcustomlist(CL);
10745:
10746:
           SIRegister_TlkJSONlist(CL);
           SIRegister_TlkJSONobjectmethod(CL);
TlkHashItem', 'record hash : cardinal; index : Integer; end
10747:
10748:
10749:
           TlkHashFunction',
                                  'Function ( const ws : WideString) : cardinal
10750:
           SIRegister_TlkHashTable(CL);
10751:
           SIRegister_TlkBalTree(CL);
10752:
           SIRegister_TlkJSONobject(CL);
10753:
           SIRegister_TlkJSON(CL);
10754:
           SIRegister_TlkJSONstreamed(CL);
10755:
         Function GenerateReadableText( vObj : TlkJSONbase; var vLevel : Integer): string
10756: end;
10757:
10758: procedure SIRegister_ZSysUtils(CL: TPSPascalCompiler);
10759: begin
          TZListSortCompare', 'Function (Item1, Item2 : TObject): Integer
10760:
10761:
           SIRegister TZSortedList(CL);
10762: Function zFirstDelimiter( const Delimiters, Str : string) : Integer
10763: Function zLastDelimiter( const Delimiters, Str : string) : Integer
```

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10764:
                //Function MemLCompUnicode( P1, P2 : PWideChar; Len : Integer) : Boolean //Function MemLCompAnsi( P1, P2 : PAnsiChar; Len : Integer) : Boolean
10765:
                Function zStartsWith( const Str, SubStr : WideString) : Boolean;
10767:
                Function StartsWith1( const Str, SubStr : RawByteString) : Boolean;
               Function EndsWith( const Str, SubStr: WideString): Boolean;
Function EndsWith( const Str, SubStr: WideString): Boolean;
Function EndsWithl( const Str, SubStr: RawByteString): Boolean;
Function SQLStrToFloatDef( Str: RawByteString; Def: Extended): Extended;
Function SQLStrToFloatDef1( Str: String; Def: Extended): Extended;
10768:
10769:
10771:
               Function SQLStrToFloat( const Str : AnsiString) : Extended
10772:
10773:
                //Function BufferToStr( Buffer : PWideChar; Length : LongInt) : string;
10774:
                //Function BufferToStr1( Buffer : PAnsiChar; Length : LongInt) : string;
Function BufferToBytes( Buffer : TObject; Length : LongInt) : TByteDynArray
10775:
               Function StrToBoolEx(Str:string): Boolean
Function BoolToStrEx(Bool:Boolean): String
Function IsIpAddr(const Str:string): Boolean
10776:
10777:
10778:
                Function zSplitString( const Str, Delimiters : string) : TStrings
10780:
                Procedure PutSplitString( List : TStrings; const Str, Delimiters : string)
10781 .
               Procedure AppendSplitString( List : TStrings; const Str, Delimiters : string)
               Function ComposeString( List : TStrings; const Delimiter : string) : string
Function FloatToSQLStr( Value : Extended) : string
10782:
10783:
                Procedure PutSplitStringEx( List : TStrings; const Str, Delimiter : string)
10784:
10785:
                Function SplitStringEx( const Str, Delimiter : string) : TStrings
               Procedure AppendSplitStringEx( List : TStrings; const Str, Delimiter : string)
Function zBytesToStr( const Value : TByteDynArray) : AnsiString
Function zStrToBytes( const Value : AnsiString) : TByteDynArray;
10786:
10787:
10788:
10789:
                Function StrToBytes1( const Value : UTF8String) : TByteDynArray
10790:
               Function StrToBytes2( const Value : RawByteString) : TByteDynArray;
10791:
               Function StrToBytes3( const Value : WideString) : TByteDynArray;
10792:
               Function StrToBytes4( const Value : UnicodeString) : TByteDynArray;
               Function BytesToVar( const Value : TByteDynArray) : Variant
10793:
               Function VarToBytes( const Value : Variant) : TByteDynArray
Function AnsiSQLDateToDateTime( const Value : string) : TDateTime
Function TimestampStrToDateTime( const Value : string) : TDateTime
10794:
10795:
10796:
                Function DateTimeToAnsiSQLDate( Value : TDateTime; WithMMSec : Boolean) : string
10797:
                Function EncodeCString( const Value : string) : string
10798:
10799:
               Function DecodeCString( const Value : string) : string
               Function zReplaceChar( const Source, Target : Char; const Str : string) : string
Function MemPas( Buffer : PChar; Length : LongInt) : string
10800:
10801:
10802:
                Procedure DecodeSQLVersioning(const FullVersion:Int;out MajorVersion:Int;out MinorVersion:Int;out
              SubVersion: Int);
10803:
             Function EncodeSQLVersioning(const MajorVersion:Integer;const MinorVersion:Integer;const
              SubVersion: Integer): Int;
             Function FormatSQLVersion( const SQLVersion : Integer) : String
10805:
                Function ZStrToFloat( Value : AnsiChar) : Extended;
10806:
               Function ZStrToFloat1( Value : AnsiString) : Extended;
               Procedure ZSetString( const Src : AnsiChar; var Dest : AnsiString);
10807:
               Procedure ZSetString1( const Src : AnsiChar; const Len : Cardinal; var Dest : AnsiString);
10808:
                Procedure ZSetString2( const Src :
                                                                                     AnsiChar; var Dest : UTF8String);
               Procedure ZsetString3 (const Src : AnsiChar; const Len : Cardinal; var Dest : UTF8String);
Procedure ZsetString4 (const Src : AnsiChar; const Len : Cardinal; var Dest : WideString);
10810:
10811:
               Procedure ZSetString5( const Src : AnsiChar; var Dest : RawByteString);
10812:
10813:
               Procedure ZSetString6( const Src : AnsiChar; const Len : Cardinal; var Dest : RawByteString);
10814:
10815:
10816: unit uPSI ZEncoding;
              Function StringToAnsiEx( const s : String; const FromCP, ToCP : Word) : RawByteString
10817:
                Function AnsiToStringEx( const s : RawByteString; const FromCP, ToCP : Word)
10818:
               Function ZRawToUnicode( const S : RawByteString; const CP : Word) : WideString
10819:
               Function ZUnicodeToRaw( const US : WideString; CP : Word) : RawByteString
Function ZConvertAnsiToRaw( const Src : AnsiString; const RawCP : Word) : RawByteString
Function ZConvertRawToAnsi( const Src : RawByteString; const RawCP : Word) : AnsiString
10820:
10821:
10822:
               Function ZConvertAnsiToUTF8( const Src : AnsiString) : UTF8String Function ZConvertUTF8ToAnsi( const Src : UTF8String) : AnsiString
10823:
10824:
10825:
               Function ZConvertRawToUTF8( const Src : RawByteString; const CP : Word) : UTF8String
               Function ZConvertUTF8ToRaw( const Src : UTF8String; const CP : Word) : RawByteString
10826:
                Function ZConvertRawToString( const Src : RawByteString; const RawCP, StringCP : Word) : String
                Function ZConvertStringToRaw( const Src : String; const StringCP, RawCP : Word) : RawByteString
10828:
10829:
               \textbf{Function} \ \ \texttt{ZConvertStringToRawWithAutoEncode}(\textbf{const} \ \ \texttt{Src}: \textbf{String}; \textbf{const} \ \ \texttt{StringCP}, \texttt{RawCP}: \texttt{Word}): \texttt{RawByteString}; \textbf{const} \ \ \texttt{StringCP}, \texttt{StringCP}, \texttt{RawCP}: \texttt{Word}): \texttt{RawByteString}; \textbf{const} \ \ \texttt{StringCP}, \texttt{RawCP}: \texttt{StringCP}, \texttt{
               Function ZConvertUTF8ToString( const Src : UTF8String; const StringCP : Word) : String
Function ZConvertStringToUTF8( const Src : String; const StringCP : Word) : UTF8String
Function ZConvertStringToUTF8WithAutoEncode( const Src : String; const StringCP: Word): UTF8String
10830:
10831:
10833:
                \textbf{Function} \  \, \textbf{ZConvertStringToAnsi}( \  \, \textbf{const} \  \, \textbf{Src} \ : \  \, \textbf{String}; \  \, \textbf{const} \  \, \textbf{StringCP} \ : \  \, \textbf{Word}) \ : \  \, \textbf{AnsiString}
               Function ZConvertStringToAnsiWithAutoEncode( const Src : String; const StringCP: Word): AnsiString Function ZConvertAnsiToString( const Src : AnsiString; const StringCP : Word) : String
10834:
10835:
               Function ZConvertUnicodeToString( const Src : WideString; const StringCP : Word) : String
Function ZConvertUnicodeToString_CPUTF8( const Src : WideString; const StringCP : Word) :
10836:
10837:
               Function ZConvertStringToUnicode( const Src : String; const StringCP : Word) : WideString
Function ZConvertString_CPUTF8ToUnicode( const Src : String; const StringCP : Word) : WideString
10838:
10839:
               Function ZConvertStringToUnicodeWithAutoEncode( const Src: String; const StringCP:Word):WideString
10840:
               Function ZMoveAnsiToRaw( const Src : AnsiString; const RawCP : Word) : RawByteString
Function ZMoveRawToAnsi( const Src : RawByteString; const RawCP : Word) : AnsiString
10841:
10842:
               Function ZMoveAnsiToUTF8( const Src : AnsiString) : UTF8String
Function ZMoveUTF8ToAnsi( const Src : UTF8String) : AnsiString
10843:
10844:
                Function ZMoveRawToUTF8( const Src : RawByteString; const CP : Word) : UTF8String
10845:
                Function ZMoveUTF8ToRaw( const Src : UTF8String; const CP : Word) : RawByteString
10846:
               Function ZMoveStringToAnsi( const Src : String; const StringCP : Word) : AnsiString
Function ZMoveAnsiToString( const Src : AnsiString; const StringCP : Word) : String
Function ZMoveRawToString( const Src : RawByteString; const RawCP, StringCP : Word) : String
10847:
10848:
10849:
               Function ZMoveStringToRaw( const Src : String; const StringCP, RawCP : Word) : RawByteString
```

```
10851:
          Function ZMoveUTF8ToString( const Src : UTF8String; StringCP : Word) : String
10852:
          Function ZMoveStringToUTF8( const Src : String; const StringCP : Word) : UTF8String
           Function ZUnknownRawToUnicode( const S : RawByteString; const CP : Word) : WideString
10854:
          Function ZUnknownRawToUnicodeWithAutoEncode( const S : RawByteString; const CP : Word) : WideString
10855:
          Function ZUnicodeToUnknownRaw( const US : WideString; CP : Word) : RawByteString
10856:
          Function ZDefaultSystemCodePage : Word
10857:
          Function ZCompatibleCodePages( const CP1, CP2 : Word) : Boolean
10858:
10859:
10860: procedure STRegister BoldComUtils(CL: TPSPascalCompiler);
10861: begin
            'RPC_C_AUTHN_LEVEL_DEFAULT','LongInt'( 0);
            'RPC_C_AUTHN_LEVEL_NONE','LongInt'( 1);
'RPC_C_AUTHN_LEVEL_CONNECT','LongInt'( 2);
10863:
10864:
            'RPC_C_AUTHN_LEVEL_CALL', 'LongInt'( 3);
'RPC_C_AUTHN_LEVEL_PKT', 'LongInt'( 4);
10865:
10866:
            'RPC_C_AUTHN_LEVEL_PKT_INTEGRITY','LongInt'(5);
'RPC_C_AUTHN_LEVEL_PKT_PRIVACY','LongInt'(6);
10867:
10868:
            ('alDefault','1 RPC_C_AUTHN_LEVEL_DEFAULT);
''alNone','2 RPC_C_AUTHN_LEVEL_NONE);
10869:
10870:
            'alConnect','3 RPC_C_AUTHN_LEVEL_CONNECT);
'alCall','4 RPC_C_AUTHN_LEVEL_CALL);
10871:
10872:
            'alPacket','5 RPC_C_AUTHN_LEVEL_PKT);
10873:
            alracketIntegrity','6 RPC_C_AUTHN_LEVEL_PKT_INTEGRITY);
'alPacketPrivacy','7 RPC_C_AUTHN_LEVEL_PKT_PRIVACY);}
'RPC_C_IMP_LEVEL_DEFAULT','LongInt'( 0);
'RPC_C_IMP_LEVEL_AUONYMOUS','LongInt'( 1);
'RPC_C_IMP_LEVEL_IDENTIFY','LongInt'( 2);
'RPC_C_IMP_LEVEL_IDENTIFY','LongInt'( 2);
10874:
10875:
10876:
10877:
10878:
10879:
             'RPC_C_IMP_LEVEL_IMPERSONATE', 'LongInt'( 3);
             'RPC_C_IMP_LEVEL_DELEGATE', 'LongInt'( 4);
10880:
10881:
            ('ilDefault','0 RPC_C_IMP_LEVEL_DEFAULT);
            'ilAnonymous','1 RPC_C_IMP_LEVEL_ANONYMOUS);
'illdentiry','2 RPC_C_IMP_LEVEL_IDENTIFY);
10882:
10883:
10884:
             ilImpersonate','3 RPC_C_IMP_LEVEL_IMPERSONATE);
            'ilDelegate','4 RPC_C_IMP_LEVEL_DELEGATE);}
'EOAC_NONE','LongWord').SetUInt( $0);
10886:
            'EOAC_DEFAULT', 'LongWord').SetUInt( $800);
10887:
             'EOAC_MUTUAL_AUTH','LongWord').SetUInt( $1);
10888:
             'EOAC_STATIC_CLOACKING','LongWord').SetUInt( $20);
'EOAC_DYNAMIC_CLOAKING','LongWord').SetUInt( $40);
10889:
10890:
            'EOAC_ANY_AUTHORITY','LongWord').SetUInt( $80);
'RPC_C_AUTHN_WINNT','LongInt'( 10);
'RPC_C_AUTHNZ_NONE','LongInt'( 0);
10891:
10892:
10893:
            ('RPC_C_AUTHNZ_NAME', 'LongInt'('1);
('RPC_C_AUTHNZ_DCE', 'LongInt'('2);
FindClass('TOBJECT'), 'EBoldCom'
10894:
10895:
10896:
          Function BoldVariantIsType( V : OleVariant; TypeCode : Integer) : Boolean
10897:
          Function BoldMemoryToVariant( const Buffer, BufSize : Integer) : OleVariant
10899:
          \textbf{Function} \  \, \texttt{BoldStreamToVariant} ( \  \, \texttt{Stream} \, : \, \, \texttt{TStream}) \, \, : \, \, \texttt{OleVariant}
          Function BoldStringsToVariant( Strings : TStrings) : OleVariant
Function BoldVariantToMemory( V : OleVariant; var Buffer, BufSize : Integer) : Integer
Function BoldVariantToStream( V : OleVariant; Stream : TStream) : Integer
Function BoldVariantArrayOfArraysOfStringToStrings( V : OleVariant; Strings : TStrings) : Integer
10900:
10901:
10902:
10903:
10904:
          Function BoldVariantIsNamedValues( V : OleVariant) : Boolean
          Function BoldCreateNamedValues(const Names:array of string;const Values:array of OleVariant):OleVariant;
Function BoldGetNamedValue(Data: OleVariant; const Name: string): OleVariant
Procedure BoldSetNamedValue(Data: OleVariant; const Name: string; Value: OleVariant)
10905:
10906:
          Function BoldCreateGUID : TGUID
10908:
10909:
          Function BoldCreateComObject( const ClsId, IId : TGUID; out Obj : variant; out Res : HResult) : Boolean
Function BoldCreateRemoteComObject(const HostName:string;const ClsId, IId:TGUID;out Obj:variant;out
10910:
         Res:HRes):Bool;
10911: Procedure BoldInitializeComSecurity( AuthenticationLevel, ImpersonationLevel : longint)
10912: Procedure BoldSetSecurityForInterface(AuthenticationLevel,ImpersonationLevel:longint;Unk:IUnknown);
10913: end;
10914:
10915: (*-
10916: procedure SIRegister_BoldIsoDateTime(CL: TPSPascalCompiler);
10917: begin
10918: Function ParseISODate( s : string) : TDateTime
          Function ParseISODateTime( s : string) : TDateTime
10919:
          Function ParseISOTime( str : string) : TDateTime
10920:
10921: end;
10922:
10923: (*
10924: procedure SIRegister_BoldGUIDUtils(CL: TPSPascalCompiler);
10925: begin
10926:
         Function BoldCreateGUIDAsString( StripBrackets : Boolean) : string
10927:
         Function BoldCreateGUIDWithBracketsAsString : string
10928: end;
10929:
10930: procedure SIRegister_BoldFileHandler(CL: TPSPascalCompiler);
10931: begin
            FindClass('TOBJECT'),'TBoldFileHandler
10932:
            FindClass('TOBJECT'), 'TBoldDiskFileHandler
10933:
            //TBoldFileHandlerClass', 'class of TBoldFileHandler
10934:
           TBoldInitializeFileContents', 'Procedure ( StringList : TStringList) SIRegister_TBoldFileHandler(CL);
10935:
10936:
10937:
            SIRegister_TBoldDiskFileHandler(CL);
10938: Procedure BoldCloseAllFilehandlers
```

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1.0939:
             Procedure BoldRemoveUnchangedFilesFromEditor
10940:
             Function BoldFileHandlerList : TBoldObjectArray
10941:
             Function BoldFileHandlerForFile(path,FileName:String; ModuleType:TBoldModuleType;ShowInEditor:Bool;
           OnInitializeFileContents : TBoldInitializeFileContents) : TBoldFileHandler
10942: end;
10943:
10944: procedure SIRegister_BoldWinINet(CL: TPSPascalCompiler);
10945: begin
10946:
              PCharArr', 'array of PChar
             Function BoldInternetOpen(Agent:String;
10947:
           AccessType:integer;Proxy:string;ProxyByPass:String;Flags:integer):ptr);
           Function BoldInternetOpenUrl(iNet:Pointer;URL: string; Headers:String; Flags,Context:cardinal):Pointer
10949:
             Function BoldInternetReadFile(hFile:Pointer;Buff:Ptr;NumbOfBytesToRead:Card;var
           NumberOfBvtesRead:Card):LongBool;
           Function BoldInternetCloseHandle( HINet : Pointer) : LongBool
10950:
10951:
             Function BoldHttpQueryInfo( hRequest : Pointer; InfoLevel : Cardinal; Buffer : Pointer; BufferLength :
            Cardinal; Reserved : Cardinal) : LongBool
10952: Function BoldInternetQueryDataAvailable( hFile : Pointer; var NumberOfBytesAvailable : Cardinal; flags :
            Cardinal; Context : Cardinal) : LongBool
10953: Function BoldHttpOpenRequest(hConnect: Pointer; Verb, ObjectName, Version, Referrer: String; AcceptTypes
              PCharArr; Flags, Context : Cardinal) : Pointer
10954: Function BoldHttpSendRequest(hRequest:Ptr;Headers:string;Optional:Ptr;OptionalLength:Cardinal): LongBool
10955:
             Function BoldInternetAttemptConnect( dwReserved : DWORD) : DWORD
Function BoldInternetConnect(hInet: HINTERNET;ServerName:string; nServerPort:INTERNET_PORT;
10956:
10957:
           Username: string; Password : string; dwService : DWORD; dwFlags : DWORD; dwContext : DWORD): HINTERNET
10958: Function BoldInternetCrackUrl(Url:PChar;UrlLength,dwFlags:DWORD;var lpUrlComponents:TURLComponents):BOOL;
10959: end;
10960:
10961: procedure SIRegister_BoldQueryUserDlg(CL: TPSPascalCompiler);
10962: begin
              TBoldQueryResult', '( qrYesAll, qrYes, qrNo, qrNoAll )
SIRegister_TfrmBoldQueryUser(CL);
10963:
10964:
10965:
           Function QueryUser( const Title, Query : string) : TBoldQueryResult
10966: end;
10967:
10968: (*----
                                                                                                         ----*)
10969: procedure SIRegister BoldOueue(CL: TPSPascalCompiler);
10970: begin
10971:
            //('befIsInDisplayList',' BoldElementFlag0);
10972:
             //('befStronglyDependedOfPrioritized',' BoldElementFlag1);
             //('befFollowerSelected',' BoldElementFlag2);
FindClass('TOBJECT'),'TBoldQueue
FindClass('TOBJECT'),'TBoldQueueable
10973:
10974:
10975:
              TBoldQueueDisplayMode', '( dmDisplayOne, dmDisplayAll )
SIRegister_TBoldQueueable(CL);
SIRegister_TBoldQueue(CL);
10976:
10977:
10978:
10979:
             Function BoldQueueFinalized : Boolean
10980:
             Function BoldInstalledQueue : TBoldQueue
10981: end;
10982:
10983: procedure SIRegister_Barcode(CL: TPSPascalCompiler);
10984: begin
10985:
             const mmPerInch','Extended').setExtended( 25.4);
               TBarcodeType', ( bcCode_2_5_interleaved, bcCode_2_5_industrial,' +' bcCode_2_5_matrix, bcCode39, bcCode39Extended, bcCode128A, bcCode128B, bc' +'Code128C, bcCode93, bcCode93Extended, bcCodeMSI, bcCodePostNet, bcCodeCoda'
10986:
10987:
10988:
                 +'bar, bcCodeEAN8, bcCodeEAN13, bcCodeUPC_A, bcCodeUPC_E0, bcCodeUPC_E1, bcC'
10989:
10990:
                 +'odeUPC_Supp2, bcCodeUPC_Supp5, bcCodeEAN128A, bcCodeEAN128B, bcCodeEAN128C
               TBarLineType', '( white, black, black_half )
TBarcodeOption', '( bcoNone, bcoCode, bcoTyp, bcoBoth )
10991:
10992:
10993:
               TShowTextPosition',
                                                  '( stpTopLeft, stpTopRight, stpTopCenter, st'
               +'pBottomLeft, stpBottomRight, stpBottomCenter )
TCheckSumMethod', '(csmNone, csmModulo10)
10994:
10995:
10996:
               SIRegister_TAsBarcode(CL);
             Function CheckSumModulo10( const data : string) : string
10997:
             Function ConvertMmToPixelsY( const Value : Double) : Integer Function ConvertMmToPixelsY( const Value : Double) : Integer
10998:
10999:
11000:
             Function ConvertInchToPixelsX( const Value : Double) : Integer
Function ConvertInchToPixelsY( const Value : Double) : Integer
11001:
11002:
11003:
11004: procedure SIRegister_Geometry(CL: TPSPascalCompiler); //OpenGL
11005:
           begin
               THomogeneousByteVector', 'array[0..3] of Byte THomogeneousWordVector', 'array[0..3] of Word THomogeneousIntVector', 'array[0..3] of Integer THomogeneousFltVector', 'array[0..3] of single
11006:
11007:
11008:
11009:
               THomogeneousDblVector', 'array[0..3] of double THomogeneousExtVector', 'array[0..3] of extended
11010:
11011:
               TAffineByteVector', 'array[0..2] of Byte TAffineWordVector', 'array[0..2] of Word TAffineIntVector', 'array[0..2] of Integer TAffineFltVector', 'array[0..2] of single
11012:
11013:
11014:
11015:
               TAffineDblVector', 'array[0..2] of double TAffineExtVector', 'array[0..2] of extended
11016:
11017:
               \label{thm:constraint} Thomogeneous By teMatrix', 'array[0..3] of Thomogeneous By teVector Thomogeneous WordMatrix', 'array[0..3] of Thomogeneous WordWector Thomogeneous IntMatrix', 'array[0..3] of Thomogeneous IntVector Thomogeneous IntMatrix', 'array[0..3] of Thomogeneous IntVector Thomogeneous IntMatrix', 'array[0..3] of Thomogeneous IntMatrix', 'array[0..3]
11018:
11019:
```

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\label{thm:constraint:thm:constraint:thm:constraint:thm:constraint:thm:constraint:thm:constraint:thm:constraint:thm:constraint:thm:constraint:thm:constraint:thm:constraint:thm:constraint:thm:constraint:thm:constraint:thm:constraint:thm:constraint:thm:constraint:thm:constraint:thm:constraint:thm:constraint:thm:constraint:thm:constraint:thm:constraint:thm:constraint:thm:constraint:thm:constraint:thm:constraint:thm:constraint:thm:constraint:thm:constraint:thm:constraint:thm:constraint:thm:constraint:thm:constraint:thm:constraint:thm:constraint:thm:constraint:thm:constraint:thm:constraint:thm:constraint:thm:constraint:thm:constraint:thm:constraint:thm:constraint:thm:constraint:thm:constraint:thm:constraint:thm:constraint:thm:constraint:thm:constraint:thm:constraint:thm:constraint:thm:constraint:thm:constraint:thm:constraint:thm:constraint:thm:constraint:thm:constraint:thm:constraint:thm:constraint:thm:constraint:thm:constraint:thm:constraint:thm:constraint:thm:constraint:thm:constraint:thm:constraint:thm:constraint:thm:constraint:thm:constraint:thm:constraint:thm:constraint:thm:constraint:thm:constraint:thm:constraint:thm:constraint:thm:constraint:thm:constraint:thm:constraint:thm:constraint:thm:constraint:thm:constraint:thm:constraint:thm:constraint:thm:constraint:thm:constraint:thm:constraint:thm:constraint:thm:constraint:thm:constraint:thm:constraint:thm:constraint:thm:constraint:thm:constraint:thm:constraint:thm:constraint:thm:constraint:thm:constraint:thm:constraint:thm:constraint:thm:constraint:thm:constraint:thm:constraint:thm:constraint:thm:constraint:thm:constraint:thm:constraint:thm:constraint:thm:constraint:thm:constraint:thm:constraint:thm:constraint:thm:constraint:thm:constraint:thm:constraint:thm:constraint:thm:constraint:thm:constraint:thm:constraint:thm:constraint:thm:constraint:thm:constraint:thm:constraint:thm:constraint:thm:constraint:thm:constraint:thm:constraint:thm:constraint:thm:constraint:thm:constraint:thm:constraint:thm:constraint:thm:constraint:thm:constraint:thm:constraint:thm:constrai
11021:
11022:
11023:
                  TAffineByteMatrix', 'array[0..2] of TAffineByteVector TAffineWordMatrix', 'array[0..2] of TAffineWordVector
11024 .
11025:
                   TAffineIntMatrix', 'array[0..2] of TAffineIntVector TAffineFltMatrix', 'array[0..3] of TAffineFltVector
11026:
11027:
                   TAffineDblMatrix',
11028:
                                                           'array[0..3] of TAffineDblVector
11029:
                   {\tt TAffineExtMatrix', 'array[0..3] \ of \ TAffineExtVector}
11030:
                  TMatrix4b', 'THomogeneousByteMatrix
TMatrix4w', 'THomogeneousWordMatrix
                                            'THomogeneousWordMatrix
11031:
                                            'THomogeneousIntMatrix
11032:
                   TMatrix4i',
11033:
                   TMatrix4f',
                                            'THomogeneousFltMatrix
                   TMatrix4d'
                                            'THomogeneousDblMatrix
11034:
11035:
                                            'THomogeneousExtMatrix
                   TMatrix4e'.
11036:
                   TMatrix3b',
                                            'TAffineByteMatrix
                                            'TAffineWordMatrix
11037:
                   TMatrix3w',
                  TMatrix3i',
TMatrix3f',
11038:
                                            'TAffineIntMatrix
                                            'TAffineFltMatrix
11039:
11040:
                   TMatrix3d', 'TAffineDblMatrix
                  TMatrix3e', 'TAffineExtMatrix
//'PMatrix', '^TMatrix // will not work
TMatrixGL', 'THomogeneousFltMatrix
11041:
11042:
11043:
                   THomogeneousMatrix',
11044:
                                                                'THomogeneousFltMatrix
                   TAffineMatrix', 'TAffineFltMatrix
11045:
                  TQuaternion', 'record Vector : TVector4f; end
TRectangle', 'record Left : integer; Top : integer; Width : inte'
11046:
11047:
                   +'ger; Height : Integer; end
TTransType', '( ttScaleX, ttScaleY, ttScaleZ, ttShearYY, ttShear
11048:
11049:
                    +'XZ, ttShearYZ, ttRotateX, ttRotateY, ttRotateZ, ttTranslateX, ttTranslateY'
11050:
11051:
                     +', ttTranslateZ, ttPerspectiveX, ttPerspectiveY, ttPerspectiveZ, ttPerspectiveW )
                 'EPSILON', 'Extended').setExtended( 1E-100);
'EPSILON2', 'Extended').setExtended( 1E-50);
11052:
11053:
                Function VectorAddGL( V1, V2: TVectorGL): TVectorGL
Function VectorAffineAdd( V1, V2: TAffineVector): TAffineVector
Function VectorAffineCombine(V1,V2:TAffineVector; F1, F2: Single): TAffineVector
11054:
11055:
11056:
               Function VectorAffineOmbline(VI,V2:HAITINEVector, FI, F2: Single): HAITINEVector Function VectorAffineDerproduct(VI, V2: TAffineVector): Single
Function VectorAffineLerp(VI, V2: TAffineVector; t: Single): TAffineVector
Function VectorAffineSubtract(VI, V2: TAffineVector): TAffineVector
Function VectorAngle(VI, V2: TAffineVector): Single
11057:
11058:
11059:
11060:
                Function VectorCombine( V1, V2 : TVectorGL; F1, F2 : Single) : TVectorGL
Function VectorCrossProduct( V1, V2 : TAffineVector) : TAffineVector
Function VectorDotProduct( V1, V2 : TVectorGL) : Single
11061:
11062:
11063:
11064:
                Function VectorLength( V : array of Single) : Single
                Function VectorLerp( V1, V2 : TVectorGL; t : Single
Procedure VectorNegate( V : array of Single)
Function VectorNorm( V : array of Single) : Single
11065:
                                                                                                            : Single) : TVectorGL
11066:
11067:
11068:
                Function VectorNormalize( V : array of Single) : Single
11069:
                Function VectorPerpendicular( V, N
                                                                                          : TAffineVector)
                Function VectorReflect( V, N : TAffineVector) : TAffineVector

Procedure VectorRotate( var Vector : TVector4f; Axis : TVector3f; Angle : Single)
11070:
11071:
                Procedure VectorScale( V : array of Single; Factor : Single)
Function VectorSubtractGL( V1, V2 : TVectorGL) : TVectorGL
Function CreateRotationMatrixX( Sine, Cosine : Single) : TMatrixGL
11072:
11073:
11074:
                Function CreateRotationMatrixY( Sine, Cosine : Single) : TMatrixGL Function CreateRotationMatrixZ( Sine, Cosine : Single) : TMatrixGL
11075:
11076:
                 Function CreateScaleMatrix( V : TAffineVector) : TMatrixGL
11077:
11078:
                Function CreateTranslationMatrix( V : TVectorGL) : TMatrixGL
                Procedure MatrixAdjoint( var M : TMatrixGL)
Function MatrixAffineDeterminant( M : TAffineMatrix) : Single
Procedure MatrixAffineTranspose( var M : TAffineMatrix)
11079:
11080:
11081:
11082:
                 \textbf{Function} \ \texttt{MatrixDeterminant}(\ \texttt{M}\ :\ \texttt{TMatrixGL})\ :\ \texttt{Single}
               Procedure MatrixDeterminant( M : IMatrixGL) : Single
Procedure MatrixInvert( var M : TMatrixGL)
Function MatrixMultiply( M1, M2 : TMatrixGL) : TMatrixGL
Procedure MatrixScale( var M : TMatrixGL; Factor : Single)
Procedure MatrixTranspose( var M : TMatrixGL)
11083:
11084:
11085:
11086:
                Function QuaternionConjugate( Q : TQuaternion) : TQuaternion
11087:
                 \begin{array}{llll} \textbf{Function} & \texttt{QuaternionFromPoints}(& \texttt{V1}, & \texttt{V2} : \texttt{TAffineVector}) : \texttt{TQuaternionFunction} & \texttt{QuaternionMultiply}(& \texttt{qL}, & \texttt{qR} : \texttt{TQuaternion}) : \texttt{TQuaternion} \\ \end{array} 
11088:
11089:
                Function QuaternionSlerp( QStart,QEnd:TQuaternion; Spin:Integer; t:Single):TQuaternionFunction QuaternionToMatrix( Q : TQuaternion) : TMatrixGL
11090:
11091:
11092:
                Procedure QuaternionToPoints( Q : TQuaternion; var ArcFrom, ArcTo : TAffineVector)
                Function ConvertRotation( Angles : TAffineVector) : TVectorGL
Function CreateRotationMatrix( Axis : TVector3f; Angle : Single) : TMatrixGL
11093:
11094:
                //Function MatrixDecompose( M : TMatrixGL; var Tran : TTransformations) : Boolean
Function VectorAffineTransform( V : TAffineVector; M : TAffineMatrix) : TAffineVector
11095:
11096:
11097:
                11098:
                Function MakeAffineDblVector( V : array of Double) : TAffineDblVector
11099:
11100:
                 Function MakeDblVector( V : array of Double) : THomogeneousDblVector
                Function MakeAffineVector( V : array of Single) : TAffineVector

Function MakeQuaternion( Imag : array of Single; Real : Single) : TQuaternion
11101:
11102:
11103:
                Function MakeVector( V : array of Single) : TVectorGL
                Function PointInPolygonGL(xp, yp: array of Single; x, y: Single): Boolean Function VectorAffineDblToFlt( V: TAffineDblVector): TAffineVector
11104:
11105:
                Function VectorDblToFlt( V: THomogeneousDblVector): THomogeneousVector
Function VectorAffineFltToDbl( V: TAffineVector): TAffineDblVector
11106:
11107:
                Function VectorFltToDbl( V : TVectorGL) : THomogeneousDblVector
11108:
11109: Function ArcCosGL( X : Extended) : Extended
```

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11110:
          Function ArcSinGL( X : Extended) : Extended
          Function ArcTan2GL( Y, X : Extended) : Extended
11111:
          Function CoTanGL( X : Extended) : Extended
          Function DegToRadGL( Degrees : Extended) : Extended
Function RadToDegGL( Radians : Extended) : Extended
11112.
11114:
11115:
          Procedure SinCosGL( Theta: Extended; var Sin, Cos: Extended)
          Function TanGL( X : Extended) : Extended
11116:
          Function Turn( Matrix : TMatrixGL; Angle : Single) : TMatrixGL;
11117:
          Function Turn1( Matrix : TMatrixGL; MasterUp : TAffineVector; Angle: Single): TMatrixGL;
11118:
11119:
          Function Pitch( Matrix : TMatrixGL; Angle : Single) : TMatrixGL;
          Function Pitch1 ( Matrix : TMatrixGL; MasterRight:TAffineVector;Angle:Single):TMatrixGL;
11120:
          Function Roll( Matrix : TMatrixGL; Angle : Single) : TMatrixGL;
11121:
11122:
          Function Roll1( Matrix:TMatrixGL; MasterDirection:TAffineVector;Angle:Single):TMatrixGL;
11123: end;
11124:
11125:
11126: procedure SIRegister JclRegistry(CL: TPSPascalCompiler);
11127: begin
          Function RegCreateKey( const RootKey: HKEY; const Key, Value: string): Longint
11128:
11129:
          Function RegDeleteEntry( const RootKey: HKEY; const Key, Name: string): Boolean
          Function RegDeleteKeyTree( const RootKey : HKEY; const Key : string)
          Function RegReadBool( const RootKey : HKEY; const Key, Name : string) : Boolean
11131:
          Function RegReadBoolDef( const RootKey : HKEY; const Key, Name : string; Def : Boolean) : Boolean Function RegReadInteger( const RootKey : HKEY; const Key, Name : string) : Integer
11132:
11133:
11134:
          Function RegReadIntegerDef ( const RootKey : HKEY; const Key, Name : string; Def : Integer) : Integer
11135:
          Function RegReadString( const RootKey: HKEY; const Key, Name: string): string
11136:
          Function RegReadStringDef( const RootKey : HKEY; const Key, Name, Def : string) : string
          Function RegReadDWORD( const RootKey: HKEY; const Key, Name: string): Int64
Function RegReadDWORDDef( const RootKey: HKEY; const Key, Name: string; Def: Int64): Int64
Procedure RegWriteBool( const RootKey: HKEY; const Key, Name: string; Value: Boolean)
11137:
11138:
11139:
          Procedure RegWriteInteger( const RootKey: HKEY; const Key, Name: string; Value: Integer)
Procedure RegWriteString( const RootKey: HKEY; const Key, Name, Value: string)
Procedure RegWriteDWORD( const RootKey: HKEY; const Key, Name: string; Value: Int64)
11140:
11141:
11142:
          Function RegGetValueNames( const RootKey: HKEY; const Key: string; const List: TStrings): Boolean Function RegGetKeyNames( const RootKey: HKEY; const Key: string; const List: TStrings): Boolean Function RegHasSubKeys( const RootKey: HKEY; const Key: string): Boolean Function RegKeyExists( const RootKey: HKEY; const Key: string): Boolean
11143:
11145:
11146:
11147:
           AddTypeS('TExecKind', '( ekMachineRun, ekMachineRunOnce, ekUserRun, ekUser
11148:
              'RunOnce,
                           ekServiceRun, ekServiceRunOnce )
           AddClassN(FindClass('TOBJECT'),'EJclRegistryError
11149:
          Function UnregisterAutoExec( ExecKind : TExecKind; const Name : string) : Boolean
Function RegisterAutoExec( ExecKind : TExecKind; const Name, Cmdline : string) : Boolean
Function RegSaveList(const RootKey:HKEY; const Key: string; const ListName: string; const
11150:
11151:
11152:
         Items:TStrings):Bool;
11153: Function RegLoadList(const RootKey:HKEY;const Key:string;const ListName:string;const
         SaveTo:TStrings):Bool;
11154: Function RegDelList( const RootKey: HKEY; const Key: string; const ListName: string): Boolean
11155: end;
11156:
11157:
         procedure SIRegister JclCOM(CL: TPSPascalCompiler);
11158: begin
          CLSID_stdComponentCategoriesMgr','TGUID '{0002E005-0000-0000-C000-00000000046}}
11159:
          CATID_SafeForInitializing','TGUID '{7DD95802-9882-11CF-9FA9-00AA006C42C4}
11160:
          CATID_SafeForScripting','TGUID'\{7DD95801-9882-11CF-9FA9-00AA006C42C4\}
icMAX_CATEGORY_DESC_LEN','LongInt'(128);
FindClass('TOBJECT'),'EInvalidParam
11161:
11162:
11163:
          Function IsDCOMInstalled : Boolean
11164:
          Function IsDCOMEnabled : Boolean
11165:
          Function GetDCOMVersion : string
Function GetMDACVersion : string
11166:
11167:
          Function MarshalInterThreadInterfaceInVarArray(const iid:TIID;unk:IUnknown;var
11168:
         VarArray:OleVariant):HResult;
11169:
          Function MarshalInterProcessInterfaceInStream(const iid:TIID;unk:IUnknown;var stm:IStream):HResult;
11170:
          Function MarshalInterProcessInterfaceInVarArray(const iid:TIID;unk:IUnknown;var
         VarArray:OleVariant):HResult;
11171: Function MarshalInterMachineInterfaceInStream( const iid:TIID;unk:IUnknown;var stm:IStream):HResult;
          Function MarshalInterMachineInterfaceInVarArray(const iid:TIID;unk:IUnknown;var
11172:
         VarArray:OleVariant):HResult;
        Function CreateComponentCategory( const CatID : TGUID; const sDescription : string) : HResult Function RegisterCLSIDInCategory( const ClassID : TGUID; const CatID : TGUID) : HResult Function UnRegisterCLSIDInCategory( const ClassID : TGUID; const CatID : TGUID) : HResult
11173:
11174:
11175:
11176:
          Function ResetIStreamToStart( Stream : IStream) : Boolean
11177:
          \textbf{Function} \  \, \texttt{SizeOfIStreamContents} \, ( \  \, \texttt{Stream} \, : \, \, \texttt{IStream}) \, : \, \texttt{Largeint}
11178:
          Function StreamToVariantArray(Stream: TStream): OleVariant;
          Function StreamToVariantArray1(Stream: IStream): OleVariant;
Procedure VariantArrayToStream(VarArray: OleVariant; var Stream: TStream);
11179:
11180:
          Procedure VariantArrayToStream1( VarArray : OleVariant; var Stream : IStream);
11181:
11182: end;
11183:
11184:
11185: procedure SIRegister_JclUnitConv_mX2(CL: TPSPascalCompiler);
11186: begin
          Const('CelsiusFreezingPoint','Extended').setExtended( 0.0);
11187:
11188:
          FahrenheitFreezingPoint','Extended').setExtended( 32.0);
          KelvinFreezingPoint', 'Extended').setExtended( 273.15);
CelsiusAbsoluteZero', 'Extended').setExtended( - 273.15);
11189:
11190:
          FahrenheitAbsoluteZero', 'Extended').setExtended( - 459.67);
11191:
          KelvinAbsoluteZero','Extended').setExtended( 0.0);
11192:
11193: DegPerCycle','Extended').setExtended( 360.0);
```

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11194:
         DegPerGrad','Extended').setExtended( 0.9);
         DegPerRad', 'Extended').setExtended( 57.295779513082320876798154814105);
11195:
         GradPerCycle','Extended').setExtended( 400.0);
         GradPerDeg','Extended').setExtended( 1.11111111111111111111111111111);
11107.
11198:
         GradPerRad', 'Extended').setExtended( 63.661977236758134307553505349006);
         RadPerCycle','Extended').setExtended( 6.283185307179586476925286766559);
11199:
         RadPerDeg', 'Extended').setExtended( 0.017453292519943295769236907684886);
RadPerGrad', 'Extended').setExtended( 0.015707963267948966192313216916398);
CyclePerDeg', 'Extended').setExtended( 0.002777777777777777777777777777778);
11200:
11201:
11202:
         CyclePerGrad','Extended').setExtended( 0.0025);
CyclePerRad','Extended').setExtended( 0.15915494309189533576888376337251);
11203:
11204:
         ArcMinutesPerDeg','Extended').setExtended( 60.0);
11205:
11206:
         ArcSecondsPerArcMinute','Extended').setExtended( 60.0);
         Function HowAOneLinerCanBiteYou( const Step, Max: Longint): Longint Function MakePercentage( const Step, Max: Longint): Longint
11207:
11208:
11209:
         Function CelsiusToKelvin( const T : double) : double
         Function CelsiusToFahrenheit( const T : double) : double
11210:
11211:
         Function KelvinToCelsius( const T : double) : double
         Function KelvinToFahrenheit( const T : double) : double
Function FahrenheitToCelsius( const T : double) : double
11212:
11213:
         Function FahrenheitToKelvin( const T : double) :
11214:
         Function CycleToDeg( const Cycles : double) : double
11215:
11216:
         Function CycleToGrad( const Cycles : double) : double
         Function CycleToRad( const Cycles : double) : double
11217:
         Function DegToCycle( const Degrees : double) : double
11218:
11219:
         Function DegToGrad( const Degrees : double) : double
11220:
         Function DegToRad( const Degrees : double) : double
11221:
         Function GradToCvcle( const Grads : double) : double
11222:
         Function GradToDeg( const Grads : double) : double
         Function GradToRad( const Grads : double) : double
11223:
11224:
         Function RadToCycle( const Radians : double) : double
         Function RadToDeg( const Radians : double) : double
Function RadToGrad( const Radians : double) : double
11225:
11226:
         Function DmsToDeg( const D, M : Integer; const S : double) : double
Function DmsToRad( const D, M : Integer; const S : double) : double
11227:
11228:
11229:
         Procedure DegToDms( const Degrees : double; out D, M : Integer; out S : double)
11230:
         Function DegToDmsStr( const Degrees : double; const SecondPrecision : Cardinal) : string
         Procedure CartesianToPolar( const X, Y : double; out R, Phi : double)
11231:
11232:
         Procedure PolarToCartesian( const R, Phi : double; out X, Y : double)
         Procedure PolarioCartesian( const R, Phi : double; out R, Phi : double)

Procedure CartesianToCylinder( const X, Y, Z : double; out R, Phi, Zeta : double)

Procedure CartesianToSpheric( const X, Y, Z : double; out Rho, Phi, Theta : double)

Procedure CylinderToCartesian( const R, Phi, Zeta : double; out X, Y, Z : double)

Procedure SphericToCartesian( const Rho, Theta, Phi : double; out X, Y, Z : double)
11233:
11234:
11235:
11236:
         Function CmToInch( const Cm : double) : double
11237:
11238:
         Function InchToCm( const Inch : double) : double
         Function FeetToMetre( const Feet : double) : double
Function MetreToFeet( const Metre : double) : double
11239:
11240:
         Function YardToMetre( const Yard : double) : double
11242:
         Function MetreToYard( const Metre : double) : double
11243:
         Function NmToKm( const Nm : double) : double
Function KmToNm( const Km : double) : double
11244:
         Function KmToSm( const Km : double) : double
11245:
         Function SmToKm( const Sm : double) : double
11246:
         Function LitreToGalUs( const Litre : double) : double
Function GalUsToLitre( const GalUs : double) : double
11247:
11248:
         Function GalUsToGalCan( const GalUs : double) : double
11249:
11250:
         Function GalCanToGalUs( const GalCan : double) :
         Function GalUsToGalUk( const GalUs : double) :
                                                                   double
11251:
11252:
         Function GalUkToGalUs( const GalUk : double) : double
11253:
         Function LitreToGalCan( const Litre : double) : double
         Function GalCanToLitre( const GalCan : double) : double
11254:
11255:
         Function LitreToGalUk( const Litre : double) : double
11256:
         Function GalUkToLitre( const GalUk : double) : double
         Function KgToLb( const Kg : double) : double
Function LbToKg( const Lb : double) : double
11257:
11258:
         Function KgToOz( const Kg : double) : double
         Function OzToKg( const Oz : double) : double
11260:
11261:
         Function CwtUsToKg( const Cwt : double) : double
         Function CwtUkToKg( const Cwt : double) : double
11262:
         Function KaratToKg( const Karat : double) : double
11263:
11264:
         Function KgToCwtUs( const Kg : double) : double
11265:
         Function KgToCwtUk( const Kg : double) : double
11266:
         Function KgToKarat( const Kg : double) : double
         Function KgToSton( const Kg : double) : double
11267:
         Function KgToLton( const Kg : double) : double
11268:
         Function StonToKg( const STon : double) : double
11269:
11270:
         Function LtonToKq( const Lton : double) : double
11271:
         Function QrUsToKg( const Qr : double) : double
         Function QrUkToKg( const Qr : double) : double
11272:
         Function KgToQrUs( const Kg : double) :
11274:
         Function KgToQrUk( const Kg : double) : double
         Function PascalToBar( const Pa : double) : double
Function PascalToAt( const Pa : double) : double
11275:
11276:
11277:
         Function PascalToTorr( const Pa : double) : double
         Function BarToPascal( const Bar : double) : double
11278:
11279:
         Function AtToPascal( const At : double) : double
         Function TorrToPascal( const Torr : double) : double
11280:
11281:
         Function KnotToMs( const Knot : double) : double
11282: Function HpElectricToWatt( const HpE : double) : double
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11283:
         Function HpMetricToWatt( const HpM : double) : double
         Function MsToKnot( const ms : double) : double
11284:
11285:
         Function WattToHpElectric( const W : double) : double
11286:
         Function WattToHpMetric( const W : double) : double
                                             //PI of 1000 numbers
11287:
         function getBigPI: string;
11288:
11289: procedure SIRegister_devcutils(CL: TPSPascalCompiler);
11290:
        begin
11291:
         Function CDExecuteFile( const FileName, Params, DefaultDir: string; ShowCmd: Integer): THandle
         Procedure CDCopyFile( const FileName, DestName : string)
Procedure CDMoveFile( const FileName, DestName : string)
Function MakeCommaTextToColor( Text : string; Index : Integer; DefaultColor : TColor) : TColor
11292:
11293:
11294:
11295:
         Procedure CDDeleteFiles( Sender : TObject; s : string)
         Function CDGetTempDir: string
Function CDGetFileSize(FileName: string): longint
11296:
11297:
11298:
         Function GetFileTime( FileName : string) : longint
         Function GetShortName( FileName : string) : string
11299:
11300:
         Function GetFullName( FileName : string) : string
         Function WinReboot : boolean
11301:
11302:
         Function WinDir : String
11303:
         Function RunFile(FileToRun: string; Params: string; Dir: string; Wait: boolean): cardinal
11304:
         Function RunFile_( Cmd, WorkDir : string; Wait : boolean) : Boolean
11305:
         Function devExecutor : TdevExecutor
11306: end;
11307:
11308: procedure SIRegister_FileAssocs(CL: TPSPascalCompiler);
11309: begin
11310: Procedure CheckAssociations // AssociationsCount','LongInt'( 7);
11311: Procedure Associate( Index : integer)
11311:
         Procedure UnAssociate( Index : integer)
11312:
         Function IsAssociated( Index : integer) : boolean
11313:
11314:
         Function CheckFiletype( const extension, filetype, description, verb, serverapp : string) : boolean
11315: Procedure RegisterFiletype( const extension, filetype, description, verb, serverapp, IcoNum: string)
11316: Procedure RegisterDEServer( const interpretation, filetype, description, verb, serverapp, IcoNum: string)
         procedure RefreshIcons;
11318: function GetShadeColor(ACanvas: TCanvas; clr: TColor; Value: integer): TColor;
11319: function MergColor(Colors: Array of TColor): TColor;
11320: function NewColor(ACanvas: TCanvas; clr: TColor; Value: integer): TColor;
11321: procedure DimBitmap(ABitmap: TBitmap; Value: integer);
11321: procedure Dimbicumap(ABICUMAP): IBICUMAP; VALUE: IBICQUIT;
11322: function GrayColor(ACanvas: TCanvas; clr: TColor; Value: integer): TColor;
11323: function GetInverseColor(AColor: TColor): TColor;
11324: procedure GrayBitmap(ABitmap: TBitmap; Value: integer);
11325: procedure DrawBitmapShadow(B: TBitmap; ACanvas: TCanvas; X,Y: integer; ShadowColor: TColor);
11326: procedure DrawCheckMark(ACanvas: TCanvas; X, Y: integer);
11327: Procedure GetSystemMenuFont(Font: TFont);
11328: end;
11329:
11331: function IsStringConstant(const St: string): Boolean;
11332: function IsIntConstant(const St: string): Boolean; 11333: function IsRealConstant(const St: string): Boolean;
11334: function IsIdentifier(const ID: string): Boolean;
11335: function GetStringValue(const St: string): string;
11336: procedure ParseString(const S: string; Ss: TStrings);
11337: function IsStringConstantW(const St: WideString): Boolean; 11338: function IsIntConstantW(const St: WideString): Boolean;
11339: function IsRealConstantW(const St: WideString): Boolean;
11340: function IsIdentifierW(const ID: WideString): Boolean;
11341: function GetStringValueW(const St: WideString): WideString; 11342: procedure ParseStringW(const S: WideString; Ss: TStrings);
11343:
11344:
         11345 .
11346:
11347: Function JclSimpleSendMail( const ARecipient, AName, ASubject, ABody: string; const AAttachment:
         TFileName; ShowDialog : Boolean; AParentWND : HWND) : Boolean
11348: Function JclSimpleSendFax( const ARecipient, AName, ASubject, ABody : string; const AAttachment :
TFileName; ShowDialog: Boolean; AParentWND: HWND): Boolean
11349: Function JclSimpleBringUpSendMailDialog(const ASubject,ABody:string;const
        AAttach:TFileName;AParentWND:HWND):Bool
11350: Function MapiCheck( const Res : DWORD; IgnoreUserAbort : Boolean) : DWORD
11351: Function MapiErrorMessage( const ErrorCode : DWORD) : string
11352:
11353: procedure SIRegister_IdNTLM(CL: TPSPascalCompiler);
11354: begin
11355: //'Pdes_key_schedule', '^des_key_schedule // will not work
11356: Function BuildTypelMessage( ADomain, AHost : String) : String
11357: Function BuildType3Message(ADomain,AHost,AUsername:WideString;APassword,ANonce:String):String
         Procedure RegisterAuthenticationMethod( MethodName : String; AuthClass : TIdAuthenticationClass)
11358:
11359: Function FindAuthClass( AuthName : String) : TIdAuthenticationClass  
11360: GBase64CodeTable','string'ABCDEFGHIJKLMNOPQRSTUVWXYZabcdefghijklmnopqrstuvwxyz0123456789+/
11361: GXXECodeTable', 'string'+-0123456789ABCDEFGHIJKLMNOPQRSTUVWXYZabcdefghijklmnopqrstuvwxyz 11362: GUUECodeTable', 'string'`!"#$%&''()*+,-./0123456789:;<=>?@ABCDEFGHIJKLMNOPQRSTUVWXYZ[\]^
11363: end;
11364:
11365: procedure SIRegister_WDosSocketUtils(CL: TPSPascalCompiler);
11366: begin
11367: ('IpAny', 'LongWord').SetUInt( $00000000);
11368: IpLoopBack', 'LongWord').SetUInt( $7F000001);
```

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11369:
         IpBroadcast','LongWord').SetUInt( $FFFFFFF);
         IpNone','LongWord').SetUInt( $FFFFFFF);
11370:
         PortAny', 'LongWord( $0000);
11371:
11372:
         SocketMaxConnections','LongInt'(5);
         TIpAddr', 'LongWord
TIpRec', 'record IpB1 : byte; IpB2 : byte; IpB3 : byte; IpB4 : Byte; end
11373:
11374:
11375:
         Function HostToNetLong( HostLong : LongWord) : LongWord
11376:
         Function HostToNetShort( HostShort: Word): Word
11377:
         Function NetToHostLong( NetLong : LongWord) : LongWord
11378:
         Function NetToHostShort( NetShort : Word) : Word
11379:
         Function StrToIp( Ip : string) : TIpAddr
11380: Function IpToStr( Ip : TIpAddr) : string
11381: end;
11382:
11383: /*
11384: procedure SIRegister_ALSMTPClient(CL: TPSPascalCompiler);
11385: begin
11386
           TAlSmtpClientAuthType', '( AlsmtpClientAuthNone, alsmtpClientAut'
           +'hPlain, AlsmtpClientAuthLogin, AlsmtpClientAuthCramMD5, AlsmtpClientAuthCr' +'amShal, AlsmtpClientAuthAutoSelect )
11387:
11388:
                                            'set of TAlSmtpClientAuthType
11389:
           TAlSmtpClientAuthTypeSet',
11390:
          SIRegister_TAlSmtpClient(CL);
11391: end;
11392:
11393: procedure SIRegister_WDosPlcUtils(CL: TPSPascalCompiler);
11394: begin
11395: 'TBitNo', 'Integer
          TStByteNo', 'Integer
StationNo', 'Integer
11396:
11397: TStationNo',
11398: TInOutNo', 'Integer
11399: TIO', '( EE, AA, NE, NA )
11400: TBitSet', 'set of TBitNo
11401: TAddrKind', 'set of (akBit0, akBit1, akBit2, akOut, akNot, akBus)
11402: TBitAddrRec', 'record Kind: TAddrKind; InOutNo: TInOutNo; ByteNo: Byte; end
                      'LongInt
11403: TBitAddr',
11404: TByteAddrRec', 'record Kind: TAddrKind; ByteNo: Byte; end
11405: TByteAddr', 'SmallInt
11406: TInOutState', '( iosInit, iosHalt, iosRun, iosError )
1407: Function BitAddr(aIo: TIo; aInOutNo: TInOutNo; aByteNo: Byte; aBitNo: TBitNo): TBitAddr
11408: Function BusBitAddr(aIo:TIo; aInOutNo:TInOutNo; aStat:TStatNo; aStByteNo:TStByteNo; aBitNo:TBitNo):TBitAddr;
11409: Procedure BitAddrToValues(aBitAdr:TBitAdr;var aIo:TIo;var aInOutNo:TInOutNo;var aByteNo:Byte;var
        aBitNo:TBitNo);
11410: Function BitAddrToStr( Value : TBitAddr) : string
         Function StrToBitAddr( const Value : string) : TBitAddr
11411:
         Function ByteAddr( aIo : TIo; aInOutNo : TInOutNo; aByteNo : Byte) : TByteAddr
Function BusByteAddr(aIo:TIo;aInOutNo:TInOutNo;aStation:TStationNo;aStByteNo: TStByteNo):TByteAddr
11412:
11413:
         Procedure ByteAddrToValues(aByteAddr:TByteAddr:var aIo:TIo:var aInOutNo:TInOutNo:var aByteNo:Byte)
11414:
11415:
         Function ByteAddrToStr( Value : TByteAddr) : string
11416:
         Function StrToByteAddr( const Value : string) : TByteAddr
         Procedure IncByteAddr( var ByteAddr: TByteAddr; Increment: Integer)
Procedure DecByteAddr( var ByteAddr: TByteAddr; Decrement: Integer)
11417:
11418:
         Function InOutStateToStr( State : TInOutState) : string
Function MasterErrorToStr( ErrorCode : TErrorCode) : string
11419:
11420:
11421:
         Function SlaveErrorToStr( ErrorCode : TErrorCode) : string
11422: end;
11423:
11424: procedure SIRegister_WDosTimers(CL: TPSPascalCompiler);
11425: begin
11426: TIntFreq', '( ifNone, if32768, if16384, if8192, if4096, if2048, '
11427: +'if1024, if512, if256, if128, if64, if32, if16, if8, if4, if2 )
11428: DpmiPmVector', 'Int64
11429:
          'DInterval', 'LongInt'(
11430:
         //'DEnabled','Boolean')BoolToStr( True);
         'DIntFreq','string' if64
//'DMessages','Boolean if64);
11431:
11432:
           SIRegister_TwdxCustomTimer(CL);
           SIRegister_TwdxTimer(CL);
11434:
11435:
           SIRegister_TwdxRtcTimer(CL);
11436:
           SIRegister_TCustomIntTimer(CL);
11437:
           SIRegister_TIntTimer(CL);
11438:
           SIRegister_TRtcIntTimer(CL);
11439:
         Function RealNow : TDateTime
11440:
         Function MsToDateTime( MilliSecond : LongInt) : TDateTime
Function DateTimeToMs( Time : TDateTime) : LongInt
11441:
11442: end;
11443:
11444: procedure SIRegister_IdSysLogMessage(CL: TPSPascalCompiler);
11445: begin
                          'Integer
11446: TIdSyslogPRI',
+'lockDaemonTwo, sfLocalUseZero, sfLocalUseOne, sfLocalUseTwo, sfLocalUseThr'+'ee, sfLocalUseFour, sfLocalUseFive, sfLocalUseSix, sfLocalUseSeven)
11450:
11451:
11452: TIdSyslogSeverity','(slEmergency,slAlert,slCritical,slError,slWarning,slNotice,slInformational,slDebug)
11453:
          SIRegister_TIdSysLogMsgPart(CL);
           SIRegister_TIdSysLogMessage(CL);
11454:
11455: Function FacilityToString( AFac : TIdSyslogFacility) : string
11456: Function SeverityToString( ASec : TIdsyslogSeverity) : string
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```
11457:
              Function NoToSeverity( ASev : Word) : TIdSvslogSeverity
              Function logSeverityToNo( ASev : TIdSyslogSeverity) : Word
11458:
              Function NoToFacility( AFac : Word) : TIdSyslogFacility
11460:
              Function logFacilityToNo( AFac : TIdSyslogFacility) : Word
11461:
            end;
11462:
11463: procedure SIRegister_TextUtils(CL: TPSPascalCompiler);
11464:
            begin
              'UWhitespace','String '(?:\s*)
Function StripSpaces( const AText : string) : string
11465:
11466:
              Function CharCount( const AText : string; Ch : Char) : Integer
11467:
              Function BalancedText( const AText : string; const Ch1, Ch2 : Char; const Count : Integer) : string
11469:
              Function BalancedTextReg( const AText:string; const Ch1, Ch2: Char; const Count: Integer): string
11470: end;
11471:
11472:
11473: procedure SIRegister ExtPascalUtils(CL: TPSPascalCompiler);
11474: begin
11475:
              ExtPascalVersion','String '0.9.8
11476:
               AddTypeS('TBrowser', '( brUnknown, brIE, brFirefox, brChrome, brSafari, br'
                    'Opera, brKonqueror, brMobileSafari )
11477:
11478:
                AddTypeS('TCSSUnit', '( cssPX, cssPerc, cssEM, cssEX, cssIN, cssCM, cssMM, cssPT, cssPC, cssnone )
              AddTypeS('TExtProcedure', 'Procedure
Function DetermineBrowser( const UserAgentStr : string) : TBrowser
11479:
11480:
11481:
              Function ExtExtract(const Delims:array of string; var S:string; var Matches:TStringList; Remove:bool):bool;
11482:
              Function ExtExplode( Delim : char; const S : string; Separator : char) : TStringList
11483:
              Function FirstDelimiter( const Delimiters, S : string; Offset : integer) : integer
              Function RPosEx( const Substr, Str : string; Offset : integer) : integer
Function CountStr( const Substr, Str : string; UntilStr : string) : integer
11484:
11485:
              Function StrToJS( const S : string; UseBR : boolean) : string
11486:
11487:
              Function CaseOf( const S : string; const Cases : array of string) : integer
              Function RCaseOf( const S : string; const Cases : array of string) : integer Function EnumToJSString( TypeInfo : PTypeInfo; Value : integer) : string
11488:
11489:
              Function SetPaddings(Top:integer/Right:int/Bottom:intr/Left:integer/CSSUnit:TCSSUnit;Header:bool):string/
11490:
              Function SetMargins(Top:integer;Right:int;Bottom:int;Left:integer;CSSUnit:TCSSUnit;Header:bool): string;
11491:
11492:
              Function ExtBefore( const BeforeS, AfterS, S : string) : boolean
              Function IsUpperCase( S : string) : boolean
Function BeautifyJS(const AScript:string;const StartingLevel:integer;SplitHTMLNewLine: boolean):string;
11493:
11494:
11495:
              Function BeautifyCSS( const AStyle : string) : string
11496:
              Function LengthRegExp( Rex : string; CountAll : Boolean) : integer
11497:
              Function JSDateToDateTime( JSDate : string) : TDateTime
11498: end;
11499:
11500: procedure SIRegister JclShell(CL: TPSPascalCompiler);
11501: begin
                TSHDeleteOption', '( doSilent, doAllowUndo, doFilesOnly )
11502:
                TSHDeleteOption', 'set of TSHDeleteOption
TSHRenameOption', '( roSilent, roRenameOnCollision )
11503:
11504:
11505:
                TSHRenameOptions '
                                                  'set of TSHRenameOption
              Function SHDeleteFiles( Parent : HWND; const Files : string; Options : TSHDeleteOptions) : Boolean Function SHDeleteFolder( Parent : HWND; const Folder : string; Options : TSHDeleteOptions) : Boolean
11506:
11507:
11508:
              Function SHRenameFile( const Src, Dest : string; Options : TSHRenameOptions) : Boolean
               TEnumFolderFlags', '( efFolders, efNonFolders, efIncludeHidden )

TEnumFolderFlags', 'set of TEnumFolderFlag

TEnumFolderRec', 'record DisplayName: string; Attributes: DWOR'

+'D; IconLarge: HICON; IconSmall: HICON; Item: PItemIdList; EnumIdList: '
11509:
11510:
11511:
11512:
                  +'IEnumIdList; Folder: IShellFolder; end
11513:
              Function SHEnumFolderFirst(const Folder:string;Flags:TEnumFolderFlags;var F:TEnumFolderRec):Boolean;
11514:
11515:
              \textbf{Function} \ \texttt{SHEnumSpecialFolderFirst} ( \texttt{SpecialFolder:DWORD}; \textbf{Flags:TEnumFolderFlags}; \textbf{var} \ \textbf{F:TEnumFolderRec}) : \texttt{Bool}; \textbf{Flags:TEnumFolderFlags}; \textbf{var} \ \textbf{F:TEnumFolderRec}) : \textbf{Flags:TenumFolderFlags}; \textbf{Var} \ \textbf{FinalFireFlags}; \textbf{Var} \ \textbf{FinalFireFl
11516:
              \label{eq:procedure} \begin{array}{lll} \textbf{Procedure} & \texttt{SHE} \texttt{numFolderClose}( & \textbf{var} & \texttt{F} & \texttt{:} & \texttt{TE} \texttt{numFolderRec}) \\ \textbf{Function} & \texttt{SHE} \texttt{numFolderNext}( & \textbf{var} & \texttt{F} & \texttt{:} & \texttt{TE} \texttt{numFolderRec}) & \texttt{:} & \texttt{Boolean} \\ \end{array}
11517:
11518:
               Function GetSpecialFolderLocation( const Folder : Integer) : string
11510:
              Function DisplayPropDialog( const Handle : HWND; const FileName : string) : Boolean;
              Function DisplayPropDialog1( const Handle : HWND; const Item : PItemIdList) : Boolean;
Function DisplayContextMenu( const Handle : HWND; const FileName : string; Pos : TPoint) : Boolean
11520:
11521:
              Function OpenFolder( const Path : string; Parent : HWND) : Boolean
              Function OpenSpecialFolder( FolderID : Integer; Parent : HWND) : Boolean
11523:
              Function SHReallocMem( var P : Pointer; Count : Integer) : Boolean
11524:
              Function SHAllocMem( out P : Pointer; Count : Integer) : Boolean
11525:
              Function SHGetMem( var P : Pointer; Count : Integer) : Boolean
Function SHFreeMem( var P : Pointer) : Boolean
11526:
11527:
11528:
              Function DriveToPidlBind( const DriveName : string; out Folder : IShellFolder) : PItemIdList
11529:
              Function PathToPidl( const Path : string; Folder : IShellFolder) : PItemIdList
Function PathToPidlBind( const FileName : string; out Folder : IShellFolder) : PItemIdList
11530:
              Function PidlBindToParent(const IdList:PItemIdList;out Folder:IShellFolder;out Last:PItemIdList):Bool;
11531:
11532:
              \textbf{Function} \  \, \texttt{PidlCompare( const Pidl1, Pidl2 : PItemIdList) : Boolean}
11533:
              Function PidlCopy( const Source : PItemIdList; out Dest : PItemIdList) : Boolean
              Function PidlFree( var IdList : PItemIdList) : Boolean
11534:
              Function PidlGetDepth( const Pidl : PItemIdList) : Integer
11535:
               Function PidlGetLength( const Pidl : PItemIdList) :
                                                                                                             Integer
11537:
              Function PidlGetNext( const Pidl : PItemIdList) : PItemIdList
              Function PidlToPath( IdList : PItemIdList) : string
Function StrRetFreeMem( StrRet : TStrRet) : Boolean
Function StrRetToString( IdList : PItemIdList; StrRet : TStrRet; Free : Boolean) : string
11538:
11539:
11540:
                PShellLink', '^TShellLink // will not work
11541:
               TShellLink', 'record Arguments: string; ShowCmd: Integer; Work'
+'ingDirectory: string; IdList: PItemIDList; Target: string; Description '
+': string; IconLocation: string; IconIndex: Integer; HotKey: Word; end
11542:
11543:
11544:
11545: Procedure ShellLinkFree( var Link : TShellLink)
```

```
11546:
         Function ShellLinkResolve( const FileName : string; var Link : TShellLink) : HRESULT
         Function ShellLinkCreate( const Link : TShellLink; const FileName : string) : HRESULT
11547:
         Function ShellLinkCreateSystem(const Link:TShellLink;const Folder:Integer; const FileName:string):HRESULT;
11540.
         Function ShellLinkGetIcon( const Link : TShellLink; const Icon : TIcon) : Boolean
11550:
         Function SHDllGetVersion( const FileName : string; var Version : TDllVersionInfo) : Boolean
         Function GetSystemIcon( IconIndex : Integer; Flags : Cardinal) : HICON
11551:
         Function OverlayIcon( var Icon: HICON; Overlay: HICON; Large: Boolean): Boolean
Function OverlayIconShortCut( var Large, Small: HICON): Boolean
11552:
11553:
11554:
         Function OverlayIconShared( var Large, Small : HICON) : Boolean
11555:
         Function SHGetItemInfoTip( const Folder : IShellFolder; Item : PItemIdList) : string
         Function ShellExecEx(const FileName:string;const Parameters:string;const Verb:string; CmdShow:Int):Bool;
11556:
         Function ShellExec(Wnd: Integer; const Operation, FileName, Parameters, Directy: string; ShowCommand: Int): Bool;
11558:
         Function ShellExecAndWait(const FileName:string;const Paramets:string;const Verb:string;CmdShow:Int):Bool;
         Function ShellOpenAs( const FileName : string) : Boolean
Function ShellRasDial( const EntryName : string) : Boolean
11559:
11560:
11561:
         Function ShellRunControlPanel( const NameOrFileName:string; AppletNumber:Integer):Boolean
         Function GetFileNameIcon( const FileName : string; Flags : Cardinal) : HICON
11562:
         TJclFileExeType', '( etError, etMsDos, etWin16, etWin32Gui, etWin32Con )
Function GetFileExeType( const FileName: TFileName): TJclFileExeType
Function ShellFindExecutable( const FileName, DefaultDir: string): string
11563:
11564:
11565:
         Procedure keybd_event( bVk : Byte; bScan : Byte; dwFlags, dwExtraInfo : DWORD)
11567:
         Function OemKeyScan( wOemChar : Word) : DWORD
11568:
         Procedure mouse_event( dwFlags, dx, dy, dwData, dwExtraInfo : DWORD)
11569:
        end;
11570:
11571:
        procedure SIRegister_cXMLFunctions(CL: TPSPascalCompiler);
11572: begin
        xmlVersion','String '1.0 FindClass('TOBJECT'),'Exml
11573:
         //Function xmlValidChar( const Ch: AnsiChar): Boolean;
Function xmlValidChar1( const Ch: UCS4Char): Boolean;
11574:
11575:
11576:
         Function xmlValidChar2( const Ch : WideChar) : Boolean;
11577:
         Function xmlIsSpaceChar( const Ch : WideChar) : Boolean
         Function xmlIsDigit( const Ch : WideChar) : Boolean
Function xmlIsDigit( const Ch : WideChar) : Boolean
11578:
11579:
         Function xmllsNameStartChar( const Ch : WideChar) :
11580:
11581:
         Function xmlIsNameChar( const Ch : WideChar) : Boolean
11582:
         Function xmlIsPubidChar( const Ch : WideChar) : Boolean
         Function xmlValidName( const Text : UnicodeString) : Boolean
11583:
11584:
         //xmlSpace','Char #$20 or #$9 or #$D or #$A);
         //Function xmlSkipSpace( var P : PWideChar) : Boolean
11585:
11586:
         //Function xmlSkipEq( var P : PWideChar) : Boolean
         //Function xmlExtractQuotedText( var P : PWideChar; var S : UnicodeString) : Boolean 
//Function xmlGetEntityEncoding( const Buf : Pointer; const BufSize : Integer; out HeaderSize : Integer)
11587:
11588:
          TUnicodeCodecClass
11589:
         Function xmlResolveEntityReference( const RefName : UnicodeString) : WideChar
         Function xmlTag( const Tag : UnicodeString) : UnicodeString
Function xmlEndTag( const Tag : UnicodeString) : UnicodeString
11590:
11591:
         Function xmlAttrTag( const Tag : UnicodeString; const Attr : UnicodeString) : UnicodeString
11592:
         Function xmlEmptyTag( const Tag, Attr : UnicodeString) : UnicodeString
Procedure xmlSafeTextInPlace( var Txt : UnicodeString)
Function xmlSafeText( const Txt : UnicodeString) : UnicodeString
11593:
11594:
11595:
         Function xmlSpaceIndent( const IndentLength : Integer; const IndentLevel : Integer):UnicodeString
11596:
         Function xmlTabIndent( const IndentLevel : Integer) : UnicodeString
11597:
11598:
         Function xmlComment( const Comment : UnicodeString) : UnicodeString
11599:
         Procedure SelfTestcXMLFunctions
11600:
        end;
11601:
11602:
11603:
        procedure SIRegister_DepWalkUtils(CL: TPSPascalCompiler);
11604: begin
11605:
         Function AWaitCursor : IUnknown
         Function ChangeCursor( NewCursor : TCursor) : IUnknown
11607:
         Procedure SuspendRedraw( AControl : TWinControl; Suspend : boolean)
11608:
         \textbf{Function} \ \texttt{YesNo} ( \ \textbf{const} \ \texttt{ACaption}, \ \texttt{AMsg} \ : \ \textbf{string}) \ : \ \texttt{boolean}
         Procedure strTokenize( const S : string; Delims : TSysCharSet; Results : TStrings)
11609:
         Function GetExpandedLibRoot( Version : integer; ForDelphi : boolean) : string
Function GetExpandedLibRoot( Version : integer; ForDelphi : boolean) : string
11611:
11612:
         Procedure GetPathList( Version : integer; ForDelphi : boolean; Strings : TStrings)
11613:
         Procedure GetSystemPaths( Strings: TStrings)
11614:
         Procedure MakeEditNumeric( EditHandle : integer)
11615:
11616:
11617:
        procedure SIRegister_yuvconverts(CL: TPSPascalCompiler);
11618: begin
11619:
          AddTypeS('TVideoCodec','(vcUnknown,vcRGB,vcYUY2,vcUYVY,vcBTYUV,vcYV,U9,vcYUV12,vcY8,vcY211)
         'BI_'UYV2', 'LongWord( $32595559);

'BI_'UYVY', 'LongWord').SetUInt( $59565955);

'BI_BTYUV', 'LongWord').SetUInt( $50313459);
11620:
11621:
11622:
         'BI_YUV12', 'LongWord').SetUInt( $39555659);
'BI_YUV12', 'LongWord( $30323449);
11623:
11624:
11625:
         'BI_Y8','LongWord').SetUInt( $20203859);
11626:
         'BI_Y211', 'LongWord').SetUInt( $31313259);
         Function BICompressionToVideoCodec( Value : DWord) : TVideoCodec
11627:
11628:
         Function ConvertCodecToRGB(Codec:TVideoCodec;Src,Dst:Pointer;AWidth,AHeight:Integer):Boolean;
11630:
11631:
11632: procedure SIRegister_AviCap(CL: TPSPascalCompiler);
11633: begin
```

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11634:
          'WM USER', 'LongWord').SetUInt( $0400);
           'WM_CAP_START', 'LongWord').SetUint($0400);
11635:
           'WM_CAP_END','longword').SetUint($0400+85);
11636:
11637:
          //WM_CAP_START+ 85
          // WM_CAP_SET_CALLBACK_CAPCONTROL = (WM_CAP_START+ 85);
Function capSetCallbackOnError( hwnd : THandle; fpProc : LongInt) : LongInt
11638:
11639:
          Function capSetCallbackOnStatus( hwnd : THandle; fpProc : LongInt) : LongInt
11640:
          Function capSetCallbackOnYield( hwnd : THandle; fpProc : LongInt) : LongInt
Function capSetCallbackOnFrame( hwnd : THandle; fpProc : LongInt) : LongInt
11641:
11642:
          Function capSetCallbackOnVideoStream( hwnd : THandle; fpProc : LongInt) : LongInt Function capSetCallbackOnWaveStream( hwnd : THandle; fpProc : LongInt) : LongInt
11643:
11644:
          Function capSetCallbackOnCapControl( hwnd : THandle; fpProc : LongInt) : LongInt
11645:
          Function capSetUserData( hwnd : THandle; lUser : LongInt) : LongInt
Function capGetUserData( hwnd : THandle) : LongInt
Function capDriverConnect( hwnd : THandle; I : Word) : LongInt
11646:
11647:
11648:
11649:
          Function capDriverDisconnect( hwnd : THandle) : LongInt
          Function capDriverGetName( hwnd : THandle; szName : LongInt; wSize : Word) : LongInt
11650:
          Function capDriverGetVersion( hwnd : THandle; szVer : LongInt; wSize : Word) : LongIntFunction capDriverGetCaps( hwnd : THandle; s : LongInt; wSize : Word) : LongInt
11651:
11652:
11653:
          Function capFileSetCaptureFile( hwnd : THandle; szName : LongInt) : LongInt
          Function capFileGetCaptureFile( hwnd : THandle; szName : LongInt; wSize : Word):LongInt
11654:
11655:
          Function capFileAlloc( hwnd : THandle; dwSize : LongInt) : LongInt
          Function capFileSaveAs( hwnd : THandle; szName : LongInt) : LongInt
11656:
          Function capFileSetInfoChunk( hwnd : THandle; lpInfoChunk : LongInt) : LongInt
11657:
          Function capFileSaveDIB( hwnd : THandle; szName : LongInt) : LongInt
11658:
11659:
          Function capEditCopy( hwnd : THandle) : LongInt
11660:
          Function capSetAudioFormat( hwnd : THandle; s : LongInt; wSize : Word) : LongInt Function capGetAudioFormat( hwnd : THandle; s : LongInt; wSize : Word) : LongInt
11661:
11662:
          Function capGetAudioFormatSize( hwnd : THandle) : LongInt
          Function capDlgVideoFormat( hwnd : THandle) : LongInt
11663:
11664:
          Function capDlgVideoSource( hwnd : THandle) : LongInt
11665:
          Function capDlgVideoDisplay( hwnd : THandle) : LongInt
11666:
          Function capDlgVideoCompression( hwnd : THandle) : LongInt
11667:
          Function capGetVideoFormat( hwnd : THandle; s : LongInt; wSize : Word) : LongInt
          Function capGetVideoFormatSize( hwnd : THandle) : LongInt
11669:
          Function capSetVideoFormat( hwnd : THandle; s : LongInt; wSize : Word) : LongInt
          Function capPreview( hwnd : THandle; f : Word) : LongInt
11670:
11671:
          Function capPreviewRate( hwnd : THandle; wMS : Word) : LongInt
11672:
          Function capOverlay( hwnd : THandle; f : Word) : LongInt
11673:
          Function capPreviewScale( hwnd : THandle; f : Word) : LongInt
11674:
          \textbf{Function} \ \texttt{capGetStatus(hwnd: THandle; s: LongInt; wSize: Word): LongInt}
          Function capSetScrollPos( hwnd : THandle; lpP : LongInt) : LongInt
11675:
          Function capGrabFrame( hwnd : THandle) : LongInt
11676:
          Function capgrabFrameNoStop(hwnd: THandle): LongInt
Function capCaptureSequence(hwnd: THandle): LongInt
11677:
11678:
11679:
          Function capCaptureSequenceNoFile( hwnd : THandle) : LongInt
          Function capCaptureStop( hwnd : THandle) : LongInt
Function capCaptureAbort( hwnd : THandle) : LongInt
11680:
11681:
          Function capCaptureSingleFrameOpen( hwnd: THandle): LongInt
Function capCaptureSingleFrameClose( hwnd: THandle): LongInt
Function capCaptureSingleFrame( hwnd: THandle): LongInt
11682:
11683:
11684:
          Function capCaptureGetSetup( hwnd : THandle; s : LongInt; wSize : Word) : LongInt
Function capCaptureSetSetup( hwnd : THandle; s : LongInt; wSize : Word) : LongInt
11685:
11686:
          Function capSetMCIDeviceName( hwnd : THandle; szName : LongInt) : LongInt
Function capGetMCIDeviceName( hwnd : THandle; szName : LongInt; wSize : Word) : LongInt
11687:
11688:
          Function capPaletteOpen( hwnd : THandle; szName : LongInt) : LongInt
11689:
          Function capPaletteSave( hwnd : THandle; szName : LongInt) : LongInt
11690:
          Function capPalettePaste( hwnd : THandle) : LongInt
11691:
          Function capPaletteAuto( hwnd : THandle; iFrames : Word; iColors : LongInt) : LongInt
Function capPaletteManual( hwnd : THandle; iFrames : Word; iColors : LongInt) : LongInt
//PCapDriverCaps', '^TCapDriverCaps // will not work
TCapDriverCaps', 'record wDeviceIndex : WORD; fHasOverlay : BOOL'
11692:
11693:
11694:
11695:
11696:
             +'; fHasDlgVideoSource : BOOL; fHasDlgVideoFormat : BOOL; fHasDlgVideoDispla'
           +'y: BOOL; fCaptureInitialized: BOOL; fDriverSuppliesPalettes: BOOL; hVid'
+'eoIn: THANDLE; hVideoOut: THANDLE; hVideoExtIn:THANDLE; hVideoExtOut:THANDLE; end
//PCapStatus', '^TCapStatus // will not work
TCapStatus', 'record uiImageWidth: UINT; uiImageHeight: UINT; '
11697:
11698:
11700:
11701:
             +'fLiveWindow : BOOL; fOverlayWindow : BOOL; fScale : BOOL; ptScroll : TPOIN'
             +'T; fUsingDefaultPalette : BOOL; fAudioHardware : BOOL; fCapFileExists : BO'+'OL; dwCurrentVideoFrame : DWORD; dwCurrentVideoFramesDropped : DWORD; dwCu'
11702:
11703:
11704:
             +'rrentWaveSamples : DWORD; dwCurrentTimeElapsedMS : DWORD; hPalCurrent : HP'
11705:
             +'ALETTE; fCapturingNow : BOOL; dwReturn : DWORD; wNumVideoAllocated : WORD;'
11706:
             +' wNumAudioAllocated : WORD; end
            //PCaptureParms', '^TCaptureParms // will not work
11707:
11708:
            TCaptureParms', 'record dwRequestMicroSecPerFrame : DWORD; fMake'
11709:
             +'UserHitOKToCapture : BOOL; wPercentDropForError : WORD; fYield : BOOL; dwI'
             +'ndexSize : DWORD; wChunkGranularity : WORD; fUsingDOSMemory : BOOL; wNumVi' +'deoRequested : WORD; fCaptureAudio : BOOL; wNumAudioRequested : WORD; vKey'
11710:
11711:
             +'Abort : WORD; fAbortLeftMouse : BOOL; fAbortRightMouse : BOOL; fLimitEnabl'
11712:
             +'ed : BOOL; wTimeLimit : WORD; fMCIControl : BOOL; fStepMCIDevice : BOOL; d'+'wMCIStartTime : DWORD; dwMCIStopTime : DWORD; fStepCaptureAt2x : BOOL; wSt'
11714:
11715:
             +'epCaptureAverageFrames : WORD; dwAudioBufferSize : DWORD; fDisableWriteCac'
             +'he : BOOL; AVStreamMaster : WORD; end
11716:
          // PCapInfoChunk', '^TCapInfoChunk // will not work
//TCapInfoChunk', 'record fccInfoID : FOURCC; lpData : LongInt; cbData : LongInt; end
11717:
11718:
          'CONTROLCALLBACK_PREROLL', 'LongInt'( 1);
'CONTROLCALLBACK_CAPTURING', 'LongInt'( 2);
11719:
11720:
11721:
          Function capCreateCaptureWindow( lpszWindowName: PChar; dwStyle : DWord; x, y : Integer; nWidth, nHeight
         : Integer; hwndParent : THandle; nID : Integer) : THandle
```

```
11722: Function
         capGetDriverDescription(wDriverIndex:DWord;lpszName:PChar;cbName:Integer;lpszVer:PChar;cbVer:Int):Bool;
           'IDS_CAP_BEGIN','LongInt'( 300);
'IDS_CAP_END','LongInt'( 301);
'IDS_CAP_INFO','LongInt'( 401);
11723:
11724 .
11725:
           'IDS_CAP_OUTOFMEM','LongInt'( 402);
'IDS_CAP_FILEEXISTS','LongInt'( 403);
11726:
11727:
11728:
           'IDS_CAP_ERRORPALOPEN', 'LongInt'( 404);
          'IDS_CAP_ERRORPALSAVE', 'LongInt'( 405);
'IDS_CAP_ERRORDIBSAVE', 'LongInt'( 406);
11729:
11730:
          'IDS_CAP_DEFAVIEXT', 'LongInt'( 407);
'IDS_CAP_DEFPALEXT', 'LongInt'( 408);
11731:
11732:
11733:
           'IDS_CAP_CANTOPEN','LongInt'( 409);
           'IDS_CAP_SEQ_MSGSTART', 'LongInt'( 410);
'IDS_CAP_SEQ_MSGSTOP', 'LongInt'( 411);
11734:
11735:
11736:
           'IDS_CAP_VIDEDITERR', 'LongInt'( 412);
           'IDS_CAP_READONLYFILE', 'LongInt'( 413);
11737:
           'IDS_CAP_WRITEERROR', LongInt'( 414);
'IDS_CAP_NODISKSPACE', LongInt'( 415);
'IDS_CAP_SETFILESIZE', LongInt'( 416);
11738 .
11739:
11740:
           'IDS_CAP_SAVEASPERCENT', 'LongInt'( 417);
11741:
11742:
           'IDS_CAP_DRIVER_ERROR', 'LongInt'( 418);
           'IDS_CAP_WAVE_OPEN_ERROR','LongInt'( 419);
'IDS_CAP_WAVE_ALLOC_ERROR','LongInt'( 420);
11743:
11744:
           'IDS_CAP_WAVE_PREPARE_ERROR', 'LongInt'( 421);
11745:
11746:
           'IDS_CAP_WAVE_ADD_ERROR', 'LongInt'( 422);
11747:
          'IDS_CAP_WAVE_SIZE_ERROR','LongInt'( 423);
'IDS_CAP_VIDEO_OPEN_ERROR','LongInt'( 424);
'IDS_CAP_VIDEO_ALLOC_ERROR','LongInt'( 425);
11748:
11749:
           'IDS_CAP_VIDEO_PREPARE_ERROR', 'LongInt'( 426);
11750:
           'IDS_CAP_VIDEO_ADD_ERROR','LongInt'( 427);
'IDS_CAP_VIDEO_SIZE_ERROR','LongInt'( 428);
'IDS_CAP_FILE_OPEN_ERROR','LongInt'( 429);
11751:
11752:
11753:
            IDS_CAP_FILE_WRITE_ERROR', 'LongInt'( 430);
11754:
           'IDS_CAP_RECORDING_ERROR', 'LongInt'(431);
'IDS_CAP_RECORDING_ERROR2', 'LongInt'(432);
11755:
11756:
           'IDS_CAP_NO_FRAME_CAP_ERROR', LongInt'( 433);
'IDS_CAP_NO_FRAME_CAP_ERROR', LongInt'( 434);
11757:
11758:
           'IDS_CAP_NO_PALETTE_WARN', LongInt'( 435);
'IDS_CAP_MCI_CONTROL_ERROR', LongInt'( 436);
11759:
11760:
           'IDS_CAP_MCI_CANT_STEP_ERROR','LongInt'( 437);
'IDS_CAP_NO_AUDIO_CAP_ERROR','LongInt'( 438);
'IDS_CAP_AVI_DRAWDIB_ERROR','LongInt'( 439);
11761:
11762:
11763:
            IDS_CAP_COMPRESSOR_ERROR', 'LongInt'( 440);
11764:
11765:
           'IDS_CAP_AUDIO_DROP_ERROR','LongInt'( 441);
           'IDS CAP STAT LIVE MODE', 'LongInt'( 500);
11766:
            IDS_CAP_STAT_OVERLAY_MODE', 'LongInt'( 501);
11767:
11768:
           'IDS_CAP_STAT_CAP_INIT', 'LongInt'( 502);
11769:
           'IDS_CAP_STAT_CAP_FINI', 'LongInt'( 503);
           'IDS_CAP_STAT_OPTPALETTE_BUILD', 'LongInt'( 504);
'IDS_CAP_STAT_OPTPAL_BUILD', 'LongInt'( 505);
11770:
11771:
           'IDS_CAP_STAT_L_FRAMES','LongInt'( 506);
'IDS_CAP_STAT_L_FRAMES','LongInt'( 507);
11772:
11773:
11774:
           'IDS_CAP_STAT_CAP_L_FRAMES', 'LongInt'( 508);
           'IDS_CAP_STAT_CAP_AUDIO', 'LongInt'( 509);
'IDS_CAP_STAT_VIDEOCURRENT', 'LongInt'( 510);
11775:
11776:
           'IDS_CAP_STAT_VIDEOAUDIO', 'LongInt'( 511);
11777:
           'IDS_CAP_STAT_VIDEOONLY', 'LongInt'( 512);
11778:
11779:
           'IDS_CAP_STAT_FRAMESDROPPED', 'LongInt'( 513);
           'AVICAP32', 'String 'AVICAP32.dll
11780:
11781:
         end;
11782:
11783:
         procedure SIRegister_ALFcnMisc(CL: TPSPascalCompiler);
11784: begin
          Function AlBoolToInt( Value : Boolean) : Integer
11785:
          Function ALMediumPos( LTotal, LBorder, LObject : integer) : Integer
11786:
          Function AlIsValidEmail( const Value : AnsiString) : boolean
11787:
11788:
          \textbf{Function} \ \ \texttt{AllocalDateTimeToGMTDateTime} ( \ \ \textbf{const} \ \ \texttt{aLocalDateTime} : \ \ \texttt{TDateTime}) : \ \ \texttt{TdateTime} 
          Function ALInc( var x : integer; Count : integer) : Integer
11789:
          function ALCopyStr(const aSourceString: AnsiString; aStart, aLength: Integer): AnsiString
11790:
11791:
          function ALGetStringFromFile(filename: AnsiString; const ShareMode: Word = fmShareDenyWrite):AnsiString;
11792:
          procedure ALSaveStringtoFile(Str: AnsiString; filename: AnsiString);
11793:
          Function ALIsInteger(const S: AnsiString): Boolean;
function ALIsDecimal(const S: AnsiString): boolean;
11794:
          function ALStringToWideString(const S: AnsiString; const aCodePage: Word): WideString; function AlWideStringToString(const WS: WideString; const aCodePage: Word): AnsiString; function ALQuotedStr(const S: AnsiString; const Quote: AnsiChar = ''''): AnsiString;
11795:
11796:
11797:
          function ALDequotedStr(const S: AnsiString; AQuote: AnsiChar): AnsiString;
11798:
                       AluTF8removeBOM(const S: AnsiString): AnsiString;
11799:
          function
          Function ALRandomStrl(const aLength: Longint; const aCharset: Array of Char): AnsiString;
Function ALRandomStr(const aLength: Longint): AnsiString;
11800:
11801:
11802:
          Function ALRandomStrUl(const aLength: Longint; const aCharset: Array of Char): String;
          Function ALRandomStrU(const aLength: Longint): String;
11803:
11804:
         end
11805:
11806: procedure SIRegister_ALJSONDoc(CL: TPSPascalCompiler);
11807: begin
11808:
         Procedure ALJSONToTStrings(const AJsonStr:AnsiString; aLst:TALStrings; const aNullStr:AnsiString; const
         aTrueStr: AnsiString; const aFalseStr : AnsiString)
```

```
11809: end;
11810:
11811:
         procedure SIRegister_ALWindows(CL: TPSPascalCompiler);
11812:
            _ALMEMORYSTATUSEX', 'record dwLength : DWORD; dwMemoryLoad : DWO
11813:
              +'RD; ullTotalPhys : Int64; ullAvailPhys : Int64; ullTotalPageFile : Int64; '+'ullAvailPageFile : Int64; ullTotalVirtual : Int64; ullAvailVirtual : Int64;
11814:
11815:
11816:
              +'; ullAvailExtendedVirtual : Int64; end
11817:
            {\tt TALMemoryStatusEx', '\_ALMEMORYSTATUSEX}
           Function ALGlobalMemoryStatusEx( var lpBuffer : TALMEMORYSTATUSEX) : BOOL Function ALInterlockedExchange64( var Target : LONGLONG; Value : LONGLONG) : LONGLONG
11818:
11819:
            'INVALID_SET_FILE_POINTER', 'LongInt'( DWORD ( - 1 ));
11820:
           'QUOTA_LIMITS_HARDWS_MIN_DISABLE','LongWord').SetUInt( $2);
'QUOTA_LIMITS_HARDWS_MIN_ENABLE','LongWord').SetUInt( $1);
'QUOTA_LIMITS_HARDWS_MAX_DISABLE','LongWord').SetUInt( $8);
'QUOTA_LIMITS_HARDWS_MAX_ENABLE','LongWord').SetUInt( $4);
11821:
11822:
11823:
11824:
11825:
11826
         procedure SIRegister IPCThrd(CL: TPSPascalCompiler);
11827:
11828: begin
11829:
             SIRegister_THandledObject(CL);
11830:
             SIRegister_TEvent(CL)
            SIRegister_TMutex(CL);
SIRegister_TSharedMem(CL);
11831:
11832:
11833:
            'TRACE_BUF_SIZE', 'LongInt'( 200 * 1024);
           'TRACE_BUFFER','String 'TRACE_BUFFER
'TRACE_MUTEX','String 'TRACE_MUTEX
//PTraceEntry', '^TTraceEntry // will not work
11834:
11835:
11836:
11837:
             SIRegister_TIPCTracer(CL);
           'MAX_CLIENTS','LongInt'( 6);
'IPCTIMEOUT','LongInt'( 2000);
11838:
11839:
           'IPCBUFFER_NAME','String 'BUFFER_NAME
'BUFFER_MUTEX_NAME','String 'BUFFER_MUTEX
'MONITOR_EVENT_NAME','String 'MONITOR_EVENT
'CLIENT_EVENT_NAME','String 'CLIENT_EVENT
'CONNECT_EVENT_NAME','String 'CONNECT_EVENT
11840:
11841:
11842:
11843:
11844:
           'CLIENT_DIR_NAME','String 'CLIENT_DIRECTORY'
'CLIENT_DIR_MUTEX','String 'DIRECTORY_MUTEX
11845:
11846:
            FindClass('TOBJECT'), 'EMonitorActive FindClass('TOBJECT'), 'TIPCThread
11847:
11848:
11849:
            TEventKind', '( evMonitorAttach, evMonitorDetach, evMonitorSignal
             +'l, evMonitorExit, evClientStart, evClientStop, evClientAttach, evClientDet' +'ach, evClientSwitch, evClientSignal, evClientExit )
11850:
11851:
            TClientFlag', '( cfError, cfMouseMove, cfMouseDown, cfResize, cfAttach )
TClientFlags', 'set of TClientFlag
//PEventData', '^TEventData // will not work
TEventData', 'record X : SmallInt; Y : SmallInt; Flag : TClientF'
11852:
11853:
11854:
11855:
              +'lag; Flags : TClientFlags; end
11856:
            TConnectEvent', 'Procedure ( Sender : TIPCThread; Connecting : Boolean)
TDirUpdateEvent', 'Procedure ( Sender : TIPCThread)
TIPCNotifyEvent', 'Procedure ( Sender : TIPCThread; Data : TEventData)
11857:
11858:
11859:
             //PIPCEventInfo', '^TIPCEventInfo // will not work
TIPCEventInfo', 'record FID: Integer; FKind: TEventKind; FData: TEventData; end
11860:
11861:
11862:
             SIRegister_TIPCEvent(CL);
             //PClientDirRecords', '^TClientDirRecords // will not work SIRegister_TClientDirectory(CL);
11863:
11864:
                              '( stInActive, stDisconnected, stConnected )
11865:
             TIPCState',
             SIRegister_TIPCThread(CL);
11866:
11867:
             SIRegister_TIPCMonitor(CL);
11868:
            STRegister TTPCClient(CL);
11869:
           Function IsMonitorRunning( var Hndl : THandle) : Boolean
11870:
11871:
11872: (*
11873: procedure SIRegister_ALGSMComm(CL: TPSPascalCompiler);
11874: begin
11875:
             SIRegister TAlGSMComm(CL);
11876:
           \textbf{Function} \ \texttt{AlgSMComm\_BuildPDUMessage} ( \ \texttt{aSMSCenter}, \ \texttt{aSMSAddress}, \ \texttt{aMessage} : \ \texttt{AnsiString}) : \ \texttt{AnsiString}) : \ \texttt{AnsiString} 
11877:
           Procedure AlgSMComm DecodePDUMessage(aPDUMessage: AnsiString; var aSMSCenter, aSMSAddress,
         AMessage: AnsiString);
11878: Function AlgSMComm_UnicodeToGSM7BitDefaultAlphabet( aMessage : WideString) : AnsiString
11879:
           Function AlGSMComm_GSM7BitDefaultAlphabetToUnicode(aMess:AnsiString;const
         UseGreekAlphabet:Bool):Widestring;
11880: function ALMatchesMask(const Filename, Mask: AnsiString): Boolean;
11881:
11882:
11883:
         procedure SIRegister_ALHttpCommon(CL: TPSPascalCompiler);
11884: begin
11885:
            TALHTTPPropertyChangeEvent','Procedure(sender:Tobject;const PropertyIndex:Integer;
            TALHTTPProtocolVersion', '( HTTPpv_1_0, HTTPpv_1_1 )
TALHTTPMethod', '(HTTPmt_Get, HTTPmt_Post, HTTPmt_Head, HTTPmt_Trace, HTTPmt_Put, HTTPmt_Delete);
11886:
11887:
           TInternetScheme', 'integer
TALIPv6Binary', 'array[1..16] of Char;
// TALIPv6Binary = array[1..16] of ansiChar;
11888:
11889:
11890:
                  TInternetScheme = Integer;
11891:
            SIRegister_TALHTTPRequestHeader(CL);
11892:
11893:
            SIRegister_TALHTTPCookie(CL);
11894:
             SIRegister_TALHTTPCookieCollection(CL);
11895:
            SIRegister_TALHTTPResponseHeader(CL);
```

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11896:
             Function ALHTTPDecode( const AStr : AnsiString) : AnsiString
11897:
             Procedure ALHTTPEncodeParamNameValues( ParamValues: TALStrings)
11898: // Procedure ALExtractHTTPFields(Separators, WhiteSpace, Quotes:TSysCharSet;
            Content: PAnsiChar; Strings: TALStrings; StripQuotes: Boolean;
11899:
            // Procedure ALExtractHeaderFields( Separators, WhiteSpace, Quotes : TSysCharSet; Content : PAnsiChar;
            Strings: TALStrings; Decode: Boolean; StripQuotes: Boolean)
// Procedure ALExtractHeaderFieldsWithQuoteEscaped(Separators,WhiteSpace,
            Quotes:TSysCharSet;Content:PAnsiChar;Strings : TALStrings; Decode : Boolean; StripQuotes : Boolean)
             Function AlRemoveShemeFromUrl( aUrl : AnsiString) : ansiString
Function AlExtractShemeFromUrl( aUrl : AnsiString) : TInternetScheme
Function AlExtractHostNameFromUrl( aUrl : AnsiString) : AnsiString
11901:
11902:
11903:
              Function AlExtractDomainNameFromUrl( aUrl : AnsiString) : AnsiString
11905:
             Function AlExtractUrlPathFromUrl( aUrl : AnsiString) : AnsiString
            Function AlInternetCrackUrl( aUrl: AnsiString; var SchemeName, HostName, UserName, Password, UrlPath, ExtraInfo: AnsiString; var PortNumber: integer): Boolean;
11906:
             Function AlInternetCrackUrll( aUrl : AnsiString; var SchemeName, HostName, UserName, Password, UrlPath,
            Anchor : AnsiString; Query : TALStrings; var PortNumber : integer) : Boolean;
11908:
            Function AlInternetCrackUrl2(var Url:AnsiString;var Anchor:AnsiString;Query:TALStrings):Boolean;
             Function AlRemoveAnchorFromUrl( aUrl : AnsiString; var aAnchor : AnsiString; Function AlRemoveAnchorFromUrl( aUrl : AnsiString) : AnsiString;
11909:
11910:
              Function AlCombineUrl( RelativeUrl, BaseUrl : AnsiString) : AnsiString;
11911:
11912:
              Function AlCombineUrl1(RelativeUrl, BaseUrl, Anchor : AnsiString; Query:TALStrings) : AnsiString;
             Function ALGmtDateTimeToRfc822Str( const aValue : TDateTime) : AnsiString
Function ALDateTimeToRfc822Str( const aValue : TDateTime) : AnsiString
Function ALTryRfc822StrToGMTDateTime( const S : AnsiString; out Value : TDateTime) : Boolean
11913:
11914:
11915:
11916:
              Function ALRfc822StrToGMTDateTime( const s : AnsiString) : TDateTime
11917:
             \textbf{Function} \  \, \texttt{ALTryIPV4StrToNumeric} ( \  \, \texttt{aIPv4Str} \  \, : \  \, \texttt{ansiString}; \\ \textbf{var} \  \, \texttt{aIPv4Num} \  \, : \  \, \texttt{Cardinal}) \  \, : \  \, \texttt{Boolean}
             Function ALIPV4StrToNumeric( aIPv4 : ansiString) : Cardinal
Function ALNumericToIPv4Str( aIPv4 : Cardinal) : ansiString
11918:
11919:
11920:
             Function ALZeroIpV6 : TALIPv6Binary
11921:
             \textbf{Function} \ \texttt{ALTryIPV6StrToBinary}( \ \texttt{aIPv6Str} \ : \ \texttt{ansiString}; \ \textbf{var} \ \texttt{aIPv6Bin} \ : \ \texttt{TALIPv6Binary}) \ : \ \texttt{Boolean}
             Function ALIPV6StrTobinary( aIPv6 : ansiString) : TALIPv6Binary
Function ALBinaryToIPv6Str( aIPv6 : TALIPv6Binary) : ansiString
Function ALBinaryStrToIPv6Binary( aIPv6BinaryStr : ansiString) : TALIPv6Binary
11922:
11923:
11924:
11925:
            end
11926:
11927: procedure SIRegister ALFcnHTML(CL: TPSPascalCompiler);
11928: begin
11929:
             Procedure ALUTF8ExtractHTMLText(HtmlCont:AnsiStr;LstExtractedResourceText:TALStrings;const
            DecodeHTMLText:Bool;
\textbf{11930:} \quad \textbf{Function} \  \, \texttt{ALUTF8ExtractHTMLText1} ( \  \, \texttt{HtmlContent:AnsiString}; \\ \textbf{const} \  \, \texttt{DecodeHTMLText:Boolean}) \colon \  \, \texttt{AnsiString}; \\ \textbf{const} \  \, \texttt{DecodeHTMLText:Boolean}) \colon \  \, \texttt{AnsiString}; \\ \textbf{const} \  \, \texttt{DecodeHTMLText:Boolean}) \colon \  \, \texttt{AnsiString}; \\ \textbf{const} \  \, \texttt{DecodeHTMLText:Boolean}) \colon \  \, \texttt{AnsiString}; \\ \textbf{const} \  \, \texttt{DecodeHTMLText:Boolean}) \colon \  \, \texttt{DecodeHTMLText:Boolean} \cap \texttt{DecodeHTMLText:Boolean}) \colon \  \, \texttt{DecodeHTMLText:Boolean} \cap \texttt{DecodeHTMLTex
11931:
             Function ALXMLCDataElementEncode( Src : AnsiString) : AnsiString
             Function ALXMLTextElementEncode(Src : Amsistring) - Amsistring Function ALXMLTextElementEncode(Src : Ansistring) const useNumericReference : boolean) : AnsiString Function ALUTF8XMLTextElementDecode( const Src : AnsiString) : AnsiString
11932:
11933:
             Function ALUTF8HTMLEncode(const Src:AnsiStr;const EncodeASCIIHtmlEntities:Bool;const
11934:
            useNumRef:bool):AnsiString);
11935:
             Function ALUTF8HTMLDecode( const Src : AnsiString) : AnsiString
              Function ALJavascriptEncode( const Src : AnsiString; const useNumericReference : boolean) : AnsiString
11936:
              Function ALUTF8JavascriptDecode( const Src : AnsiString) : AnsiString
11938:
             \textbf{Procedure} \ \texttt{ALHideHtmlUnwantedTagForHTMLHandleTagfunct} (\textbf{var} \ \texttt{HtmlContent:AnsiString}; \ \textbf{const.} \\
            DeleteBodyOfUnwantedTag : Boolean; const ReplaceUnwantedTagCharBy : AnsiChar)
Procedure ALCompactHtmlTagParams( TagParams : TALStrings)
11939:
11940: end;
11941:
11942:
            procedure SIRegister_ALInternetMessageCommon(CL: TPSPascalCompiler);
11943:
            begin
11944:
                SIRegister_TALEMailHeader(CL);
                SIRegister_TALNewsArticleHeader(CL);
11945:
11946:
             Function AlParseEmailAddress(FriendlyEmail:AnsiString;var RealName:AString;const
            decodeRealName:Bool):AnsiString;
11947: Function AlExtractEmailAddress( FriendlyEmail : AnsiString) : AnsiString
11948:
              Function ALMakeFriendlyEmailAddress( aRealName, aEmail : AnsiString) : AnsiString
11949:
             Function ALEncodeRealName4FriendlyEmailAddress( aRealName : AnsiString) : AnsiString
             Function AlGenerateInternetMessageID : AnsiString;
Function AlGenerateInternetMessageID1( ahostname : AnsiString) : AnsiString;
11950:
11951:
              Function ALDecodeQuotedPrintableString( src : AnsiString) : AnsiString
11952:
             Function AlDecodeInternetMessageHeaderInUTF8(aHeaderStr:AnsiString;aDefaultCodePage:Integer):AnsiString;
11953:
11954: end;
11955:
11956:
            procedure SIRegister_ALFcnWinSock(CL: TPSPascalCompiler);
11957:
11958: begin
11959:
             Function ALHostToIP( HostName : AnsiString; var Ip : AnsiString):Boolean
             Function ALIPAddrToName( IPAddr : AnsiString) : AnsiString Function ALgetLocalIPs : TALStrings
11960:
11961:
11962:
             Function ALgetLocalHostName : AnsiString
11963:
            end;
11964:
11965: procedure SIRegister_ALFcnCGI(CL: TPSPascalCompiler);
11966: begin
             Procedure AlCGIInitDefaultServerVariablesFromWebRequest(WebRequest :
11967:
            TALWebRequest; ServerVariables: TALStrings);
11968:
             Procedure AlCGIInitDefaultServerVariablesFromWebRequest1(WebRequest: TALWebRequest; ServerVariables:
            TALStrings; ScriptName, ScriptFileName : AnsiString; Url : AnsiString);
11969: Procedure ALCGIInitDefaultServerVariables ( ServerVariables : TALStrings);
11970: Procedure AlCGIInitDefaultServerVariables1(ServerVars:TALStrings;ScriptName,
            ScriptFileName: AnsiString; Url: AnsiStr;
             Procedure AlCGIInitServerVariablesFromWebRequest( WebRequest:TALWebRequest; ServerVariables : TALStrings;
            ScriptName, ScriptFileName : AnsiString; Url : AnsiString);
```

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11972: Procedure AlcGIExec( InterpreterFilename : AnsiString; ServerVariables : TALStrings; RequestContentStream
            : Tstream; ResponseContentStream : Tstream; ResponseHeader : TALHTTPResponseHeader);
             Procedure AlCGIExecl(ScriptName, ScriptFileName, Url, X_REWRITE_URL, InterpreterFilename:AnsiString;
           WebRequest : TALIsapiRequest;
           overloadedCookies:AnsiString;overloadedQueryString:AnsiString;overloadedReferer: AnsiString;
11974:
             +'overloadedRequestContentStream:Tstream; var
           ResponseContentStr:AnsiString;ResponseHeader:TALHTTPResponseHeader;
11975: Procedure AlCGIExec2(ScriptName, ScriptFileName, Url, X_REWRITE_URL,
           InterpreterFilename: AnsiString; WebRequest: \ TALIsapiRequest; \ \textbf{var} \ ResponseContentString : AnsiString; String; Strin
           ResponseHeader : TALHTTPResponseHeader);
11976: end;
11977:
11978:
           procedure SIRegister_ALFcnExecute(CL: TPSPascalCompiler);
11979: begin
              TStartupInfoA', 'TStartupInfo
11980:
11981:
              'SE_CREATE_TOKEN_NAME','String'( 'SeCreateTokenPrivilege
             SE_ASSIGNPRIMARYTOKEN_NAME','String 'SeAssignPrimaryTokenPrivilege
11982:
             SE_ASSIGNTHMANIONEN NAME', String SeassignThmaryTokenFilVIII
SE_LOCK_MEMORY_NAME', String (SeLockMemoryPrivilege
SE_INCREASE_QUOTA_NAME', String (SeIncreaseQuotaPrivilege
SE_UNSOLICITED_INPUT_NAME', String (SeUnsolicitedInputPrivilege
SE_MACHINE_ACCOUNT_NAME', String (SeMachineAccountPrivilege
11083.
11984:
11985:
11986:
             SE_TCB_NAME', 'String 'SeTcbPrivilege
11987:
             SE_SECURITY_NAME','String 'SeSecurityPrivilege
SE_TAKE_OWNERSHIP_NAME','String 'SeTakeOwnershipPrivilege
SE_LOAD_DRIVER_NAME','String 'SeLoadDriverPrivilege
11988:
11989:
11990:
11991:
             SE_SYSTEM_PROFILE_NAME','String 'SeSystemProfilePrivilege
11992:
             SE_SYSTEMTIME_NAME','String 'SeSystemtimePrivilege
SE_PROF_SINGLE_PROCESS_NAME','String 'SeProfileSingleProcessPrivilege
11993:
             SE_PROF_SINGLE_PROCESS_NAME , String 'SelloreaseBasePriorityPrivilege SE_CREATE_PAGEFILE_NAME', 'String 'SeCreatePagefilePrivilege SE_CREATE_PERMANENT_NAME', 'String 'SeCreatePermanentPrivilege
11994:
11995:
11996:
             SE_BACKUP_NAME','String 'SeBackupPrivilege
SE_RESTORE_NAME','String 'SeRestorePrivilege
SE_SHUTDOWN_NAME','String 'SeShutdownPrivilege
11997:
11998:
11999:
             SE_DEBUG_NAME', 'String 'SeDebugPrivilege
SE_AUDIT_NAME', 'String 'SeAuditPrivilege
12000:
12001:
             SE_SYSTEM_ENVIRONMENT_NAME', String 'SeSystemEnvironmentPrivilege SE_CHANGE_NOTIFY_NAME', 'String 'SeChangeNotifyPrivilege
12002:
12003:
             SE_REMOTE_SHUTDOWN_NAME', 'String 'SeRemoteShutdownPrivilege SE_UNDOCK_NAME', 'String 'SeUndockPrivilege
12004:
12005:
             SE_SYNC_AGENT_NAME','String 'SeSyncAgentPrivilege
SE_ENABLE_DELEGATION_NAME','String 'SeEnableDelegationPrivilege
SE_MANAGE_VOLUME_NAME','String 'SeManageVolumePrivilege
12006:
12007:
12008:
             Function AlGetEnvironmentString : AnsiString
12009:
12010:
             Function ALWinExec32(const FileName, CurrentDir,
           Environment:AnsiString;InStream:Tstream;OutStream:TStream):Dword;
12011:
             Function ALWinExec321(const FileName:AnsiString; InputStream:Tstream;OutputStream:TStream):Dword;
             Function ALWinExecAndWait32( FileName : AnsiString; Visibility : integer) : DWORD
12013:
             Function ALWinExecAndWait32V2( FileName : AnsiString; Visibility : integer) : DWORD
12014:
             Function ALNTSetPrivilege( sPrivilege : AnsiString; bEnabled : Boolean) : Boolean
12015:
           end;
12016:
           procedure SIRegister_ALFcnFile(CL: TPSPascalCompiler);
12017:
12018: begin
12019:
            Function AlEmptyDirectory(Directory:ansiString;SubDirectory:Bool;IgnoreFiles:array of AnsiString; const
           RemoveEmptySubDirectory: Boolean; const FileNameMask: ansiString; const MinFileAge: TdateTime):Boolean; Function AlEmptyDirectory1( Directory: ansiString; SubDirectory: Boolean; const
           RemoveEmptySubDirectory:Bool; const FileNameMask : ansiString; const MinFileAge : TdateTime) : Boolean;
           Function AlCopyDirectory( SrcDirectory, DestDirectory: ansiString; SubDirectory: Boolean; const FileNameMask: ansiString; const FailIfExists: Boolean): Boolean
12021:
12022: Function ALGetModuleName : ansistring
12023:
             Function ALGetModuleFileNameWithoutExtension : ansistring
12024:
             Function ALGetModulePath : ansiString
             Function AlGetFileSize( const AFileName : ansistring) : int64
12025:
12026:
             Function AlGetFileVersion( const AFileName : ansistring) : ansiString
             Function ALGetFileCreationDateTime( const aFileName : Ansistring) : TDateTime
             Function ALGetFileLastWriteDateTime( const aFileName : Ansistring) : TDateTime
12028:
12029:
             \textbf{Function} \  \, \texttt{ALGetFileLastAccessDateTime( const aFileName : Ansistring) : TDateTime} \\
12030:
             Procedure ALSetFileCreationDateTime( const aFileName : Ansistring; const aCreationDateTime : TDateTime)
             Function ALIsDirectoryEmpty( const directory : ansiString) : boolean
Function ALFileExists( const Path : ansiString) : boolean
12031:
12032:
12033:
             Function ALDirectoryExists( const Directory : Ansistring) : Boolean
             Function ALCreateDir( const Dir : Ansistring) : Boolean
Function ALRemoveDir( const Dir : Ansistring) : Boolean
12034:
12035:
12036:
             Function ALDeleteFile( const FileName : Ansistring) : Boolean
12037:
             Function ALRenameFile( const OldName, NewName : ansistring) : Boolean
12038:
           end;
12039:
12040: procedure SIRegister_ALFcnMime(CL: TPSPascalCompiler);
12041:
           begin
              NativeInt', 'Integer
NativeUInt', 'Cardinal
12042:
12043:
             Function ALMimeBase64EncodeString( const S : AnsiString) : AnsiString
12044:
12045:
             Function ALMimeBase64EncodeStringNoCRLF( const S : AnsiString) : AnsiString
             Function ALMimeBase64DecodeString( const S : AnsiString) : AnsiString
12046:
12047:
             Function ALMimeBase64EncodedSize( const InputSize : NativeInt) : NativeInt
12048:
             Function ALMimeBase64EncodedSizeNoCRLF( const InputSize : NativeInt) : NativeInt
12049:
             Function ALMimeBase64DecodedSize( const InputSize : NativeInt) : NativeInt
             Procedure ALMimeBase64Encode( const InputBuffer : TByteDynArray; InputOffset : NativeInt; const
            InputByteCount : NativeInt; out OutputBuffer : TByteDynArray; OutputOffset : NativeInt)
```

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12051: Procedure ALMimeBase64EncodeNoCRLF( const InputBuffer : TByteDynArray; InputOffset : NativeInt; const
        InputByteCount : NativeInt; out OutputBuffer : TByteDynArray; OutputOffset : NativeInt)
         Procedure ALMimeBase64EncodeFullLines( const InputBuffer : TByteDynArray; InputOffset : NativeInt; const
        InputByteCount : NativeInt; out OutputBuffer : TByteDynArray; OutputOffset : NativeInt)
12053: Function ALMimeBase64Decode( const InputBuffer : TByteDynArray; InputOffset : NativeInt; const
        InputByteCount : NativeInt; out OutputBuffer : TByteDynArray; OutputOffset : NativeInt) : NativeInt;
12054: Function ALMimeBase64DecodePartial (const InputBuffer: TByteDynArray; InputOffset: NativeInt; const
        InputByteCount : NativeInt; out OutputBuffer : TByteDynArray; OutputOffset : NativeInt; + 'var ByteBuffer : Cardinal; var ByteBufferSpace : Cardinal) : NativeInt;
12055:
12055: + 'var ByteBuffer : Cardinal, var ByteBufferSpace : Cardinal, ByteBuffer : TByteDynArray; OutputOffset : NativeInt; const
ByteBuffer : Cardinal; const ByteBufferSpace : Cardinal) : NativeInt;
        Procedure ALMimeBase64Encode(const InputBuf:TByteDynArray;const InputByteCnt:NatInt;out
        OutputBuf: TByteDynArray);
12058:
         Procedure ALMimeBase64EncodeNoCRLF(const InputBuffer:TByteDynArray; const InputByteCount:NativeInt;out
        OutputBuffer: TByteDynArray);
         Procedure ALMimeBase64EncodeFullLines(const InputBuffer:TByteDynArray;const InputByteCount:NativeInt;out
        OutputBuffer:TByteDynArray);
12060:
         Function ALMimeBase64Decodel(const InputBuffer:TByteDynArray;const InputByteCount:NativeInt;out
        OutputBuffer: TByteDynArray): NativeInt;
        Function ALMimeBase64DecodePartial1(const InputBuffer:TByteDynArray;const InputByteCount:NativeInt;out
12061:
        OutputBuffer: TByteDynArray; var ByteBuffer: Cardinal; var ByteBufferSpace: Cardinal): NativeInt;
         Function ALMimeBase64DecodePartialEndl(out OutputBuffer:TByteDynArray;const ByteBuffer:Cardinal;const
        ByteBufferSpace:Cardinal):NativeInt;
12063:
         Procedure ALMimeBase64EncodeFile( const InputFileName, OutputFileName: TFileName)
         Procedure ALMimeBase64EncodeFileNoCRLF( const InputFileName, OutputFileName : TFileName)
12064:
12065:
         Procedure ALMimeBase64DecodeFile( const InputFileName, OutputFileName: TFileName)
12066:
         Procedure ALMimeBase64EncodeStream( const InputStream: TStream; const OutputStream: TStream)
         Procedure ALMimeBase64EncodeStreamNoCRLF( const InputStream: TStream; const OutputStream: TStream)

Procedure ALMimeBase64DecodeStream( const InputStream: TStream; const OutputStream: TStream)
12067:
12068:
         'calmimeBase64_ENCODED_LINE_BREAK', 'LongInt'( calmimeBase64_ENCODED_LINE_BREAK div 4 * 3);
12069:
12070:
         'CALMimeBase64_BUFFER_SIZE','LongInt'( CALMimeBase64_DECODED_LINE_BREAK * 3 * 4 * 4);

Procedure ALFillMimeContentTypeByExtList( AMIMEList: TALStrings)

Procedure ALFillExtByMimeContentTypeList( AMIMEList: TALStrings)
12071:
12072:
12073:
12074:
         Function ALGetDefaultFileExtFromMimeContentType( aContentType : AnsiString) : AnsiString
12075:
         Function ALGetDefaultMIMEContentTypeFromExt( aExt : AnsiString) : AnsiString
12076:
12077:
12078:
        procedure SIRegister ALXmlDoc(CL: TPSPascalCompiler);
12079:
12080:
          'cALXMLNodeMaxListSize', 'LongInt'( Maxint div 16);
          FindClass('TOBJECT'), 'TALXMLNode
FindClass('TOBJECT'), 'TALXMLNodeList
12081:
12082:
           FindClass('TOBJECT'), 'TALXMLDocument
12083:
12084:
           TAlXMLParseProcessingInstructionEvent','Procedure (Sender:TObject; const Target,Data:AnsiString)
           TALXMLParseTextEvent', 'Procedure ( Sender : TObject; const str: AnsiString)
12085:
          TALIMMParseStartElementEvent', 'Procedure ( Sender : TObject; co + 'nst Name : AnsiString; const Attributes : TALStrings)
12086:
12088:
           TAlXMLParseEndElementEvent', 'Procedure ( Sender : TObject; const Name : AnsiString)
          TALXmlNodeType', '( ntReserved, ntElement, ntAttribute, ntText, ' +'ntCData, ntEntityRef, ntEntity, ntProcessingInstr, ntComment, ntDocument, '
12089:
12090:
12091:
            +'ntDocType, ntDocFragment, ntNotation )
          TALXMLDocOptions', '( doNodeAutoCreate, doNodeAutoIndent )
TALXMLDocOptions', 'set of TALXMLDocOption
TALXMLParseOption', '( poPreserveWhiteSpace, poIgnoreXMLReferences )
TALXMLParseOptions', 'set of TALXMLParseOption
12092:
12093:
12094:
12095:
                                 ( xpVersion, xpEncoding, xpStandalone
12096:
           TALXMLPrologItem',
12097:
           PALPointerXMLNodeList', '^TALPointerXMLNodeList // will not work
          SIRegister_EALXMLDocError(CL);
SIRegister_TALXMLNodeList(CL);
12098:
12099:
           SIRegister_TALXMLNode(CL);
12100:
           SIRegister_TALXmlElementNode(CL);
12101:
12102:
           SIRegister_TALXmlAttributeNode(CL);
12103:
           SIRegister TALXmlTextNode(CL);
12104:
           SIRegister_TALXmlDocumentNode(CL);
           SIRegister_TALXmlCommentNode(CL);
12105:
12106:
           SIRegister_TALXmlProcessingInstrNode(CL);
12107:
           SIRegister_TALXmlCDataNode(CL);
          SIRegister_TALXmlEntityRefNode(CL);
12108:
           SIRegister_TALXmlEntityNode(CL);
12109:
12110:
           SIRegister_TALXmlDocTypeNode(CL);
12111:
           SIRegister_TALXmlDocFragmentNode(CL);
12112:
           SIRegister_TALXmlNotationNode(CL);
          SIRegister TALXMLDocument(CL);
12113:
         calXMLUTF8EncodingStr','String 'UTF-8 calXMLUTF8HeaderStr','String'<?xmlversion="1.0"encoding="UTF-8"standalone="yes"?>'+#13#10); CalNSDelim','String ':
12114:
12115:
12116:
         CALXML', 'String 'xml
CALVersion', 'String 'version
CALEncoding', 'String 'encoding
12117:
12118:
12120:
         CALStandalone', 'String 'standalone
12121:
         CALDefaultNodeIndent', 'String '
         CALXMIDocument', 'String 'DOCUMENT

Function ALCreateEmptyXMLDocument( const Rootname : AnsiString) : TalXMLDocument
12122:
12123:
12124:
         Procedure ALClearXMLDocument(const rootname:AnsiString;xmldoc:TalXMLDocument;const
        EncodingStr:AnsiString);
        Function ALFindXmlNodeByChildNodeValue(xmlrec:TalxmlNode;const ChildNodeName,
12125:
        ChildNodeValue:AnsiString; const Recurse: Boolean) : TalxmlNode
         Function ALFindXmlNodeByNameAndChildNodeValue( xmlrec : TalxmlNode; const NodeName : ansiString; const
        ChildNodeName, ChildNodeValue : AnsiString; const Recurse : Boolean) : TalxmlNode
```

```
12127: Function ALFindXmlNodeByAttribute(xmlrec:TalxmlNode;const AttributeName,AttributeValue:AnsiString;const
        Recurse: Boolean):TalxmlNode
         Function ALFindXmlNodeByNameAndAttribute( xmlrec : TalxmlNode; const NodeName : ansiString; const
        {\tt AttributeName,\ AttributeValue:\ AnsiString;\ {\tt const}\ {\tt Recurse:\ Boolean):\ TalxmlNode}}
12129: Function ALExtractAttrValue( const AttrName, AttrLine : AnsiString; const Default : AnsiString) :
        AnsiString
12130: end;
12131:
12132: procedure SIRegister_TeCanvas(CL: TPSPascalCompiler);
12133:
        //based on TEEProc, TeCanvas, TEEngine, TChart
12134: begin
12135:
         'TeePiStep', 'Double').setExtended( Pi / 180.0);
         'TeeDefaultPerspective', 'LongInt'( 100);
'TeeMinAngle', 'LongInt'( 270);
12136:
12137:
         'teeclMonevGreen'.'LongWord').SetUInt( TColor ( $CODCCO ));
12138:
12139:
         'teeclSkyBlue', 'LongWord').SetUInt( TColor ( $FOCAA6 ));
         'teeclCream', 'LongWord( TColor ( $F0FBFF ));
12140:
12141 .
         'teeclMedGray', 'LongWord').SetUInt( TColor ( $A4A0A0 ));
         'teeclMoneyGreen','LongWord').SetUInt( TColor ( $CODCCO ));
'teeclSkyBlue','LongWord').SetUInt( TColor ( $FOCAA6 ));
12142:
12143:
         'teeclCream', 'LongWord').SetUInt( TColor ( $F0FBFF ));
12144:
12145:
         'teeclMedGray', 'LongWord').SetUInt( TColor ( $A4A0A0 ));
         'TA_LEFT','LongInt'( 0);
'TA_RIGHT','LongInt'( 2);
'TA_CENTER','LongInt'( 6);
12146:
12147:
12148:
12149:
         'TA_TOP','LongInt'( 0);
12150:
         'TA_BOTTOM','LongInt'( 8);
'teePATCOPY','LongInt'( 0);
12151:
12152:
         'NumCirclePoints', 'LongInt'( 64);
         'teeDEFAULT_CHARSET', 'LongInt'( 1);
12153:
12154:
         'teeANTIALIASED_QUALITY', 'LongInt'( 4);
         'TA_LEFT','LongInt'(0);
'bs_Solid','LongInt'(0);
'teepf24Bit','LongInt'(0);
'teepfDevice','LongInt'(1);
12155:
12156:
12157:
12158:
         'CM_MOUSELEAVE', 'LongInt'( 10000);
12159:
         'CM_SYSCOLORCHANGE', 'LongInt'( 10001);
'DC_BRUSH', 'LongInt'( 18);
12160:
12161:
         'DC_PEN','LongInt'( 19);
12162:
          TLogBrush', 'record lbStyle : Integer; lbColor : TColor; lbHatch: Integer; end
12163:
12164:
          //TNotifyEvent', 'Procedure ( Sender : TObject)
SIRegister_TFilterRegion(CL);
12165:
12166:
12167:
          SIRegister_IFormCreator(CL);
12168:
          SIRegister_TTeeFilter(CL);
          //TFilterClass', 'class of TTeeFilter
SIRegister_TFilterItems(CL);
12169:
12170:
12171:
          SIRegister_TConvolveFilter(CL);
           SIRegister_TBlurFilter(CL);
12172:
12173:
           SIRegister TTeePicture(CL);
12174:
          TPenEndStyle', '( esRound, esSquare, esFlat )
12175:
          SIRegister_TChartPen(CL);
12176:
           SIRegister_TChartHiddenPen(CL);
12177:
           SIRegister_TDottedGrayPen(CL);
12178:
          SIRegister_TDarkGrayPen(CL);
SIRegister_TWhitePen(CL);
12179:
12180:
           SIRegister_TChartBrush(CL);
12181:
           TTeeView3DScrolled', 'Procedure ( IsHoriz : Boolean)
12182:
           TTeeView3DChangedZoom', 'Procedure ( NewZoom : Integer)
          SIRegister_TView3DOptions(CL);
FindClass('TOBJECT'),'TTeeCanvas
12183:
12184:
           TTeeTransparency', 'Integer
12185:
12186:
           SIRegister_TTeeBlend(CL);
12187:
          FindClass('TOBJECT'), 'TCanvas3D
12188:
           SIRegister_TTeeShadow(CL);
12189:
           teeTGradientDirection', '( gdTopBottom, gdBottomTop, gdLeftRight, g
12190:
            +'dRightLeft, gdFromCenter, gdFromTopLeft, gdFromBottomLeft, gdRadial,gdDiagonalUp,gdDiagonalDown )
12191:
          FindClass('TOBJECT'), 'TSubGradient
          SIRegister_TCustomTeeGradient(CL);
SIRegister_TSubGradient(CL);
12192:
12193:
12194:
           SIRegister_TTeeGradient(CL);
12195:
          SIRegister_TTeeFontGradient(CL);
12196:
           SIRegister_TTeeFont(CL);
          TCanvasBackMode', '( cbmNone, cbmTransparent, cbmOpaque )
TCanvasTextAlign', 'Integer
12197:
12198:
           TTeeCanvasHandle', 'HDC
12199:
12200:
          SIRegister TTeeCanvas(CL);
          TPoint3DFloat', 'record X : Double; Y : Double; Z : Double; end
12201:
          SIRegister_TFloatXYZ(CL);
12202:
          TROINT3D', 'record x: integer; y: integer; z: Integer; end
TRGB', 'record blue: byte; green: byte; red: byte; end
12203:
12204:
           {TRGB=packed record
12205:
12206:
             Blue : Byte;
Green : Byte;
12207:
12208:
             Red
                   : Byte;
12209:
             //$IFDEF CLX //Alpha : Byte; // Linux end;}
12210:
12211: TTeeCanvasCalcPoints', 'Function ( x, z : Integer; var PO, P1 : '
           +'TPoint3D; var Color0, Color1 : TColor) : Boolean
```

```
12213: TTeeCanvasSurfaceStyle', '( tcsSolid, tcsWire, tcsDot )
12214: TCanvas3DPlane', '( cpX, cpY, cpZ )
12215: //IInterface', 'IUnknown
12216
            SIRegister_TCanvas3D(CL);
12217:
           SIRegister TTeeCanvas3D(CL);
           TTrianglePoints', 'Array[0..2] of TPoint;
TFourPoints', 'Array[0..3] of TPoint;
12218:
12219:
12220:
          Function ApplyDark( Color : TColor; HowMuch : Byte) : TColor
12221:
          Function ApplyBright( Color : TColor; HowMuch : Byte) : TColor
          Function Point3D( const x, y, z : Integer) : TPoint3D

Procedure SwapDouble( var a, b : Double)

Procedure SwapInteger( var a, b : Integer)

Procedure RectSize( const R : TRect; var RectWidth, RectHeight : Integer)
12222:
12223:
12224:
12225:
          Procedure teeRectCenter( const R : TRect; var X, Y : Integer)
Function RectFromPolygon( const Points : array of TPoint; NumPoints : Integer): TRect
12226:
12227:
12228:
          Function RectFromTriangle( const Points : TTrianglePoints) : TRect
          Function RectangleInRectangle( const Small, Big : TRect) : Boolean
12229:
12230 •
          Procedure ClipCanvas( ACanvas : TCanvas; const Rect : TRect)
          Procedure UnClipCanvas( ACanvas: TCanvas)
Procedure ClipEllipse( ACanvas: TTeeCanvas; const Rect: TRect)
12231:
12232:
12233:
          Procedure ClipRoundRectangle(ACanvas:TTeeCanvas;const Rect : TRect; RoundSize : Integer)
12234:
          Procedure ClipPolygon(ACanvas:TTeeCanvas;const Points:array of TPoint;NumPoints:Integer)
          'TeeCharForHeight', 'String 'W
'DarkerColorQuantity', 'Byte').SetUInt( 128);
'DarkColorQuantity', 'Byte').SetUInt( 64);
12235:
12236:
12237:
12238:
           TButtonGetColorProc',
                                        Function
                                                       : TColor
12239:
           SIRegister_TTeeButton(CL);
12240:
           SIRegister_TButtonColor(CL);
12241:
           SIRegister_TComboFlat(CL);
          Procedure TeeSetTeePen(FPen:TPen; APen : TChartPen; AColor : TColor; Handle:TTeeCanvasHandle)
12242:
12243:
          Function TeePoint( const aX, aY : Integer) : TPoint
          Function TEEPointInRect( const Rect : TRect; const P : TPoint) : Boolean;
Function PointInRect1( const Rect : TRect; x, y : Integer) : Boolean;
12244:
12245:
          Function TeeRect( Left, Top, Right, Bottom : Integer) : TRect
Function OrientRectangle( const R : TRect) : TRect
12246:
12247:
12248:
          Procedure TeeSetBitmapSize( Bitmap : TBitmap; Width, Height : Integer)
          Function PolygonBounds( const P : array of TPoint) : TRect
Function PolygonInPolygon( const A, B : array of TPoint) : Boolean
12249:
12250:
12251:
          Function RGBValue( const Color : TColor) : TRGB
12252:
          \textbf{Function} \  \, \texttt{EditColor}(\  \, \texttt{AOwner} \  \, : \  \, \texttt{TComponent}; \  \, \texttt{AColor} \  \, : \  \, \texttt{TColor}) \  \, : \  \, \texttt{TColor}
12253:
          \textbf{Function} \ \ \texttt{EditColorDialog}(\ \ \texttt{AOwner} \ : \ \ \texttt{TComponent}; \ \ \textbf{var} \ \ \texttt{AColor} \ : \ \ \texttt{TColor}) \ : \ \ \texttt{Boolean}
          Function PointAtDistance( AFrom, ATo: TPoint; ADist: Integer): TPoint
Function TeeCull( const P: TFourPoints): Boolean;
12254:
12255:
          Function TeeCull1( const P0, P1, P2 : TPoint) : Boolean;
12256:
          TSmoothStretchOption', '( ssBestQuality, ssBestPerformance )

Procedure SmoothStretch( Src, Dst : TBitmap);

Procedure SmoothStretch1( Src, Dst : TBitmap; Option : TSmoothStretchOption);
12257:
12258:
12259:
          Function TeeDistance( const x, y : Double) : Double
12260:
12261:
          Function TeeLoadLibrary( const FileName : String) : HInst
12262:
          Procedure TeeFreeLibrary( hLibModule : HMODULE)
12263:
          Procedure TeeBlendBitmaps( const Percent : Double; ABitmap, BBitmap : TBitmap; BOrigin : TPoint)
          //Procedure TeeCalcLines( var Lines : TRGBArray; Bitmap : TBitmap)

Procedure TeeShadowSmooth(Bitmap, Back : TBitmap; Left, Top, Width, Height, horz, vert : Integer;
12264:
12265:
         Smoothness : Double; FullDraw : Boolean; ACanvas : TCanvas3D; Clip : Boolean)
           SIRegister_ICanvasHyperlinks(CL);
12266:
           SIRegister_ICanvasToolTips(CL);
12267:
12268:
          Function Supports (const Instance : IInterface; const IID : TGUID) : Boolean
12269: end;
12270:
12271: procedure STRegister ovemisc(CL: TPSPascalCompiler);
12272: begin
12273:
            TOvcHdc', 'Integer
           TOVCHWND', 'Cardinal
TOVCHdc', 'HDC
TOVCHWND', 'HWND
12274:
12275:
12276:
12277:
          Function LoadBaseBitmap( lpBitmapName : PChar) : HBITMAP
          Function LoadBaseCursor( lpCursorName : PChar) : HCURSOR
12278:
12279:
          Function ovCompStruct( const S1, S2, Size : Cardinal) : Integer
12280:
          Function DefaultEpoch : Integer
          Function DrawButtonFrame(Canvas:TCanvas;const Client:TRect;IsDown,IsFlat:Bool;Style:TButtonStyle):TRect;
12281:
          Procedure FixRealPrim( P : PChar; DC : Char)
12282:
12283:
          Function GetDisplayString( Canvas : TCanvas; const S : string; MinChars, MaxWidth : Integer) : string
12284:
          Function GetLeftButton : Byte
Function GetNextDlqItem( Ctrl : TOvcHWnd) : hWnd
12285:
          Procedure GetReB( Clr: TColor; var IR, IG, IB: Byte)
Function GetShiftFlags: Byte
12286:
12287:
          Function ovCreateRotatedFont( F : TFont; Angle : Integer) : hFont
12288:
          Function GetTopTextMargin(Font:TFont;BorderStyle:TBorderStyle; Height:Integer;Ctl3D:Boolean): Integer
12289:
          Function ovExtractWord( N : Integer; const S : string; WordDelims : TCharSet) : string
12290:
12291:
          Function ovIsForegroundTask : Boolean
12292:
          Function ovTrimLeft( const S : string) : string
          Function ovTrimRight( const S : string) : string
Function ovQuotedStr( const S : string) : string
12293:
12294:
12295:
          Function ovWordCount( const S : string; const WordDelims : TCharSet) : Integer
          Function ovWordPosition(const N:Integer;const S: string;const WordDelims : TCharSet) : Integer
12296:
12297: Function PtrDiff( const P1, P2 : PChar) : Word
12298: Procedure PtrInc( var P, Delta : Word)
12299: Procedure PtrDec( var P, Delta : Word)
12300: Procedure FixTextBuffer( InBuf, OutBuf : PChar; OutSize : Integer)
```

```
Procedure TransStretchBlt( DstDC : TOvcHdc; DstX, DstY, DstW, DstH : Integer; SrcDC : TOvcHdc; SrcX, SrcY,
12301:
               SrcW, SrcH : Integer; MaskDC : TOvcHdc; MaskX, MaskY : Integer)
              Function ovMinI( X, Y : Integer) : Integer
12303:
              Function ovMaxI( X, Y : Integer) : Integer
12304:
              \textbf{Function} \  \, \text{ovMinL}(\  \, \text{X} \,, \  \, \text{Y} \, : \, \text{LongInt}) \  \, : \, \, \text{LongInt}
              Function ovMaxL( X, Y : LongInt) : LongInt
12305:
12306:
              Function GenerateComponentName( PF : TWinControl; const Root : string) : string
              Function PartialCompare( const S1, S2 : string) : Boolean
12307:
              \textbf{Function} \ \ \texttt{PathEllipsis} ( \ \textbf{const} \ \ \texttt{S} \ : \ \textbf{string}; \ \ \texttt{MaxWidth} \ : \ \ \texttt{Integer}) \ : \ \textbf{string}
12308:
12309:
              Function ovCreateDisabledBitmap( FOriginal : TBitmap; OutlineColor : TColor) : TBitmap
12310:
              Procedure ovCopyParentImage( Control : TControl; Dest : TCanvas)
              Procedure ovDrawTransparentBitmap( Dest : TCanvas; X, Y, W, H : Integer; Rect : TRect; Bitmap : TBitmap;
12311:
             TransparentColor : TColor)
              Procedure DrawTransparentBitmapPrim(DC:TOvcHdc;Bitmap:HBitmap;xStart,yStart,Width,Height:Int;Rect:TRect;
12312:
             TransparentColor : TColorRef)
              Function ovWidthOf( const R : TRect) : Integer
              Function ovHeightOf( const R : TRect) : Integer
12314:
              Procedure ovDebugOutput( const S : string)
Function GetArrowWidth( Width, Height : Integer) : Integer
12315:
12316:
              Procedure StripCharSeq( CharSeq: string; var Str: string)
Procedure StripCharFromEnd( aChr: Char; var Str: string)
12317:
12318:
              Procedure StripCharFromFront( aChr : Char; var Str : string)
12319:
12320:
              Function SystemParametersInfo( uiAction, uiParam : UINT; pvParam : UINT; fWinIni : UINT) : BOOL
              Function SystemParametersInfoNCM(uiAction,uiParam:UINT;pvParam:TNonClientMetrics;fWinIni:UINT):BOOL;
12321:
12322:
              Function SystemParametersInfoA( uiAction, uiParam : UINT; pvParam : UINT; fWinIni : UINT) : BOOL
12323:
              Function CreateEllipticRgn( pl, p2, p3, p4 : Integer) : HRGN
12324:
              Function CreateEllipticRgnIndirect( const p1 : TRect) : HRGN
              Function CreateFontIndirect( const p1 : TLogFont) : HFONT
Function CreateMetaFile( p1 : PChar) : HDC
12325:
12326:
              Function DescribePixelFormat(DC: HDC/p2:Int;p3:UINT;var p4:TPixelFormatDescriptor): BOOL
12327:
12328:
              \textbf{Function} \ \ \texttt{DrawText}(\ \texttt{hDC}: \texttt{HDC}; \texttt{lpString}: \texttt{PChar}; \texttt{nCount}: \texttt{Integer}; \ \ \textbf{var} \ \ \texttt{lpRect}: \ \ \texttt{TRect}; \texttt{uFormat}: \texttt{UINT}): \texttt{Integer}; \ \ \textbf{var} \ \ \texttt{lpRect}: \ \ \texttt{TRect}; \texttt{uFormat}: \texttt{UINT}): \texttt{Integer}; \ \ \texttt{var} \ \ \texttt{lpRect}: \ \ \texttt{lpR
12329:
              Function SetMapperFlags( DC : HDC; Flag : DWORD) : DWORD
12330:
              Function SetGraphicsMode( hdc : HDC; iMode : Integer) : Integer
Function SetMapMode( DC : HDC; p2 : Integer) : Integer
Function SetMetaFileBitsEx( Size : UINT; const Data : PChar) : HMETAFILE
12331:
12333:
12334:
               //Function SetPaletteEntries(Palette:HPALETTE;StartIndex,NumEntries:UINT;var PaletteEntries):UINT
              Function SetPixel( DC : HDC; X, Y : Integer; Color : COLORREF) : COLORREF
12335:
12336:
              Function SetPixelV( DC : HDC; X, Y : Integer; Color : COLORREF) : BOOL
              Function SetFixelFormat( DC : HDC; PixelFormat : Integer; FormatDef : PPixelFormatDescriptor) : BOOL
Function SetPolyFillMode( DC : HDC; PolyFillMode : Integer) : Integer
12337:
12338:
              Function StretchBlt(DestDC:HDC;X,Y,Width,Height:Int;SrcDC:HDC;XSrc,YSrc,SrcWidth,
12339:
            SrcHeight:Int;Rop:DWORD):BOOL
              Function SetRectRgn( Rgn : HRgn; X1, Y1, X2, Y2 : Integer) : BOOL
Function StretchDIBits(DC : HDC; DestX,DestY,DestWidth,DestHeight,SrcX,SrcY,SrcWidth,
12340:
12341:
            SrcHeight:Int;Bits:int; var BitsInfo : TBitmapInfo; Usage : UINT; Rop : DWORD) : Integer
Function SetROP2( DC : HDC; p2 : Integer) : Integer
Function SetStretchBltMode( DC : HDC; StretchMode : Integer) : Integer
12342:
              Function SetSystemPaletteUse( DC : HDC; p2 : UINT) : UINT
Function SetTextCharacterExtra( DC : HDC; CharExtra : Integer) : Integer
Function SetTextColor( DC : HDC; Color : COLORREF) : COLORREF
12344:
12345:
12346:
              Function SetTextAlign( DC : HDC; Flags : UINT) : UINT
12347:
              Function SetTextJustification( DC : HDC; BreakExtra, BreakCount : Integer) : Integer
12348:
              \textbf{Function} \  \, \texttt{UpdateColors(DC:HDC):BOOL}
12349:
              Function GetViewportExtEx( DC : HDC; var Size : TSize) : BOOL
Function GetViewportOrgEx( DC : HDC; var Point : TPoint) : BOOL
12350:
12351:
               Function GetWindowExtEx( DC : HDC; var Size : TSize) : BOOL
              Function GetWindowOrgEx( DC : HDC; var Point : TPoint) : BOOL
12353:
              Function IntersectClipRect( DC : HDC; X1, Y1, X2, Y2 : Integer) : Integer
Function InvertRgn( DC : HDC; p2 : HRGN) : BOOL
Function MaskBlt( DestDC : HDC; XDest, YDest, Width, Height : Integer; SrcDC : HDC; XScr, YScr : Integer;
12354:
12355:
12356:
                         HBITMAP; xMask, yMask : Integer; Rop : DWORD) : BOOL
12357: Function PlgBlt(DestDC:HDC;const PtsArray,SrcDC:HDC;XSrc,YSrc,Widt,Heigh:Int;Mask:HBITMAP;xMask,
            yMask:Int):BOOL;
12358:
            Function OffsetClipRgn( DC : HDC; XOffset, YOffset : Integer) : Integer
              Function OffsetRgn( RGN : HRGN; XOffset, YOffset : Integer) : Integer
              Function PatBlt( DC : HDC; X, Y, Width, Height : Integer; Rop : DWORD) : BOOL
12360:
              Function Pie( DC : HDC; X1, Y1, X2, Y2, X3, Y3, X4, Y4 : Integer) : BOOL Function PlayMetaFile( DC : HDC; MF : HMETAFILE) : BOOL Function PaintRgn( DC : HDC; RGN : HRGN) : BOOL
12361:
12362:
12363:
              Function PtInRegion( RGN : HRGN; X, Y : Integer) : BOOL
12364:
12365:
              Function PtVisible( DC : HDC; X, Y : Integer) : BOOL
              Function RectInRegion( RGN : HRGN; const Rect : TRect) : BOOL
Function RectVisible( DC : HDC; const Rect : TRect) : BOOL
12366:
12367:
              Function Rectargle( DC : HDC; X1, Y1, X2, Y2 : Integer) : BOOL
Function RestoreDC( DC : HDC; SavedDC : Integer) : BOOL
12368:
12369:
12370:
            end;
12371:
12372: procedure SIRegister_ovcfiler(CL: TPSPascalCompiler);
12373:
12374:
                SIRegister TOvcAbstractStore(CL);
                //PExPropInfo', '^TExPropInfo // will not work
/ TExPropInfo', 'record PI : TPropInfo; AObject : TObject; end
SIRegister_TOvcPropertyList(CL);
12375:
12376: //
12377:
                SIRegister_TOvcDataFiler(CL);
12378:
              Procedure UpdateStoredList( AForm : TWinControl; AStoredList : TStrings; FromForm : Boolean)
Procedure UpdateStoredList1( AForm : TCustomForm; AStoredList : TStrings; FromForm : Boolean)
12379:
12380:
              Function CreateStoredItem( const CompName, PropName : string) : string
12381:
12382: Function ParseStoredItem( const Item: string; var CompName, PropName: string): Boolean
```

```
12383: //Function GetPropType( PropInfo : PExPropInfo) : PTypeInfo
12384: end;
12385:
12386: procedure SIRegister_ovccoco(CL: TPSPascalCompiler);
12387:
        begin
12388:
          'ovsetsize', 'LongInt'( 16);
          'etSyntax','LongInt'( 0);
12389:
          'etSymantic','LongInt'( 1);
12390:
         'chCR','Char #13);
'chLF','Char #10);
12391:
12392:
          'chLineSeparator',' chCR);
12393:
12394:
          SIRegister TCocoError(CL);
          SIRegister_TCommentItem(CL);
12395:
12396:
          SIRegister_TCommentList(CL);
12397:
          SIRegister TSymbolPosition(CL);
12398: TGenListType', '(glNever, glAlways, glOnError)
12399: TovBitSet', 'set of Integer
12400: //PStartTable', '^TStartTable // will not work
12401: 'TovCharSet', 'set of AnsiChar
12402: TAfterGenListEvent', 'Procedure ( Sender : TObject; var PrintErrorCount : boolean)
12403: TCommentEvent', 'Procedure ( Sender : TObject; CommentList : TCommentList)
12404: TCustomErrorEvent', 'Function(Sender:TObject;const ErrorCode: longint;const Data:string): string
12405: TovErrorEvent', 'Procedure ( Sender : Tobject; Error : TCocoError) 12406: TovErrorProc', 'Procedure ( ErrorCode : integer; Symbol : TSymbolP
            +'osition; const Data : string; ErrorType : integer)
12408: TFailureEvent', 'Procedure ( Sender : TObject; NumErrors : integer) 12409: TGetCH', 'Function ( pos : longint) : char
                                 'Procedure ( Sender : TObject; Status: string; LineNum:integer)
12410: TStatusUpdateProc',
12411:
          SIRegister_TCocoRScanner(CL);
12412:
          SIRegister_TCocoRGrammar(CL);
         '_EF','Char #0);
'_TAB','Char').SetString( #09);
'_CR','Char').SetString( #13);
'_LF','Char').SetString( #10);
12413:
12414:
12415:
12416:
          '_EL','').SetString( _CR);
12417:
12418:
          '_EOF','Char').SetString( #26);
          'LineEnds','TCharSet'(ord(_CR) or ord(_LF) or ord(_EF));
'minErrDist','LongInt'( 2);
12419:
12420:
12421:
        Function ovPadL( S : string; ch : char; L : integer) : string
12422: end;
12423:
12424:
          TFormatSettings = record
             CurrencyFormat: Byte;
12425:
12426:
             NegCurrFormat: Byte;
12427:
             ThousandSeparator: Char;
12428:
             DecimalSeparator: Char;
             CurrencyDecimals: Byte;
12429:
12430:
             DateSeparator: Char;
12431:
             TimeSeparator: Char;
12432:
             ListSeparator: Char;
             CurrencyString: string;
ShortDateFormat: string;
12433:
12434:
             LongDateFormat: string;
12435:
12436:
             TimeAMString: string;
12437:
             TimePMString: string;
12438:
             ShortTimeFormat: string;
             LongTimeFormat: string;
12439:
12440:
             ShortMonthNames: array[1..12] of string;
             LongMonthNames: array[1..12] of string;
ShortDayNames: array[1..7] of string;
12441:
12442:
             ShortDayNames: array[1..7] of string LongDayNames: array[1..7] of string;
12443:
             TwoDigitYearCenturyWindow: Word;
12444:
12445:
           end;
12446:
12447: procedure SIRegister OvcFormatSettings(CL: TPSPascalCompiler);
12448: begin
12449:
         Function ovFormatSettings : TFormatSettings
12450: end;
12451:
12452: procedure SIRegister ovcstr(CL: TPSPascalCompiler);
12453: begin
12454:
          TOvcCharSet', 'set of Char
          ovBTable', 'array[0..255] of Byte
//BTable = array[0..{$IFDEF UNICODE}{{$IFDEF}}
12455:
12456:
       HUGE_UNICODE_BMTABLE}$FFFF{$ELSE}$FF{$ENDIF}{$ELSE}$FF{$ENDIF}] of Byte;
12457: Function BinaryBPChar( Dest : PChar; B : Byte) : PChar
         Function BinaryLPChar( Dest : PChar; L : LongInt) : PChar
Function BinaryWPChar( Dest : PChar; W : Word) : PChar
12458:
12459:
         Procedure BMMakeTable( MatchString : PChar; var BT : ovBTable)
12460:
         Function BMSearch(var Buffer, BufLength: Cardinal; var BT:ovBTable; MatchString: PChar; var Pos:Cardinal):Bool;
12461:
12462:
         Function BMSearchUC(var Buffer,BufLength:Card; var BT:ovBTable;MatchString:PChar; var Pos: Card):Boolean
         Function CharStrPChar( Dest : PChar; C : Char; Len : Cardinal) : PChar
Function DetabPChar( Dest : PChar; Src : PChar; TabSize : Byte) : PChar
Function HexBPChar( Dest : PChar; B : Byte) : PChar
12463:
12464:
12465:
         Function HexLPChar( Dest : PChar; L : LongInt) : PChar
12466:
         Function HexPtrPChar( Dest : PChar; P : TObject) : PChar
12467:
         Function HexWPChar( Dest : PChar; W : Word) : PChar
Function LoCaseChar( C : Char) : Char
12468:
12469:
12470: Function OctalLPChar( Dest : PChar; L : LongInt) : PChar
```

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12471:
         Function StrChDeletePrim( P : PChar; Pos : Cardinal) : PChar
12472:
         Function StrChInsertPrim( Dest : PChar; C : Char; Pos: Cardinal) : PChar
         Function StrChPos( P : PChar; C : Char; var Pos : Cardinal) : Boolean
12474:
         Procedure StrInsertChars( Dest : PChar; Ch : Char; Pos, Count : Word)
         Function StrStCopy( Dest, S : PChar; Pos, Count : Cardinal) : PChar
Function StrStDeletePrim( P : PChar; Pos, Count : Cardinal) : PChar
12475:
12476:
         Function StrStInsert( Dest, S1, S2 : PChar; Pos : Cardinal) : PChar
Function StrStInsertPrim( Dest, S : PChar; Pos : Cardinal) : PChar
12477:
12478:
         Function StrStPos( P, S : PChar; var Pos : Cardinal) : Boolean
Function StrToLongPChar( S : PChar; var I : LongInt) : Boolean
12479:
12480:
         Procedure TrimAllSpacesPChar( P : PChar)
12481:
         Function TrimEmbeddedZeros( const S : string) : string
12483:
         Procedure TrimEmbeddedZerosPChar( P : PChar
         Function TrimTrailPrimPChar( S : PChar) : PChar
Function TrimTrailPChar( Dest, S : PChar) : PChar
12484:
12485:
12486:
         Function TrimTrailingZeros( const S : string) : string
         Procedure TrimTrailingZerosPChar( P : PChar)
12487:
         Function UpCaseChar( C : Char) : Char
Function ovcCharInSet( C : Char; const CharSet : TOvcCharSet) : Boolean
12488:
12489:
         Function ovc32StringIsCurrentCodePage( const S : WideString) : Boolean;
12490:
12491:
         //Function ovc32StringIsCurrentCodePage1( const S:PWideChar; CP : Cardinal) : Boolean;
12492:
12493:
12494:
        procedure SIRegister AfUtils(CL: TPSPascalCompiler);
12495:
        begin
12496:
           //PRaiseFrame', '^TRaiseFrame // will not work
         TRaiseFrame', 'record NextRaise: PRaiseFrame' ExceptAddr: __Poin'
+'ter; ExceptObject: TObject; ExceptionRecord: PExceptionRecord; end
Procedure SafeCloseHandle( var Handle: THandle)
Procedure ExchangeInteger( X1, X2: Integer)
12497:
12498:
12499:
12500:
12501:
         Procedure FillInteger( const Buffer, Size, Value : Integer)
         Function LongMulDiv( Mult1, Mult2, Div1 : Longint) : Longint
Function afCompareMem( P1, P2 : TObject; Length : Integer) : Boolean
12502:
12503:
12504:
12505:
        FILENAME ADVAPI32
                                   = 'ADVAPI32.DLL';
12506:
             function AbortSystemShutdown; external advapi32 name 'AbortSystemShutdownW';
12507:
        function AbortSystemShutdown(lpMachineName: PKOLChar): BOOL; stdcall;
12508:
             function AccessCheckAndAuditAlarm(SubsystemName: PKOLChar;
12509:
                HandleId: Pointer; ObjectTypeName, ObjectName: PKOLChar;
12510:
                SecurityDescriptor: PSecurityDescriptor; DesiredAccess: DWORD;
12511:
                const GenericMapping: TGenericMapping; ObjectCreation: BOOL;
             var GrantedAccess: DWORD; var AccessStatus, pfGenerateOnClose: BOOL): BOOL; stdcall;
function AccessCheckByTypeAndAuditAlarm(SubsystemName: PKOLChar;
12512:
12513:
12514:
                HandleId: Pointer; ObjectTypeName, ObjectName: PKOLChar;
12515:
                SecurityDescriptor: PSecurityDescriptor; PrincipalSelfSid: PSID; DesiredAccess: DWORD;
                AuditType: AUDIT_EVENT_TYPE; Flags: DWORD; ObjectTypeList: PObjectTypeList;
12516:
               ObjectTypeListLength: DWORD; const GenericMapping: TGenericMapping: ObjectCreation: BOOL; var GrantedAccess: DWORD; var AccessStatus, pfGenerateOnClose: BOOL; stdcall;
12517:
12518:
12519:
             function AccessCheckByTypeResultListAndAuditAlarm(SubsystemName: PKOLChar
               HandleId: Pointer; ObjectTypeName, ObjectName: PKOLChar;
SecurityDescriptor: PSecurityDescriptor; PrincipalSelfSid: PSID; DesiredAccess: DWORD;
12520:
12521:
                AuditType: AUDIT_EVENT_TYPE; Flags: DWORD; ObjectTypeList: PObjectTypeList;
12522:
                ObjectTypeListLength: DWORD; const GenericMapping: TGenericMapping; ObjectCreation: BOOL;
12523:
12524:
                var GrantedAccess: DWORD; var AccessStatusList:DWORD; var pfGenerateOnClose: BOOL): BOOL; stdcall;
12525:
             function BackupEventLog(hEventLog: THandle; lpBackupFileName: PKOLChar): BOOL; stdcall;
function ClearEventLog(hEventLog: THandle; lpBackupFileName: PKOLChar): BOOL; stdcall;
12526:
             function CreateProcessAsUser(hToken: THandle; lpApplicationName: PKOLChar;
12527:
12528:
                lpCommandLine: PKOLChar; lpProcessAttributes: PSecurityAttributes;
12529:
                {\tt lpThreadAttributes: PSecurityAttributes; bInheritHandles: BOOL;}
               dwCreationFlags: DWORD; lpEnvironment: Pointer; lpCurrentDirectory: PKOLChar; const lpStartupInfo: TStartupInfo; var lpProcessInformation: TProcessInformation): BOOL; stdcall;
12530:
12531:
12532:
             function GetCurrentHwProfile(var lpHwProfileInfo: THWProfileInfo): BOOL; stdcall;
12533:
             function GetFileSecurity(lpFileName: PKOLChar; RequestedInformation: SECURITY_INFORMATION;
12534:
                pSecurityDescriptor: PSecurityDescriptor;nLength:DWORD;var lpnLengthNeeded: DWORD):BOOL; stdcall;
             function GetUserName(lpBuffer: PKOLChar; var nSize: DWORD): BOOL; stdcall; function InitiateSystemShutdown(lpMachineName, lpMessage: PKOLChar;
12535:
12536:
12537:
                dwTimeout: DWORD; bForceAppsClosed, bRebootAfterShutdown: BOOL): BOOL; stdcall;
             function LogonUser(lpszUsername, lpszDomain, lpszPassword: PKOLChar;
  dwLogonType, dwLogonProvider: DWORD; var phToken: THandle): BOOL; stdcall;
12538:
12539:
             function LookupAccountName(lpSystemName, lpAccountName: PKOLChar;
12540:
                Sid: PSID; var cbSid: DWORD; ReferencedDomainName: PKOLChar;
12541:
12542:
                var cbReferencedDomainName: DWORD; var peUse: SID_NAME_USE): BOOL; stdcall;
12543:
             function LookupAccountSid(lpSystemName: PKOLChar; Sid: PSID;
                Name: PKOLChar; var cbName: DWORD; ReferencedDomainName: PKOLChar;
12544:
                var cbReferencedDomainName: DWORD; var peUse: SID_NAME_USE): BOOL; stdcall;
12545:
12546:
             function LookupPrivilegeDisplayName(lpSystemName, lpName: PKOLChar;
12547:
             lpDisplayName: PKOLChar; var cbDisplayName, lpLanguageId: DWORD): BOOL; stdcall; function LookupPrivilegeName(lpSystemName: PKOLChar; var lpLuid: TLargeInteger; lpName: PKOLChar; var cbName: DWORD): BOOL; stdcall;
12548:
12549:
12550:
             function LookupPrivilegeValue(lpSystemName, lpName: PKOLChar;
12551:
                var lpLuid: TLargeInteger): BOOL; stdcall;
12552:
             function ObjectCloseAuditAlarm(SubsystemName: PKOLChar;
12553:
                HandleId: Pointer; GenerateOnClose: BOOL): BOOL; stdcall;
             function ObjectDeleteAuditAlarm(SubsystemName: PKOLChar;
12554:
               HandleId: Pointer; GenerateOnClose: BOOL): BOOL; stdcall;
12555:
             function ObjectOpenAuditAlarm(SubsystemName: PKOLChar; HandleId: Pointer;
12556:
                ObjectTypeName: PKOLChar; ObjectName: PKOLChar; pSecurityDescriptor: PSecurityDescriptor;
12557:
12558:
                ClientToken: THandle; DesiredAccess, GrantedAccess: DWORD;
12559:
                var Privileges: TPrivilegeSet; ObjectCreation, AccessGranted: BOOL;
```

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12560:
                  var GenerateOnClose: BOOL): BOOL; stdcall;
12561:
               function ObjectPrivilegeAuditAlarm(SubsystemName: PKOLChar;
12562:
                  HandleId: Pointer; ClientToken: THandle; DesiredAccess: DWORD;
12563:
                  var Privileges: TPrivilegeSet; AccessGranted: BOOL; BOOL; stdcall;
               \textbf{function} \ \texttt{OpenBackupEventLog(lpUNCServerName, lpFileName: PKOLChar): THandle}; \ \textbf{stdcall}; \\
12564:
               function OpenBackupFventLog(lpUNCServerName, lpSourceName: PKOLChar): THandle; stdcall; function PrivilegedServiceAuditAlarm(SubsystemName, ServiceName: PKOLChar):
12565:
12566:
               ClientToken: THandle; var Privileges: TPrivilegeSet; AccessGranted: BOOL): BOOL; stdcall; function ReadEventLog(hEventLog: THandle; dwReadFlags, dwRecordOffset: DWORD; lpBuffer: Pointer; nNumberOfBytesToRead: DWORD;
12567:
12568:
12569:
12570:
                  var pnBytesRead, pnMinNumberOfBytesNeeded: DWORD): BOOL; stdcall;
               function RegConnectRegistry(lpMachineName: PKOLChar; hKey: HKEY;
12571:
               var phkResult: HKEY: Longint; stdcall;
function RegCreateKey(hKey: HKEY; lpSubKey: PKOLChar;
12572:
12573:
12574:
                  var phkResult: HKEY): Longint; stdcall;
12575:
               function RegCreateKeyEx(hKey: HKEY; lpSubKey: PKOLChar;
12576:
                  Reserved: DWORD; lpClass: PKOLChar; dwOptions: DWORD; samDesired: REGSAM;
               lpSecurityAttributes: PSecurityAttributes; var phkResult: HKEY;
lpdwDisposition: PDWORD): Longint; stdcall;
function RegDeleteKey(hKey: HKEY; lpSubKey: PKOLChar): Longint; stdcall;
12577
12578:
12579:
12580:
                function RegDeleteValue(hKey: HKEY; lpValueName: PKOLChar): Longint; stdcall;
12581:
                function RegEnumKeyEx(hKey: HKEY; dwIndex: DWORD; lpName: PKOLChar;
                  var lpcbName: DWORD; lpReserved: Pointer; lpClass: PKOLChar;
lpcbClass: PDWORD; lpftLastWriteTime: PFileTime): Longint; stdcall;
12582:
12583:
               function RegEnumKey(hKey:HKEY; dwIndex:DWORD; lpName:PKOLChar; cbName:DWORD):Longint;stdcall;
12584:
12585:
                function RegEnumValue(hKey: HKEY; dwIndex: DWORD; lpValueName: PKOLChar;
12586:
                  var lpcbValueName: DWORD; lpReserved: Pointer; lpType: PDWORD;
12587:
                  lpData: PByte; lpcbData: PDWORD): Longint; stdcall;
               function RegLoadKey(hKey: HKEY; lpSubKey, lpFile: PKOLChar): Longint; stdcall; function RegOpenKey(hKey: HKEY; lpSubKey: PKOLChar; var phkResult: HKEY):Longint; stdcall;
12588:
12589:
12590:
               function RegOpenKeyEx(hKey: HKEY; lpSubKey: PKOLChar;
               uloptions: DWORD; samDesired: REGSAM; var phkResult: HKEY): Longint; stdcall; function RegQueryInfoKey(hKey: HKEY; lpClass: PKOLChar;
12591:
12592:
                  lpcbClass: PDWORD; lpReserved: Pointer;
12593:
12594:
                  lpcSubKeys, lpcbMaxSubKeyLen, lpcbMaxClassLen, lpcValues,
12595:
                  lpcbMaxValueNameLen, lpcbMaxValueLen, lpcbSecurityDescriptor: PDWORD;
               lpftLastWriteTime: PFileTime): Longint; stdcall;
function RegQueryMultipleValues(hKey: HKEY; var ValList;
NumVals: DWORD; lpValueBuf: PKOLChar; var ldwTotsize: DWORD): Longint; stdcall;
12596:
12597:
12598:
               function RegQueryValue(hKey: HKEY: lpSubKey: PKOLChar; lpValue: PKOLChar; var lpcbValue: Longint): Longint; stdcall;
12599:
12600:
               function RegQueryValueEx(hKey: HKEY; lpValueName: PKOLChar; lpReserved: Pointer; lpType: PDWORD; lpData: PByte; lpcbData: PDWORD): Longint; stdcall;
12601:
12602:
               function RegReplaceKey(hKey: HKEY; lpSubKey: PKOLChar; lpNewFile: PKOLChar; lpNewFile: PKOLChar; lpNewFile: PKOLChar; lpNewFile: PKOLChar; lpFile: PKOLChar; dwFlags: DWORD): Longint; stdcall; function RegRestoreKey(hKey: HKEY; lpFile: PKOLChar; dwFlags: DWORD): Longint; stdcall; function RegSaveKey(hKey: HKEY; lpFile: PKOLChar;
12603:
12604:
12605:
12606:
                  lpSecurityAttributes: PSecurityAttributes): Longint; stdcall;
12607:
               function RegSetValue(hKey: HKEY; lpSubKey: PKOLChar;
  dwType: DWORD; lpData: PKOLChar; cbData: DWORD): Longint; stdcall;
function RegSetValueEx(hKey: HKEY; lpValueName: PKOLChar;
12608:
12609:
12610:
                  Reserved: DWORD; dwType: DWORD; lpData: Pointer; cbData: DWORD): Longint; stdcall;
12611:
               function RegUnLoadKey(hKey: HKEY; lpSubKey: PKOLChar): Longint; stdcall;
12612:
12613:
               function RegisterEventSource(lpUNCServerName, lpSourceName: PKOLChar): THandle; stdcall;
12614:
               function ReportEvent(hEventLog: THandle; wType, wCategory: Word;
  dwEventID: DWORD; lpUserSid: Pointer; wNumStrings: Word;
12615:
                  dwDataSize: DWORD; lpStrings, lpRawData: Pointer): BOOL; stdcall;
12616:
12617:
               function SetFileSecurity(lpFileName: PKOLChar; SecurityInformation: SECURITY_INFORMATION;
12618:
                  pSecurityDescriptor: PSecurityDescriptor): BOOL; stdcall;
12619:
12620:
           Function wAddAtom( lpString : PKOLChar) : ATOM
12621:
           Function wBeginUpdateResource( pFileName : PKOLChar; bDeleteExistingResources : BOOL) : THandle
         //Function wCallNamedPipe( lpNamedPipeName : PKOLChar; lpInBuffer : Pointer; nInBufferSize : DWORD; lpOutBuffer : Pointer; nOutBufferSize : DWORD; var lpBytesRead : DWORD; nTimeOut : DWORD) : BOOL //Function wCommConfigDialog( lpszName : PKOLChar; hWnd : HWND; var lpCC : TCommConfig) : BOOL Function wCompareString( Locale : LCID; dwCmpFlags : DWORD; lpString1 : PKOLChar; cchCount1 : Integer; lpString2 : PKOLChar; cchCount2 : Integer) : Integer
12622:
12623:
12625: \quad \textbf{Function} \text{ wCopyFile( lpExistingFileName, lpNewFileName : PKOLChar; bFailIfExists : BOOL) : BOOL}
12626: //Function wCopyFileEx( lpExistingFileName, lpNewFileName : PKOLChar; lpProgressRoutine : TFNProgressRoutine; lpData : Pointer; pbCancel : PBool; dwCopyFlags : DWORD) : BOOL
12627: Function wCreateDirectory( lpPathName : PKOLChar; lpSecurityAttributes : PSecurityAttributes) : BOOL
12626:
           Function wCreateDirectoryEx(lpTemplateDirectory,
12628:
          lpNewDirectory:PKOLChar;lpSecAttrib:PSecurityAttribts):BOOL;
          Function wCreateEvent(lpEventAttribes:PSecurityAttrib;bManualReset,
         bInitialState:BOOL;lpName:PKOLChar):THandle;
12630: Function wCreateFile( lpFileName : PKOLChar; dwDesiredAccess, dwShareMode : DWORD; lpSecurityAttributes :
         PSecurityAttributes; dwCreationDisposition, dwFlagsAndAttributes:DWORD;hTemplateFile:THandle):THandle Function wCreateFileMapping( hFile : THandle; lpFileMappingAttributes : PSecurityAttributes; flProtect, dwMaximumSizeHigh, dwMaximumSizeLow : DWORD; lpName : PKOLChar) : THandle
12631:
           Function wCreateHardLink(lpFileName
         lpExistingFileName:PKOLChar; lpSecurityAttributes:PSecurityAttributes):BOOL
12633: Function
         CreateMailslot(lpName:PKOLChar;MaxMessSize:DWORD;lpReadTimeout:DWORD;lpSecurityAttrib:PSecurityAttributes):THandle);
12634: Function wCreateNamedPipe( lpName : PKOLChar; dwOpenMode, dwPipeMode, nMaxInstances, nOutBufferSize,
         nInBufferSize, nDefaultTimeOut : DWORD; lpSecurityAttributes : PSecurityAttributes) : THandle
          //Function CreateProcess( lpApplicationName : PKOLChar; lpCommandLine : PKOLChar; lpProcessAttributes,
          lpProcessInfo:TProcessInformation): BOOL
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12636: \quad \textbf{Function} \ \text{wCreateSemaphore(lpSemaphoreAttributes: PSecurityAttributes: lInitialCount, lMaximumCount} : \\
                   Longint; lpName : PKOLChar) : THandle
                     Function
                    wCreateWaitableTimer(lpTimerAttributes:PSecurityAttribs;bManualReset:BOOL;lpTimerName:PKOLChar):THandle);
                  Function wDefineDosDevice( dwFlags : DWORD; lpDeviceName, lpTargetPath : PKOLChar) : BOOL Function wDeleteFile( lpFileName : PKOLChar) : BOOL
12638:
12639:
12640:
                     Function wEndUpdateResource( hUpdate : THandle; fDiscard : BOOL) : BOOL
12641:
                   wEnumCalendarInfo(lpCalInfEnumProc:TFNCalInfEnumProc;Locale:LCID;Calendar:CALID;CalType:CALTYPE):BOOL;
12642:
                     //Function wEnumDateFormats(lpDateFmtEnumProc: TFNDateFmtEnumProc; Locale : LCID; dwFlags : DWORD) : BOOL
12643:
                      //Function
                   wEnumResourceNames(hModule:HMODULE;lpType:PKOLChar;lpEnumFunc:ENUMRESNAMEPROC;lParam:Longint):BOOL;
 12644:
                      //Function wEnumResourceTypes( hModule:HMODULE; lpEnumFunc:ENUMRESTYPEPROC;lParam:Longint):BOOL;
                     //Function wEnumSystemCodePages( lpCodePageEnumProc : TFNCodepageEnumProc; dwFlags : DWORD) : BOOL //Function wEnumSystemLocales( lpLocaleEnumProc : TFNLocaleEnumProc; dwFlags : DWORD) : BOOL
12645:
12646:
12647:
                      //Function wEnumTimeFormats(lpTimeFmtEnumProc:TFNTimeFmtEnumProc;Locale:LCID;dwFlags:DWORD):BOOL;
                      Function wExpandEnvironmentStrings( lpSrc : PKOLChar; lpDst : PKOLChar; nSize : DWORD) : DWORD
                     Procedure wFatalAppExit( uAction : UINT; lpMessageText : PKOLChar)
//Function wFillConsoleOutputCharacter( hConsoleOutput : THandle; cCharacter : KOLChar; nLength : DWORD;
12649 .
12650:
                   dwWriteCoord : TCoord; var lpNumberOfCharsWritten : DWORD) : BOOL
                     Function wFindAtom( lpString : PKOLChar) : ATOM
12651:
12652:
                     Function
                   wFindFirstChangeNotification(lpPathName:PKOLChar;bWatchSubtree:BOOL;dwNotifyFilter:DWORD):THandle;bWatchSubtree:BOOL;dwNotifyFilter:DWORD):Thandle;bWatchSubtree:BOOL;dwNotifyFilter:DWORD):Thandle;bWatchSubtree:BOOL;dwNotifyFilter:DWORD):Thandle;bWatchSubtree:BOOL;dwNotifyFilter:DWORD):Thandle;bWatchSubtree:BOOL;dwNotifyFilter:DWORD):Thandle;bWatchSubtree:BOOL;dwNotifyFilter:DWORD):Thandle;bWatchSubtree:BOOL;dwNotifyFilter:DWORD):Thandle;bWatchSubtree:BOOL;dwNotifyFilter:DWORD):Thandle;bWatchSubtree:BOOL;dwNotifyFilter:DWORD):Thandle;bWatchSubtree:BOOL;dwNotifyFilter:DWORD):Thandle;bWatchSubtree:BOOL;dwNotifyFilter:DWORD):Thandle;bWatchSubtree:BOOL;dwNotifyFilter:DWORD):Thandle;bWatchSubtree:BOOL;dwNotifyFilter:DWORD):Thandle;bWatchSubtree:BOOL;dwNotifyFilter:DWORD):Thandle;bWatchSubtree:BoolchSubtree:BoolchSubtree:BoolchSubtree:BoolchSubtree:BoolchSubtree:BoolchSubtree:BoolchSubtree:BoolchSubtree:BoolchSubtree:BoolchSubtree:BoolchSubtree:BoolchSubtree:BoolchSubtree:BoolchSubtree:BoolchSubtree:BoolchSubtree:BoolchSubtree:BoolchSubtree:BoolchSubtree:BoolchSubtree:BoolchSubtree:BoolchSubtree:BoolchSubtree:BoolchSubtree:BoolchSubtree:BoolchSubtree:BoolchSubtree:BoolchSubtree:BoolchSubtree:BoolchSubtree:BoolchSubtree:BoolchSubtree:BoolchSubtree:BoolchSubtree:BoolchSubtree:BoolchSubtree:BoolchSubtree:BoolchSubtree:BoolchSubtree:BoolchSubtree:BoolchSubtree:BoolchSubtree:BoolchSubtree:BoolchSubtree:BoolchSubtree:BoolchSubtree:BoolchSubtree:BoolchSubtree:BoolchSubtree:BoolchSubtree:BoolchSubtree:BoolchSubtree:BoolchSubtree:BoolchSubtree:BoolchSubtree:BoolchSubtree:BoolchSubtree:BoolchSubtree:BoolchSubtree:BoolchSubtree:BoolchSubtree:BoolchSubtree:BoolchSubtree:BoolchSubtree:BoolchSubtree:BoolchSubtree:BoolchSubtree:BoolchSubtree:BoolchSubtree:BoolchSubtree:BoolchSubtree:BoolchSubtree:BoolchSubtree:BoolchSubtree:BoolchSubtree:BoolchSubtree:BoolchSubtree:BoolchSubtree:BoolchSubtree:BoolchSubtree:BoolchSubtree:BoolchSubtree:BoolchSubtree:BoolchSubtree:BoolchSubtree:BoolchSubtree:BoolchSubtree:BoolchSubtree:BoolchSubtree:
                     Function wFindFirstFile( lpFileName : PKOLChar; var lpFindFileData : TWIN32FindData) : THandle //Function wFindFirstFileEx( lpFileName : PKOLChar; fInfoLevelId : TFindexInfoLevels; lpFindFileData :
12653:
12654:
                   Pointer; fSearchOp: TFindexSearchOps; lpSearchFilter: Pointer; dwAdditionalFlags: DWORD): BOOL
12655:
                     Function wFindNextFile( hFindFile : THandle; var lpFindFileData : TWIN32FindData) : BOOL
Function wFindResource( hModule : HMODULE; lpName, lpType : PKOLChar) : HRSRC
Function wFindResourceEx( hModule : HMODULE; lpType, lpName : PKOLChar; wLanguage : Word) : HRSRC
12656:
12657:
                     Function
                   wFoldString(dwMapFlags:DWORD;lpSrcStr:PKOLChar;cchSrc:Int;lpDestStr:PKOLChar;cchDest:Integer):Integer); Integer); 
                   //Function wFormatMessage( dwFlags : DWORD; lpSource : Pointer; dwMessageId : DWORD; dwLanguageId : DWORD; lpBuffer : PKOLChar; nSize : DWORD; Arguments : Pointer) : DWORD
12659:
                     Function wFreeEnvironmentStrings( EnvBlock : PKOLChar) : BOOL
12660:
                      Function wGetAtomName( nAtom : ATOM; lpBuffer : PKOLChar; nSize : Integer) : UINT
12662:
                     Function wGetBinaryType( lpApplicationName : PKOLChar; var lpBinaryType : DWORD) : BOOL
12663:
                     Function wGetCommandLine : PKOLChar
                      Function wGetCompressedFileSize( lpFileName : PKOLChar; lpFileSizeHigh : PDWORD) : DWORD Function wGetComputerName( lpBuffer : PKOLChar; var nSize : DWORD) : BOOL
12664:
12665:
                     Function wGetConsoleTitle( lpConsoleTitle: PKOLChar; nSize: DWORD): DWORD
12666:
12667:
                      //Function wGetCurrencyFormat( Locale : LCID; dwFlags : DWORD; lpValue : PKOLChar; lpFormat :
                   PCurrencyFmt; lpCurrencyStr : PKOLChar; cchCurrency : Integer) : Integer
Function wGetCurrentDirectory( nBufferLength : DWORD; lpBuffer : PKOLChar) : DWORD
12669:
                      //Function wGetDateFormat( Locale : LCID; dwFlags : DWORD; lpDate : PSystemTime; lpFormat : PKOLChar;
                    lpDateStr : PKOLChar; cchDate : Integer) : Integer
                       //Function wGetDefaultCommConfig( lpszName:PKOLChar;var lpCC : TCommConfig;var lpdwSize:DWORD):BOOL
12670:
                   Function wGetDiskFreeSpace(lpRootPathName:PKOLChar; var lpSectorsPerCluster, lpBytesPerSector,lpNumberOfFreeClusters,lpTotalNumberOfClusters:DWORD):BOOL
12671:
12672:
                       //Function wGetDiskFreeSpaceEx( lpDirectoryName : PKOLChar; var lpFreeBytesAvailableToCaller,
                    lpTotalNumberOfBytes, lpTotalNumberOfFreeBytes : PLargeInteger) : BOOL
12673:
                     Function wGetDriveType( lpRootPathName : PKOLChar) : UINT
                     Function wGetEnvironmentStrings: PKOLChar
Function wGetEnvironmentVariable( lpName: PKOLChar; lpBuffer: PKOLChar; nSize: DWORD): DWORD;
12674:
 12675:
12676:
                     Function wGetFileAttributes( lpFileName : PKOLChar) : DWORD
12677:
                      //Function
                   wGetFileAttributesEx(lpFileName:PKOLChar:fInfoLevelId:TGetFileExInfoLevs:lpFileInform:Pointer):BOOL:
                     Function wGetFullPathName(lpFileName:PKOLChar;nBufferLength:WORD;lpBuffer:PKOLChar;var
12678:
                   lpFilePart:PKOLChar):DWORD;
12679:
                     //Function wGetLocaleInfo(Locale:LCID; LCType:LCTYPE; lpLCData:PKOLChar; cchData:Integer): Integer
Function wGetLogicalDriveStrings( nBufferLength : DWORD; lpBuffer : PKOLChar) : DWORD
Function wGetModuleFileName( hModule : HINST; lpFilename : PKOLChar; nSize : DWORD) : DWORD
12680:
12681:
                      Function wGetModuleHandle( lpModuleName : PKOLChar) : HMODULE
                      //Function wGetNamedPipeHandleState( hNamedPipe : THandle; lpState, lpCurInstances,
12683:
                   lpCollectDataTimeout : PDWORD; lpUserName : PKOLChar; nMaxUserNameSize : DWORD) : BOOL
//Function wGetNumberFormat( Locale : LCID; dwFlags:DWORD; lpValue:PKOLChar; lpFormat:PNumberFmt;
lpNumberStr : PKOLChar; cchNumber : Integer) : Integer
12684:
 12685:
                     Function wGetPrivateProfileInt(lpAppName,lpKeyName:PKOLChar;nDefault:Integer;lpFileName:PKOLChar):UINT;
12686:
                     Function
                   w {\tt GetPrivateProfileSection(lpAppName:PKOLChar;lpRetrStr:PKOLChar;nSize:DWORD;pFileName:PKOLChar):DWORD;pFileName:PKOLChar):DWORD;pFileName:PKOLChar):DWORD;pFileName:PKOLChar):DWORD;pFileName:PKOLChar):DWORD;pFileName:PKOLChar):DWORD;pFileName:PKOLChar):DWORD;pFileName:PKOLChar):DWORD;pFileName:PKOLChar):DWORD;pFileName:PKOLChar):DWORD;pFileName:PKOLChar):DWORD;pFileName:PKOLChar):DWORD;pFileName:PKOLChar):DWORD;pFileName:PKOLChar):DWORD;pFileName:PKOLChar):DWORD;pFileName:PKOLChar):DWORD;pFileName:PKOLChar):DWORD;pFileName:PKOLChar):DWORD;pFileName:PKOLChar):DWORD;pFileName:PKOLChar):DWORD;pFileName:PKOLChar):DWORD;pFileName:PKOLChar):DWORD;pFileName:PKOLChar):DWORD;pFileName:PKOLChar):DWORD;pFileName:PKOLChar):DWORD;pFileName:PKOLChar):DWORD;pFileName:PKOLChar):DWORD;pFileName:PKOLChar):DWORD;pFileName:PKOLChar):DWORD;pFileName:PKOLChar):DWORD;pFileName:PKOLChar):DWORD;pFileName:PKOLChar):DWORD;pFileName:PKOLChar):DWORD;pFileName:PKOLChar):DWORD;pFileName:PKOLChar):DWORD;pFileName:PKOLChar):DWORD;pFileName:PKOLChar):DWORD;pFileName:PKOLChar):DWORD;pFileName:PKOLChar):DWORD;pFileName:PKOLChar):DWORD;pFileName:PKOLChar):DWORD;pFileName:PKOLChar):DWORD;pFileName:PKOLChar):DWORD;pFileName:PKOLChar):DWORD;pFileName:PKOLChar):DWORD;pFileName:PKOLChar):DWORD;pFileName:PKOLChar):DWORD;pFileName:PKOLChar):DWORD;pFileName:PKOLChar):DWORD;pFileName:PKOLChar):DWORD;pFileName:PKOLChar):DWORD;pFileName:PKOLChar):DWORD;pFileName:PKOLChar):DWORD;pFileName:PKOLChar):DWORD;pFileName:PKOLChar):DWORD;pFileName:PKOLChar):DWORD;pFileName:PKOLChar):DWORD;pFileName:PKOLChar):DWORD;pFileName:PKOLChar):DWORD;pFileName:PKOLChar):DWORD;pFileName:PKOLChar):DWORD;pFileName:PKOLChar):DWORD;pFileName:PKOLChar):DWORD;pFileName:PKOLChar):DWORD;pFileName:PKOLChar):DWORD;pFileName:PKOLChar):DWORD;pFileName:PKOLChar):DWORD;pFileName:PKOLChar):DWORD;pFileName:PKOLChar):DWORD;pFileName:PKOLChar):DWORD;pFileName:PKOLChar):DWORD;pFileName:PKOLChar):DWORD;pFileName:PKOLChar):DWORD;pFileName:PKOLChar):DWORD;pFileName:PKOLChar):DWORD;pFileName:PKOL
12687:
                     Function wGetPrivateProfileSectionNames(lpszReturnBuffer:PKOLChar;nSize:DWORD;lpFileName:PKOLChar):DWORD;
                     Function wGetPrivateProfileString( lpAppName, lpKeyName, lpDefault : PKOLChar; lpReturnedStr: PKOLChar;
                   nSize:DWORD; lpFileName : PKOLChar) : DWORD
                     Function wGetProfileInt( lpAppName, lpKeyName : PKOLChar; nDefault : Integer) : UINT
Function wGetProfileSection( lpAppName : PKOLChar; lpReturnedString : PKOLChar; nSize : DWORD) : DWORD
12689:
12690:
12691:
                     Function wGetProfileString(lpAppName,lpKeyName,
                    lpDefault:PKOLChar;lpReturnedStr:PKOLChar;nSize:DWORD):DWORD;
12692:
                     Function wGetShortPathName( lpszLongPath:PKOLChar;lpszShortPath: PKOLChar; cchBuffer : DWORD) : DWORD
                   //Procedure wGetStartupInfo( var lpStartupInfo : TStartupInfo)
// Function wGetStringTypeEx(Locale:LCID; dwInfoType:DWORD;lpSrcStr:PKOLChar;cchSrc:Integer;var
12693:
12694:
                    lpCharType):BOOL
12695:
                     Function wGetSystemDirectory( lpBuffer : PKOLChar; uSize : UINT) : UINT
                     Function wGetTempFileName( lpPathName, lpPrefixString: PKOLChar;uUnique:UINT;lpTempFileName:PKOLChar):UINT
Function wGetTempPath( nBufferLength : DWORD; lpBuffer : PKOLChar) : DWORD
12696:
12697:
12698:
                   //Function
                   w \textit{GetTimeFormat(Loc:LCID;dwFlgs:DWORD;lpTime:PSystemTime;lpFrm:PKOLChar;lpTimeStr:PKOLChar;cTime:Int):Intworder(a) = (1) + (1) + (1) + (1) + (1) + (1) + (1) + (1) + (1) + (1) + (1) + (1) + (1) + (1) + (1) + (1) + (1) + (1) + (1) + (1) + (1) + (1) + (1) + (1) + (1) + (1) + (1) + (1) + (1) + (1) + (1) + (1) + (1) + (1) + (1) + (1) + (1) + (1) + (1) + (1) + (1) + (1) + (1) + (1) + (1) + (1) + (1) + (1) + (1) + (1) + (1) + (1) + (1) + (1) + (1) + (1) + (1) + (1) + (1) + (1) + (1) + (1) + (1) + (1) + (1) + (1) + (1) + (1) + (1) + (1) + (1) + (1) + (1) + (1) + (1) + (1) + (1) + (1) + (1) + (1) + (1) + (1) + (1) + (1) + (1) + (1) + (1) + (1) + (1) + (1) + (1) + (1) + (1) + (1) + (1) + (1) + (1) + (1) + (1) + (1) + (1) + (1) + (1) + (1) + (1) + (1) + (1) + (1) + (1) + (1) + (1) + (1) + (1) + (1) + (1) + (1) + (1) + (1) + (1) + (1) + (1) + (1) + (1) + (1) + (1) + (1) + (1) + (1) + (1) + (1) + (1) + (1) + (1) + (1) + (1) + (1) + (1) + (1) + (1) + (1) + (1) + (1) + (1) + (1) + (1) + (1) + (1) + (1) + (1) + (1) + (1) + (1) + (1) + (1) + (1) + (1) + (1) + (1) + (1) + (1) + (1) + (1) + (1) + (1) + (1) + (1) + (1) + (1) + (1) + (1) + (1) + (1) + (1) + (1) + (1) + (1) + (1) + (1) + (1) + (1) + (1) + (1) + (1) + (1) + (1) + (1) + (1) + (1) + (1) + (1) + (1) + (1) + (1) + (1) + (1) + (1) + (1) + (1) + (1) + (1) + (1) + (1) + (1) + (1) + (1) + (1) + (1) + (1) + (1) + (1) + (1) + (1) + (1) + (1) + (1) + (1) + (1) + (1) + (1) + (1) + (1) + (1) + (1) + (1) + (1) + (1) + (1) + (1) + (1) + (1) + (1) + (1) + (1) + (1) + (1) + (1) + (1) + (1) + (1) + (1) + (1) + (1) + (1) + (1) + (1) + (1) + (1) + (1) + (1) + (1) + (1) + (1) + (1) + (1) + (1) + (1) + (1) + (1) + (1) + (1) + (1) + (1) + (1) + (1) + (1) + (1) + (1) + (1) + (1) + (1) + (1) + (1) + (1) + (1) + (1) + (1) + (1) + (1) + (1) + (1) + (1) + (1) + (1) + (1) + (1) + (1) + (1) + (1) + (1) + (1) + (1) + (1) + (1) + (1) + (1) + (1) + (1) + (1) + (1) + (1) + (1) + (1) + (1) + (1) + (1) + (1) + (1) + (1) + (1) + (1) + (1) + (1) + (1) + (1) + (1) + (1) + (1) + (1) + (1) + (1) + (1) +
12699:
                   // Function \ w {\tt GetVersionEx}(\ var\ lp {\tt VersionInformation}\ :\ {\tt TOSVersionInfo})\ :\ {\tt BOOL}
12700: //Function GetVolumeInformation( lpRootPathName : PKOLChar; lpVolumeNameBuffer : PKOLChar; nVolumeNameSize : DWORD; lpVolumeSerialNumber : PDWORD; var lpMaximumComponentLength, lpFileSystemFlags : DWORD; lpFileSystemNameBuffer : PKOLChar; nFileSystemNameSize : DWORD) : BOOL
```

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12701:
                 Function wGetWindowsDirectory( lpBuffer : PKOLChar; uSize : UINT) : UINT
12702:
                  Function wGlobalAddAtom( lpString : PKOLChar) : ATOM
                  Function wGlobalFindAtom( lpString : PKOLChar) :
                                                                                                                                 ATOM
                  Function wGlobalGetAtomName( nAtom : ATOM; lpBuffer : PKOLChar; nSize : Integer) : UINT
12704 •
12705:
                  Function wIsBadStringPtr( lpsz : PKOLChar; ucchMax : UINT) : BOOL
12706:
                 Function
                wLCMapString(Loc:LCID;dwMapFlgs:DWORD;lpSrcStr:PKOLChar;cchSrc:Int;lpDestStr:PKOLChar;cchDest:Int):Int;
                 Function wLoadLibrary( lpLibFileName : PKOLChar; hFile : THANDULE

Function wLoadLibraryEx( lpLibFileName : PKOLChar; hFile : THANDULE
12707:
12708:
                 Function wMoveFile( lpExistingFileName, lpNewFileName : PKOLChar) : BOOL
Function wMoveFileEx( lpExistingFileName, lpNewFileName : PKOLChar; dwFlags : DWORD) : BOOL
//Function wMoveFileWithProgress( lpExistingFileName, lpNewFileName : PKOLChar; lpProgressRoutine :
12709:
12710:
12711:
               TFNProgressRoutine; lpData : Pointer; dwFlags : DWORD) : BOOL
                 Function wOpenFileMapping( dwDesiredAccess : DWORD; bInheritHandle : BOOL; lpName: PKOLChar) : THandle
Function wOpenFileMapping( dwDesiredAccess : DWORD; bInheritHandle: BOOL; lpName: PKOLChar): THandle
12712:
12713:
12714:
                  Function wOpenMutex( dwDesiredAccess : DWORD; bInheritHandle : BOOL; lpName : PKOLChar) : THandle
                  12715:
12716
                  \textbf{Function} \ \ \texttt{wOpenWaitableTimer} ( \ \texttt{dwDesiredAccess:DWORD}; \\ \texttt{bInheritHandle:BOOL}; \\ \texttt{lpTimerName:PKOLChar}) : \\ \texttt{THandle:BOOL}; \\ \texttt{dpTimerName:PKOLChar}) : \\ \texttt{dpTimerN
                 Procedure wOutputDebugString( lpOutputString: PKOLChar)
//Function wPeekConsoleInput(hConsoleInput:THandle;var lpBuffer:TInputRecord;nLength:DWORD;var
12717:
12718:
                 lpNumberOfEventsRead:DWORD):BOOL;
12719:
                  Function wQueryDosDevice( lpDeviceName : PKOLChar; lpTargetPath : PKOLChar; ucchMax : DWORD) : DWORD
12720:
                  // Function \ wQueryRecoveryAgents (p1:PKOLChar; var \ p2:Pointer; var \ p3:TRecoveryAgentInformation): DWORD \ part of the 
12721:
                //Function wReadConsole( hConsoleInput : THandle; lpBuffer : Pointer; nNumberOfCharsToRead : DWORD; var lpNumberOfCharsRead : DWORD; lpReserved : Pointer) : BOOL
12722:
                   //Function wReadConsoleInput(hConsInp:THandle;var lpBuf:TInpRec;nLength:DWORD;var
                12723:
                 : TCoord; var lpReadRegion : TSmallRect) : BOOL
//Function wReadConsoleOutputCharacter( hConsoleOutput : THandle; lpCharacter : PKOLChar; nLength :
               DWORD; dwReadCoord: TCoord; var lpNumberofCharsRead: DWORD): BOOL

Function wRemoveDirectory( lpPathName: PKOLChar): BOOL

//Function wScrollConsoleScreenBuffer( hConsoleOutput: THandle; const lpScrollRectangle: TSmallRect;
12725:
12726:
                lpClipRectangle : PSmallRect; dwDestinationOrigin : TCoord; var lpFill : TCharInfo) : BOOL
                 Function wSearchPath( lpPath,lpFileName,lpExtension:PKOLChar;nBufferLength:DWORD;lpBuffer:PKOLChar;var
12727:
                lpFilePart:PKOLChar):DWORD;
12728:
                 Function wSetComputerName( lpComputerName : PKOLChar) : BOOL
                  Function wSetConsoleTitle( lpConsoleTitle : PKOLChar) : BOOL
12729:
12730:
                  Function wSetCurrentDirectory( lpPathName : PKOLChar) : BOOL
12731:
                  //Function wSetDefaultCommConfig( lpszName : PKOLChar; lpCC : PCommConfig; dwSize : DWORD) : BOOL
12732:
                  \textbf{Function} \ \ \text{wSetEnvironmentVariable} ( \ \ \text{lpName} \,, \ \ \text{lpValue} \, : \, \, \text{PKOLChar}) \, : \, \, \text{BOOL}
                  Function wSetFileAttributes( lpFileName : PKOLChar; dwFileAttributes : DWORD) : BOOL
12733:
12734:
                  //Function wSetLocaleInfo( Locale : LCID; LCType : LCTYPE; lpLCData : PKOLChar) : BOOL
                  Function wSetVolumeLabel( lpRootPathName : PKOLChar; lpVolumeName : PKOLChar) : BOOL
12735:
                   //Function wUpdateResource(hUpdate:THandle;lpType,
12736:
                lpName:PKOLChar;wLanguage:Word;lpData:Ptr;cbData:DWORD):BOOL
12737:
                  Function wVerLanguageName( wLang : DWORD; szLang : PKOLChar; nSize : DWORD) : DWORD
                  Function wWaitNamedPipe( lpNamedPipeName : PKOLChar; nTimeOut : DWORD) : BOOL
12738:
12739:
                   //Function wWriteConsole( hConsoleOutput : THandle; const lpBuffer : Pointer; nNumberOfCharsToWrite :
               DWORD; var lpNumberOfCharsWritten : DWORD; lpReserved : Pointer) : BOOL
12740:
                 //Function wWriteConsoleInput( hConsoleInput: THandle; const lpBuffer: TInputRecord; nLength: DWORD;
               var lpNumberOfEventsWritten : DWORD) : BOOL
                  //Function wWriteConsoleOutput(hConsoleOutput:THandle; lpBuffer:Pointer; dwBufferSize,dwBufferCoord :
               TCoord; var lpWriteRegion : TSmallRect) : BOOL
12742:
                   //Function wWriteConsoleOutputCharacter( hConsoleOutput : THandle; lpCharacter : PKOLChar; nLength :
               DWORD; dwWriteCoord : TCoord; var lpNumberOfCharsWritten : DWORD) : BOOL
Function wWritePrivateProfileSection( lpAppName, lpString, lpFileName : PKOLChar) : BOOL
                 Function wWritePrivateProfileString( lpAppName, lpKeyName, lpString, lpFileName : PKOLChar) : BOOL
12744:
12745:
                 Function wWriteProfileSection( lpAppName, lpString : PKOLChar) : BOOL
Function wWriteProfileString( lpAppName, lpKeyName, lpString : PKOLChar) : BOOL
Function wlstrcat( lpString1, lpString2 : PKOLChar) : PKOLChar
12746:
12747:
12748:
                  Function wlstrcmp( lpString1, lpString2 : PKOLChar) : Integer
12749:
                  Function wlstrcmpi( lpString1, lpString2 : PKOLChar) : Integer
                 Function wlstrcpy( lpString1, lpString2 : PKOLChar) : PKOLChar
Function wlstrcpyn( lpString1, lpString2 : PKOLChar; iMaxLength : Integer) : PKOLChar
Function wlstrlen( lpString : PKOLChar) : Integer
12750:
12751:
                   //Function wMultinetGetConnectionPerformance( lpNetResource : PNetResource; lpNetConnectInfoStruc :
12753:
                PNetConnectInfoStruct) : DWORD
12754:
                 //Function wWNetAddConnection2(var lpNetResource:TNetResource;lpPassword,
                lpUserName:PKOLChar;dwFlags:DWORD):DWORD;
12755:
                  //Function wWNetAddConnection3( hwndOwner : HWND; var lpNetResource:TNetResource;lpPassword,
                 lpUserName:PKOLChar; dwFlags : DWORD) : DWORD
                 Function wWNetAddConnection( lpRemoteName, lpPassword, lpLocalName : PKOLChar) : DWORD Function wWNetCancelConnection2( lpName : PKOLChar; dwFlags : DWORD; fForce : BOOL) : DWORD Function wWNetCancelConnection( lpName : PKOLChar; fForce : BOOL) : DWORD
12756:
12757:
12758:
12759:
                  /\!/ Function \ wWN etConnection Dialog 1 ( \ var \ lpConnDlgStruct : TConnectDlgStruct) : DWORD \ and the substitution of th
12760:
                   //Function wWNetDisconnectDialog1( var lpConnDlgStruct : TDiscDlgStruct) : DWORD
                 //Function wWNetEnumResource(hEnum:THandle;var lpcCount:DWORD;lpBuffer:Ptr;var lpBufferSize:DWORD):DWORD;
Function wWNetGetConnection(lpLocalName:PKOLChar;lpRemoteName:PKOLChar; var lpnLength:DWORD):DWORD;
12761:
12762:
12763:
                  Function wWNetGetLastError( var lpError: DWORD; lpErrorBuf: PKOLChar; nErrorBufSize: DWORD; lpNameBuf
                 : PKOLChar; nNameBufSize : DWORD) : DWORD
12764:
                   //Function wWNetGetNetworkInformation(lpProvider:PKOLChar;var lpNetInfoStruct:TNetInfoStruct):DWORD;
                 Function wWNetGetProviderName(dwNetType:DWORD;lpProviderName:PKOLChar; var lpBufferSize:DWORD):DWORD;
12765:
                  //Function wWNetGetResourceParent(lpNetResource:PNetResource;lpBuffer:Pointer;var cbBuffer:DWORD):DWORD;
12766:
                 //Function wWNetGetUniversalName(lpLocalPath:PKOLChar;dwInfoLevel:DWORD;lpBuffer:Ptr;var
12767:
                 lpBufferSize:DWORD):DWORD;
12768:
                Function wWNetGetUser( lpName : PKOLChar; lpUserName : PKOLChar; var lpnLength : DWORD) : DWORD
12769: // Function wWNetOpenEnum(dwScope,dwType,dwUsage:DWORD;lpNetResource:PNetRes;var lphEnum:THandle):DWORD; 12770: // Function wWNetSetConnection( lpName : PKOLChar; dwProperties : DWORD; pvValues : Pointer) : DWORD
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12771:
                     //Function wWNetUseConnection(hwndOwner:HWND:var
                    lpNetResource:TNetResource;lpUserID:PKOLChar;lpPassword:PKOLChar; dwFlags:DWORD;lpAccessName:PKOLChar;var
                    lpBufferSize:DWORD;var lpResult:DWORD):DWORD
12772.
                      Function wGetFileVersionInfo(lptstrFilename:PKOLChar;dwHandle,dwLen:DWORD;lpData:Pointer):BOOL;
12773:
                     \textbf{Function} \ \ \text{wGetFileVersionInfoSize} ( \ \ \text{lptstrFilename} \ : \ \ \text{PKOLChar}; \ \ \textbf{var} \ \ \text{lpdwHandle} \ : \ \ \text{DWORD}) \ : \ \ \text{DWORD}
                   Function wVerFindFile( uFlags : DWORD; szFileName, szWinDir, szCurDir : PKOLChar; var lpuCurDirLen : UINT; szDestDir : PKOLChar; var lpuDestDirLen : UINT) : DWORD
12774:
                     Function wVerInstallFile( uFlags : DWORD; szSrcFileName, szDestFileName, szSrcDir, szDestDir, szCurDir,
12775:
                   szTmpFile : PKOLChar; var lpuTmpFileLen : UINT) : DWORD
12776: //Function wVerQueryValue(pBlock:Pointer;lpSubBlock:PKOLChar;var lplpBuffer:Ptr;var puLen:UINT):BOOL;
12777:
                   //Function wGetPrivateProfileStruct(lpszSection.
                   lpszKey:PKOLChar;lpStruct:Ptr;uSizeStruct:UINT;szFile:PKOLChar):BOOL;
12778: //Function wWritePrivateProfileStruct(lpszSection,
                  lpszKey:PKOLChar;lpStruct:Ptr;uSizeStruct:UINT;szFile:PKOLChar):BOOL;
Function wAddFontResource( FileName : PKOLChar) : Integer
                     //Function wAddFontResourceEx( p1 : PKOLChar; p2 : DWORD; p3 : PDesignVector) : Integer Function wCopyEnhMetaFile( p1 : HENHMETAFILE; p2 : PKOLChar) : HENHMETAFILE Function wCopyMetaFile( p1 : HMETAFILE; p2 : PKOLChar) : HMETAFILE
12781:
12782.
                 //Function wCreateColorSpace( var ColorSpace: Thorcolor): MMSIATING
//Function wCreateColorSpace( var ColorSpace: Thorcolor): HCOLORSPACE
//Function wCreateDC( lpszDriver, lpszDevice, lpszOutput: PKOLChar; lpdvmInit: PDeviceMode): HDC
// Function wCreateEnhMetaFile( DC: HDC; FileName: PKOLChar; Rect: PRect; Desc: PKOLChar): HDC
Function wCreateFont( nHeight, nWidth, nEscapement, nOrientaion, fnWeight: Integer; fdwItalic,
12783:
12784:
12785:
12786:
                   fdw Underline, \ fdw Strike Out, fdw Char Set, fdw Output Prec, fdw Clip Precision, fdw Qualy, fdw Clip Precision, fdw C
                  fdwPitchAndFamily:DWORD;1pszFace:PKOLChar):HFONT;
Function wCreateFontIndirect( const pl : TLogFont) : HFONT
12788:
                      //Function wCreateFontIndirectEx( const p1 : PEnumLogFontExDV) : HFONT
12789:
                     // Function wCreateIC( lpszDriver, lpszDevice, lpszOutput : PKOLChar; lpdvmInit : PDeviceMode) : HDC Function wCreateMetaFile( p1 : PKOLChar) : HDC Function wCreateScalableFontResource( p1 : DWORD; p2, p3, p4 : PKOLChar) : BOOL
12790:
12791:
                   //Function wDeviceCapabilities(pDriverNa,pDeviceNam,
                  pPort:PKOLChar;iIdx:Int;pOut:PKOLChar;DevMod:PDeviceMode):Int;
                   // Function wEnumFontFamilies( DC : HDC; p2 : PKOLChar; p3 : TFNFontEnumProc; p4 : LPARAM) : BOOL //Function wEnumFontFamiliesEx(DC:HDC;var p2:TLogFont;p3:TFNFontEnumProc;p4:LPARAM;p5:DWORD):BOOL);
12793:
12794:
12795:
                      //Function wEnumFonts(DC:HDC; lpszFace:PKOLChar; fntenmprc:TFNFontEnumProc; lpszData:PKOLChar):Integer;
                      //Function wEnumICMProfiles( DC : HDC; ICMProc : TFNICMEnumProc; p3 : LPARAM) : Integer
12796:
12797:
                      //Function wExtTextOut(DC:HDC;X,
                  Y:Int;Options:Longint;Rect:PRect;Str:PKOLChar;Count:Longint;Dx:PInteger:BOOL
//Function wGetCharABCWidths( DC : HDC; FirstChar, LastChar : UINT; const ABCStructs) : BOOL
//Function wGetCharABCWidthsFloat( DC : HDC; FirstChar, LastChar : UINT; const ABCFloatSturcts) : BOOL
12798:
12799:
12800:
                      //Function wGetCharWidth32( DC : HDC; FirstChar, LastChar : UINT; const Widths) : BOOL
                    //Function wGetCharWidth( DC : HDC; FirstChar, LastChar : UINT; const Widths) : BOOL
// Function wGetCharWidthFloat( DC : HDC; FirstChar, LastChar : UINT; const Widths) : BOOL
// Function wGetCharacterPlacement(DC:HDC;p2:PKOLChar;p3,p4:BOOL;var p5:TGCPResults;p6:DWORD):DWORD
12801:
12802:
12803:
                     Function wGetEnhMetaFile(pl: PKOLChar): HENHMETAFILE

Function wGetEnhMetaFile(pl: PKOLChar): HENHMETAFILE

Function wGetEnhMetaFile(pl: PKOLChar): HENHMETAFILE; p2: UINT; p3: PKOLChar): UINT
12805:
                  // Function wGetGlyphIndices( DC : HDC; p2 : PKOLChar; p3 : Integer; p4 : PWORD; p5 : DWORD) : DWORD
// Function wGetGlyphOutline( DC : HDC; uChar, uFormat:UINT; const lpgm:TGlyphMetrics; cbBuffer : DWORD;
12806:
12807:
                   lpvBuffer : Pointer; const lpmat2 : TMat2) : DWORD
12808:
                     Function wGetICMProfile( DC : HDC; var Size : DWORD; Name : PKOLChar) : BOOL
12809:
                    // Function wGetLogColorSpace( p1 : HCOLORSPACE; var ColorSpace : TLogColorSpace; Size : DWORD) : BOOL
                     Function wGetMetaFile( p1 : PKOLChar) : HMETAFILE
12810:
                   // Function wGetObject( p1 : HGDIOBJ; p2 : Integer; p3 : Pointer) : Integer
//Function wGetOutlineTextMetrics( DC : HDC; p2 : UINT; OTMetricStructs : Pointer) : UINT
12811:
12812:
12813:
                      //Function wGetTextExtentExPoint(DC:HDC;p2:PKOLChar; p3,p4:Integer;p5,p6:PInteger;var p7:TSize):BOOL
                     Function wGetTextExtentPoint32( DC : HDC; Str : PKOLChar; Count : Integer; var Size : TSize) : BOOL

Function wGetTextExtentPoint( DC : HDC; Str : PKOLChar; Count : Integer; var Size : TSize) : BOOL
12814:
12815:
                      Function wGetTextFace( DC : HDC; Count : Integer; Buffer : PKOLChar) : Integer
12816:
                     //Function wGetTextMetrics( DC : HDC; var TM : TTextMetric) : BOOL

Function wPolyTextOut( DC : HDC; const PolyTextArray, Strings : Integer) : BOOL

Function wRemoveFontResource( FileName : PKOLChar) : BOOL
12817:
12818:
12819:
                      //Function wRemoveFontResourceEx( p1 : PKOLChar; p2 : DWORD; p3 : PDesignVector) : BOOL
12820:
12821:
                       //Function wResetDC( DC : HDC; const InitData : TDeviceMode) : HDC
                     Function wsetICMProfile( DC: HDC; Name: PKOLChar): BOOL

//Function wStartDoc( DC: HDC; const p2: TDocInfo): Integer

Function wTextOut( DC: HDC; X, Y: Integer; Str: PKOLChar; Count: Integer): BOOL

Function wUpdateICMRegKey( p1: DWORD; p2, p3: PKOLChar; p4: UINT): BOOL

Function wwglUseFontBitmaps( DC: HDC; p2, p3, p4: DWORD): BOOL
12822:
12823:
12824:
12826:
12827:
                      //Function wwglUseFontOutlines(p1:HDC; p2,p3,p4:DWORD;p5,p6:Single;p7:Int;p8:PGlyphMetricsFloat):BOOL
12828:
                     Function wAppendMenu( hMenu : HMENU; uFlags, uIDNewItem : UINT; lpNewItem : PKOLChar) : BOOL
Function wCallMsgFilter( var lpMsg : TMsg; nCode : Integer) : BOOL
12829:
                      //Function
                   wCallWindowProc(lpPrevWndFunc:TFNWndProc;hWnd:HWND;Msg:UINT;wParam:WPARAM;lParam:LPARAM):LRESULT
                   //Function wChangeDisplaySettings( var lpDevMode : TDeviceMode; dwFlags : DWORD) : Longint
// Function wChangeDisplaySettingsEx( lpszDeviceName:PKOLChar;var lpDevMode: TDeviceMode; wnd : HWND;
12831:
12832:
                   dwFlags : DWORD; lParam : Pointer) : Longint
12833:
                     \textbf{Function} \ \ \text{wChangeMenu(hMenu:HMENU;cmd:UINT;lpszNewItem:PKOLChar;cmdInsert:UINT;flags:UINT):BOOLiinsert:PKOLChar;cmdInsert:UINT;flags:UINT):BOOLiinsert:PKOLChar;cmdInsert:UINT;flags:UINT):BOOLiinsert:PKOLChar;cmdInsert:UINT;flags:UINT):BOOLiinsert:PKOLChar;cmdInsert:UINT;flags:UINT):BOOLiinsert:PKOLChar;cmdInsert:UINT;flags:UINT):BOOLiinsert:PKOLChar;cmdInsert:UINT;flags:UINT):BOOLiinsert:PKOLChar;cmdInsert:UINT;flags:UINT):BOOLiinsert:PKOLChar;cmdInsert:UINT;flags:UINT):BOOLiinsert:PKOLChar;cmdInsert:UINT;flags:UINT):BOOLiinsert:PKOLChar;cmdInsert:UINT;flags:UINT):BOOLiinsert:PKOLChar;cmdInsert:UINT;flags:UINT):BOOLiinsert:PKOLChar;cmdInsert:UINT;flags:UINT):BOOLiinsert:PKOLChar;cmdInsert:UINT;flags:UINT):BOOLiinsert:PKOLChar;cmdInsert:UINT;flags:UINT):BOOLiinsert:PKOLChar;cmdInsert:UINT;flags:UINT):BOOLiinsert:PKOLChar;cmdInsert:UINT;flags:UINT;flags:UINT;flags:UINT;flags:UINT;flags:UINT;flags:UINT;flags:UINT;flags:UINT;flags:UINT;flags:UINT;flags:UINT;flags:UINT;flags:UINT;flags:UINT;flags:UINT;flags:UINT;flags:UINT;flags:UINT;flags:UINT;flags:UINT;flags:UINT;flags:UINT;flags:UINT;flags:UINT;flags:UINT;flags:UINT;flags:UINT;flags:UINT;flags:UINT;flags:UINT;flags:UINT;flags:UINT;flags:UINT;flags:UINT;flags:UINT;flags:UINT;flags:UINT;flags:UINT;flags:UINT;flags:UINT;flags:UINT;flags:UINT;flags:UINT;flags:UINT;flags:UINT;flags:UINT;flags:UINT;flags:UINT;flags:UINT;flags:UINT;flags:UINT;flags:UINT;flags:UINT;flags:UINT;flags:UINT;flags:UINT;flags:UINT;flags:UINT;flags:UINT;flags:UINT;flags:UINT;flags:UINT;flags:UINT;flags:UINT;flags:UINT;flags:UINT;flags:UINT;flags:UINT;flags:UINT;flags:UINT;flags:UINT;flags:UINT;flags:UINT;flags:UINT;flags:UINT;flags:UINT;flags:UINT;flags:UINT;flags:UINT;flags:UINT;flags:UINT;flags:UINT;flags:UINT;flags:UINT;flags:UINT;flags:UINT;flags:UINT;flags:UINT;flags:UINT;flags:UINT;flags:UINT;flags:UINT;flags:UINT;flags:UINT;flags:UINT;flags:UINT;flags:UINT;flags:UINT;flags:UINT;flags:UINT;flags:UINT;flags:UINT;flags:UINT;flags:UINT;flags:UINT;flags:UINT;flags:UINT;flags:UINT;f
12834:
                      Function wCharLower( lpsz : PKOLChar) : PKOLChar
                     Function wCharLowerBuff( lpsz : PKOLChar; cchLength : DWORD) : DWORD Function wCharNext( lpsz : PKOLChar) : PKOLChar
12835:
12836:
                     //Function wCharNextEx( CodePage : Word; lpCurrentChar : LPCSTR; dwFlags : DWORD) : LPSTR Function wCharPrev( lpszStart : PKOLChar; lpszCurrent : PKOLChar) : PKOLChar
12837:
12838:
                     // Function wCharPrevEx( CodePage : Word; lpStart, lpCurrentChar : LPCSTR; dwFlags : DWORD) : LPSTR Function wCharToOem( lpszSrc : PKOLChar; lpszDst : PKOLChar) : BOOL
12839:
12840:
                     Function wCharToOemBuff( lpszSrc : PKOLChar; lpszDst : PKOLChar; cchDstLength : DWORD) : BOOL
12841:
                     Function wCharUpper( lpsz : PKOLChar) : PKOLChar
12842:
                     Function wCharUpperBuff( lpsz : PKOLChar; cchLength : DWORD) : DWORD

Function wCopyAcceleratorTable( hAccelSrc : HACCEL; var lpAccelDst, cAccelEntries : Integer) : Integer

Function wCreateAcceleratorTable( var Accel, Count : Integer) : HACCEL
12843:
12844:
12845:
                     //Function wCreateDesktop(lpszDesktop,
                   1psz Device: PKOLChar; pDevmode: PDeviceMode; dwFlags: DWORD; dwDesiredAccess: DWORD; 1psa: PSecurityAttribs): HDESK DWORD; dwDesiredAccess: DWORD;
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//Function wCreateDialogIndirectParam( hInstance : HINST; const lpTemplate : TDlgTemplate; hWndParent : HWND; lpDialogFunc : TFNDlgProc; dwInitParam : LPARAM) : HWND //Function wCreateDialogParam( hInstance : HINST; lpTemplateName : PKOLChar; hWndParent : HWND;
12847:
         lpDialogFunc: TFNDlgProc; dwInitParam : LPARAM) : HWND

Function wCreateMDIWindow( lpClassName, lpWindowName:PKOLChar;dwStyle: DWORD; X,Y,nWidth,nHeight:Integer;
12849:
         hWndParent : HWND; hInstance : HINST; lParam : LPARAM) : HWND
12850: //Function wCreateWindowEx(dwExStyle:DWORD;lpClassName:PKOLChar;lpWindowName:PKOLChar;dwStyle DWORD;X,Y,
         nWidth, nHeight:Int WndParent:HWND;hMenu:HMENU;hInstance:HINST;lpParam:Pointer):HWND
12851:
           //Function wCreateWindowStation(lpwinsta:PKOLChar;dwReserv,
         {\it dwDesiredAccess:DWORD;lpsa:PSecurityAttribs):HWINSTA;}
12852:
          Function wDefDlgProc( hDlg : HWND; Msg : UINT; wParam : WPARAM; lParam : LPARAM) : LRESULT
           Function wDefFrameProc(hWnd,hWndMDIClient:HWND;uMsg:UINT;wParam:WPARAM;lParam:LPARAM):LRESULT;
12854:
          Function wDefMDIChildProc( hWnd : HWND; uMsg : UINT; wParam : WPARAM; lParam: LPARAM):LRESULT;
          Function wDefWindowProc( hWnd : HWND; Msg : UINT; wParam : WPARAM; 1Param:LPARAM): LRESULT
12855:
           //Function wDialogBoxIndirectParam( hInstance : HINST; const lpDialogTemplate : TDlgTemplate; hWndParent
12856:
          : HWND; lpDialogFunc : TFNDlgProc; dwInitParam : LPARAM) : Integer
           //Function wDialogBoxParam( hInstance : HINST; lpTemplateName : PKOLChar; hWndParent : HWND; lpDialogFunc
            TFNDlgProc; dwInitParam : LPARAM) : Integer
12858:
          Function wDispatchMessage( const lpMsg : TMsg) : Longint
          Function wDlgDirList(hDlg:HWND;lpPathSpec:PKOLChar;nIDListBox,
12859:
         nIDStaticPath:Integer;uFileType:UINT):Integer
          Function wDlgDirListComboBox(hDlg:HWND;lpPathSpec:PKOLChar;nIDComboBox,
         nIDStaticPath:Int;uFiletype:UINT):Int;
          Function wDlgDirSelectComboBoxEx( hDlg : HWND; lpString:PKOLChar;nCount,nIDComboBox:Integer): BOOL
12861:
          Function wDlgDirSelectEx( hDlg : HWND; lpString : PKOLChar; nCount, nIDListBox : Integer) : BOOL
12862:
12863:
         //Function wDrawState(DC:HDC;Brush:HBRUSH;CBFunc:TFNDrawStateProc;lData:LPARA;wDat:WPARA;x,y,cx,
          cy:Int;Flags:UINT):BOOL;
          Function wDrawText(hDC:hDC:hDC;lpString:PKOLChar;nCount:Integer;var lpRect:TRect;uFormat:UINT):Integer;
Function wFindWindow( lpClassName, lpWindowName : PKOLChar) : HWND
Function wFindWindowEx( Parent, Child : HWND; ClassName, WindowName : PKOLChar) : HWND
12864:
12865:
           //Function wGetAltTabInfo(hwnd:HWND;iItem:Int;var
12867:
         pati:TAltTabInfo;pszItemText:PKOLChar;cchItemText:UINT):BOOL;
         // Function wGetClassInfo( hInstance : HINST; lpClassName : PKOLChar; var lpWndClass : TWndClass) : BOOL
//Function wGetClassInfoEx( Instance : HINST; Classname : PKOLChar; var WndClass : TWndClassEx) : BOOL
Function wGetClassLong( hWnd : HWND; nIndex : Integer) : DWORD
Function wGetClassName( hWnd : HWND; lpClassName : PKOLChar; nMaxCount : Integer) : Integer
Function wGetClassName( hWnd : HWND; lpClassName : PKOLChar; nMaxCount : Integer) : Integer
12868:
12869:
12870:
12871:
12872:
          Function wGetClipboardFormatName( format : UINT; lpszFormatName:PKOLChar;cchMaxCount:Integer):Integer;
          Function wGetDlgItemText( hDlg: HWND;nIDDlgItem:Integer;lpString:PKOLChar;nMaxCount:Integer):UINT
12873:
          Function wGetKeyNameText( lParam : Longint; lpString : PKOLChar; nSize : Integer) : Integer Function wGetKeyboardLayoutName( pwszKLID : PKOLChar) : BOOL
12874:
12875:
12876:
          //Function wGetMenuItemInfo( p1 : HMENU; p2 : UINT; p3 : BOOL; var p4 : TMenuItemInfo) : BOOL Function wGetMenuString(hMenu:HMENU;uIDItem:UINT;lpString:PKOLChar;nMaxCount:Integer;uFlag:UINT):Integer;
12877:
          Function wGetMessage( var lpMsg : TMsg; hWnd : HWND; wMsgFilterMin, wMsgFilterMax : UINT) : BOOL

Function wGetProp( hWnd : HWND; lpString : PKOLChar) : THandle
12878:
12879:
12880:
           //Function wGetTabbedTextExtent( hDC : HDC; lpString : PKOLChar; nCount, nTabPositions : Integer; var
         lpnTabStopPositions) : DWORD
12881:
         //Function wGetUserObjectInformation(hObj:THandle:nIndex:Int:pvInfo:Ptr:nLength:DWORD:var
         lpnLengthNeed:DWORD)BOOL;
          Function wGetWindowLong( hWnd : HWND; nIndex : Integer) : Longint
12882:
          Function wGetWindowModuleFileName( hwnd: HWND; pszFileName: PKOLChar; cchFileNameMax: UINT): UINT Function wGetWindowText( hWnd: HWND; lpString: PKOLChar; nMaxCount: Integer): Integer
12883:
12884:
           Function wGetWindowTextLength( hWnd : HWND) : Integer
12885:
          // Function \ wGrayString(hDC:HDC;hBrush:HBRUSH;lpOutFunc:TFNGrayStrProc;lpDat:LPARA;nCnt,X,Y,nWidt,
         nHeigt:Int):BOOL;
          Function wInsertMenu( hMenu : HMENU; uPosition, uFlags, uIDNewItem : UINT; lpNewItem : PKOLChar) : BOOL
12887:
12888:
          // Function \ wInsertMenuItem( \ p1 : HMENU; \ p2 : UINT; \ p3 : BOOL; \ const \ p4 : TMenuItemInfo) : BOOL \ Function \ wIsCharAlpha( \ ch : KOLChar) : BOOL
          Function wIsCharAlphaNumeric( ch : KOLChar) : BOOL
12890:
          Function wIsCharLower( ch : KOLChar) : BOOL
Function wIsCharUpper( ch : KOLChar) : BOOL
12891:
12892:
12893:
          Function wIsDialogMessage( hDlg : HWND; var lpMsg : TMsg) : BOOL
12894:
           Function wLoadAccelerators( hInstance : HINST; lpTableName : PKOLChar) : HACCEL
          Function wLoadBitmap( hInstance : HINST; lpBitmapName : PKOLChar) : HBITMAP Function wLoadCursor( hInstance : HINST; lpCursorName : PKOLChar) : HCURSOR
12895:
12896:
          Function wLoadCursorFromFile( lpFileName : PKOLChar) : HCURSOR
Function wLoadIcon( hInstance : HINST; lpIconName : PKOLChar) : HICON
12897:
12899:
           12900:
          \textbf{Function} \ \ \text{wLoadKeyboardLayout} \ ( \ \ \text{pwszKLID} \ : \ \ \text{PKOLChar}; \ \ \text{Flags} \ : \ \ \text{UINT}) \ : \ \ \text{HKL}
          Function wLoadMenu( hInstance : HINST; lpMenuName : PKOLChar) : HMENU
12901:
          //Function wLoadMenuIndirect( lpMenuTemplate : Pointer) : HMENU
Function wLoadString(hInstance:HINST;uID: UINT; lpBuffer :PKOLChar;nBufferMax:Integer):Integer
12902:
12903:
          Function wMapVirtualKey( uCode, uMapType : UINT) : UINT

Function wMapVirtualKey( uCode, uMapType : UINT): UINT

Function wMapVirtualKeyEx( uCode, uMapType : UINT; dwhkl : HKL) : UINT

Function wMessageBox( hWnd : HWND; lpText, lpCaption : PKOLChar; uType : UINT) : Integer

Function wMessageBoxEx( hWnd:HWND; lpText,lpCaption:PKOLChar; uType:UINT; wLanguageId:Word): Integer
12904:
12905:
12906:
12907:
          //Function wMessageBoxIndirect( const MsgBoxParams : TMsgBoxParams) : BOOL
Function wModifyMenu( hMnu : HMENU; uPosition, uFlags, uIDNewItem : UINT; lpNewItem : PKOLChar) : BOOL
12908:
12909:
          //Function wOemToAnsi( const lpszSrc : LPCSTR; lpszDst : LPSTR) : BOOL //7Function wOemToAnsiBuff( lpszSrc : LPCSTR; lpszDst : LPSTR; cchDstLength : DWORD) : BOOL
12910:
12911:
          //Function wOemToChar( lpszSrc : PKOLChar; lpszDst : PKOLChar) : BOOL
Function wOemToCharBuff( lpszSrc : PKOLChar; lpszDst : PKOLChar; cchDstLength : DWORD) : BOOL
12913:
12914:
          Function wOpenDesktop(lpszDesktop:PKOLChar;dwFlags:DWORD;fInherit:BOOL;dwDesiredAccess:DWORD): HDESK
          Function wOpenWindowStation( lpszWinSta : PKOLChar; fInherit : BOOL; dwDesiredAccess : DWORD): HWINSTA
12915:
          Function wPeekMessage( var lpMsg: TMsg; hWnd: HWND; wMsgFilterMin, wMsgFilterMax, wRemoveMsg:UINT): BOOL
12916:
          Function wPostMessage( hWnd : HWND; Msg : UINT; wParam : WPARAM; lParam : LPARAM) : BOOL
12917:
          Function wPostThreadMessage(idThread:DWORD;Msg : UINT; wParam : WPARAM; lParam : LPARAM) : BOOL
12918:
          Function wRealGetWindowClass( hwnd : HWND; pszType : PKOLChar; cchType : UINT) : UINT
12919:
12920: // Function wRegisterClass( const lpWndClass : TWndClass) : ATOM 12921: // Function wRegisterClassEx( const WndClass : TWndClassEx) : ATOM
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12922:
             Function wRegisterClipboardFormat( lpszFormat : PKOLChar) : UINT
12923:
            // Function wRegisterDeviceNotification(hRecipient:THandle;NotificFilter:Pointer;Flags:DWORD):HDEVNOTIFY
             Function wRegisterWindowMessage( lpString : PKOLChar) : UINT
             Function wRemoveProp( hWnd : HWND; lpString : PKOLChar) : THandle
12925 .
12926:
             Function wSendDlgItemMessage(hDlg:HWND;nIDDlgItem:Integer;Msg:UINT;wParam:WPARAM;lParam:LPARAM):Longint;
             Function wSendMessage( hWnd : HWND; Msg : UINT; wParam : WPARAM; lParam : LPARAM) : LRESULT //Function wSendMessageCallback( hWnd : HWND; Msg : UINT; wParam : WPARAM; lParam:LPARAM;
12927:
12928:
            lpResultCallBack : TFNSendAsyncProc; dwData : DWORD) : BOOL
             Function wSendMessageTimeout(hWnd:HWND;Msg:UINT;wParam:WPARAM;lParam:LPARAM; fuFlags,uTimeout:UINT;var
12929:
           lpdwResult:DWORD): LRESULT
12930:
             Function wSendNotifyMessage( hWnd : HWND; Msg : UINT; wParam : WPARAM; lParam : LPARAM) : BOOL
             Function wSetClassLong( hWnd : HWND; nIndex : Integer; dwNewLong : Longint) : DWORD
12932:
             Function wSetDlgItemText( hDlg : HWND; nIDDlgItem : Integer; lpString : PKOLChar) : BOOL
             //Function wSetMenuItemInfo( p1 : HMENU; p2 : UINT; p3 : BOOL; const p4 : TMenuItemInfo) : BOOL Function wSetProp( hWnd : HWND; lpString : PKOLChar; hData : THandle) : BOOL
12933:
12934:
            // Function wSetUserObjectInformation(hObj:THandle;nIndex:Integer;pvInfo:Pointer;nLength:DWORD):BOOL
             Function wSetWindowLong( hWnd : HWND; nIndex : Integer; dwNewLong : Longint) : Longint Function wSetWindowText( hWnd : HWND; lpString : PKOLChar) : BOOL
12936:
12037 .
             //Function wSetWindowsHook( nFilterType : Integer; pfnFilterProc : TFNHookProc) : HHOOK
//Function wSetWindowsHookEx(idHook:Integer;lpfn:TFNHookProc;hmod:HINST;dwThreadId:DWORD):HHOOK;
12938:
12939:
12940:
           // Function wSystemParametersInfo( uiAction, uiParam : UINT; pvParam : Pointer; fWinIni: UINT):BOOL
             Function wTabbedTextOut(hDC:HDC;X,Y:Int;lpString:PKOLChar;nCount,nTabPositions:Int;var
12941:
           lpnTabStopPositions,nTabOrigin:Int):Longint;
             Function wTranslateAccelerator( hWnd : HWND; hAccTable : HACCEL; var lpMsg : TMsg) : Integer Function wTunregisterClass( lpClassName : PKOLChar; hInstance : HINST) : BOOL
12942:
12943:
12944:
             Function wVkKeyScan( ch : KOLChar) : SHORT
12945:
             Function wVkKeyScanEx( ch : KOLChar; dwhkl : HKL) : SHORT
             Function wWinHelp( hWndMain : HWND; lpszHelp : PKOLChar; uCommand : UINT; dwData : DWORD) : BOOL Function wwsprintf( Output : PKOLChar; Format : PKOLChar) : Integer
12946:
12947:
             Function wwwsprintf( Output : PKOLChar; Format : PKOLChar; arglist : va_list) : Integer
12948:
12949:
12950:
            'SID_REVISION','LongInt'(1);'FILENAME_ADVAPI32','String').SetString('ADVAPI32.DLL
12951:
12952:
             'PROC_CONVERTSIDTOSTRINGSIDA', 'String').SetString( 'ConvertSidToStringSidA
             Function GetDomainUserSidS(const domainName:String;const userName:String; var foundDomain:String):String;
12953:
12954:
             Function GetLocalUserSidStr( const UserName : string) : string
12955:
             Function getPid4user( const domain : string; const user : string; var pid : dword) : boolean
12956:
             Function Impersonate2User( const domain : string; const user : string) : boolean
             Function GetProcessUserBypid( pid: DWORD; var UserName, Domain: AnsiString): Boolean
Function KillProcessbyname( const exename: string; var found: integer): integer
12957:
12958:
12959:
             Function getWinProcessList : TStringList
12960:
12961:
12962:
           procedure SIRegister AfSafeSync(CL: TPSPascalCompiler);
12963:
             'AfMaxSyncSlots','LongInt'( 64);
12964:
              'AfSynchronizeTimeout', 'LongInt'( 2000);
TAfSyncSlotID', 'DWORD
12965:
12966:
               \texttt{TAfSyncStatistics','record} \ \texttt{MessagesCount:Int;TimeoutMessages:Int;DisabledMessages:Int;end;CountiesCountiesCountiesCountiesCountiesCountiesCountiesCountiesCountiesCountiesCountiesCountiesCountiesCountiesCountiesCountiesCountiesCountiesCountiesCountiesCountiesCountiesCountiesCountiesCountiesCountiesCountiesCountiesCountiesCountiesCountiesCountiesCountiesCountiesCountiesCountiesCountiesCountiesCountiesCountiesCountiesCountiesCountiesCountiesCountiesCountiesCountiesCountiesCountiesCountiesCountiesCountiesCountiesCountiesCountiesCountiesCountiesCountiesCountiesCountiesCountiesCountiesCountiesCountiesCountiesCountiesCountiesCountiesCountiesCountiesCountiesCountiesCountiesCountiesCountiesCountiesCountiesCountiesCountiesCountiesCountiesCountiesCountiesCountiesCountiesCountiesCountiesCountiesCountiesCountiesCountiesCountiesCountiesCountiesCountiesCountiesCountiesCountiesCountiesCountiesCountiesCountiesCountiesCountiesCountiesCountiesCountiesCountiesCountiesCountiesCountiesCountiesCountiesCountiesCountiesCountiesCountiesCountiesCountiesCountiesCountiesCountiesCountiesCountiesCountiesCountiesCountiesCountiesCountiesCountiesCountiesCountiesCountiesCountiesCountiesCountiesCountiesCountiesCountiesCountiesCountiesCountiesCountiesCountiesCountiesCountiesCountiesCountiesCountiesCountiesCountiesCountiesCountiesCountiesCountiesCountiesCountiesCountiesCountiesCountiesCountiesCountiesCountiesCountiesCountiesCountiesCountiesCountiesCountiesCountiesCountiesCountiesCountiesCountiesCountiesCountiesCountiesCountiesCountiesCountiesCountiesCountiesCountiesCountiesCountiesCountiesCountiesCountiesCountiesCountiesCountiesCountiesCountiesCountiesCountiesCountiesCountiesCountiesCountiesCountiesCountiesCountiesCountiesCountiesCountiesCountiesCountiesCountiesCountiesCountiesCountiesCountiesCountiesCountiesCountiesCountiesCountiesCountiesCountiesCountiesCountiesCountiesCountiesCountiesCountiesCountiesCountiesCountiesCountiesCountiesCountiesCountiesCountiesCountiesCountiesCountiesCountiesCountiesCountiesCountiesCountiesCountiesCountiesCou
12967:
12968:
               TAfSafeSyncEvent',
                                              'Procedure ( ID : TAfSyncSlotID)
12969:
              TAfSafeDirectSyncEvent', 'Procedure
12970:
             Function AfNewSyncSlot( const AEvent : TAfSafeSyncEvent) : TAfSyncSlotID
12971:
             Function AfReleaseSyncSlot( const ID : TAfSyncSlotID) : Boolean
12972:
             Function AfEnableSyncSlot( const ID : TAfSyncSlotID; Enable : Boolean) : Boolean
             Function AfValidateSyncSlot(const ID: TAfSyncSlotID): Boolean
Function AfSyncEvent(const ID: TAfSyncSlotID): Boolean
12973:
12974:
             Function AfDirectSyncEvent( Event : TAfSafeDirectSyncEvent; Timeout : DWORD) : Boolean
12975:
12976:
             Function AfIsSyncMethod : Boolean
12977:
             Function AfSyncWnd : HWnd
             Function AfSyncStatistics : TAfSyncStatistics
12978:
12979:
             Procedure AfClearSyncStatistics
12980:
12981:
12982:
           procedure SIRegister AfComPortCore(CL: TPSPascalCompiler);
12983:
           begin
              'fBinary', 'LongWord')( $00000001);
              'fParity', 'LongWord'( $00000002);
12985:
             'fOutxCtsFlow', 'LongWord').SetUInt( $00000004);
12986:
             'fOutxDsrFlow', 'LongWord')( $00000008);
'fDtrControl', 'LongWord')( $00000030);
12987:
12988:
             'fDtrControlDisable', 'LongWord')( $00000000);
12989:
             'IDTrControlDisable', 'LongWord')( $00000000);
'fDtrControlHandshake', 'LongWord')( $00000000);
'fDsrSensitivity', 'LongWord')( $00000040);
'fTXContinueOnXoff', 'LongWord')( $00000080);
'fOutX', 'LongWord')( $00000100);
'fInX', 'LongWord')( $00000200);
12990:
12991:
12992:
12993:
12994:
12995:
             'fErrorChar', 'LongWord')( $00000400);
12996:
12997:
               fNull', 'LongWord')( $00000800);
               fRtsControl','LongWord')( $00003000);
12998:
             'fRtsControlDisable', 'LongWord')( $0000000);
'fRtsControlEnable', 'LongWord')( $00001000);
12999:
13000:
               fRtsControlHandshake','LongWord')( $00002000);
13001:
               fRtsControlToggle','LongWord')( $00003000);
13002:
              'fAbortOnError','LongWord')( $00004000);
'fDummy2','LongWord')( $FFFF8000);
13003:
13004:
13005:
               TAfCoreEvent', '( ceOutFree, ceLineEvent, ceNeedReadData, ceException )
              FindClass('TOBJECT'), 'EAfComPortCoreError
FindClass('TOBJECT'), 'TAfComPortCore
13006:
```

```
13008:
            TAfComPortCoreEvent', 'Procedure ( Sender : TAfComPortCore; Even'
13009:
              +'tKind : TAfCoreEvent; Data : DWORD)
             SIRegister_TAfComPortCoreThread(CL);
13010:
13011:
             SIRegister_TAfComPortEventThread(CL);
13012:
            SIRegister TAfComPortWriteThread(CL);
13013:
            SIRegister TAfComPortCore(CL);
13014:
           Function FormatDeviceName( PortNumber : Integer) : string
13015:
13016:
13017:
         procedure SIRegister ApplicationFileIO(CL: TPSPascalCompiler);
13018: begin
             TAFIOFileStreamEvent', 'Function ( const fileName : String; mode: Word) : TStream
13019:
             TAFIOFileStreamExistsEvent', 'Function ( const fileName : String) : Boolean SIRegister_TApplicationFileIO(CL);
13020:
13021:
13022:
             TDataFileCapability', '( dfcRead, dfcWrite )
13023:
             TDataFileCapabilities',
                                                'set of TDataFileCapability
             SIRegister_TDataFile(CL);
13024:
          //TDataFileClass', 'class of TDataFile
Function ApplicationFileIODefined: Boolean
13025 •
13026:
           Function CreateFileStream(const fileName: String; mode: WordfmShareDenyNone):TStream
13027:
           Function FileStreamExists(const fileName: String) : Boolean
13028:
13029:
           //Procedure Register
13030: end;
13031:
13032:
         procedure SIRegister_ALFBXLib(CL: TPSPascalCompiler);
13033: begin
13034:
            TALFBXFieldType', '( uftUnKnown, uftNumeric, uftChar, uftVarchar'
              +', uftCstring, uftSmallint, uftInteger, uftQuad, uftFloat, uftDoublePrecisi' +'on, uftTimestamp, uftBlob, uftBlobId, uftDate, uftTime, uftInt64, uftArray, uftNull )
13035:
13036:
             TALFBXScale', 'Integer
13037:
13038:
             FindClass('TOBJECT'),'EALFBXConvertError
             SIRegister_EALFBXError(CL);
13039:
            SIRegister_EALFBXException(CL);
FindClass('TOBJECT'),'EALFBXGFixError
FindClass('TOBJECT'),'EALFBXDSQLError
13040:
13041:
13042:
             FindClass('TOBJECT'), 'EALFBXDynError
13043:
             FindClass('TOBJECT'), 'EALFBXGBakError
13044:
            FindClass('TOBJECT'),'EALFBXGSecError
13045:
             FindClass('TOBJECT'), 'EALFBXLicenseError
FindClass('TOBJECT'), 'EALFBXGStatError
13046:
13047:
            //EALFBXExceptionClass', 'class of EALFBXError
TALFBXCharacterSet', '(csNONE, csASCII, csBIG_5, csCYRL, csDOS4'
+'37, csDOS850, csDOS852, csDOS857, csDOS860, csDOS861, csDOS863, csDOS865, '
+'csEUCJ_0208, csGB_2312, csISO8859_1, csISO8859_2, csKSC_5601, csNEXT, csOC'
13048:
13049:
13050:
13051:
13052:
              +'TETS, csSJIS_0208, csUNICODE_FSS, csUTF8, csWIN1250, csWIN1251, csWIN1252,'
+' csWIN1253, csWIN1254, csDOS737, csDOS775, csDOS858, csDOS862, csDOS864, c'
13053:
              +'sDOS866, csDOS869, csWIN1255, csWIN1256, csWIN1257, csISO8859_3, csISO8859
+'_4, csISO8859_5, csISO8859_6, csISO8859_7, csISO8859_8, csISO8859_9, csISO
13054:
              +'8859_13, csKOI8R, csKOI8U, csWIN1258, csTIS620, csGBK, csCP943C )
PALFBXTransParam', '( tpConsistency, tpConcurrency, tpShared, tp'
+'Protected, tpExclusive, tpWait, tpNowait, tpRead, tpWrite, tpLockRead, tpL'
13056:
13057:
             TALFBXTransParam',
13058:
13059:
              +'ockWrite, tpVerbTime, tpCommitTime, tpIgnoreLimbo, tpReadCommitted, tpAuto
              +'Commit, tpRecVersion, tpNoRecVersion, tpRestartRequests, tpNoAutoUndo, tpLockTimeout )
13060:
           TALFEXTransParams', 'set of TALFEXTransParam

Function ALFEXStrToCharacterSet( const CharacterSet: AnsiString): TALFEXCharacterSet
13061:
13062:
           Function ALFBXCreateDBParams( Params: AnsiString; Delimiter: Char): AnsiString
13063:
           Function ALFBXCreateBlobParams( Params : AnsiString; Delimiter : Char) : AnsiString
13064:
13065:
            'cALFBXMaxParamLength','LongInt'( 125);
            TALFBXParamsFlag', '( pfNotInitialized, pfNotNullable )
TALFBXParamsFlags', 'set of TALFBXParamsFlag
//PALFBXSQLVar', '^TALFBXSQLVar // will not work
13066:
13067:
13068:
             //PALFBXSQLDaData', '^TALFBXSQLDaData // will not work
TALFBXStatementType', '( stSelect, stInsert, stUpdate, stDelete,'
13069:
13070:
13071:
              +' stDDL, stGetSegment, stPutSegment, stExecProcedure, stStartTrans, stCommi'
13072:
               +'t, stRollback, stSelectForUpdate, stSetGenerator, stSavePoint )
             SIRegister_TALFBXSQLDA(CL);
13073:
             //PALFBXPtrArray', '^TALFBXPtrArray // will not work SIRegister_TALFBXPoolStream(CL);
13074:
13075:
             //PALFBXBlobData', '~TALFBXBlobData // will not work
TALFBXBlobData', 'record Size : Integer; Buffer : string; end
13076:
13077:
            TALFBXB10DData', 'record Size : Integer; Buffer : String; end

//PALFBXArrayDesc', 'ATALFBXArrayDesc // will not work

//TALFBXArrayDesc', 'TISCB10bDesc

//PALFBXArrayInfo', 'ATALFBXArrayInfo // will not work

//TALFBXArrayInfo', 'record index : Integer; size : integer; info: TALFBXArrayDesc; end
13078:
13079:
13080:
13081:
13082:
13083:
             SIRegister_TALFBXSQLResult(CL);
13084:
             //TALFBXSQLResultClass', 'class of TALFBXSQLResult
             SIRegister_TALFBXSQLParams(CL);
//TALFBXSQLParamsClass', 'class of TALFBXSQLParams
13085:
13086:
             TALFBXDSQLInfoData', 'record InfoCode : byte; InfoLen : Word; St' + 'atementType : TALFBXStatementType; end
13087:
13088:
            FindClass('TOBJECT'),'TALFBXLibrary
//PALFBXStatusVector', '^TALFBXStatusVector'/ will not work
TALFBXOnConnectionLost', 'Procedure ( Lib : TALFBXLibrary)
13089:
13090:
13091:
13092:
             //TALFBXOnGetDBExceptionClass', 'Procedure ( Number : Integer; out'
           //HAR DANGE LIBEACEPTION LIBEA
//+' Excep : EALFBXExceptionClass)
SIRegister_TALFBXLibrary(CL);
'cAlfBXDateOffset','LongInt'( 15018);
'cALFBXTimeCoeff','LongInt'( 864000000);
13093:
13094:
13095:
```

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13097:
           // Procedure \ ALFBXDecodeTimeStamp( \ v \ : PISCTimeStamp; \ out \ DateTime \ : \ Double);
          //Procedure ALFBXDecodeTimeStamp1( v : PISCTimeStamp; out TimeStamp : TTimeStamp);
13098:
          //Function ALFBXDecodeTimeStamp2( v : PISCTImeStamp) : Double;

Procedure ALFBXDecodeSQLDate( v : Integer; out Year : SmallInt; out Month, Day : Word)
13100:
          \textbf{Procedure} \ \texttt{ALFBXDecodeSQLTime} (v: \texttt{Cardinal}; \textbf{out} \ \texttt{Hour}, \texttt{Minute}, \texttt{Second}: \texttt{Word}; \ \textbf{out} \ \texttt{Fractions}: \ \texttt{LongWord}) \\
13101:
          //Procedure ALFBXEncodeTimeStamp( const DateTime : TDateTime; v : PISCTimeStamp);
//Procedure ALFBXEncodeTimeStamp1( const Date : Integer; v : PISCTimeStamp);
//Procedure ALFBXEncodeTimeStamp2( const Time : Cardinal; v : PISCTimeStamp);
13102:
13103:
13104:
          Function ALFBXEncodeSQLDate( Year : Integer; Month, Day : Integer) : Integer Function ALFBXEncodeSQLTime( Hour, Minute, Second : Word; var Fractions : LongWord): Cardinal
13105:
13106:
           TALFBXParamType', '( prNone, prByte, prShrt, prCard, prStrg, prIgno )
TALFBXDPBInfo', 'record Name : AnsiString; ParamType : TALFBXParamType; end
13107:
13108:
          Function ALFBXSQLQuote( const name : AnsiString) : AnsiString
Function ALFBXSQLUnQuote( const name : AnsiString) : AnsiString
13109:
13110:
13111:
         end;
13112:
13113: procedure SIRegister_ALFBXClient(CL: TPSPascalCompiler);
13114: begin
            TALFBXClientSQLParam', 'record Value : AnsiString; IsNull : Boolean; end TALFBXClientSQLParams', 'array of TALFBXClientSQLParam
13115:
13116:
            TALFBXClientSelectDataSQL', 'record SQL : AnsiString; Params : T'
13118:
             +'ALFBXClientSQLParams; RowTag : AnsiString; ViewTag : AnsiString; Skip : in'
13119:
             +'teger; First : Integer; CacheThreshold : Integer; end
            TALFBXClientSelectDataSQLs', 'array of TALFBXClientSelectDataSQL
TALFBXClientUpdateDataSQL', 'record SQL : AnsiString; Params: TALFBXClientSQLParams; end
TALFBXClientUpdateDataSQLs', 'array of TALFBXClientUpdateDataSQL
13120:
13121:
13122:
13123:
            TALFBXClientMonitoringIOStats', 'record page_reads : int64; page'
13124:
             +'_writes : int64; page_fetches : int64; page_marks : int64; end
13125:
            SIRegister_TALFBXClient(CL);
            SIRegister_TALFBXConnectionStatementPoolBinTreeNode(CL);
13126:
13127:
            SIRegister_TALFBXConnectionStatementPoolBinTree(CL)
13128:
            SIRegister TALFBXConnectionWithStmtPoolContainer(CL);
            SIRegister TALFBXConnectionWithoutStmtPoolContainer(CL);
13129:
13130:
            SIRegister_TALFBXReadTransactionPoolContainer(CL);
            SIRegister_TALFBXReadStatementPoolContainer(CL);
13132:
            SIRegister_TALFBXStringKeyPoolBinTreeNode(CL);
            SIRegister_TALFBXConnectionPoolClient(CL);
13133:
            SIRegister_TALFBXEventThread(CL);
13134:
13135:
            Function AlMySqlClientSlashedStr( const Str : AnsiString) : AnsiString
13136: end;
13137:
13138: procedure SIRegister_ovcBidi(CL: TPSPascalCompiler);
13139: begin
13140: _OSVERSIONINFOA = record
13141:
              dwOSVersionInfoSize: DWORD;
13142:
              dwMajorVersion: DWORD;
              dwMinorVersion: DWORD;
13143:
13144:
              dwBuildNumber: DWORD;
13145:
              dwPlatformId: DWORD;
13146:
              szCSDVersion: array[0..127] of AnsiChar; { Maintenance AnsiString for PSS usage }
13147:
            end;
          TOSVersionInfoA', '_OSVERSIONINFOA
TOSVersionInfo', 'TOSVersionInfoA
13148:
13149:
          'WS_EX_RIGHT','LongWord')( $00001000);
'WS_EX_LEFT','LongWord')( $00000000);
'WS_EX_RTLREADING','LongWord')( $00002000);
'WS_EX_LTRREADING','LongWord')( $00000000);
13150:
13151:
13152:
13153:
          'WS_EX_LEFTSCROLLBAR','LongWord')( $00004000);
'WS_EX_RIGHTSCROLLBAR','LongWord')( $00000000);
13154:
13155:
          Function SetProcessDefaultLayout( dwDefaultLayout : DWORD) : BOOL
13156:
13157:
           'LAYOUT_RTL','LongWord')( $00000001);
13158:
           'LAYOUT_BTT','LongWord')( $00000002);
13159:
           'LAYOUT_VBH','LongWord')( $00000004);
          'LAYOUT_BITMAPORIENTATIONPRESERVED','LongWord')( $00000008);
'NOMIRRORBITMAP','LongWord')( DWORD ( $80000000 ));
Function SetLayout( dc : HDC; dwLayout : DWORD) : DWORD
13160:
13161:
13162:
          Function GetLayout ( dc : hdc) : DWORD
13163:
13164:
          Function IsBidi : Boolean
13165:
          Function GetCurrentHwProfile( var lpHwProfileInfo : THWProfileInfo) : BOOL
          Function GetVersionEx( var lpVersionInformation: TOSVersionInfo): BOOL

Function SetPriorityClass( hProcess: THandle; dwPriorityClass: DWORD): BOOL
13166:
13167:
13168:
          Function GetPriorityClass( hProcess : THandle) : DWORD
13169:
          Function OpenClipboard( hWndNewOwner : HWND) : BOOL
13170:
          Function CloseClipboard : BOOL
13171:
          Function GetClipboardSequenceNumber : DWORD
13172:
          Function GetClipboardOwner : HWND
13173:
          Function SetClipboardViewer( hWndNewViewer : HWND) : HWND
          Function GetClipboardViewer: HWND

Function ChangeClipboardChain( hWndRemove, hWndNewNext: HWND): BOOL

Function SetClipboardData( uFormat: UINT; hMem: THandle): THandle

Function GetClipboardData( uFormat: UINT): THandle
13174:
13175:
13177:
13178:
          \textbf{Function} \ \texttt{RegisterClipboardFormat} ( \ \texttt{lpszFormat} : \ \texttt{PChar}) \ : \ \texttt{UINT}
          Function CountClipboardFormats : Integer
13179:
          Function EnumClipboardFormats( format : UINT) : UINT
13180:
          Function GetClipboardFormatName(format:UINT;lpszFormatName:PChar;cchMaxCount:Integer):Integer
13181:
13182:
          Function EmptyClipboard : BOOL
          Function IsClipboardFormatAvailable( format : UINT) : BOOL
Function GetPriorityClipboardFormat( var paFormatPriorityList, cFormats : Integer) : Integer
13183:
13184:
13185: Function GetOpenClipboardWindow : HWND
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13186:
               Function EndDialog( hDlq : HWND; nResult : Integer) : BOOT.
               Function GetDlgItem( hDlg : HWND; nIDDlgItem : Integer) : HWND
13187:
                Function SetDlgItemInt( hDlg : HWND; nIDDlgItem : Integer; uValue : UINT; bSigned: BOOL): BOOL
13189:
               Function GetDlgItemInt(hDlg:HWND;nIDDlgItem:Integer;var lpTranslated:BOOL;bSigned: BOOL): UINT
               Function SetDlgItemText( hDlg : HWND; nIDDlgItem : Integer; lpString : PChar) : BOOL Function CheckDlgButton( hDlg : HWND; nIDButton : Integer; uCheck : UINT) : BOOL
13190:
13191:
13192:
               Function CheckRadioButton( hDlg : HWND; nIDFirstButton, nIDLastButton, nIDCheckButton:Integer) : BOOL
               Function IsDlgButtonChecked(hDlg:HWND;nIDButton;Integer): UINT
Function SendDlgItemMessage(hDlg:HWND;nIDDlgItem:Int;Msg:UINT;wParam:WPARAM;lParam:LPARAM):Longint;
13193:
13194:
13195:
             end;
13196:
13197:
             procedure SIRegister DXPUtils(CL: TPSPascalCompiler);
13198: begin
13199:
               Function glExecuteAndWait(cmdLine:String; visibility:Word; timeout:Cardinal; killAppOnTimeOut:Bool):Int;
13200:
               Function GetTemporaryFilesPath : String
13201:
               Function GetTemporaryFileName : String
13202:
               Function FindFileInPaths( const fileName, paths : String) : String
13203:
               Function PathsToString( const paths : TStrings) : String
               Procedure StringToPaths( const pathsString : String; paths : TStrings)
13204:
13205:
               //Function MacroExpandPath( const aPath : String) : String
13206:
13207:
13208:
             procedure SIRegister_ALMultiPartBaseParser(CL: TPSPascalCompiler);
13209: begin
13210:
                 SIRegister_TALMultiPartBaseContent(CL);
13211:
                  SIRegister_TALMultiPartBaseContents(CL);
13212:
                 SIRegister_TAlMultiPartBaseStream(CL);
13213:
                 SIRegister_TALMultipartBaseEncoder(CL);
13214:
                 SIRegister_TALMultipartBaseDecoder(CL);
13215:
               \textbf{Function} \hspace{0.1cm} \texttt{ALMultipartExtractBoundaryFromContentType} ( \hspace{0.1cm} \texttt{aContentType} : \hspace{0.1cm} \texttt{AnsiString}) : \hspace{0.1cm} \texttt{AnsiString}) \\
13216:
               \textbf{Function} \ \texttt{ALMultipartExtractSubValueFromHeaderLine} \\ (\texttt{aHeaderLine}: \texttt{AnsiString}; \texttt{aName}: \texttt{AnsiString}) \\ (\texttt{ahsiString}; \texttt{aname}: \texttt{aname}; \texttt{
13217:
               Function ALMultipartSetSubValueInHeaderLine(aHeaderLine:AnsiString;aName,AValue:AnsiString):AnsiString;
13218: end;
13219:
13220:
             procedure SIRegister SmallUtils(CL: TPSPascalCompiler);
13221: begin
13222:
                 TdriveSize', 'record FreeS : Int64; TotalS : Int64; end
                 TWinVerRec', 'record WinPlatform : Integer; WinMajorVersion : In
13223:
13224:
                    +teger; WinMinorVersion : Integer; WinBuildNumber : Integer; WinCSDVersion: String; end
13225:
               Function aAllocPadedMem( Size : Cardinal) : TObject
               Procedure aFreePadedMem( var P : TObject);
13226:
               Procedure aFreePadedMem1( var P : PChar);
13227:
13228:
               Function aCheckPadedMem( P : Pointer) : Byte
               Function aGetPadMemSize( P : Pointer) : Cardinal
13229:
               Function aAllocMem( Size : Cardinal) : Pointer
Function aStrLen( const Str : PChar) : Cardinal
13230:
13231:
               Function aStrLCopy( Dest : PChar; const Source : PChar; MaxLen : Cardinal) : PChar
13232:
               Function aStrECopy( Dest : PChar; const Source : PChar) : PChar
               Function aStrCopy( Dest : PChar; const Source : PChar) : PChar
13234:
               Function aStrEnd( const Str : PChar) : PChar
Function aStrScan( const Str : PChar; aChr : Char) : PChar
13235:
13236:
               Function aStrMove( Dest : PChar; const Source : PChar; Count : Cardinal) : PChar
13237:
               Function aPCharLength( const Str : PChar) : Cardinal
13238:
               Function aPCharUpper(Str : PChar) : PChar
Function aPCharLower(Str : PChar) : PChar
Function aStrCat(Dest : PChar; const Source : PChar) : PChar
13239:
13240:
13241:
                Function aLastDelimiter( const Delimiters, S : String) : Integer
13242:
               Function aCopyTail( const S : String; Len : Integer) : String
13243:
               Function aInt2Thos( I : Int64) : String
Function aUpperCase( const S : String) : String
Function aLowerCase( const S : string) : String
13244:
13245:
13246:
13247:
               Function aCompareText( const S1, S2 : string) :
               Function aSameText( const S1, S2 : string) : Integer
Function aSameText( const S1, S2 : string) : Boolean
Function aInt2Str( Value : Int64) : String
Function aStr2Int( const Value : String) : Int64
Function aStr2IntDef( const S : string; Default : Int64) : Int64
13248:
13249:
13250:
               Function aGetFileExt( const FileName : String) : String
13252:
13253:
               Function aGetFilePath( const FileName : String) : String
13254:
               Function aGetFileName( const FileName : String) : String
               Function aChangeExt( const FileName, Extension : String) : String
Function aAdjustLineBreaks( const S : string) : string
13255:
13256:
13257:
               Function aGetWindowStr( WinHandle : HWND) : String
13258:
               Function aDiskSpace( Drive : String) : TdriveSize
Function aFileExists( FileName : String) : Boolean
13259:
               Function aFileSize(FileName: String): Int64
Function aDirectoryExists(const Name: string): Boolean
Function aSysErrorMessage(ErrorCode: Integer): string
13260:
13261:
13262:
               Function aShortPathName( const LongName : string) : stringFunction aGetWindowVer : TWinVerRec
13263:
13264:
13265:
               procedure InitDriveSpacePtr;
13266: end;
13267:
13268: procedure SIRegister MakeApp(CL: TPSPascalCompiler);
13269: begin
13270:
             aZero', 'LongInt'( 0);
               'makeappDEF', 'LongInt'( - 1);
'CS_VREDRAW', 'LongInt'( DWORD ( 1 ));
'CS_HREDRAW', 'LongInt'( DWORD ( 2 ));
13271:
13272:
13273:
              'CS_KEYCVTWINDOW','LongInt'( 4);
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13275:
                 'CS DBLCLKS', 'LongInt'( 8);
                  'CS_OMNDC', 'LongWord')( $20);
'CS_CLASSDC', 'LongWord')( $40);
'CS_PARENTDC', 'LongWord')( $80);
13276:
13278:
13279:
                  'CS_NOKEYCVT', 'LongWord')( $100);
                  'CS_NOCLOSE', 'LongWord')( $200);
'CS_SAVEBITS', 'LongWord')( $800);
13280:
13281:
                 'CS_BYTEALIGNCLIENT', 'LongWord')( $1000);
'CS_BYTEALIGNWINDOW', 'LongWord')( $2000);
13282:
13283:
13284:
                  'CS_GLOBALCLASS', 'LongWord')( $4000);
13285:
                   'CS_IME', 'LongWord')( $10000);
                 'CS_IME','LongWord')( $10000);
'CS_DROPSHADOW','LongWord')( $20000);
//PPanelFunc', '^TPanelFunc' / will not work
TPanelStyle', '(psEdge, psTabEdge, psBorder, psTabBorder, psTab, psNone)
TFontLook', '(flBold, flItalic, flUnderLine, flStrikeOut)
TFontLooks', 'set of TFontLook
TMessagefunc','function(NWnd,iMsg,wParam,lParam:Integer):Integer)
TREACTION CONTROL CONTRO
13286:
13287:
13288:
13289:
13290:
13291:
13292.
                 Function SetWinClass(const ClassName:String; pMessFunc: Tmessagefunc; wcStyle : Integer): Word
                 Function SetWinClass(const ClassName: String; pMessFunc: Tmessagerunc; wcStyle: Integer): word Function SetWinClassO( const ClassName: String; pMessFunc: TObject; wcStyle: Integer): Word Function SetWinClass( const ClassName: String; pMessFunc: TObject; wcStyle: Integer): Word
13293:
13294:
                  Function MakeForm(Left,Top,Width,Height:Integer;const Caption:String;WinStyle:Integer):Integer
13295:
13296:
                 Procedure RunMsgLoop( Show : Boolean)
13297:
                 \textbf{Function} \ \ \texttt{MakeFont(Height,Width:Integer}; \ \ \textbf{const} \ \ \texttt{FontName:String}; \ \ \texttt{Look:TFontLooks}; \ \ \texttt{Roman:Boolean)}: \ \ \texttt{Integer}; \ \ \texttt{Integer}; \ \ \texttt{MakeFont(Height,Width:Integer)}; \ \ \texttt{Integer}; \ \ \texttt{MakeFont(Height,Width:Integer)}; \ \ \texttt{Integer}; \ \ \texttt{MakeFont(Height,Width:Integer)}; \ \ \texttt{MakeFon
13298: Function MakeButton(Left, Top, Width, Height:Integer; pCaption:PChar; hParent,
                ID_Number:Cardinal;hFont:Int;
13299: Function MakeListBox(Left,Top,Width,Height,Parent:Integer;const ListItems:String;WinStyle:Integer):Integer
13300:
                 Function MakeComboBox(Left,Top,Width,Height,Parent:Integer;const ListItems:String;WinStyle:Integer):Int
13301:
                 Function MakePanel(Left,Top,Width,Height,
               hParent:Int;WndFunc:TPanelFunc;ID_Number:Card;Style:TPanelStyle):Int;
               Function MakeSubMenu(const ItemList: String; ID1, ID2: Cardinal; hMenu: Integer): Integer Function id4menu(a, b: Byte; c: Byte; d: Byte): Cardinal
13303:
13304:
                 Procedure DoInitMakeApp //set first to init formclasscontrol!
13305: end;
13306:
13307:
               procedure SIRegister ScreenSaver(CL: TPSPascalCompiler);
13308: begin
13309:
                    TScreenSaverOption', '( ssoAutoAdjustFormProperties, ssoAutoHook'
13310:
                       +'KeyboardEvents, ssoAutoHookMouseEvents, ssoEnhancedMouseMoveDetection )
13311:
                     TScreenSaverOptions', 'set of TScreenSaverOption
               'cDefaultScreenSaverOptions', 'LongInt').Value.ts32:=ord(ssoAutoAdjustFormProperties) or ord(ssoAutoHookKeyboardEvents) or ord(ssoEnhancedMouseMoveDetection);
13312:
13313:
                    TScreenSaverPreviewEvent', 'Procedure ( Sender : TObject; previewHwnd: HWND) SIRegister_TScreenSaver(CL);
13314:
                  //Procedure Register
13315:
13316:
                 Procedure SetScreenSaverPassword
13317: end;
13318:
13319: procedure SIRegister_XCollection(CL: TPSPascalCompiler);
13320: begin
13321:
                    FindClass('TOBJECT'), 'TXCollection
13322:
                    SIRegister_EFilerException(CL);
13323:
                    SIRegister_TXCollectionItem(CL);
                     //TXCollectionItemClass', 'class of TXCollectionItem
13324:
13325:
                    SIRegister_TXCollection(CL);
13326:
                 Procedure RegisterXCollectionDestroyEvent( notifyEvent : TNotifyEvent)
                 Procedure DeRegisterXCollectionDestroyEvent( notifyEvent : TNotifyEvent)
13327:
                  Procedure RegisterXCollectionItemClass( aClass : TXCollectionItemClass)
13328:
                 Procedure UnregisterXCollectionItemClass( aClass : TXCollectionItemClass)
13329:
                 Function FindXCollectionItemClass( const className : String) : TXCollectionItemClass
Function GetXCollectionItemClassesList( baseClass : TXCollectionItemClass) : TList
13330:
13331:
13332:
               end
13333:
13334: procedure SIRegister_XOpenGL(CL: TPSPascalCompiler);
13335: begin
                    TMapTexCoordMode', '(mtcmUndefined, mtcmNull, mtcmMain, mtcmDual, mtcmSecond,mtcmArbitrary);
13336:
                  Procedure xglMapTexCoordToNull
                 Procedure xglMapTexCoordToMain
13338:
13339:
                 Procedure xglMapTexCoordToSecond
13340:
                 Procedure xqlMapTexCoordToDual
13341:
                 Procedure xglMapTexCoordToArbitrary( const units : array of Cardinal);
                  Procedure xglMapTexCoordToArbitrary1( const bitWiseUnits : Cardinal)
13342:
13343:
                 Procedure xglMapTexCoordToArbitraryAdd( const bitWiseUnits : Cardinal)
13344:
                 Procedure xglBeginUpdate
13345:
                 Procedure xglEndUpdate
13346:
                 Procedure xglPushState
13347:
                  Procedure xglPopState
13348:
                 Procedure xglForbidSecondTextureUnit
13349:
                 Procedure xglAllowSecondTextureUnit
13350:
                 Function xqlGetBitWiseMapping : Cardinal
13351:
13352:
               procedure SIRegister VectorLists(CL: TPSPascalCompiler);
13353:
13354: begin
                    TBaseListOption', '( bloExternalMemory, bloSetCountResetsMemory)
TBaseListOptions', 'set of TBaseListOption
13355:
13356:
13357:
                    SIRegister_TBaseList(CL);
                    SIRegister_TBaseVectorList(CL);
SIRegister_TAffineVectorList(CL);
13358:
13359:
13360:
                    SIRegister_TVectorList(CL);
```

```
SIRegister_TTexPointList(CL);
SIRegister_TXIntegerList(CL);
13361:
13362:
13363:
                 //PSingleArrayList',
                                                      '^TSingleArrayList // will not work
                SIRegister_TSingleList(CL);
13364:
13365:
                SIRegister TByteList(CL);
13366:
                SIRegister TOuaternionList(CL);
13367:
              Procedure QuickSortLists( startIndex, endIndex : Integer; refList : TSingleList; objList : TList);
              Procedure QuickSortLists1( startIndex, endIndex : Integer; refList : TSingleList; objList : TBaseList);
13368:
              Procedure FastQuickSortLists(startIndex,
13369:
             endIndex:Integer;refList:TSingleList;objList:TPersistentObjectList);
13370:
            end;
13371:
13372:
            procedure SIRegister_MeshUtils(CL: TPSPascalCompiler);
13373: begin
13374:
              Procedure ConvertStripToList( const strip : TAffineVectorList; list : TAffineVectorList);
13375:
              Procedure ConvertStripToList1( const strip : TIntegerList; list : TIntegerList);
              Procedure ConvertStripToList2(const strip:TAffineVectorList;const
             indices:TIntegerList;list:TAffineVectorList);
13377:
              Procedure ConvertIndexedListToList(const data: TAffineVectlist; const
            indices:TIntegerList;list:TAffineVectorList);
13378:
              Function BuildVectorCountOptimizedIndices(const vertices:TAffineVectorList; const
             normals:TAffineVectorList; const texCoords : TAffineVectorList) : TIntegerList
13379: Procedure RemapReferences( reference : TAffineVectorList; const indices : TIntegerList);
13380: Procedure RemapReferences1( reference : TIntegerList; const indices : TIntegerList);
13381: Procedure RemapAndCleanupReferences( reference : TAffineVectorList; indices : TIntegerList)
13382:
              Function RemapIndicesToIndicesMap( remapIndices : TIntegerList) : TIntegerList
13383:
              Procedure RemapTrianglesIndices( indices, indicesMap : TIntegerList)
              Procedure RemapIndices( indices, indicesMap : TIntegerList)
Procedure UnifyTrianglesWinding( indices : TIntegerList)
Procedure InvertTrianglesWinding( indices : TIntegerList)
13384:
13385:
13386:
13387:
              Function BuildNormals( reference : TAffineVectorList; indices : TIntegerList) : TAffineVectorList
13388:
              Function BuildNonOrientedEdgesList(triangleIndices:TIntegerList; triangleEdges : TIntegerList;
            edgesTriangles : TIntegerList) : TIntegerList
13389:
              Procedure WeldVertices ( vertices : TAffineVectorList; indicesMap : TIntegerList; weldRadius : Single)
              Function StripifyMesh(indices:TIntegerList;maxVertexIndex:Integer;agglomerateLoneTriangles:Boolean)
            TPersistentObjectList;
13391:
              Procedure IncreaseCoherency( indices : TIntegerList; cacheSize : Integer)
Procedure SubdivideTriangles( smoothFactor : Single; vertices : TAffineVectorList; triangleIndices :
13392:
             TIntegerList; normals : TAffineVectorList; onSubdivideEdge : TSubdivideEdgeEvent)
13393:
13394:
            procedure SIRegister_JclSysUtils(CL: TPSPascalCompiler);
13395:
13396:
            begin
13397:
              Procedure GetAndFillMem( var P : TObject; const Size : Integer; const Value : Byte)
              Procedure FreeMemAndNil( var P : TObject)
Function PCharOrNil( const S : string) : PChar
13398:
13399:
13400:
                SIRegister TJclReferenceMemoryStream(CL);
13401:
                FindClass('TOBJECT'), 'EJclVMTError
13402:
               {Function GetVirtualMethodCount( AClass : TClass) : Integer
13403:
              Function GetVirtualMethod( AClass : TClass; const Index : Integer) : Pointer
13404:
              Procedure SetVirtualMethod( AClass: TClass; const Index: Integer; const Method: Pointer)
13405:
                PDynamicIndexList', '^TDynamicIndexList // will not work
PDynamicAddressList', '^TDynamicAddressList // will not work
13406:
13407:
              Function GetDynamicMethodCount( AClass : TClass) : Integer
13408:
              Function \ \textit{GetDynamicIndexList}(\ \textit{AClass} \ : \ \textit{TClass}) \ : \ \textit{PDynamicIndexList}
13409:
              Function GetDynamicAddressList( AClass : TClass) : PDynamicAddressList
13410:
              Function HasDynamicMethod( AClass : TClass; Index : Integer) : Boolean
              Function GetDynamicMethod( AClass : TClass; Index : Integer) : Pointer
13411:
              Function GetInitTable( AClass : TClass) : PTypeInfo
PFieldEntry', '^TFieldEntry // will not work}
TFieldEntry', 'record OffSet : Integer; IDX : Word; Name : Short'
13412:
13413:
13414:
13415:
                  +'String; end
13416:
              Function JIsClass( Address : Pointer) : Boolean
13417:
              Function JIsObject( Address : Pointer) : Boolean
13418:
              Function GetImplementorOfInterface( const I : IInterface) : TObject
13419:
                TDigitCount',
                                          'Integer
13420:
                SIRegister_TJclNumericFormat(CL);
13421:
              Function JIntToStrZeroPad( Value, Count : Integer) : AnsiString
               TTextHandler', 'Procedure ( const Text : string)
/ 'ABORT_EXIT_CODE','LongInt'( ERROR_CANCELLED 1223);
13422:
13423: //
              Function JExecute(const
13424:
             \texttt{CommandLine:} \textbf{string}; \texttt{OutputLineCallback:} \texttt{TTextHandler}; \texttt{RawOutpt:Bool}; \texttt{AbortPtr:PBool}) : \texttt{Card}; \texttt{C
13425:
              13426:
              \textbf{Function} \ \texttt{ReadKey} \ : \ \texttt{Char}
                TModuleHandle', 'HINST
//TModuleHandle', 'Pointer
13427:
13428:
               'INVALID_MODULEHANDLE_VALUE', 'LongInt'( TModuleHandle ( 0 ));
13429:
              Function LoadModule( var Module : TModuleHandle; FileName : string) : Boolean
Function LoadModuleEx( var Module : TModuleHandle; FileName : string; Flags : Cardinal) : Boolean
13430:
13431:
               Procedure UnloadModule( var Module : TModuleHandle)
              Function GetModuleSymbol( Module : TModuleHandle; SymbolName : string) : Pointer
13433:
13434:
              Function GetModuleSymbolEx( Module : TModuleHandle; SymbolName : string; var Accu : Boolean) : Pointer
              Function ReadModuleData(Module:TModuleHandle;SymbolName:string;var Buffer,Size: Cardinal):Boolean;
13435:
13436:
              Function WriteModuleData(Module:TModuleHandle;SymbolName:string;var Buffer,Size:Cardinal):Boolean;
                FindClass('TOBJECT'),'EJclConversionError
13437:
              Function JStrToBoolean( const S : string) : Boolean
13438:
              Function JBooleanToStr( B : Boolean) : string
13439:
              Function JIntToBool( I : Integer) : Boolean
13440:
13441: Function JBoolToInt( B : Boolean) : Integer
```

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13442:
           'ListSeparator', 'String ';
           'ListSeparator1','String ':
13443:
           Procedure ListAddItems( var List : string; const Separator, Items : string)
           Procedure ListIncludeItems( var List: string; const Separator, Items: string)

Procedure ListRemoveItems( var List: string; const Separator, Items: string)
13445:
13446:
           Procedure ListDelItem( var List : string; const Separator : string; const Index : Integer)
Function ListItemCount( const List, Separator : string) : Integer
13447:
13448:
13449:
           Function ListGetItem( const List, Separator : string; const Index : Integer) : string
13450:
           Procedure ListSetItem(var List:string;const Separator:string;const Index:Integer;const Value:string)
13451:
           \textbf{Function} \ \texttt{ListItemIndex}( \ \textbf{const} \ \texttt{List}, \ \texttt{Separator}, \ \texttt{Item} : \ \textbf{string}) \ : \ \texttt{Integer}
           Function SystemTObjectInstance : LongWord
13452:
           Function IsCompiledWithPackages : Boolean
13454:
           Function JJclGUIDToString( const GUID : TGUID) : string
           Function JJclStringToGUID( const S : string) : TGUID
13455:
13456:
            SIRegister TJclIntfCriticalSection(CL);
13457:
            SIRegister_TJclSimpleLog(CL);
13458:
           Procedure InitSimpleLog( const ALogFileName : string)
13459:
         end;
13460:
13461:
         procedure SIRegister_JclBorlandTools(CL: TPSPascalCompiler);
13462:
         begin
13463:
             FindClass('TOBJECT'), 'EJclBorRADException
            TJclBorRADToolKind', '( brDelphi, brCppBuilder, brBorlandDevStudio )
TJclBorRADToolEdition', '( deOPEN, dePRO, deSVR )
TJclBorRADToolEdition', '( deSTD, dePRO, deCSS, deARC )
13464:
13465:
13466:
13467:
            TJclBorRADToolPath', 'string
13468:
            'SupportedDelphiVersions', 'LongInt'( 5 or 6 or 7 or 8 or 9 or 10 or 11);
            'SupportedBCBVersions','LongInt'(5 or 6 or 10 or 11);
'SupportedBDSVersions','LongInt'(1 or 2 or 3 or 4 or 5);
13469:
13470:
           BorRADToolRepositoryPagesSection','String 'Repository Pages
13471:
           BorRADToolRepositoryDialogsPage','String 'Dial
BorRADToolRepositoryFormsPage','String 'Forms
                                                                      'Dialogs
13472:
13473:
13474:
           BorRADToolRepositoryProjectsPage', 'String 'Projects
13475:
           BorRADToolRepositoryDataModulesPage', 'String 'Data Modules
           BorRADToolRepositoryObjectType','String 'Type
BorRADToolRepositoryFormTemplate','String 'FormTemplate
13476:
13477:
13478:
           BorRADToolRepositoryProjectTemplate','String 'ProjectTemplate
           BorRADToolRepositoryObjectName','String 'Name
BorRADToolRepositoryObjectPage','String 'Page
13479:
13480:
13481:
           BorRADToolRepositoryObjectIcon','String 'Icon
           BorRADToolRepositoryObjectDescr','String 'Description
BorRADToolRepositoryObjectAuthor','String 'Author
BorRADToolRepositoryObjectAncestor','String 'Ancestor
13482:
13483:
13484:
           BorRADToolRepositoryObjectDesigner', 'String
                                                                          'Designer
13485:
           BorRADToolRepositoryDesignerDfm','String 'dfm
BorRADToolRepositoryDesignerXfm','String 'xfm
13486:
13487:
           BorRADToolRepositoryObjectNewForm', String 'DefaultNewForm BorRADToolRepositoryObjectMainForm', String 'DefaultMainForm
13488:
13489:
13490:
           SourceExtensionDelphiPackage', 'String '.dpk
13491:
           SourceExtensionBCBPackage','String '.bpk
13492:
           SourceExtensionDelphiProject', 'String '.dpr
           SourceExtensionBCBProject', 'String '.bpr
SourceExtensionBDSProject', 'String '.bdsproj
13493:
13494:
           SourceExtensionDProject', 'String '.dproj
BinaryExtensionPackage', 'String '.bpl
BinaryExtensionLibrary', 'String '.dll
13495:
13496:
13497:
           BinaryExtensionExecutable','String '.exe
13498:
13499:
           CompilerExtensionDCP', 'String '.dcp
           CompilerExtensionBPI', 'String '.bpi
CompilerExtensionLIB', 'String '.lib
13500:
13501:
           CompilerExtensionTDS', 'String
13502:
                                                        .tds
13503:
           CompilerExtensionMAP', 'String
                                                      '.map
13504:
           CompilerExtensionDRC', 'String '.drc
CompilerExtensionDEF', 'String '.def
13505:
           SourceExtensionCPP', 'String '.cpp
SourceExtensionH', 'String '.h
13506:
13507:
13508:
           SourceExtensionPAS', 'String '.pas
           SourceExtensionDFM', 'String '.dfm
13509:
           SourceExtensionXFM', 'String '.xfm
13510:
           SourceDescriptionPAS', 'String 'Pascal source file SourceDescriptionCPP', 'String 'C++ source file
13511:
13512:
          DesignerVCL', 'String 'VCL
DesignerCLX', 'String 'CLX
ProjectTypePackage', 'String 'package
ProjectTypeLibrary', 'String 'library
13513:
13514:
13515:
13516:
13517:
           ProjectTypeProgram','String
                                                   'program
13518:
           Personality32Bit','String '32 bit
Personality64Bit','String '64 bit
PersonalityDelphi','String 'Delphi
13519:
13520:
           PersonalityDelphiDotNet','string 'Delphi.net
PersonalityBCB','string 'C++Builder
13521:
13522:
           PersonalityCSB','String 'C#Builder
PersonalityVB','String 'Visual Basic
13523:
13524:
           PersonalityDesign', 'String 'Design
PersonalityUnknown', 'String 'Unknown personality
13525:
13526:
13527:
           PersonalityBDS', 'String 'Borland Developer Studio
           DOFDirectoriesSection', 'String 'Directories
DOFUnitOutputDirKey', 'String 'UnitOutputDir
DOFSearchPathName', 'String 'SearchPath
13528:
13529:
```

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13531:
          DOFConditionals', 'String 'Conditionals
          DOFLinkerSection', 'String 'Linker
13532:
          DOFPackagesKey', 'String 'Packages
DOFCompilerSection', 'String 'Compiler
DOFPackageNoLinkKey', 'String 'PackageNoLink
DOFAdditionalSection', 'String 'Additional
13534 .
13535:
13536:
          DOFOptionsKey', 'String 'Options
TJclBorPersonality', '(bpDelphi32, bpDelphi64, bpBCBuilder32, b'
13537:
            TJclBorPersonality', '( bpDelphi32, bpDelphi64, bpBCBuilder32, b'+'pBCBuilder64, bpDelphiNet64, bpCSBuilder32, bpCSBuilder64, '+'bpVisualBasic32, bpVisualBasic64, bpDesign, bpUnknown )

TJclBorPersonality
13538:
13539:
13540:
13541:
            TJclBorDesigner', '( bdVCL, bdCLX )
13542:
            TJclBorDesigners', 'set of TJclBorDesigner
TJclBorPlatform', '( bp32bit, bp64bit )
FindClass('TOBJECT'),'TJclBorRADToolInstallation
13543:
13544:
13545:
13546:
            SIRegister_TJclBorRADToolInstallationObject(CL);
            SIRegister_TJclBorlandOpenHelp(CL);
13547:
            TJclHelp2Object', '( hoRegisterSession, hoRegister, hoPlugin )
TJclHelp2Objects', 'set of TJclHelp2Object
13548 .
13549:
            SIRegister_TJclHelp2Manager(CL);
13550:
            SIRegister_TJclBorRADToolIdeTool(CL);
13551:
13552:
            SIRegister_TJclBorRADToolIdePackages(CL);
13553:
            SIRegister_IJclCommandLineTool(CL);
            FindClass('TOBJECT'), 'EJclCommandLineToolError
SIRegister_TJclCommandLineTool(CL);
13554:
13555:
            SIRegister_TJclBorlandCommandLineTool(CL);
13556:
13557:
            SIRegister_TJclBCC32(CL);
            SIRegister_TJclDCC32(CL);
TJclDCC', 'TJclDCC32
13558:
13559:
            SIRegister_TJclBpr2Mak(CL);
13560:
13561:
            SIRegister_TJclBorlandMake(CL);
13562:
            SIRegister TJclBorRADToolPalette(CL);
13563:
            SIRegister_TJclBorRADToolRepository(CL);
            TCommandLineTool', '( clAsm, clBcc32, clDcc32, clDccIL, clMake,clProj2Mak ) TCommandLineTools', 'set of TCommandLineTool
13564:
13565:
13566:
             //TJclBorRADToolInstallationClass', 'class of TJclBorRADToolInstallation
13567:
            SIRegister_TJclBorRADToolInstallation(CL);
13568:
            SIRegister_TJclBCBInstallation(CL);
13569:
            SIRegister_TJclDelphiInstallation(CL);
13570:
            SIRegister_TJclDCCIL(CL);
13571:
            SIRegister_TJclBDSInstallation(CL);
            \label{thm:condition} \mbox{TTraverseMethod', 'Function (Installation : TJclBorRADToolInstallation) : Boolean $$SIRegister\_TJclBorRADToolInstallations(CL);$
13572:
13573:
13574:
           Function BPLFileName( const BPLPath, PackageFileName : string) : string
13575:
          Function BinaryFileName( const OutputPath, ProjectFileName : string) : string
Function IsDelphiPackage( const FileName : string) : Boolean
13576:
           Function IsDelphiProject( const FileName : string) : Boolean
13577:
           Function IsBCBPackage( const FileName : string) : Boolean
13579:
           Function IsBCBProject( const FileName : string) : Boolean
13580:
          Procedure GetDPRFileInfo(const DPRFileName:string;out BinaryExtensio:string;const LibSuffx:PString);
          Procedure GetBPRFileInfo(const BPRFileName:string;out BinaryFileName:string;const Descript:PString);
13581:
          Procedure GetDPKFileInfo(const DPKFileName:string;out RunOnly:Bool;const LibSuffix:PString;const
13582:
         Descript: PString;
13583:
         Procedure GetBPKFileInfo(const BPKFileName:string;out RunOnly:Bool;const BinaryFName:PString;const
         Descript: PString
13584: function SamePath(const Path1, Path2: string): Boolean;
13585:
13586:
13587:
         procedure SIRegister_JclFileUtils_max(CL: TPSPascalCompiler);
13588: begin
13589:
         'ERROR_NO_MORE_FILES','LongInt'( 18);
13590:
           //Function stat64( FileName: PChar; var StatBuffer : TStatBuf64) : Integer
           //Function fstat64( FileDes: Integer; var StatBuffer : TStatBuf64) : Integer
//Function lstat64( FileName: PChar; var StatBuffer : TStatBuf64) : Integer
13591:
13592:
13593:
          'LPathSeparator','String '/
'LDirDelimiter','String '/
13594:
13595:
           'LDirSeparator', 'String ':
13596:
           'JXPathDevicePrefix','String '\\.\
           'JXPathSeparator','String '\
'JXDirDelimiter','String '\
'JXDirSeparator','String ';
13597:
13598:
13599:
          'JXPathUncPrefix','String '\
'faNormalFile','LongWord')( $00000080);
//'faUnixSpecific',' faSymLink);
JXTCompactPath', '( cpCenter, cpEnd )
13600:
13601:
13602:
            //'faUnixSpecific',' faSymLink);
JXTCompactPath', '( cpCenter, cpEnd )
   _WIN32_FILE_ATTRIBUTE_DATA', 'record dwFileAttributes : DWORD; f'
   +'tCreationTime : TFileTime; ftLastAccessTime : TFileTime; ftLastWriteTime :'
   +' TFileTime; nFileSizeHigh : DWORD; nFileSizeLow : DWORD; end
TWin32FileAttributeData', '_WIN32_FILE_ATTRIBUTE_DATA
WIN32_FILE_ATTRIBUTE_DATA', '_WIN32_FILE_ATTRIBUTE_DATA
13603:
13604:
13605:
13606:
13607:
13608:
13609:
          Function jxPathAddSeparator( const Path : string) : string
13610:
13611:
          Function jxPathAddExtension( const Path, Extension: string): string
                                                                                   : string
           Function jxPathAppend( const Path, Append: string)
13612:
13613:
          Function jxPathBuildRoot( const Drive : Byte) : string
          Function jxPathCanonicalize( const Path: string): string
Function jxPathCommonPrefix( const Path1, Path2: string): Integer
Function jxPathCompactPath(const DC:HDC;const Path:string;const Width:Integer;CmpFmt:TCompactPath):string
13614:
13615:
13616:
13617: Procedure jxPathExtractElements( const Source : string; var Drive, Path, FileName, Ext : string)
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13618:
         Function jxPathExtractFileDirFixed( const S : string) : string
          Function jxPathExtractFileNameNoExt( const Path : string) : string
13619:
          Function jxPathExtractPathDepth( const Path : string; Depth : Integer) : string
13621:
          Function jxPathGetDepth( const Path : string) : Integer
13622:
          Function jxPathGetLongName( const Path : string) : string
          Function ixPathGetShortName( const Path : string) : string
13623:
          Function jxPathGetLongName( const Path : string) : string
13624:
          Function jxPathGetShortName( const Path : string) : string
13625:
13626:
          Function jxPathGetRelativePath( Origin, Destination : string) : string
13627:
          Function jxPathGetTempPath : string
          Function jxPathIsAbsolute( const Path : string) : Boolean
13628:
          Function jxPathIsChild( const Path, Base : string) : Boolean
13630:
          Function jxPathIsDiskDevice( const Path : string)
         Function jxPathIsUNC( const Path : string) : Boolean
Function jxPathRemoveSeparator( const Path : string) : string
13631:
13632:
13633:
          Function jxPathRemoveExtension( const Path : string) : string
          Function jxPathGetPhysicalPath( const LocalizedPath : string)
         Function jxPathGetLocalizedPath( const PhysicalPath: string): strin

JxTFileListOption', '( flFullNames, flRecursive, flMaskedSubfolders)

JxTFileListOptions', 'set of TFileListOption
13635:
                                                                                          string
13636:
13637:
           JxTJclAttributeMatch',
13638:
                                       '( amAny, amExact, amSubSetOf, amSuperSetOf, amCustom )
           TFileHandler', 'Procedure ( const FileName : string)
TFileHandlerEx', 'Procedure ( const Directory : string; const FileInfo : TSearchRec)
13639:
13640:
         Function BuildFileList( const Path: string; const Attr: Integer; const List: TStrings): Boolean //Function AdvBuildFileList( const Path: string; const Attr: Integer; const Files: TStrings; const
13641:
13642:
        AttributeMatch:TJclAttributeMatch;const Optis:TFileListOptions;const SubfoldersMask:string;const
         FileMatchFunc:TFileMatchFunc):Bool;
         Function jxVerifyFileAttributeMask( var RejectedAttributes, RequiredAttributes : Int) : Boolean
13643:
13644:
          Function jxIsFileAttributeMatch(FileAttributes, RejectedAttributes, RequiredAttributes:Int):Boolean;
          Function jxFileAttributesStr( const FileInfo : TSearchRec) : string
          Function jxIsFileNameMatch(FileName:string;const Mask:string;const CaseSensitive:Boolean):Boolean;
13646:
13647:
          Procedure jxEnumFiles(const Path:string; HandleFile:TFileHandlerEx;
        RejectedAttributes:Integer;RequiredAttributes : Integer; Abort : TObject)
13648:
         Procedure jxEnumDirectories(const Root:string;const HandleDirectory:TFileHandler;const
         IncludeHiddenDirects:Boolean;const SubDirectoriesMask:string;Abort:TObject;ResolveSymLinks:Bool)
         Procedure jxCreateEmptyFile( const FileName : string)
Function jxCloseVolume( var Volume : THandle) : Boolean
13649:
13650:
         Function jxDeleteDirectory( const DirectoryName : string; MoveToRecycleBin : Boolean) : Boolean
13651:
         Function jxCopyDirectory( ExistingDirectoryName, NewDirectoryName: string): Boolean Function jxMoveDirectory( ExistingDirectoryName, NewDirectoryName: string): Boolean
13652:
13653:
13654:
         Function jxDelTree( const Path : string) : Boolean
13655:
          //Function DelTreeEx(const Path:string;AbortOnFailure:Boolean; Progress:TDelTreeProgress):Boolean
13656:
          Function jxDiskInDrive( Drive : Char) : Boolean
          Function jxDirectoryExists( const Name : string; ResolveSymLinks : Boolean) : Boolean
         Function jxFileCreateTemp( var Prefix : string) : THandle
Function jxFileBackup( const FileName : string; Move : Boolean) : Boolean
13658:
13659:
          Function jxFileCopy( const ExistingFileName, NewFileName: string; ReplaceExisting: Boolean): Boolean
13660:
          Function jxFileDelete( const FileName : string; MoveToRecycleBin : Boolean) : Boolean
13661:
13662:
          Function jxFileExists( const FileName : string) : Boolean
         Function jxFileMove( const ExistingFileName, NewFileName: string; ReplaceExisting: Boolean): Boolean
13663:
13664:
          \textbf{Function} \  \, \texttt{jxFileRestore}(\  \, \textbf{const} \  \, \texttt{FileName} \  \, : \  \, \textbf{string}) \  \, : \  \, \texttt{Boolean}
         Function jxGetBackupFileName( const FileName: string): string
Function jxIsBackupFileName( const FileName: string): Boolean
13665:
13666:
          Function jxFileGetDisplayName( const FileName : string) : string
13667:
         Function jxFileGetGroupName( const FileName : string; ResolveSymLinks : Boolean) : string
Function jxFileGetOwnerName( const FileName : string; ResolveSymLinks : Boolean) : string
13668:
13669:
         Function jxFileGetSize( const FileName : string) : Int64
Function jxFileGetTempName( const Prefix : string) : string
13670:
13671:
13672:
          Function jxFileGetTypeName( const FileName : string) : string
         Function jxFindUnusedFileName(FileName:string; const FileExt: string; NumberPrefix: string): string
Function jxForceDirectories( Name: string): Boolean
13673:
13674:
         Function jxGetDirectorySize( const Path : string) : Int64
Function jxGetDriveTypeStr( const Drive : Char) : string
Function jxGetFileAgeCoherence( const FileName : string) : Boolean
13675:
13676:
13677:
         Procedure jxGetFileAttributeList( const Items : TStrings; const Attr : Integer)
13678:
          Procedure jxGetFileAttributeListEx( const Items: TStrings; const Attr: Integer)
          Function jxGetFileInformation( const FileName : string; out FileInfo : TSearchRec) : Boolean;
13680:
13681:
          \textbf{Function} \hspace{0.1cm} \texttt{jxGetFileInformation1(} \hspace{0.1cm} \textbf{const} \hspace{0.1cm} \texttt{FileName} \hspace{0.1cm} : \hspace{0.1cm} \textbf{string)} \hspace{0.1cm} : \hspace{0.1cm} \texttt{TSearchRec} \texttt{;}
13682:
          //Function GetFileStatus(const FileName:string;out StatBuf:TStatBuf64;const
        ResolveSymLinks:Boolean):Integer
13683:
        Function jxGetFileLastWrite( const FName : string) : TFileTime;
13684:
          Function jxGetFileLastWritel( const FName : string; out LocalTime : TDateTime) : Boolean;
13685:
          \textbf{Function} \hspace{0.1cm} \texttt{jxGetFileLastAccess(} \hspace{0.1cm} \textbf{const} \hspace{0.1cm} \texttt{FName} \hspace{0.1cm} : \hspace{0.1cm} \textbf{string)} \hspace{0.1cm} : \hspace{0.1cm} \texttt{TFileTime;} \\
13686:
          Function jxGetFileLastAccess1( const FName : string; out LocalTime : TDateTime) : Boolean;
13687:
          Function jxGetFileCreation( const FName : string) : TFileTime;
          Function jxGetFileCreation1( const FName : string; out LocalTime : TDateTime) : Boolean;
13688:
13689:
          Function jxGetFileLastWrite( const FName : string;out TimeStamp:Integer;ResolveSymLinks : Bool):Bool;
         Function jxGetFileLastWrite1(const FName:string; out LocalTime:TDateTime;ResolveSymLinks:Bool): Bool;
13690:
          Function jxGetFileLastWrite2( const FName : string; ResolveSymLinks : Boolean) : Integer;
13691:
13692:
          Function jxGetFileLastAccess(const FName:string; out TimeStamp:Integer;ResolveSymLinks: Bool): Bool;
13693:
          Function jxGetFileLastAccess1(const FName:string; out LocalTime:TDateTime;ResolveSymLinks:Bool):Bool;
         Function jxGetFileLastAccess2(const FName:string; ResolveSymLinks:Boolean): Integer;
13694:
13695:
         Function jxGetFileLastAttrChange(const FName:string;out TimeStamp:Integer;ResolveSymLinks:Bool): Bool;
13696:
          Function jxGetFileLastAttrChangel(const FName:string; out LocalTime:TDateTime;ResolveSymLinks:Bool):Bool;
13697:
          Function jxGetFileLastAttrChange2( const FName : string; ResolveSymLinks:Boolean): Integer;
         Function jxGetModulePath( const Module : HMODULE) : string
Function jxGetSizeOfFile( const FileName : string) : Int64;
Function jxGetSizeOfFile1( const FileInfo : TSearchRec) : Int64;
Function jxGetSizeOfFile2( Handle : THandle) : Int64;
13698:
13699:
13700:
```

```
13702:
          Function ixGetStandardFileInfo( const FileName : string) : TWin32FileAttributeData
13703:
          Function jxIsDirectory( const FileName : string; ResolveSymLinks : Boolean) : Boolean
          Function jxIsRootDirectory( const CanonicFileName : string) : Boolean Function jxLockVolume( const Volume : string; var Handle : THandle) : Boolean Function jxOpenVolume( const Drive : Char) : THandle
13704:
13705:
13706:
13707:
          Function jxSetDirLastWrite( const DirName : string; const DateTime : TDateTime) : Boolean
          Function jxSetDirLastAccess( const DirName : string; const DateTime : TDateTime) : Boolean
13708:
13709:
          Function jxSetDirCreation( const DirName : string; const DateTime : TDateTime) : Boolean
          Function jxSetFileLastWrite( const FileName : string; const DateTime : TDateTime) : Boolean Function jxSetFileLastAccess( const FileName : string; const DateTime : TDateTime) : Boolean
13710:
13711:
          Function jxSetFileCreation( const FileName : string; const DateTime : TDateTime) : Boolean
13712:
          Procedure jxShredFile( const FileName : string; Times : Integer)
13713:
13714:
          Function jxUnlockVolume( var Handle : THandle) : Boolean
          Function jxCreateSymbolicLink( const Name, Target : string) : Boolean
Function jxSymbolicLinkTarget( const Name : string) : string
13715:
13716:
13717:
           TAttributeInterest', '( aiIgnored, aiRejected, aiRequired )
           SIRegister_TJclCustomFileAttrMask(CL);
13718:
13710 .
           SIRegister_TJclFileAttributeMask(CL);
           TFileSearchOption', '(fsIncludeSubDirectories, fsIncludeHiddenS' +'ubDirectories, fsLastChangeAfter, fsLastChangeBefore, fsMaxSize, fsMinSize)
13720:
13721:
           TFileSearchOptions', 'set of TFileSearchOption TFileSearchTaskID', 'Integer
13722:
13723:
           TFileSearchTaskID',
           TFileSearchTerminationEvent',
13724:
                                                 'Procedure ( const ID : TFileSearc'
13725:
           +'hTaskID; const Aborted : Boolean)
TFileEnumeratorSyncMode', '( smPerFile, smPerDirectory )
13726:
13727:
           SIRegister_IJclFileEnumerator(CL);
13728:
           SIRegister_TJclFileEnumerator(CL);
13729:
          Function JxFileSearch : IJclFileEnumerator
           JxTFileFlag', 'f ffDebug, ffInfoInferred, ffPatched,ffPreRelease,ffPrivateBuild, ffSpecialBuild )
JxTFileFlags', 'set of TFileFlag
13730:
13731:
13732:
           FindClass('TOBJECT'),'EJclFileVersionInfoError
           SIRegister_TJclFileVersionInfo(CL);
13733:
          \textbf{Function} \hspace{0.1cm} \texttt{jxOSIdentToString(} \hspace{0.1cm} \textbf{const} \hspace{0.1cm} \texttt{OSIdent} \hspace{0.1cm} : \hspace{0.1cm} \texttt{DWORD)} \hspace{0.1cm} : \hspace{0.1cm} \textbf{string}
13734:
          Function jxOSFileTypeToString( const OSFileType : DWORD; const OSFileSubType : DWORD) : string
Function jxVersionResourceAvailable( const FileName : string) : Boolean
13735:
13736:
13737:
           TFileVersionFormat', '( vfMajorMinor, vfFull )
          \textbf{Function} \hspace{0.1cm} \texttt{jxFormatVersionString}(\hspace{0.1cm} \textbf{const} \hspace{0.1cm} \texttt{HiV}, \hspace{0.1cm} \texttt{LoV} \hspace{0.1cm} : \hspace{0.1cm} \texttt{Word}) \hspace{0.1cm} : \hspace{0.1cm} \textbf{string};
13738:
13739:
          Function jxFormatVersionString1( const Major, Minor, Build, Revision : Word) : string;
13740:
          //Function FormatVersionString2( const FixedInfo : TVSFixedFileInfo; VersionFormat: TFileVersionFormat): str;
13741:
          //Procedure VersionExtractFileInfo(const FixedInfo:TVSFixedFileInfo;var Major,Minor,Build,Revision:Word);
13742:
          //Procedure VersionExtractProductInfo(const FixedInfo:TVSFixedFileInfo;var Major,Minor,Build,
         Revision:Word);
          //Function VersionFixedFileInfo( const FileName : string; var FixedInfo : TVSFixedFileInfo) : Boolean
          Function jxVersionFixedFileInfoString( const FileName : string; VersionFormat : TFileVersionFormat; const
13744:
        NotAvailableText : string) : string
13745:
           SIRegister_TJclTempFileStream(CL);
FindClass('TOBJECT'),'TJclCustomFileMapping
13746:
           SIRegister_TJclFileMappingView(CL);
13747:
13748:
           TJclFileMappingRoundOffset', '( rvDown, rvUp )
13749:
           SIRegister_TJclCustomFileMapping(CL);
13750:
           SIRegister_TJclFileMapping(CL);
13751:
           SIRegister_TJclSwapFileMapping(CL);
           SIRegister_TJclFileMappingStream(CL);
13752:
13753:
           TJclMappedTextReaderIndex', '( tiNoIndex, tiFull )
13754:
           //PPCharArray', '^TPCharArray // will not work
SIRegister_TJclMappedTextReader(CL);
13755:
13756:
           SIRegister_TJclFileMaskComparator(CL)
13757:
           FindClass('TOBJECT'),'EJclPathError
           FindClass('TOBJECT'),'EJclFileUtilsError
FindClass('TOBJECT'),'EJclTempFileStreamError
13758:
13759:
           FindClass('TOBJECT'),'EJclTempFileStreamError
13760:
13761:
           FindClass('TOBJECT'),'EJclFileMappingError
13762:
           FindClass('TOBJECT'),'EJclFileMappingViewError
13763:
          Function jxPathGetLongName2( const Path : string) : string
13764:
          Function jxWin32DeleteFile( const FileName : string; MoveToRecycleBin : Boolean) : Boolean
          Function jxWin32MoveFileReplaceExisting( const SrcFileName, DstFileName : string) : Boolean
13765:
          Function jxWin32BackupFile( const FileName : string; Move : Boolean) : Boolean Function jxWin32RestoreFile( const FileName : string) : Boolean
13766:
13767:
          Function jxSamePath( const Path1, Path2 : string) : Boolean
Procedure jxPathListAddItems( var List : string; const Items : string)
Procedure jxPathListIncludeItems( var List : string; const Items : string)
13768:
13769:
13770:
13771:
          Procedure jxPathListDelItems( var List : string; const Items : string)
          Procedure jxPathListDelItem( var List : string; const Index : Integer)
Function jxPathListItemCount( const List : string) : Integer
13772:
13773:
13774:
          Function jxPathListGetItem( const List : string; const Index : Integer) : string
13775:
          Procedure jxPathListSetItem( var List : string; const Index : Integer; const Value : string)
13776:
          \textbf{Function} \  \, \texttt{jxPathListItemIndex}(\  \, \textbf{const} \  \, \texttt{List}, \  \, \texttt{Item} : \  \, \textbf{string}) \  \, : \  \, \texttt{Integer}
          Function jxParamName(Idx:Int:const Separator:string:const AllowedPrefixChars:string:TrimName:Bool):string:
13777:
          Function jxParamValue(Index : Integer; const Separator : string; TrimValue : Boolean) : string;
13778:
          Function jxParamValuel(const SearchName:string; const Separator : string; CaseSensitive : Boolean; const
13779:
         AllowedPrefixCharacters : string; TrimValue : Boolean) : string;
        Function jxParamPos( const SearchName : string; const Separator : string; CaseSensitive : Boolean; const
13780:
         AllowedPrefixCharacters : string) : Integer
13781:
        end
13782:
13783: procedure SIRegister_FileUtil(CL: TPSPascalCompiler);
13784: begin
13785:
           'UTF8FileHeader','String #$ef#$bb#$bf);
          Function | CompareFilenames( const Filename1, Filename2 : string) : integer
```

```
Function lCompareFilenamesIgnoreCase( const Filename1, Filename2 : string) : integer
13787:
13788:
              Function | CompareFilenames (const Filename1, Filename2 : string; ResolveLinks : boolean) : integer
               Function lCompareFilenames(Filename1:PChar;Len1:int;Filename2:PChar;Len2:int;ResolveLinks:boolean):int;
13790:
              Function lFilenameIsAbsolute( const TheFilename : string) : boolean
13791:
              Function lFilenameIsWinAbsolute( const TheFilename : string) : boolean
13792:
              Function | Filename | SUnixAbsolute ( const The Filename : string) : boolean
13793:
              Procedure lCheckIfFileIsExecutable( const AFilename : string)
13794:
              Procedure lCheckIfFileIsSymlink( const AFilename : string)
              Function lFileIsReadable( const AFilename : string) : boolean Function lFileIsWritable( const AFilename : string) : boolean
13795:
13796:
              Function lFileIsText( const AFilename : string) : boolean
Function lFileIsText( const AFilename : string; out FileReadable : boolean) : boolean
13797:
13798:
13799:
              Function lFileIsExecutable( const AFilename : string) : boolean
              Function lFileIsSymlink( const AFilename : string) : boolean Function lFileIsHardLink( const AFilename : string) : boolean
13800:
13801:
13802:
              Function lFileSize( const Filename : string) : int64;
              Function lGetFileDescription( const AFilename : string) : string
Function lReadAllLinks( const Filename : string; ExceptionOnError : boolean) : string
13803:
13804:
              Function lTryReadAllLinks( const Filename : string) : string
Function lDirPathExists( const FileName : String) : Boolean
Function lForceDirectory( DirectoryName : string) : boolean
13805:
13806:
13807:
              Function lDeleteDirectory( const DirectoryName : string; OnlyChildren : boolean) : boolean
13808:
13809:
              Function lProgramDirectory : string
              Function | Directory|SWritable( const DirectoryName : string) : boolean Function | LextractFileNameOnly( const AFilename : string) : string
13810:
13811:
13812:
              Function lExtractFileNameWithoutExt( const AFilename : string) : string
13813:
              Function | CompareFileExt( const Filename, Ext : string; CaseSensitive : boolean) : integer;
              Function | CompareFileExt( const Filename, Ext : string) : integer;
13814:
              Function lFilenameIsPascalUnit( const Filename : string) : boolean
13815:
              Function lAppendPathDelim( const Path : string) : string
13816:
13817:
              Function lChompPathDelim( const Path : string) : string
              Function lTrimFilename( const AFilename: string): string
Function lCleanAndExpandFilename( const Filename: string): string
13818:
13819:
              Function lCleanAndExpandDirectory( const Filename : string) : string
Function lCreateAbsoluteSearchPath( const SearchPath, BaseDirectory : string) : string
13820:
13821:
13822:
              Function | CreateRelativePath( const Filename, BaseDirectory: string; UsePointDirectory: boolean;
            AlwaysRequireSharedBaseFolder : Boolean) : string

Function lCreateAbsolutePath( const Filename, BaseDirectory : string) : string

Function lFileIsInPath( const Filename, Path : string) : boolean

Function lFileIsInDirectory( const Filename, Directory : string) : boolean
13823:
13824:
13825:
13826:
                \label{thm:continuous} TS earchFileInPathFlag', '( sffDontSearchInBasePath, sffSearchLoUpCase ) \\ TS earchFileInPathFlags', 'set of TS earchFileInPathFlag )
13827:
13828:
               'AllDirectoryEntriesMask','String
              Function | GetAllFilesMask : string
13829:
              Function lGetExeExt : string
13830:
13831:
              Function | SearchFileInPath( const. Filename, BasePath, SearchPath, Delimiter : string; Flags :
             TSearchFileInPathFlags) : string
13832: Function | SearchAllFilesInPath( const Filename, BasePath, SearchPath, Delimiter:string;Flags :
             TSearchFileInPathFlags) : TStrings
13833:
              Function lFindDiskFilename( const Filename : string) : string
13834:
              Function lFindDiskFileCaseInsensitive( const Filename : string) : string
               Function | FindDefaultExecutablePath( const Executable : string; const BaseDir: string):string
13835:
               Function | GetDarwinSystemFilename(Filename: string) : string
13837:
                SIRegister_TFileIterator(CL);
                TFileFoundEvent', 'Procedure ( FileIterator : TFileIterator)
13838:
                TDirectoryFoundEvent', 'Procedure (FileIterator: TFileIterator)
TDirectoryEnterEvent', 'Procedure (FileIterator: TFileIterator)
13839:
13840:
                SIRegister_TFileSearcher(CL);
13841:
13842:
              \textbf{Function} \ \texttt{lFindAllFiles}(\textbf{const} \ \texttt{SearchPath}: \textbf{String}; \texttt{SearchMsk}: \textbf{String}; \texttt{SearchSubDirs}: \texttt{Bool}): \texttt{TStringList} \ \texttt{
              Function | FindAllDirectories( const SearchPath : string; SearchSubDirs : Boolean) : TStringList // TCopyFileFlag', '( cffOverwriteFile, cffCreateDestDirectory, cffPreserveTime )
13843:
13844:
13845:
               // TCopyFileFlags', 'set of TCopyFileFlag
              Function lCopyFile( const SrcFilename, DestFilename : string; Flags : TCopyFileFlags) : boolean
13846:
              Function lCopyFile( const SrcFilename, DestFilename: string; PreserveTime: boolean): boolean Function lCopyDirTree( const SourceDir, TargetDir: string; Flags: TCopyFileFlags): Boolean
13847:
13848:
              Function | ReadFileToString( const Filename : string) : string
13850:
              Function | GetTempFilename( const Directory, Prefix : string)
13851:
               {Function NeedRTLAnsi : boolean
13852:
              Procedure SetNeedRTLAnsi( NewValue : boolean)
              Function UTF8ToSys( const s : string) : string
Function SysToUTF8( const s : string) : string
13853:
13854:
13855:
              Function ConsoleToUTF8( const s : string) : string
13856:
              Function UTF8ToConsole( const s : string) : string}
Function FileExistsUTF8( const Filename : string) : boolean
13857:
              Function FileAgeUTF8( const FileName: string): Longint
Function DirectoryExistSUTF8( const Directory: string): Boolean
Function ExpandFileNameUTF8( const FileName: string): string
13858:
13859:
13860:
              Function ExpandUNCFileNameUTF8( const FileName : string) : string
13861:
              Function ExtractShortPathNameUTF8( const FileName : String) : String
13862:
               Function FindFirstUTF8(const Path: string; Attr : Longint; out Rslt : TSearchRec) : Longint
13863:
              Function FindPrescore (var Rslt : TSearchRec) : Longint

Procedure FindCloseUTF8( var F : TSearchrec)

Function FileSetDateUTF8( const FileName : String; Age : Longint) : Longint

Function FileGetAttrUTF8( const FileName : String) : Longint
13864:
13865:
13866:
13867:
              Function FileSetAttrUTF8( const Filename : String; Attr : longint) : Longint
13868:
13869:
              Function DeleteFileUTF8( const FileName : String) : Boolean
13870: Function RenameFileUTF8( const OldName, NewName : String) : Boolean
13871: Function FileSearchUTF8( const Name, DirList : String; ImplicitCurrentDir : Boolean) : String
13872: Function FileIsReadOnlyUTF8( const FileName : String) : Boolean
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13873:
          Function GetCurrentDirUTF8 : String
13874:
          Function SetCurrentDirUTF8( const NewDir : String) : Boolean
          Function CreateDirUTF8( const NewDir : String) : Boolean
13876:
          Function RemoveDirUTF8( const Dir : String) : Boolean
13877:
          Function ForceDirectoriesUTF8( const Dir : string) : Boolean
          Function FileOpenUTF8( const FileName : string; Mode : Integer) : THandle Function FileCreateUTF8( const FileName : string) : THandle;
13878:
13879:
          Function FileCreateUTF81( const FileName : string; Rights : Cardinal) : THandle;
13880:
13881:
          Function ParamStrUTF8( Param : Integer) : string
          Function GetEnvironmentStringUTF8( Index : Integer) : string
Function GetEnvironmentVariableUTF8( const EnvVar : string) : String
Function GetAppConfigDirUTF8( Global : Boolean; Create : boolean) : string
13882:
13883:
13885:
          Function GetAppConfigFileUTF8(Global:Boolean; SubDir:boolean; CreateDir: boolean) : string
13886: Function SysErrorMessageUTF8( ErrorCode : Integer) : String
13887:
         end;
13888:
13889: procedure SIRegister Keyboard(CL: TPSPascalCompiler);
13890: begin
13891:
            //VK_F23 = 134;
13892:
           //{$EXTERNALSYM VK_F24}
13893:
            //VK_F24 = 135;
          TVITL23 - 135,
TVITTUALKEYCOG', 'Integer
'VK_MOUSEWHEELUP', 'integer'(134);
'VK_MOUSEWHEELDOWN', 'integer'(135);
13894:
13895:
13896:
          Function glIsKeyDown( c : Char) : Boolean;
13897:
13898:
          Function glIsKeyDown1( vk : TVirtualKeyCode) : Boolean;
13899:
          Function glKeyPressed( minVkCode : TVirtualKeyCode) : TVirtualKeyCode
          Function glVirtualKeyCodeToKeyName( vk : TVirtualKeyCode) : String
Function glKeyNameToVirtualKeyCode( const keyName : String) : TVirtualKeyCode
Function glCharToVirtualKeyCode( c : Char) : TVirtualKeyCode
13900:
13901:
13902:
13903:
          Procedure glKeyboardNotifyWheelMoved( wheelDelta : Integer)
13904: end;
13905:
13906: procedure SIRegister_GLCrossPlatform(CL: TPSPascalCompiler);
13907:
         begin
           TGLPoint', 'TPoint
13908:
           '/PGLPoint', '^TGLPoint // will not work
TGLRect', 'TRect
//PGLRect', '^TGLRect // will not work
13909:
13910:
13911:
           TDelphiColor', 'TColor
TGLPicture', 'TPicture
TGLGraphic', 'TGraphic
TGLBitmap', 'TBitmap
13912:
13913:
13914:
13915:
           //TGraphicClass', 'class of TGraphic
TGLTextLayout', '( tlTop, tlCenter, tlBottom )
13916:
13917:
           TGLMouseButton', '(mbLeft, mbRight, mbMiddle)
TGLMouseEvent', 'Procedure (Sender: TObject; Button: TGLMouse'
13918:
13919:
             +'Button; Shift: TShiftState; X, Y: Integer)
13920:
13921:
            TGLMouseMoveEvent', 'TMouseMoveEvent
           TGLKeyEvent', 'TKeyEvent
TGLKeyPressEvent', 'TKeyPressEvent
13922:
13923:
           EGLOSError', 'EWin32Error
EGLOSError', 'EWin32Error
13924:
13925:
          EGLOSETTOT', EWNINSERTOR
EGLOSETTOT', 'EOSETTOT
'glsAllFilter', 'string'All // sAllFilter
Function GLPoint( const x, y : Integer) : TGLPoint
Function GLRGB( const r, g, b : Byte) : TColor
13926:
13927:
13928:
13929:
          Function GLColorToRGB( color : TColor) : TColor
13930:
          Function GLGetRValue( rgb : DWORD) : Byte
Function GLGetGValue( rgb : DWORD) : Byte
13931:
13932:
13933:
          Function GLGetBValue( rgb : DWORD) : Byte
13934:
          Procedure GLInitWinColors
13935:
          Function GLRect( const aLeft, aTop, aRight, aBottom : Integer) : TGLRect
          Procedure GLInflateGLRect( var aRect : TGLRect; dx, dy : Integer)
Procedure GLIntersectGLRect( var aRect : TGLRect; const rect2 : TGLRect)
13936:
13937:
          Procedure GLInformationDlg( const msg : String)
13939:
          Function GLQuestionDlg( const msg : String) : Boolean
          Function GLInputDlg( const aCaption, aPrompt, aDefault : String) : String
Function GLSavePictureDialog( var aFileName : String; const aTitle : String) : Boolean
Function GLOpenPictureDialog( var aFileName : String; const aTitle : String) : Boolean
13940:
13941:
13942:
          Function GLApplicationTerminated : Boolean
13943:
13944:
          Procedure GLRaiseLastOSError
13945:
          Procedure GLFreeAndNil( var anObject: TObject)
13946:
          Function GLGetDeviceLogicalPixelsX( device : Cardinal) : Integer
13947:
          Function GLGetCurrentColorDepth : Integer
13948:
          Function GLPixelFormatToColorBits( aPixelFormat : TPixelFormat) : Integer
          Function GLBitmapScanLine( aBitmap : TGLBitmap; aRow : Integer) : Pointer
Procedure GLSleep( length : Cardinal)
13949:
13950:
          Procedure GLQueryPerformanceCounter( var val : Int64)
13951:
          Function GLQueryPerformanceFrequency( var val : Int64) : Boolean
13953:
          Function GLStartPrecisionTimer : Int64
13954:
          Function GLPrecisionTimerLap( const precisionTimer : Int64) : Double
13955:
          Function GLStopPrecisionTimer( const precisionTimer: Int64): Double
13956:
          Function GLRDTSC : Int64
          Procedure GLLoadBitmapFromInstance( ABitmap : TBitmap; AName : string)
13957:
13958:
          \textbf{Function} \  \, \texttt{GLOKMessageBox}( \  \, \textbf{const} \  \, \texttt{Text} \,, \  \, \texttt{Caption} \, : \, \, \textbf{string}) \, : \, \, \texttt{Integer}
          Procedure GLShowHTMLUrl( Url : String)
13959:
          Procedure GLShowCursor( AShow : boolean)
13960:
13961: Procedure GLSetCursorPos( AScreenX, AScreenY : integer)
```

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13962:
          Procedure GLGetCursorPos( var point : TGLPoint)
          Function GLGetScreenWidth : integer
13963:
           Function GLGetScreenHeight : integer
13965
          Function GLGetTickCount : int64
          function RemoveSpaces(const str : String) : String;
13966:
          TNormalMapSpace', '(nmsObject, nmsTangent)

Procedure CalcObjectSpaceLightVectors(Light:TAffineVector;Vertices TAffineVectorList;Colors:TVectorList)
13967:
13968:
          Procedure SetupTangentSpace( Vertices, Normals, TextCoords, Tangents, BiNormals: TAffineVectorList)

Procedure CalcTangentSpaceLightVectors( Light: TAffineVector; Vertices, Normals, Tangents, BiNormals:
13969:
13970:
         TAffineVectorList; Colors : TVectorList)
          Function CreateObjectSpaceNormalMap( Width, Height:Integer; HiNormals,
         HiTexCoords:TAffineVectorList):TGLBitmap
13972: Function CreateTangentSpaceNormalMap( Width, Height: Integer; HiNormals, HiTexCoords, LoNormals, LoTexCoords, Tangents, BiNormals: TAffineVectorList): TGLBitmap
13973: end;
13974:
13975: procedure SIRegister_GLStarRecord(CL: TPSPascalCompiler);
13976: begin
            TGLStarRecord', 'record RA: Word; DEC: SmallInt; BVColorIndex: Byte; VMagnitude: Byte; end
13977:
          // PGLStarRecord', '^TGLStarRecord // will not work
Function StarRecordPositionZUp( const starRecord : TGLStarRecord) : TAffineVector
13978:
13979:
          Function StarRecordPositionYUp( const starRecord : TGLStarRecord) : TAffineVector
13980:
13981:
          Function StarRecordColor( const starRecord : TGLStarRecord; bias : Single) : TVector
13982: end;
13983:
13984:
13985: procedure SIRegister_GeometryBB(CL: TPSPascalCompiler);
13986: begin
13987:
            TAABB', 'record min : TAffineVector; max : TAffineVector; end
          //PAABB', '^TAABB // will not work
TBSphere', 'record Center : TAffineVector; Radius : single; end
13988:
13989:
          TClipRect', 'record Left : Single; Top:Single; Right:Single; Bottom : Single; end
13990:
          TSpaceContains', '(scNoOverlap, scContainsFully, scContainsPartially )

Function AddBB( var c1 : THmgBoundingBox; const c2 : THmgBoundingBox) : THmgBoundingBox
13991:
13992:
           Procedure AddAABB( var aabb : TAABB; const aabb1 : TAABB)
13993:
13994:
          Procedure SetBB( var c : THmgBoundingBox; const v : TVector)
13995:
          \textbf{Procedure} \  \, \texttt{SetAABB}( \  \, \textbf{var} \  \, \texttt{bb} \  \, \texttt{:} \  \, \texttt{TAABB}; \  \, \textbf{const} \  \, \texttt{v} \  \, \texttt{:} \  \, \texttt{TVector})
13996:
          Procedure BBTransform( var c : THmgBoundingBox; const m : TMatrix)
13997:
          Procedure AABBTransform( var bb : TAABB; const m :
                                                                               TMatrix)
13998:
          Procedure AABBScale( var bb : TAABB; const v : TAffineVector)
          Function BBMinX( const c : THmgBoundingBox) : Single Function BBMaxX( const c : THmgBoundingBox) : Single
13999:
14000:
14001:
          Function BBMinY( const c : THmgBoundingBox) : Single
14002:
          Function BBMaxY( const c : THmgBoundingBox) : Single
14003:
          Function BBMinZ( const c : THmgBoundingBox) : Single
          Function BBMaxZ( const c : THmgBoundingBox) : Single
14004:
          Procedure AABBInclude( var bb : TAABB; const p : TAffineVector)
14005:
          Procedure AABBFromSweep( var SweepAABB : TAABB; const Start, Dest : TVector; const Radius : Single)
14007:
          Function AABBIntersection( const aabb1, aabb2 : TAABB)
                                                                                    : TAABB
          Function BBToAABB( const aBB: THmgBoundingBox): TAABB
Function AABBToBB( const anAABB: TAABB): THmgBoundingBox;
14008:
14009:
14010:
          Function AABBToBB1( const anAABB : TAABB; const m : TMatrix) : THmgBoundingBox;
          Procedure OffsetAABB( var aabb : TAABB; const delta : TAffineVector);
14011:
14012:
          Procedure OffsetAABB1( var aabb : TAABB; const delta : TVector);
          Function IntersectAABBs( const aabb1, aabb2 : TAABB; const mlTo2, m2To1 : TMatrix) : Boolean;
Function IntersectAABBsAbsoluteXY( const aabb1, aabb2 : TAABB) : Boolean
Function IntersectAABBsAbsoluteXZ( const aabb1, aabb2 : TAABB) : Boolean
14013:
14014:
          Function IntersectAABBsAbsolute( const aabb1, aabb2 : TAABB) : Boolean
14016:
          Function AABBFitsInAABBAbsolute( const aabb1, aabb2 : TAABB) : Boolean
Function PointInAABB( const p : TAffineVector; const aabb : TAABB) : Boolean;
Function PointInAABB1( const p : TVector; const aabb : TAABB) : Boolean;
14017:
14018:
14019:
14020:
           \textbf{Function} \ \ \texttt{PlaneIntersectAABB}( \ \ \ \texttt{Normal} \ : \ \ \texttt{TAffineVector}; \ \ d \ : \ \ \texttt{single}; \ \ \texttt{aabb} \ : \ \ \texttt{TAABB}) \ : \ \ \texttt{boolean}
14021:
          Function TriangleIntersectAABB( const aabb : TAABB; v1, v2, v3 : TAffineVector) : boolean
14022:
          Procedure ExtractAABBCorners( const AABB : TAABB; var AABBCorners : TAABBCorners)
          Procedure AABBToBSphere( const AABB : TAABB; var BSphere : TBSphere)
14023:
          Procedure BSphereToAABB( const BSphere : TBSphere; var AABB : TAABB);
          Function BSphereToAABB1( const center : TAFfineVector; radius : Single) : TAABB;
Function BSphereToAABB2( const center : TVector; radius : Single) : TAABB;
14025:
14026:
          Function AABBContainsAABB( const mainAABB, testAABB : TAABB) : TSpaceContains
Function BSphereContainsAABB( const mainBSphere : TBSphere; const testAABB : TAABB) : TSpaceContains
Function BSphereContainsBSphere( const mainBSphere, testBSphere : TBSphere) : TSpaceContains
14027:
14028:
14029:
14030:
          Function AABBContainsBSphere( const mainAABB : TAABB; const testBSphere : TBSphere) : TSpaceContains
14031:
          Function PlaneContainsBSphere(const Location, Normal: TAffineVector; const
         testBSphere:TBSphere):TSpaceContains
          Function FrustumContainsBSphere( const Frustum: TFrustum; const testBSphere: TBSphere): TSpaceContains
          Function FrustumContainsAABB( const Frustum: TFrustum; const testAABB: TAABB): TSpaceContains
Function ClipToAABB( const v: TAffineVector; const AABB: TAABB): TAffineVector
14033:
14034:
          Function BSphereIntersectsBSphere(const mainBSphere, testBSphere): boolean Procedure IncludeInClipRect(var clipRect: TClipRect; x, y: Single)
14035:
14036:
          Function AABBToClipRect(const aabb:TAABB;modelViewProjection:TMatrix;viewportSizeX,
14037:
         viewportSizeY:Int):TClipRect
14038: end;
14039:
14040: procedure SIRegister_GeometryCoordinates(CL: TPSPascalCompiler);
14041: begin
14042: Procedure Cylindrical_Cartesian( const r, theta, z1 : single; var x, y, z : single);
14043: Procedure Cylindrical_Cartesian1( const r, theta, z1 : double; var x, y, z : double);
14044: Procedure Cylindrical_Cartesian2( const r, theta, z1 : single; var x, y, z : single; var ierr : integer);
14045: Procedure Cylindrical_Cartesian3( const r, theta, z1 : double; var x, y, z : double; var ierr : integer);
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14046:
14047:
            Procedure Spherical_Cartesian( const r, theta, phi : single; var x, y, z : single);
           Procedure Spherical_Cartesian1( const r, theta, phi : double; var x, y, z : double);
14049 .
           Procedure Spherical_Cartesian2( const r, theta, phi : single; var x, y, z : single; var ierr : integer);

Procedure Spherical_Cartesian3( const r, theta, phi : double; var x, y, z : single; var ierr : integer);

Procedure Cartesian_Spherical( const x, y, z : single; var r, theta, phi : single);

Procedure Cartesian_Spherical1( const v : TAffineVector; var r, theta, phi : Single);
14050:
14051:
14052:
14053:
           Procedure Cartesian_Spherical2( const v. ) Harithevector, var r, theta, phi : Single);

Procedure Cartesian_Spherical2( const x, y, z : double; var r, theta, phi : double);

Procedure ProlateSpheroidal_Cartesian( const xi, eta, phi, a : single; var x, y, z : single);

Procedure ProlateSpheroidal_Cartesian1( const xi, eta, phi, a : double; var x, y, z : double);

Procedure ProlateSpheroidal_Cartesian2(const xi, eta, phi, a : single; var x, y, z : integer);
14054:
14055:
14056:
14058:
           Procedure ProlateSpheroidal_Cartesian3(const xi,eta,phi,a:double;var x,y,z:double;var ierr: integer);
           Procedure OblateSpheroidal_Cartesian( const xi, eta, phi, a : single; var x, y, z : single);
Procedure OblateSpheroidal_Cartesian1( const xi, eta, phi, a : double; var x, y, z : double);
14059:
14060:
14061:
           Procedure OblateSpheroidal_Cartesian2(const xi,eta,phi,a:single; var x,y,z: single;var ierr:integer);
           Procedure OblateSpheroidal_Cartesian3( const xi,eta,phi,a:double; var x,y,z:double; var ierr:integer);
14062:
           Procedure BipolarCylindrical_Cartesian( const u, v, z1, a : single; var x, y, z : single);
Procedure BipolarCylindrical_Cartesian1(const u, v, z1, a : double; var x, y, z : double);
Procedure BipolarCylindrical_Cartesian2(const u, v, z1, a: single; var x, y, z: single; var ierr : integer);
14063:
14064:
14065:
           Procedure BipolarCylindrical_Cartesian3(const u,v,z1,a: double; var x,y,z:double; var ierr : integer);
14066:
14067:
14068:
14069:
          procedure SIRegister VectorGeometry(CL: TPSPascalCompiler);
14070:
          begin
14071:
             EPSILON','Single').setExtended( le-40);
14072:
            'EPSILON2', 'Single').setExtended( 1e-30);
           TRenderContextClippingInfo', 'record origin: TVector; clippingD'
+'irection: TVector; viewPortRadius: Single; farClippingDistance:Single; frustum: TFrustum; end
14073:
14074:
           THmgPlane', 'TVector
14075:
14076:
             TDoubleHmgPlane', 'THomogeneousDblVector
14077:
            {TTransType', '( ttScaleX, ttScaleY, ttScaleZ, ttShearXY, ttShear'
14078:
              +'XZ, ttShearYZ, ttRotateX, ttRotateY, ttRotateZ, ttTranslateX, ttTranslateY'
14079:
               +', ttTranslateZ, ttPerspectiveX, ttPerspectiveY, ttPerspectiveZ, ttPerspectiveW )}
14080:
             TSingleArray', 'array of Single
14081:
             TTransformations', 'array [0..15] of Single)
14082:
             \label{thm:condition} TPackedRotationMatrix', \ensuremath{\mbox{'array}} \ensuremath{\mbox{[0..2]}} \ensuremath{\mbox{of}} \ensuremath{\mbox{Smallint}})
14083:
             TVertex', 'TAffineVector
             //TVectorGL', 'THomogeneousFltVector
//TMatrixGL', 'THomogeneousFltMatrix
14084:
14085:
14086:
             // TPackedRotationMatrix = array [0..2] of SmallInt;
           Function glTexPointMake( const s, t : Single) : TTexPoint Function glAffineVectorMake( const x, y, z : Single) : TAffineVector; Function glAffineVectorMakel( const v : TVectorGL) : TAffineVector;
14087:
14088:
14089:
           Procedure glSetVector( var v : TAffineVector; const x, y, z : Single);

Procedure glSetVector( var v : TAffineVector; const x, y, z : Single);
14090:
14091:
           Procedure glSetVector1( var v : TAffineVector; const vSrc : TVectorGL);
14092:
           Procedure glSetVector2( var v : TAffineVector; const vSrc : TAffineVector);
           Procedure glSetVector3( var v : TAffineDblVector; const vSrc : TAffineVector);
Procedure glSetVector4( var v : TAffineDblVector; const vSrc : TVectorGL);
14094:
14095:
           Function glVectorMake( const v : TAffineVector; w : Single) : TVectorGL;
14096:
          Function glVectorMake( const v : TAffineVector; w : Single) : TVectorGL;
Function glVectorMake( const x, y, z : Single; w : Single) : TVectorGL;
Function glPointMake( const x, y, z : Single) : TVectorGL;
Function glPointMake1( const v : TAffineVector) : TVectorGL;
Function glPointMake2( const v : TVectorGL) : TVectorGL;
Procedure glSetVector5( var v : TVectorGL; const x, y, z : Single; w : Single);
Procedure glSetVector6( var v : TVectorGL; const av : TAffineVector; w : Single);
14097:
14098:
14099:
14100:
14101:
14102:
           Procedure glglSetVector7( var v : TVectorGL; const vSrc : TVectorGL);
14103:
           Procedure glMakePoint( var v : TVectorGL; const x, y, z : Single);
Procedure glMakePoint1( var v : TVectorGL; const av : TAffineVector);
14104:
14105:
           Procedure glMakePoint2( var v : TVectorGL; const av : TVectorGL);
14106:
14107:
            Procedure glMakeVector( var v : TAffineVector; const x, y, z : Single);
14108:
           Procedure glMakeVector1( var v : TVectorGL; const x, y, z : Single);
Procedure glMakeVector2( var v : TVectorGL; const av : TAffineVector);
14109:
           Procedure glMakeVector3( var v : TVectorGL; const av : TVectorGL);
14110:
           Procedure glRstVector( var v : TAffineVector);
           Procedure glRstVector1( var v : TVectorGL);
14112:
14113:
           Function glVectorAdd( const v1, v2 : TAffineVector) : TAffineVector;
           Procedure glVectorAdd1( const v1, v2 : TAffineVector; var vr : TAffineVector);
14114:
            //Procedure VectorAdd2( const v1, v2 : TAffineVector; vr : PAffineVector);
14115:
14116:
            Function glVectorAdd3( const v1, v2 : TVectorGL) : TVectorGL;
14117:
           Procedure glVectorAdd4( const v1, v2 : TVectorGL; var vr : TVectorGL);
14118:
           Function glVectorAdd5( const v : TAffineVector; const f : Single) : TAffineVector; Function glVectorAdd6( const v : TVectorGL; const f : Single) : TVectorGL;
14119:
           Procedure glAddVector7( var v1 : TAffineVector; const v2 : TAffineVector);

Procedure glAddVector8( var v1 : TAffineVector; const v2 : TVectorGL);
14120:
14121:
14122:
           Procedure glAddVector9( var v1 : TVectorGL; const v2 : TVectorGL);
           Procedure glAddVector10( var v : TAffineVector; const f : Single);
14123:
           Procedure glAddVector11( var v : TVectorGL; const f : Single);
14124:
            //Procedure TexPointArrayAdd(const src:PTexPointArray;const delta:TTexPoint;const
          nb:Int;dest:PTexPointArray);
14126:
           //Procedure TexPointArrayScaleAndAdd(const src:PTexPointArray;const delta:TTexPoint;const
         nb:Integer;const scale: TTexPoint; dest : PTexPointArray);
//Procedure VectorArrayAdd(const src:PAffineVectorArray;const delta:TAffineVector;const nb:Integer;dest:
14127:
          PAffineVectorArray);
14128:
           Function glVectorSubtract( const V1, V2 : TAffineVector) : TAffineVector;
           Procedure glVectorSubtract1( const v1, v2 : TAffineVector; var result : TAffineVector);

Procedure glVectorSubtract2( const v1, v2 : TAffineVector; var result : TVectorGL);

Procedure glVectorSubtract3( const v1 : TVectorGL; v2 : TAffineVector; var result : TVectorGL);
14129:
14130:
```

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Function glVectorSubtract4( const V1, V2 : TVectorGL) : TVectorGL;
14132:
              Procedure glVectorSubtract5( const v1, v2 : TVectorGL; var result : TVectorGL);

Procedure glVectorSubtract6( const v1, v2 : TVectorGL; var result : TAffineVector);
14133:
14135:
               Function glVectorSubtract7( const v1 : TAffineVector; delta : Single) : TAffineVector;
              Function glVectorSubtract8( const v1 : TVectorGL; delta : Single) : TVectorGL;
14136:
              Procedure glSubtractVector9( var V1 : TAffineVector; const V2 : TAffineVector);

Procedure glSubtractVector10( var V1 : TVectorGL; const V2 : TVectorGL);
14137:
14138:
               \textbf{Procedure} \ \ \text{glCombineVector}( \ \textbf{var} \ \ \text{vr} \ : \ \text{TAffineVector}; \ \textbf{const} \ \ \text{v} \ : \ \text{TAffineVector}; \ \textbf{var} \ \ \text{f} \ : \ \text{Single}); 
14139:
              **Procedure glcombinevector** (var vr : Infilievector; const v : TaffineVector; pf : Single);

//Procedure CombineVector1( var vr : TaffineVector; const v : TaffineVector; pf : PFloat);

Function glTexPointCombine( const t1, t2 : TTexPoint; f1, f2 : Single) : TTexPoint

Function glVectorCombine2( const V1, V2 : TaffineVector; const F1, F2 : Single) : TaffineVector;

Function glVectorCombine33( const V1, V2, V3 : TaffineVector; const F1, F2, F3 : Single) : TaffineVector;
14140:
14141:
14142:
14143:
14144:
              Procedure glVectorCombine34(const V1,V2,V3:TAffineVector; const F1,F2,F3: Single; var vr : TAffineVector);
              Procedure glCombineVector5( var vr : TVectorGL; const v : TVectorGL; var f : Single);
Procedure glCombineVector6( var vr : TVectorGL; const v : TAffineVector; var f : Single);
14145:
14146:
14147:
              Function glVectorCombine7( const V1, V2 : TVectorGL; const F1, F2 : Single) : TVectorGL;
              Function glVectorCombine8( const V1 : TVectorGL; const V2: TAffineVector; const F1,F2:Single): TVectorGL;
14148:
14149 .
              Procedure glVectorCombine9(const V1:TVectorGL;const V2:TAffineVector;const F1,F2:Single;var vr:TVectorGL);
              Procedure glVectorCombine10( const V1, V2 : TVectorGL; const F1, F2 : Single; var vr : TVectorGL);

Procedure glVectorCombine11( const V1, V2 : TVectorGL; const F2 : Single; var vr : TVectorGL);

Function glVectorCombine3( const V1, V2, V3 : TVectorGL; const F1, F2, F3 : Single) : TVectorGL;
14150:
14151:
              Procedure glVectorCombines1( const V1, V2, V3 : TVectorGL; const F1, F2, F3 : Single; var vr : TVectorGL);
Function glVectorDotProduct( const V1, V2 : TAffineVector) : Single;
Function glVectorDotProduct1( const V1, V2 : TVectorGL) : Single;
Function glVectorDotProduct2( const V1 : TVectorGL; const V2 : TAffineVector) : Single;
14153:
14154:
14155:
14156:
14157:
              Function glPointProject( const p, origin, direction : TAffineVector) : Single;
14158:
              Function glPointProject1( const p, origin, direction : TVectorGL) : Single;
              Function glVectorCrossProduct( const V1, V2 : TAffineVector) : TAffineVector;
Function glVectorCrossProduct1( const V1, V2 : TVectorGL) : TVectorGL;
Procedure glVectorCrossProduct2( const V1, V2 : TVectorGL; var Vr : TVectorGL);
14159:
14160:
14161:
14162:
               \textbf{Procedure} \  \, \texttt{glVectorCrossProduct3(} \  \, \textbf{const} \  \, \texttt{v1, v2} \  \, \texttt{:} \  \, \texttt{TAffineVector}; \  \, \textbf{var} \  \, \texttt{vr} \  \, \texttt{:} \  \, \texttt{TVectorGL)}; 
              Procedure glVectorCrossProduct4( const v1, v2 : TVectorGL; var vr : TAffineVector);
14163:
              Procedure glvectorCrossProduct5 (const v1, v2 : TAffineVector; var vr : TAffineVector);
14164:
              Function glLerp( const start, stop, t : Single) : Single Function glAngleLerp( start, stop, t : Single) : Single
14165:
14167:
              Function glDistanceBetweenAngles( angle1, angle2 : Single) : Single
              Function glTexPointLerp( const t1, t2 : TTexPoint; t : Single) : TTexPoint;
Function glVectorLerp( const v1, v2 : TAffineVector; t : Single) : TAffineVector;
14168:
14169:
14170:
              Procedure glVectorLerp1( const v1, v2 : TAffineVector; t : Single; var vr : TAffineVector);
14171:
              Function glVectorLerp2( const v1, v2 : TVectorGL; t : Single) : TVectorGL;
14172:
              Procedure glVectorLerp3( const v1, v2 : TVectorGL; t : Single; var vr : TVectorGL);
14173: Function glVectorAngleLerp( const v1, v2 : TAffineVector; t : Single) : TAffineVector; 14174: Function glVectorAngleCombine( const v1, v2 : TAffineVector; t : Single) : TAffineVector; 14175: // Procedure VectorArrayLerp( const src1, src2:PVectorArray; t:Single; n:Integer; dest:PVectorArray);
14176:
             // \ {\tt Procedure \ Vector Array Lerp1(\ const\ src1,\ src2:\ {\tt PAffine Vector Array;\ t: Single;\ n: Integer;\ dest:\ results for the procedure of the proc
             PAffineVectorArray);
              Function glVectorLength( const x, y : Single) : Single;
14177:
              Function glVectorLength1( const x, y, z : Single) : Single;
Function glVectorLength2( const v : TAffineVector) : Single;
Function glVectorLength3( const v : TVectorGL) : Single;
14178:
14179:
14180:
14181:
              Function glVectorLength4( const v : array of Single) : Single;
              Function glVectorNorm( const x, y : Single) : Single;
Function glVectorNorm1( const v : TAffineVector) : Single;
14182:
14183:
14184:
              Function glVectorNorm2( const v : TVectorGL) : Single;
              Function glVectorNorm3( var V : array of Single) : Single;
Procedure glNormalizeVector( var v : TAffineVector);
14185:
14186:
               Procedure glNormalizeVector1( var v : TVectorGL);
14187:
              14188:
14189:
              Function glVectorNormalize1( const v : TVectorGL) : TVectorGL;
              // Procedure NormalizeVectorArray( list : PAffineVectorArray; n : Integer);
Function glVectorAngleCosine( const V1, V2 : TAffineVector) : Single
14190:
14191:
14192:
               Function glVectorNegate( const v : TAffineVector) : TAffineVector;
14193:
              \textbf{Function} \  \, \texttt{glVectorNegatel}( \  \, \textbf{const} \  \, \texttt{v} \  \, \texttt{:} \  \, \texttt{TVectorGL}) \  \, \texttt{:} \  \, \texttt{TVectorGL};
              Procedure glNegateVector( var V : TAffineVector);
14194:
              Procedure glNegateVector2( var V : TVectorGL);

Procedure glNegateVector3( var V : array of Single);
14195:
              Procedure glScaleVector( var v : TAffineVector; factor : Single);
14197:
              Procedure glScaleVector1( var v : TAffineVector; const factor : TAffineVector);
14198:
              Procedure glScaleVector2( var v : TVectorGL; factor : Single);
14199:
              Procedure giscalevector3 (var v : TvectorGL; const factor : TvectorGL);

Function glVectorScale( const v : TAffineVector; factor : Single) : TAffineVector;
14200:
14201:
14202:
               \textbf{Procedure} \ \text{glVectorScalel(} \ \textbf{const} \ \text{v} \ : \ \text{TAffineVector;} \ \text{factor:} \ \text{Single;} \ \textbf{var} \ \text{vr} \ : \ \text{TAffineVector);} 
              Function glVectorScale2( const v : TVectorGL; factor : Single) : TVectorGL;

Procedure glVectorScale3( const v : TVectorGL; factor : Single; var vr : TVectorGL);
14203:
14204:
              Procedure glVectorScale4( const v : TVectorGL; factor :
                                                                                                                        Single; var vr : TAffineVector);
14205:
               Procedure glDivideVector( var v : TVectorGL; const divider : TVectorGL);
14206:
14207:
              Function glVectorEquals( const V1, V2 : TVectorGL) : Boolean;
              Function glVectorEquals1( const V1, V2 : TAffineVector) : Boolean;
14208:
              Function glAffineVectorEquals( const V1, V2 : TVectorGL) : Boolean;
14209:
              Function glVectorIsNull( const v : TVectorGL) : Boolean;
Function glVectorIsNull( const v : TAffineVector) : Boolean;
14210:
14211:
14212:
              Function glVectorSpacing( const v1, v2 : TTexPoint) : Single;
              Function glVectorSpacing1( const v1, v2 : TAffineVector) : Single;
14213:
              Function glVectorSpacing2( const v1, v2 : TVectorGL) : Single;
14214:
              Function glVectorDistance( const v1, v2 : TAffineVector) :
14215:
14216:
              Function glVectorDistance1( const v1, v2 : TVectorGL) : Single;
              Function glVectorDistance2( const v1, v2 : TAffineVector) : Single;
Function glVectorDistance21( const v1, v2 : TVectorGL) : Single;
14217:
14218:
              Function glVectorPerpendicular( const V, N : TAffineVector) : TAffineVector
```

```
14220:
               Function glVectorReflect( const V, N : TAffineVector) : TAffineVector
                Procedure glRotateVector( var vector : TVectorGL; const axis : TAffineVector; angle : Single);
14221:
                Procedure glRotateVector1( var vector : TVectorGL; const axis : TVectorGL; angle : Single);
14223:
                Procedure glRotateVectorAroundY( var v : TAffineVector; alpha : Single)
                Function glVectorRotateAroundX( const v : TAffineVector; alpha : Single) : TAffineVector;
14224:
                Function glVectorRotateAroundY( const v : TAffineVector; alpha : Single) : TAffineVector;
14225:
14226:
                Procedure glVectorRotateAroundY1(const v : TAffineVector; alpha : Single; var vr : TAffineVector);
                Function glVectorRotateAroundZ( const v : TAffineVector; alpha : Single) : TAffineVector;
14227:
               Procedure glAbsVector( var v : TVectorGL);

Procedure glAbsVector1( var v : TAffineVector);
14228:
14229:
                Function glVectorAbs( const v : TVectorGL) : TVectorGL;
14230:
                Function glVectorAbs1( const v : TAffineVector) : TAffineVector;
14232:
                Procedure glSetMatrix( var dest : THomogeneousDblMatrix; const src : TMatrixGL);
               Procedure glSetMatrix1( var dest : TAffineMatrix; const src : TMatrixGL);
Procedure glSetMatrix2( var dest : TMatrixGL; const src : TAffineMatrix);
14233:
14234:
14235:
                Procedure glSetMatrixRow( var dest : TMatrixGL; rowNb : Integer; const aRow : TVectorGL);
                Function glCreateScaleMatrix( const v : TAffineVector) : TMatrixGL;
14236:
14237:
                \textbf{Function} \  \, \texttt{glCreateScaleMatrix1}( \  \, \textbf{const} \  \, \textbf{v} \  \, \texttt{TVectorGL}) \  \, \texttt{:} \  \, \texttt{TMatrixGL};
               Function glCreateTranslationMatrix( const V : TAffineVector) : TMatrixGL;
Function glCreateTranslationMatrix( const V : TVectorGL) : TMatrixGL;
14238:
14239:
               Function glCreateScaleAndTranslationMatrix( const scale, offset : TVectorGL) : TMatrixGL;
Function glCreateRotationMatrixX( const sine, cosine : Single) : TMatrixGL;
14240:
14241:
14242:
               \textbf{Function} \  \, \texttt{glCreateRotationMatrixX1( const } \  \, \texttt{angle} \  \, : \  \, \texttt{Single)} \  \, : \  \, \texttt{TMatrixGL;}
               Function glCreateRotationMatrixY( const sine, cosine : Single) : TMatrixGL;
Function glCreateRotationMatrixY1( const angle : Single) : TMatrixGL;
14243:
14244:
14245:
                Function glCreateRotationMatrixZ( const sine, cosine : Single) : TMatrixGL;
14246:
               Function glCreateRotationMatrixZ1( const angle : Single) : TMatrixGL;
Function glCreateRotationMatrix( const anAxis : TAffineVector; angle : Single) : TMatrixGL;
Function glCreateRotationMatrix1( const anAxis : TVectorGL; angle : Single) : TMatrixGL;
14247:
14248:
                Function glCreateAffineRotationMatrix( const anAxis : TAffineVector; angle:Single):TAffineMatrix
14250:
                \textbf{Function} \ \ \texttt{glMatrixMultiply}( \ \ \textbf{const} \ \ \texttt{M1}, \ \ \texttt{M2} \ : \ \texttt{TAffineMatrix}) \ : \ \texttt{TAffineMatrix};
               Function glMatrixMultiply1( const M1, M2 : TMatrixGL) : TMatrixGL;
Procedure glMatrixMultiply2( const M1, M2 : TMatrixGL; var MResult : TMatrixGL);
14251:
14252:
               Function glVectorTransform( const V : TVectorGL; const M : TMatrixGL) : TVectorGL;
Function glVectorTransform1( const V : TVectorGL; const M : TAffineMatrix) : TVectorGL;
14253:
               Function glVectorTransform2( const V : TAffineVector; const M : TMatrixGL) : TAffineVector;
Function glVectorTransform3( const V : TAffineVector; const M : TAffineMatrix) : TAffineVector;
14255:
14256:
               Function glMatrixDeterminant( const M : TAffineMatrix) : Single;
14257:
14258:
                Function glMatrixDeterminant1( const M : TMatrixGL) : Single;
               Procedure glAdjointMatrix( var M : TMatrixGl);
Procedure glAdjointMatrix1( var M : TAffineMatrix);
14259:
14260:
               Procedure glScaleMatrix( var M : TMatrixGL; const factor : Single);
Procedure glScaleMatrix1( var M : TMatrixGL; const factor : Single);
14261:
14262:
                Procedure glTranslateMatrix( var M : TMatrixGL; const v : TAffineVector);
14263:
                Procedure glTranslateMatrix1( var M : TMatrixGL; const v : TVectorGL);
14264:
               Procedure glNormalizeMatrix( var M : TMatrixGL)
Procedure glTransposeMatrix( var M : TAffineMatrix);
14265:
14266:
                Procedure glTransposeMatrix1( var M : TMatrixGL);
14267:
               Procedure glInvertMatrix( var M : TMatrixGl);
Procedure glInvertMatrix1( var M : TAffineMatrix);
14268:
14269:
                Function glAnglePreservingMatrixInvert( const mat : TMatrixGL) : TMatrixGL
14270:
14271:
                Function glMatrixDecompose( const M : TMatrixGL; var Tran : TTransformations) : Boolean
                Function glPlaneMake( const p1, p2, p3 : TAffineVector) : THmgPlane;
14272:
14273:
                Function glPlaneMakel( const p1, p2, p3 : TVectorGL) : THmgPlane;
               Function glPlaneMake2( const point, normal : TAffineVector) : THmgPlane;
Function glPlaneMake3( const point, normal : TVectorGL) : THmgPlane;
14274:
14275:
                Procedure glSetPlane( var dest : TDoubleHmgPlane; const src : THmgPlane)
                Procedure glNormalizePlane( var plane : THmgPlane)
14277:
               Function glPlaneEvaluatePoint( const plane : THmgPlane; const point : TAffineVector) : Single;
Function glPlaneEvaluatePoint1( const plane : THmgPlane; const point : TVectorGL) : Single;
Function glCalcPlaneNormal( const pl, p2, p3 : TAffineVector) : TAffineVector;
14278:
14279:
14280:
               Procedure glCalcPlaneNormal1( const p1, p2, p3 : TATffineVector) : TATffineVector);

Procedure glCalcPlaneNormal1( const p1, p2, p3 : TAffineVector; var vr : TAffineVector);

Procedure glCalcPlaneNormal2( const p1, p2, p3 : TVectorGL) var vr : TAffineVector);

Function glPointIsInHalfSpace( const point, planePoint, planeNormal : TVectorGL) : Boolean;

Function glPointIsInHalfSpace( const point, planePoint, planeNormal : TAffineVector) : Boolean;
14281:
14282:
14283:
14284:
               Function glPointPlaneDistance( const point, planePoint, planeNormal : TWectorGL) : Single;
Function glPointPlaneDistance( const point, planePoint, planeNormal : TAffineVector) : Single;
14286:
14287:
                \textbf{Function} \ \texttt{glPointSegmentClosestPoint} ( \ \textbf{const} \ \texttt{point}, \ \texttt{segmentStart}, \ \texttt{segmentStop:} \texttt{TAffineVector}) : \texttt{TAffineVector} ) : \texttt{TAffi
               Function glPointSegmentDistance( const point, segmentStart, segmentStop: TAffineVector): single
Function glPointLineClosestPoint( const point, linePoint, lineDirection: TAffineVector): TAffineVector
Function glPointLineDistance( const point, linePoint, lineDirection: TAffineVector): Single
14288:
14289:
14290:
14291:
                Procedure SglegmentSegmentClosestPoint( const S0Start, S0Stop, S1Start, S1Stop : TAffineVector; var
              SegmentOClosest, SegmentIClosest: TAffineVector)

Function glSegmentSegmentDistance( const SOStart, SOStop, SlStart, SlStop: TAffineVector): single TEulerOrder', '( eulXYZ, eulXZY, eulYZZ, eulYZX, eulZYX, eulZYX)

Function glQuaternionMake( const Imag: array of Single; Real: Single): TQuaternion
14292:
14293:
14294:
               Function glQuaternionConjugate( const Q : TQuaternion) : TQuaternion Function glQuaternionMagnitude( const Q : TQuaternion) : Single
14295:
14296:
                Procedure glNormalizeQuaternion( var Q : TQuaternion)
14297:
               Function glQuaternionFromPoints( const V1, V2 : TAffineVector) : TQuaternion

Procedure glQuaternionToPoints( const Q : TQuaternion; var ArcFrom, ArcTo : TAffineVector)
14299:
               \textbf{Function} \  \, \texttt{glQuaternionFromMatrix}( \  \, \textbf{const} \  \, \texttt{mat} \  \, : \  \, \texttt{TMatrixGL}) \  \, : \  \, \texttt{TQuaternion}
14300:
                Function glQuaternionToMatrix( quat : TQuaternion) : TMatrixGL
14301:
                Function glQuaternionToAffineMatrix( quat : TQuaternion) : TAffineMatrix
14302:
                Function glQuaternionFromAngleAxis( const angle : Single; const axis : TAffineVector) : TQuaternion
14303:
               Function glQuaternionFromRollPitchYaw( const r, p, y : Single) : TQuaternion

Function glQuaternionFromEuler( const x, y, z : Single; eulerOrder : TEulerOrder) : TQuaternion

Function glQuaternionMultiply( const qL, qR : TQuaternion) : TQuaternion

Function glQuaternionSlerp( const QStart, QEnd : TQuaternion; Spin : Integer; t : Single) : TQuaternion;
14304:
14305:
14306:
```

```
14308:
         Function glOuaternionSlerpl( const source, dest : TOuaternion; const t : Single) : TOuaternion;
         Function glLnXP1( X : Extended) : Extended
14309:
         Function glLog10( X : Extended) : Extended
14311:
         Function glLog2( X : Extended) : Extended;
         Function glLog21( X : Single) : Single;
14312:
         Function glLogN( Base, X : Extended) : Extended
Function glIntPower( Base : Extended; Exponent : Integer) : Extended
14313:
14314:
         Function glPower( const Base, Exponent : Single) : Single;
14315:
         Function glPower1( Base : Single; Exponent : Integer) : Single;
14316:
14317:
         Function glDegToRad( const Degrees : Extended) : Extended;
         Function glDegToRad1( const Degrees : Single) : Single;
14318:
         Function glRadToDeg( const Radians : Extended) : Extended;
14319:
14320:
         Function glRadToDeg1( const Radians : Single) : Single;
         Function glNormalizeAngle( angle : Single) : Single
14321:
         Function glNormalizeDegAngle( angle : Single) : Single
14322:
14323:
         Procedure glSinCos( const Theta : Extended; var Sin, Cos : Extended);
         Procedure glSinCos1( const Theta : Double; var Sin, Cos : Double);
14324:
14325 .
         Procedure glSinCos( const Theta : Single; var Sin, Cos : Single);
         Procedure glSinCosl( const theta, radius : Double; var Sin, Cos : Extended);
14326:
         Procedure glSinCos2( const theta, radius : Double; var Sin, Cos : Double);
14327:
         Procedure glSinCos3( const theta, radius : Single; var Sin, Cos : Single);
14328:
         Procedure glPrepareSinCosCache( var s, c : array of Single; startAngle, stopAngle : Single)
14329:
14330:
         Function glArcCos( const X : Extended) : Extended;
         Function glArcCos1( const x : Single) : Single;
14331:
         Function glArcSin( const X : Extended) : Extended;
14332:
14333:
         Function glArcSin1( const X : Single) : Single;
        Function glArcTan21( const Y, X : Extended): Extended;
Function glArcTan21( const Y, X : Single): Single;
Function glFastArcTan2( y, x : Single): Single
Function glTan( const X : Extended): Extended;
14334:
14335:
14336:
14338:
         Function glTan1( const X : Single) : Single;
        Function glCoTan( const X : Extended) : Extended;
Function glCoTan1( const X : Single) : Single;
14339:
14340:
         Function glSinh( const x : Single) : Single;
Function glSinh1( const x : Double) : Double;
14341:
14343:
         Function glCosh( const x : Single) : Single;
14344:
         Function glCosh1( const x : Double) : Double;
         Function glRSqrt( v : Single) : Single
14345:
14346:
         Function glRLength(x, y : Single) : Single
         Function glISqrt( i : Integer) : Integer
14347:
14348:
         Function glILength(x, y : Integer) : Integer;
         \textbf{Function} \  \, \texttt{glILength1}(\  \, \texttt{x},\  \, \texttt{y},\  \, \texttt{z} \  \, \texttt{:} \  \, \texttt{Integer}) \  \, \texttt{:} \  \, \texttt{Integer};
14349:
14350:
         Procedure glRegisterBasedExp
         Procedure glRandomPointOnSphere( var p : TAffineVector)
14352:
         Function glRoundInt( v : Single) : Single;
Function glRoundInt1( v : Extended) : Extended;
14353:
         Function glTrunc( v : Single) : Integer;
14354:
         Function glTrunc64( v : Extended) : Int64;
14355:
14356:
         Function glInt( v : Single) : Single;
         Function glInt1( v : Extended) : Extended;
14357:
         Function glFrac( v : Single) : Single;
14358:
         Function glFrac1( v : Extended) : Extended;
14359:
         Function glRound( v : Single) : Integer;
         Function glRound64( v : Single) : Int64;
14361:
         Function glRound641( v : Extended) : Int64;
14362:
         Function glTrunc( X : Extended) : Int64
14363:
         Function glRound( X : Extended) : Int64
14364:
         Function glFrac( X : Extended) : Extended
14365:
         Function glCeil( v : Single) : Integer;
Function glCeil64( v : Extended) : Int64;
14366:
14367:
         Function glFloor( v : Single) : Integer;
14368:
14369:
         Function glFloor64( v : Extended) : Int64;
         Function glScaleAndRound( i : Integer; var s : Single) : Integer
Function glSign( x : Single) : Integer
14370:
14371:
        Function glIsInRange(const x, a, b : Single) : Boolean;
Function glIsInRangel(const x, a, b : Double) : Boolean;
14372:
14374:
         Function glIsInCube( const p, d : TAffineVector) : Boolean;
14375:
         Function glIsInCubel( const p, d : TVectorGL) : Boolean;
14376:
         //Function MinFloat( values : PSingleArray; nbItems : Integer) : Single;
         //Function MinFloat1( values : PDoubleArray; nbItems : Integer) : Double;
14377:
         //Function MinFloat2( values : PExtendedArray; nbItems : Integer) : Extended;
14378:
14379:
         Function glMinFloat3( const v1, v2 : Single) : Single;
14380:
         Function glMinFloat4( const v : array of Single) : Single;
         Function glMinFloat5( const v1, v2 : Double) : Double;
Function glMinFloat6( const v1, v2 : Extended) : Extended;
14381:
14382:
         Function glMinFloat7( const v1, v2, v3 : Single) : Single;
14383:
14384:
         Function glMinFloat8( const v1, v2, v3 : Double) : Double;
         Function glMinFloat9( const v1, v2, v3 : Extended) : Extended;
14385:
         //Function MaxFloat10( values : PSingleArray; nbItems : Integer) : Single;
14386:
         //Function MaxFloat( values : PDoubleArray; nbItems : Integer) : Double;
14388:
         //Function MaxFloat1( values : PExtendedArray; nbItems : Integer) : Extended;
14389:
         Function glMaxFloat2( const v : array of Single) : Single;
        Function glMaxFloat3( const v1, v2: Single): Single;
Function glMaxFloat4( const v1, v2: Double): Double;
14390:
14391:
         Function glMaxFloat5( const v1, v2 : Extended) : Extended;
14392:
14393:
         Function glMaxFloat6( const v1, v2, v3 : Single) : Single;
        Function glMaxFloat7( const v1, v2, v3 : Double) : Double;
Function glMaxFloat8( const v1, v2, v3 : Extended) : Extended;
14394:
14395:
14396: Function glMinInteger9( const v1, v2 : Integer) : Integer;
```

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14397:
          Function glMinInteger( const v1, v2 : Cardinal) : Cardinal;
14398:
           Function glMaxInteger( const v1, v2 : Integer) : Integer;
           Function glMaxInteger1( const v1, v2 : Cardinal) : Cardinal;
14400 •
           Function glTriangleArea( const p1, p2, p3 : TAffineVector) : Single;
          //Function PolygonArea( const p : PAffineVectorArray; nSides : Integer) : Single;
Function glTriangleSignedArea( const p1, p2, p3 : TAffineVector) : Single;
//Function PolygonSignedArea( const p1, p2, p3 : TAffineVector) : Single;
//Function PolygonSignedArea( const p : PAffineVectorArray; nSides : Integer) : Single;
//Procedure ScaleFloatArray( values : PSingleArray; nb : Integer; var factor : Single);
14401:
14402:
14403:
14404:
           Procedure glScaleFloatArray( var values : TSingleArray; factor : Single);
14405:
          //Procedure OffsetFloatArray( values : PSingleArray; nb : Integer; var delta : Single);
Procedure glOffsetFloatArray1( var values : array of Single; delta : Single);
//Procedure OffsetFloatArray2( valuesDest, valuesDelta : PSingleArray; nb : Integer);
14406:
14407:
          Function glMaxXYZComponent( const v : TVectorGL) : Single;
Function glMaxXYZComponent1( const v : TAffineVector) : single;
14409:
14410:
           Function glMinXYZComponent( const v : TVectorGL) : Single;
14411:
14412:
           Function glMinXYZComponent1( const v : TAffineVector) : single;
           Function glMaxAbsXYZComponent( v : TVectorGL) : Single
14413:
          Procedure glMaxVector( var v : TVectorGL; const v1 : TVectorGL);

Procedure glMaxVector( var v : TAffineVector; const v1 : TAffineVector);
14414 .
14415:
14416:
           Procedure glMinVector( var v : TVectorGL; const v1 : TVectorGL);
14417:
14418:
           Procedure glMinVector1( var v : TAffineVector; const v1 : TAffineVector);
          Procedure glSortArrayAscending( var a : array of Extended)
Function glClampValue( const aValue, aMin, aMax : Single) : Single;
Function glClampValue1( const aValue, aMin : Single) : Single;
14419:
14420:
14421:
14422:
           Function glGeometryOptimizationMode : String
14423:
          Procedure glBeginFPUOnlySection
14424:
          Procedure glEndFPUOnlySection
14425:
           Function glConvertRotation( const Angles : TAffineVector) : TVectorGL
           Function glMakeAffineDblVector( var v : array of Double) : TAffineDblVector
          Function glMakeDblVector( var v : array of Double) : THomogeneousDblVector
Function glVectorAffineDblToFlt( const v : TAffineDblVector) : TAffineVector
Function glVectorDblToFlt( const v : THomogeneousDblVector) : THomogeneousVector
14427:
14428:
14429:
14430:
           Function glVectorAffineFltToDbl( const v : TAffineVector) : TAffineDblVector
           Function glPointInPolygon( var xp, yp : array of Single; x, y : Single) : Boolean
Procedure glDivMod( Dividend : Integer; Divisor : Word; var Result, Remainder : Word)
Function glTurn( const Matrix : TMatrixGL; angle : Single) : TMatrixGL;
14432:
14433:
14434:
          Function glTurn1( const Matrix : TMatrixGL; const MasterUp:TAffineVector;Angle:Single):TMatrixGL;
Function glPitch( const Matrix : TMatrixGL; Angle : Single) : TMatrixGL;
14435:
14436:
14437:
          Function glPitch1( const Matrix:TMatrixGL;const MasterRight:TAffineVector;Angle:Single):TMatrixGL;
          Function glRoll( const Matrix: TMatrixGL; Angle : Single) : TMatrixGL;
Function glRoll1(const Matrix: TMatrixGL; const MasterDirection:TAffineVector;Angle: Single): TMatrixGL;
14438:
14439:
           Function glRayCastMinDistToPoint( const rayStart, rayVector: TVectorGL; const point:TVectorGL):Single
         Function glRayCastIntersectsSphere( const rayStart, rayVector: TVectorGL; const sphereCenter:TVectorGL; const sphereRadius: Single): Boolean;
14441:
         Function glRayCastSphereIntersect( const rayStart, rayVector: TVectorGL; const sphereCenter:TVectorGL; const sphereRadius: Single; var i1, i2: TVectorGL): Integer;
14442:
          Function glSphereVisibleRadius( distance, radius : Single)
                                                                                             : Single
14444:
          Function glExtractFrustumFromModelViewProjection( const modelViewProj : TMatrixGL) : TFrustum
          Function glIsVolumeClipped( const objPos : TVectorGL; const objRadius : Single; const rcci :
14445:
         TRenderContextClippingInfo) : Boolean;
          Function glIsVolumeClippedl( const objPos : TAffineVector; const objRadius : Single; const rcci :
         TRenderContextClippingInfo) : Boolean;
14447:
          Function glIsVolumeClipped2(const min, max:TAffineVector; const rcci : TRenderContextClippingInfo) : Bool;
          Function glIsVolumeClipped3(const objPos:TAffineVector;const objRadius:Single;const
14448:
         Frustum: TFrustum): Bool;
14449:
         Function glMakeParallelProjectionMatrix( const plane : THmgPlane; const dir : TVectorGL) : TMatrixGL
          Function glMakeShadowMatrix( const planePoint, planeNormal, lightPos: TVectorGL): TMatrixGL Function glMakeReflectionMatrix( const planePoint, planeNormal: TAffineVector): TMatrixGL Function glPackRotationMatrix( const mat: TMatrixGL): TPackedRotationMatrix
14450:
14451:
14452:
14453:
           Function glUnPackRotationMatrix( const packedMatrix: TPackedRotationMatrix): TMatrixGL
14454:
           'cPI','Single').setExtended( 3.141592654);
           'cPIdiv180','Single').setExtended( 0.017453292);
'c180divPI','Single').setExtended( 57.29577951);
14455:
14456:
           'c2PI', 'Single').setExtended( 6.283185307);
14458:
           'cPIdiv2', 'Single').setExtended( 1.570796326);
           'cPIdiv4','Single').setExtended( 0.785398163);
14459:
14460:
           'c3PIdiv4', 'Single').setExtended( 2.35619449);
           'cInv2PI', Single').setExtended( 1 / 6.283185307);
'cInv360', Single').setExtended( 1 / 360);
14461:
14462:
14463:
           'c180','Single').setExtended( 180);
14464:
           'c360','Single').setExtended( 360);
           'cOneHalf','Single').setExtended( 0.5);
14465:
14466:
            cLn10','Single').setExtended( 2.302585093);
           ('MinSingle','Extended').setExtended( 1.5e-45);
'MaxSingle','Extended').setExtended( 3.4e+38);
'MinDouble','Extended').setExtended( 5.0e-324);
'MaxDouble','Extended').setExtended( 1.7e+308);
14467:
14468:
14469:
14470:
           'MinExtended','Extended').setExtended( 3.4e-4932);
14471:
14472:
           'MaxExtended', 'Extended').setExtended( 1.1e+4932);
           'MinComp','Extended').setExtended( - 9.223372036854775807e+18);
'MaxComp','Extended').setExtended( 9.223372036854775807e+18);}
14473:
14474:
14475:
14476:
14477: procedure SIRegister_GLVectorFileObjects(CL: TPSPascalCompiler);
14478: begin
14479:
            AddClassN(FindClass('TOBJECT'),'TMeshObjectList
            (FindClass('TOBJECT'),'TFaceGroups
```

```
\label{thm:contering} TMeshAutoCentering', '( macCenterX, macCenterY, macCenterZ, macUseBarycenter ) \\ TMeshAutoCenterings', 'set of TMeshAutoCentering \\ TMeshObjectMode', '( momTriangles, momTriangleStrip, momFaceGroups ) \\
14481:
14482:
            TMeshObjectMode', '( momTriangle SIRegister_TBaseMeshObject(CL);
14483:
14484:
14485:
            (FindClass('TOBJECT'), 'TSkeletonFrameList
            TSkeletonFrameTransform', '( sftRotation, sftQuaternion )
14486:
            SIRegister_TSkeletonFrame(CL);
14487:
            SIRegister_TSkeletonFrameList(CL);
14488:
            (FindClass('TOBJECT'),'TSkeleton
(FindClass('TOBJECT'),'TSkeletonBone
14489:
14490:
14491:
            SIRegister_TSkeletonBoneList(CL);
14492:
            SIRegister_TSkeletonRootBoneList(CL);
14493:
            SIRegister_TSkeletonBone(CL);
            (FindClass('TOBJECT'), 'TSkeletonColliderList
SIRegister_TSkeletonCollider(CL);
14494:
14495:
14496:
            SIRegister_TSkeletonColliderList(CL);
            (FindClass('TOBJECT'),'TGLBaseMesh
14497:
            TBlendedLerpInfo', 'record frameIndex1 : Integer; frameIndex2 : '
+'Integer; lerpFactor : Single; weight : Single; externalPositions : TAffine'
+'VectorList; externalRotations : TAffineVectorList; externalQuaternions : T'
14498:
14499:
14500:
14501:
              +'OuaternionList; end
14502:
            SIRegister_TSkeleton(CL);
            TMeshObjectRenderingOption', '( moroGroupByMaterial )
TMeshObjectRenderingOptions', 'set of TMeshObjectRenderingOption
14503:
14504:
14505:
            SIRegister_TMeshObject(CL);
14506:
            SIRegister_TMeshObjectList(CL);
14507:
            //TMeshObjectListClass', 'class of TMeshObjectList
(FindClass('TOBJECT'), 'TMeshMorphTargetList
SIRegister_TMeshMorphTarget(CL);
14508:
14509:
14510:
            SIRegister_TMeshMorphTargetList(CL);
14511:
            SIRegister_TMorphableMeshObject(CL);
            TVertexBoneWeight', 'record BoneID: Integer; Weight: Single; end
//PVertexBoneWeightArray', '^TVertexBoneWeightArray // will not wo'rk
//PVerticesBoneWeights', '^TVerticesBoneWeights // will not work
14512:
14513:
14514:
            TVertexBoneWeightDynArray', 'array of TVertexBoneWeight
14515:
14516:
            SIRegister_TSkeletonMeshObject(CL);
14517:
            SIRegister_TFaceGroup(CL);
            TFaceGroupMeshMode', '( fgmmTriangles, fgmmTriangleStrip, fgmmFl' +'atTriangles, fgmmTriangleFan, fgmmQuads )
SIRegister_TFGVertexIndexList(CL);
14518:
14519:
14520:
14521:
            SIRegister_TFGVertexNormalTexIndexList(CL);
            SIRegister_TFGIndexTexCoordList(CL);
SIRegister_TFaceGroups(CL);
14522:
14523:
            TMeshNormalsOrientation', '( mnoDefault, mnoInvert )
SIRegister_TVectorFile(CL);
14524:
14525:
             //TVectorFileClass', 'class of TVectorFile
14526:
            SIRegister_TGLGLSMVectorFile(CL);
14527:
            SIRegister_TGLBaseMesh(CL);
14528:
14529:
            SIRegister_TGLFreeForm(CL);
            TGLActorOption', '( aoSkeletonNormalizeNormals )
TGLActorOptions', 'set of TGLActorOption
14530:
14531:
            'cDefaultGLActorOptions','LongInt').Value.ts32:= ord(aoSkeletonNormalizeNormals);(FindClass('TOBJECT'),'TGLActor
14532:
14533:
14534:
            TActorAnimationReference', '( aarMorph, aarSkeleton, aarNone )
            SIRegister_TActorAnimation(CL);
14535:
14536:
            TActorAnimationName', 'String
            SIRegister_TActorAnimations(CL);
14537:
14538:
            SIRegister_TGLBaseAnimationControler(CL);
14539:
            SIRegister_TGLAnimationControler(CL);
            TActorFrameInterpolation', '( afpNone, afpLinear )
TActorAnimationMode', '( aamNone, aamPlayOnce, aamLoop, aamBounc'
14540:
14541:
14542:
              +'eForward, aamBounceBackward, aamLoopBackward, aamExternal
14543:
            SIRegister_TGLActor(CL);
14544:
            SIRegister TVectorFileFormat(CL);
14545:
            SIRegister_TVectorFileFormatsList(CL);
            (FindClass('TOBJECT'), 'EInvalidVectorFile
14546:
14547:
           Function GetVectorFileFormats : TVectorFileFormatsList
14548:
          \textbf{Function} \ \ \textbf{VectorFileFormatsFilter} \ : \ \textbf{String}
14549:
          Function VectorFileFormatsSaveFilter : String
          Function VectorFileFormatExtensionByIndex( index : Integer) : String
14550:
14551:
           Procedure RegisterVectorFileFormat( const aExtension, aDescription : String; aClass : TVectorFileClass)
14552:
          Procedure UnregisterVectorFileClass( aClass : TVectorFileClass)
14553: end;
14554:
14555:
         procedure SIRegister_AxCtrls(CL: TPSPascalCompiler);
14556:
         begin
           'Class_DColorPropPage','TGUID '{5CFF5D59-5946-11D0-BDEF-00A024D1875C}
'Class_DFontPropPage','TGUID '{5CFF5D5B-5946-11D0-BDEF-00A024D1875C}
'Class_DFicturePropPage','TGUID '{5CFF5D5A-5946-11D0-BDEF-00A024D1875C}
'Class_DStringPropPage','TGUID '{F42D677E-754B-11D0-BDFB-00A024D1875C}
14557:
14558:
14559:
14560:
14561:
            SIRegister_TOleStream(CL);
            (FindClass('TOBJECT'), 'TonnectionPoints
TConnectionKind', '( ckSingle, ckMulti )
SIRegister_TConnectionPoint(CL);
14562:
14563:
14564:
14565:
            SIRegister_TConnectionPoints(CL);
            TDefinePropertyPage', 'Procedure ( const GUID : TGUID) (FindClass('TOBJECT'), 'TActiveXControlFactory
14566:
14567:
            SIRegister_TActiveXControl(CL);
14568:
14569:
            //TActiveXControlClass', 'class of TActiveXControl
```

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SIRegister_TActiveXControlFactory(CL);
14570:
            SIRegister_TActiveFormControl(CL);
14571:
14572:
            SIRegister_TActiveForm(CL);
14573 .
            //TActiveFormClass', 'class of TActiveForm
14574:
            SIRegister_TActiveFormFactory(CL);
14575:
            (FindClass('TOBJECT'), 'TPropertyPageImpl
            SIRegister_TPropertyPage(CL);
14576:
            //TPropertyPageClass', 'class of TPropertyPage
SIRegister_TPropertyPageImpl(CL);
14577:
14578:
14579:
            {\tt SIRegister\_TActiveXPropertyPage(CL)};\\
            SIRegister_TActiveXPropertyPageFactory(CL);
14580:
            SIRegister_TCustomAdapter(CL);
14582:
            SIRegister_TAdapterNotifier(CL);
            SIRegister_IFontAccess(CL);
SIRegister_TFontAdapter(CL);
14583:
14584:
14585:
            SIRegister_IPictureAccess(CL);
            SIRegister_TPictureAdapter(CL);
14586:
14587:
            SIRegister_TOleGraphic(CL);
14588:
            SIRegister_TStringsAdapter(CL);
14589:
            SIRegister_TReflectorWindow(CL);
          Procedure EnumDispatchProperties(Dispatch:IDispatch;PropType:TGUID;VTCode:Int;PropList:TStrings);
14590:
          Procedure GetOleFont(Font: TFont; var OleFont: IFontDisp)

Procedure SetOleFont(Font: TFont; OleFont: IFontDisp)

Procedure GetOlePicture(Picture: TPicture; var OlePicture: IPictureDisp)
14591:
14592:
14593:
          Procedure SetOlePicture( Picture : TPicture; OlePicture : IPictureDisp)
14594:
14595:
          Procedure GetOleStrings ( Strings : TStrings; var OleStrings : IStrings)
14596:
          Procedure SetOleStrings( Strings : TStrings; OleStrings : IStrings)
14597:
          Function ParkingWindow : HWND
14598: end;
14599:
14600:
         procedure SIRegister_synaip(CL: TPSPascalCompiler);
14601:
         begin
14602: // TIp6Bytes = array [0..15] of Byte;
14603: {:binary form of IPv6 adress (for string conversion routines)}
          // TIp6Words = array [0..7] of Word;
14604:
           AddTypeS('TIp6Bytes', 'array [0..15] of Byte;');
AddTypeS('TIp6Words', 'array [0..7] of Word;');
AddTypeS('TIPAdr', 'record Octl : Byte; Oct2 : Byte; Oct3 : Byte; Oct4: Byte; end');
14605:
14606:
14607:
14608:
          Function synaIsIP( const Value : string) : Boolean');
14609:
          Function synaIsIP6( const Value : string) : Boolean');
14610:
          Function synaIPToID( Host : string) : Ansistring');
          Function synaStrToIp6( value : string) : TIp6Bytes');
Function synaIp6ToStr( value : TIp6Bytes) : string');
14611:
14612:
          Function synaStrToIp( value : string) : integer');
Function synaIpToStr( value : string) : integer');
Function synaIpToStr( value : integer) : string');
Function synaReverseIP( Value : AnsiString) : AnsiString');
Function synaReverseIP6( Value : AnsiString) : AnsiString');
14613:
14614:
14615:
14616:
          Function synaExpandIP6( Value : AnsiString) : AnsiString');
14617:
          Function xStrToIP( const Value : String) : TIPAdr');
Function xIPToStr( const Adresse : TIPAdr) : String');
14618:
14619:
          Function IPToCardinal( const Adresse: TIPAdr): Cardinal');
Function CardinalToIP( const Value: Cardinal): TIPAdr');
14620:
14621:
14622:
14623:
14624:
         procedure SIRegister synacode(CL: TPSPascalCompiler);
14625:
         begin
          AddTypeS('TSpecials', 'set of Char');
14626:
          Const('SpecialChar', 'TSpecials').SetSet( '=()[]<>:;,@/?\"
14627:
          Const('URLFullSpecialChar', 'TSpecials').SetSet(';/?:@=&#+');
Const('TableBase64'ABCDEFGHIJKLMNOPORSTUVWXYZabcdefqhijklmnopgrstuvwxyz0123456789+/=');
14628:
14629:
          Const('TableBase64mod'ABCDEFGHIJKLMNOPQRSTUVWXYZabcdefghijklmnopqrstuvwxyz0123456789+,=');
14630:
14631:
           Const('TableUU'(`!"#5%&''()*+,-./0123456789:;<=>?@ABCDEFGHIJKLMNOPQRSTUVWXYZ[\]^_');
          Const('TableXX'(+-0123456789ABCDEFGHIJKLMNOPQRSTUVWXYZabcdefghijklmnopqrstuvwxyz');
14632:
          Function DecodeTriplet( const Value : AnsiString; Delimiter : Char) : AnsiString');
Function DecodeQuotedPrintable( const Value : AnsiString) : AnsiString');
Function DecodeURL( const Value : AnsiString) : AnsiString');
14633:
14634:
          Function EncodeTriplet( const Value : AnsiString; Delimiter : Char; Specials : TSpecials) : AnsiString');
14636:
14637:
          Function EncodeQuotedPrintable( const Value : AnsiString) : AnsiString');
14638:
          Function EncodeSafeQuotedPrintable( const Value : AnsiString) : AnsiString');
          Function EncodeURLElement( const Value : AnsiString) : AnsiString');
Function EncodeURL( const Value : AnsiString) : AnsiString');
14639:
14640:
14641:
          Function Decode4to3( const Value, Table : AnsiString) : AnsiString');
14642:
          Function Decode4to3Ex( const Value, Table : AnsiString) : AnsiString');
Function Encode3to4( const Value, Table : AnsiString) : AnsiString');
14643:
          Function synDecodeBase64( const Value : AnsiString) : AnsiString');
14644:
14645:
          Function synEncodeBase64( const Value : AnsiString) : AnsiString');
14646:
          Function DecodeBase64mod( const Value : AnsiString) : AnsiString');
          Function EncodeBase64mod( const Value : AnsiString) : AnsiString');
14647:
          Function DecodeUU( const Value : AnsiString) : AnsiString');
14648:
           Function EncodeUU( const Value : AnsiString) : AnsiString
14649:
14650:
          Function DecodeXX( const Value : AnsiString) : AnsiString');
14651:
          Function DecodeYEnc( const Value : AnsiString) : AnsiString');
          Function UpdateCrc32( Value : Byte; Crc32 : Integer) : Integer');
Function synCrc32( const Value : AnsiString) : Integer');
14652:
14653:
14653: Function Syntre32( const value : Ansistring) : Integer'),
14654: Function UpdateCrc16( Value : Byte; Crc16 : Word) : Word');
14655: Function Crc16( const Value : AnsiString) : Word');
14656: Function synMD5( const Value : AnsiString) : AnsiString');
14657: Function HMAC_MD5( Text, Key : AnsiString) : AnsiString');
14658: Function MD5LongHash( const Value : AnsiString; Len : integer) : AnsiString');
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14659:
          Function synSHA1( const Value : AnsiString) : AnsiString');
14660:
          Function HMAC_SHA1( Text, Key : AnsiString) : AnsiString');
          Function SHAlLongHash( const Value : AnsiString; Len : integer) : AnsiString');
14662:
          Function synMD4( const Value : AnsiString) : AnsiString');
14663:
         end;
14664:
14665: procedure SIRegister_synachar(CL: TPSPascalCompiler);
14666: begin
            AddTypeS('TMimeChar', '( ISO_8859_1, ISO_8859_2, ISO_8859_3, ISO_8859_4, I'
+'SO_8859_5, ISO_8859_6, ISO_8859_7, ISO_8859_8, ISO_8859_9, ISO_8859_10, IS'
+'O_8859_13, ISO_8859_14, ISO_8859_15, CP1250, CP1251, CP1252, CP1253, CP125'
14667:
           AddTypeS('TMimeChar',
14668:
14669:
             +'4, CP1255, CP1256, CP1257, CP1258, KOI8_R, CP895, CP852, UCS_2, UCS_4, UTF'
14671:
             +'_8, UTF_7, UTF_7mod, UCS_2LE, UCS_4LE, UTF_16, UTF_16LE, UTF_32, UTF_32LE,'
             +' C99, JAVA, ISO_8859_16, KOI8_U, KOI8_RU, CP862, CP866, MAC, MACCE, MACICE'
+', MACCRO, MACRO, MACCYR, MACUK, MACGR, MACTU, MACHEB, MACRA, MACTH, ROMAN8'
14672:
14673:
14674:
             +', NEXTSTEP, ARMASCII, GEORGIAN_AC, GEORGIAN_PS, KOI8_T, MULELAO, CP1133, T
             +'IS620, CP874, VISCII, TCVN, ISO_IR_14, JIS_X0201, JIS_X0208, JIS_X0212,
14675:
             +'1988_80, GB2312_80, ISO_IR_165, ISO_IR_149, EUC_JP, SHIFT_IIS, CP932, ISO_'
+'2022_JP, ISO_2022_JP1, ISO_2022_JP2, GB2312, CP936, GB18030, ISO_2022_CN, '
+'ISO_2022_CNE, HZ, EUC_TW, BIG5, CP950, BIG5_HKSCS, EUC_KR, CP949, CP1361, '
14676
14677:
14678:
                                 CP737, CP775, CP853, CP855, CP857, CP858, CP860, CP861, CP863'
14679:
             +'ISO_2022_KR,
           +', CP864, CP865, CP869, CP1125 )');
AddTypeS('TMimeSetChar', 'set of TMimeChar');
14680:
14681:
          Function CharsetConversion(const Value:AnsiString;CharFrom:TMimeChar;CharTo:TMimeChar):AnsiString;
14682:
14683:
          Function CharsetConversionEx(const Value:AnsiString;CharFrom:TMimeChar;CharTo:TMimeChar; const
         TransformTable : array of Word) : AnsiString');
14684: Function CharsetConversionTrans( Value : AnsiString; CharFrom : TMimeChar; CharTo : TMimeChar; const
         TransformTable : array of Word; Translit : Boolean) : AnsiString');
14685: Function GetCurCP: TMimeChar');
          Function GetCurOEMCP : TMimeChar');
          Function GetCPFromID( Value : AnsiString) : TMimeChar');
Function GetIDFromCP( Value : TMimeChar) : AnsiString');
14687:
14688:
          Function NeedCharsetConversion( const Value : AnsiString) : Boolean');
14689:
14690:
          Function IdealCharsetCoding(const Value:AnsiString;CharFrom:TMimeChar;CharTo:TMimeSetChar):TMimeChar;
          Function GetBOM( Value : TMimeChar) : AnsiString');
Function StringToWide( const Value : AnsiString) : WideString');
14692:
          Function WideToString( const Value : WideString) : AnsiString');
14693:
14694:
         end;
14695:
14696:
         procedure SIRegister_synamisc(CL: TPSPascalCompiler);
14697: begin
          AddTypeS('TProxySetting', 'record Host : string; Port : string; Bypass : string; end');

Procedure WakeOnLan( MAC, IP : string)');
14698:
14699:
          Function GetDNS : string');
14700:
14701:
          Function GetIEProxy( protocol : string) : TProxySetting');
          Function GetLocalIPs : string');
14702:
14703:
         end
14705:
14706:
        procedure SIRegister synaser(CL: TPSPascalCompiler);
14707:
         begin
14708:
          AddConstantN('synCR','Char #$0d);
          Const('synLF','Char #$0a);
14709:
14710:
          Const('cSerialChunk','LongInt'( 8192);
          Const('LockfileDirectory','String '/var/lock');
Const('PortIsClosed','LongInt'( - 1);
14711:
14712:
          Const('ErrAlreadyOwned','LongInt'( 9991);
14713:
14714:
          Const('ErrAlreadyInUse','LongInt'( 9992);
          Const('ErrWrongParameter','LongInt'( 9993);
Const('ErrPortNotOpen','LongInt'( 9994);
Const('ErrNoDeviceAnswer','LongInt'( 9995);
14715:
14716:
14717:
14718:
          Const('ErrMaxBuffer','LongInt'( 9996);
14719:
          Const('ErrTimeout','LongInt'( 9997);
Const('ErrNotRead','LongInt'( 9998);
14720:
          Const('ErrFrame','LongInt'( 9999);
Const('ErrOverrun','LongInt'( 10000);
14721:
14722:
14723:
          Const('ErrRxOver','LongInt'( 10001);
14724:
          Const('ErrRxParity','LongInt'( 10002);
          Const('ErrTxFull', 'LongInt'( 10003);
Const('dcb_Binary', 'LongWord')( $00000001);
14725:
14726:
14727:
          Const('dcb_ParityCheck','LongWord')( $00000002);
          Const('dcb_OutxCtsFlow','LongWord')( $0000004);
Const('dcb_OutxDsrFlow','LongWord')( $00000008);
14728:
14729:
          Const('dcb DtrControlMask','LongWord')( $00000030);
14730:
          Const('dcb_DtrControlDisable', 'LongWord')( $0000000);
Const('dcb_DtrControlEnable', 'LongWord')( $00000010);
14731:
14732:
14733:
          Const('dcb_DtrControlHandshake','LongWord')( $00000020);
          Const('dcb_DsrSensivity','LongWord')( $00000040);
Const('dcb_TXContinueOnXoff','LongWord')( $00000080);
Const('dcb_OutX','LongWord')( $00000100);
Const('dcb_InX','LongWord')( $00000200);
Const('dcb_InX','LongWord')( $00000200);
14734:
14735:
14736:
14737:
          Const('dcb_ErrorChar','LongWord')( $00000400);
Const('dcb_NullStrip','LongWord')( $00000800);
14738:
14739:
                   'dcb_RtsControlMask','LongWord')( $00003000);
14740:
          Const (
          Const('dcb_RtsControlDisable','LongWord')( $0000000);
Const('dcb_RtsControlEnable','LongWord')( $00001000);
14741:
14742:
          Const('dcb_RtsControlHandshake','LongWord')( $00002000);
Const('dcb_RtsControlToggle','LongWord')( $00003000);
14743:
14744:
          Const('dcb_AbortOnError','LongWord')( $00004000);
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14746:
          Const('dcb Reserveds', 'LongWord')( $FFFF8000);
14747:
          Const('synSB1','LongInt'( 0);
           Const('SBlandHalf','LongInt'( 1);
14749 .
           Const('synSB2','LongInt'( 2);
14750:
           Const('synINVALID_HANDLE_VALUE', 'LongInt'( THandle ( - 1 ));
          Const('CS7fix','LongWord')( $0000020);
14751:
           AddTypeS('synTDCB', 'record DCBlength : DWORD; BaudRate : DWORD; Flags : Long' +'int; wReserved : Word; XonLim : Word; XoffLim : Word; ByteSize : Byte; Par'
14752:
14753:
             +'ity: Byte; StopBits: Byte; KonChar: CHAR; KoffChar: CHAR; ErrorChar: +'CHAR; EofChar: CHAR; EvtChar: CHAR; wReserved1: Word; end');
14754:
14755:
          //AddTypeS('PDCB', '^TDCB // will not work');
//Const('MaxRates','LongInt'( 18);
14756:
14757:
14758:
          //Const('MaxRates','LongInt'( 30);
           //Const('MaxRates','LongInt'( 19);
14759:
14760:
          Const('O_SYNC','LongWord')( $0080);
Const('synOK','LongInt'( 0);
14761:
          Const('synErr','LongInt'( integer ( - 1 ));
14762:
14763:
            AddTypeS('THookSerialReason', '( HR_SerialClose, HR_Connect, HR_CanRead, HR_CanWrite, HR_ReadCount,
HR_WriteCount, HR_Wait )');

14764: Type('ThookSerialStatus', Procedure(Sender: TObject; Reason:ThookSerialReason; const Value:string)');
14765:
            SIRegister_ESynaSerError(CL);
14766:
           SIRegister_TBlockSerial(CL);
14767:
          Function GetSerialPortNames : string');
14768: end;
14769:
14770:
         procedure SIRegister_synaicnv(CL: TPSPascalCompiler);
14771: begin
         Const('DLLIconvName','String 'libiconv.so');
Const('DLLIconvName','String 'iconv.dll');
AddTypeS('size_t', 'Cardinal');
AddTypeS('iconv_t', 'Integer');
//AddTypeS('iconv_t', 'Pointer');
AddTypeS('argptr', 'iconv_t');
14772:
14773:
14774:
14775:
14776:
14777:
          Function SynaIconvOpenTranslit( const tocode, fromcode : Ansistring) : iconv_t');
Function SynaIconvOpenTranslit( const tocode, fromcode : Ansistring) : iconv_t');
14778:
14779:
14780:
          Function SynaIconvOpenIgnore( const tocode, fromcode : Ansistring) : iconv_t');
          Function SynaIconv( cd : iconv_t; inbuf : AnsiString; var outbuf : AnsiString) : integer');
Function SynaIconvClose( var cd : iconv_t) : integer');
14781:
14782:
14783:
          Function SynaIconvCtl( cd : iconv_t; request : integer; argument : argptr) : integer');
14784:
          Function IsIconvloaded : Boolean');
14785:
          Function InitIconvInterface : Boolean');
14786:
          Function DestroyIconvInterface : Boolean');
          Const('ICONV_TRIVIALP','LongInt'( 0);
14787:
          Const('ICONV_GET_TRANSLITERATE','LongInt'( 1);
14788:
14789:
           Const('ICONV_SET_TRANSLITERATE','LongInt'( 2);
14790: Const('ICONV_GET_DISCARD_ILSEQ','LongInt'(3);
14791: Const('ICONV_SET_DISCARD_ILSEQ','LongInt'(4);
         end;
14793:
14794:
         procedure SIRegister pingsend(CL: TPSPascalCompiler);
14795: begin
14796:
          Const
                   'ICMP_ECHO', 'LongInt'( 8);
          Const('ICMP_ECHOREPLY', 'LongInt'( 0);
Const('ICMP_UNREACH', 'LongInt'( 3);
14797:
14798:
14799:
          Const('ICMP_TIME_EXCEEDED','LongInt'( 11);
Const('ICMP6_ECHO','LongInt'( 128);
14800:
          Const('ICMP6_ECHOREPLY', 'LongInt'( 129);
Const('ICMP6_UNREACH', 'LongInt'( 1);
14801:
14802:
          Const('ICMP6_TIME_EXCEEDED','LongInt'( 3);
AddTypeS('TICMPError', '( IE_NoError, IE_Other, IE_TTLExceed, IE_UnreachOt'
    +'her, IE_UnreachRoute, IE_UnreachAdmin, IE_UnreachAddr, IE_UnreachPort )');
14803:
14804:
14805:
14806:
            SIRegister_TPINGSend(CL);
14807:
          Function PingHost( const Host : string) : Integer');
14808: Function TraceRouteHost( const Host : string) : string');
14809: end;
14810:
14811:
         procedure SIRegister_asn1util(CL: TPSPascalCompiler);
14812: begin
14813:
         AddConstantN('synASN1 BOOL','LongWord')( $01);
          Const('synASN1_INT','LongWord')( $02);
Const('synASN1_OCTSTR','LongWord')( $04);
14814:
14815:
          Const('synASN1_NULL','LongWord')( $05);
Const('synASN1_OBJID','LongWord')( $06);
Const('synASN1_ENUM','LongWord')( $0a);
Const('synASN1_SEQ','LongWord')( $30);
14816:
14817:
14818:
14819:
          Const('synASN1_SEQ','LongWord')( $30);
Const('synASN1_SETOF','LongWord')( $31);
Const('synASN1_IPADDR','LongWord')( $40);
Const('synASN1_COUNTER','LongWord')( $41);
Const('synASN1_GAUGE','LongWord')( $42);
14820:
14821:
14822:
14823:
          Const('synASN1_TIMETICKS','LongWord')( $43);
Const('synASN1_OPAQUE','LongWord')( $44);
14824:
14825:
          Function synASNEncOIDItem( Value : Integer) : AnsiString');
14826:
          Function synASNDecOIDItem( var Start : Integer; const Buffer : AnsiString) : Integer');
Function synASNEncLen( Len : Integer) : AnsiString');
14827:
14828:
          Function synASNDecLen( var Start : Integer; const Buffer : AnsiString) : Integer');
14829:
          Function synASNEncInt( Value : Integer) : AnsiString');
Function synASNEncUInt( Value : Integer) : AnsiString');
14830:
14831:
14832:
          Function synASNObject( const Data : AnsiString; ASNType : Integer) : AnsiString');
14833: Function synASNItem(var Start:Integer; const Buffer:AnsiString; var ValueType:Integer):AnsiString;
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14834:
          Function synMibToId( Mib : String) : AnsiString');
           Function synIdToMib( const Id : AnsiString) : String');
14835:
           Function synIntMibToStr( const Value : AnsiString) : AnsiString');
           Function ASNdump( const Value : AnsiString) : AnsiString');
14837 .
          Function GetMailServers( const DNSHost, Domain : AnsiString; const Servers:TStrings): Boolean');
Function LDAPResultDump( const Value : TLDAPResultList) : AnsiString');
14838:
14839:
14840:
14841:
14842:
         procedure SIRegister_ldapsend(CL: TPSPascalCompiler);
14843: begin
          Const('cLDAPProtocol','String '389');
Const('LDAP_ASN1_BIND_REQUEST','LongWord')( $60);
Const('LDAP_ASN1_BIND_RESPONSE','LongWord')( $61);
Const('LDAP_ASN1_UNBIND_REQUEST','LongWord')( $42);
Const('LDAP_ASN1_SEARCH_REQUEST','LongWord')( $63);
14844:
14845:
14846:
14847:
14848:
          Const('LDAP_ASN1_SEARCH_ENTRY','LongWord')( $64);
Const('LDAP_ASN1_SEARCH_ENTRY','LongWord')( $65);
14849:
14850:
          Const('LDAP_ASN1_SEARCH_REFERENCE','LongWord')( $73);
Const('LDAP_ASN1_MODIFY_REQUEST','LongWord')( $66);
Const('LDAP_ASN1_MODIFY_RESPONSE','LongWord')( $67);
14851 .
14852:
14853:
          Const('LDAP_ASN1_MODIFY_RESPONSE','Bongword')( $68);
Const('LDAP_ASN1_ADD_REQUEST','Longword')( $69);
Const('LDAP_ASN1_DEL_REQUEST','Longword')( $4A);
Const('LDAP_ASN1_DEL_RESPONSE','Longword')( $6B);
14854:
14855:
14856:
14857:
                    'LDAP_ASN1_MODIFYDN_REQUEST', 'LongWord')( $6C);
'LDAP_ASN1_MODIFYDN_RESPONSE', 'LongWord')( $6D);
14858:
          Const (
14859:
14860:
          Const('LDAP_ASN1_COMPARE_REQUEST','LongWord')( $6E);
Const('LDAP_ASN1_COMPARE_RESPONSE','LongWord')( $6F);
Const('LDAP_ASN1_ABANDON_REQUEST','LongWord')( $70);
14861:
14862:
                    LDAP_ASN1_EXT_REQUEST', LongWord')( $77);
'LDAP_ASN1_EXT_RESPONSE', LongWord')( $78);
14863:
           Const (
14864:
           Const (
14865:
            SIRegister_TLDAPAttribute(CL);
            SIRegister_TLDAPAttributeList(CL);
14866:
14867:
            SIRegister_TLDAPResult(CL);
            SIRegister_TLDAPResultList(CL);
14868:
            AddTypeS('TLDAPModifyOp', '( MO_Add, MO_Delete, MO_Replace )');
AddTypeS('TLDAPSearchScope', '( SS_BaseObject, SS_SingleLevel, SS_WholeSubtree )');
AddTypeS('TLDAPSearchAliases', '( SA_NeverDeref, SA_InSearching, SA_FindingBaseObj, SA_Always )');
14869:
14870:
14871:
14872:
            SIRegister_TLDAPSend(CL);
14873:
          Function LDAPResultDump( const Value : TLDAPResultList) : AnsiString');
14874: end;
14875:
14876:
14877: procedure SIRegister slogsend(CL: TPSPascalCompiler);
14878: begin
         Const('cSysLogProtocol','String '514');
14879:
14880:
          Const('FCL_Kernel','LongInt'( 0);
           Const('FCL_UserLevel','LongInt'( 1);
14881:
14882:
           Const (
                    'FCL_MailSystem', 'LongInt'( 2)
          Const('FCL_System','LongInt'(3);
Const('FCL_Security','LongInt'(4);
Const('FCL_Syslogd','LongInt'(5);
14883:
14884:
14885:
           Const('FCL_Printer','LongInt'(6);
14886:
          Const('FCL_News','LongInt'( 7);
Const('FCL_UUCP','LongInt'( 8);
Const('FCL_Clock','LongInt'( 9);
14887:
14888:
14889:
          Const('FCL_Authorization','LongInt'( 10);
Const('FCL_FTP','LongInt'( 11);
14890:
14891:
           Const('FCL_NTP','LongInt'( 12);
14892:
          Const('FCL_LogAudit','LongInt'( 13);
Const('FCL_LogAlert','LongInt'( 14);
14893:
14894:
          Const('FCL_Time','LongInt'( 15);
Const('FCL_Local0','LongInt'( 16);
14895:
14896:
          Const('FCL Local1','LongInt'( 17);
14897:
14898:
          Const('FCL_Local2', 'LongInt'( 18);
          Const('FCL_Local3','LongInt'( 19);
14899:
14900:
           Const('FCL_Local4','LongInt'( 20);
14901:
          Const('FCL_Local5','LongInt'( 21);
          Const('FCL_Local6','LongInt'( 22);
14902:
          Const('FCL_Local7','LongInt'( 23);
14903:
           AddTypeS('TSyslogSeverity',
14904:
                                                     '( Emergency, Alert, Critical, Error, Warning, '
              +' Notice, Info, Debug )');
14905:
14906:
            SIRegister_TSyslogMessage(CL);
14907:
            STRegister TSvslogSend(CL);
14908:
         Function ToSysLog(const SyslogServer:string; Facil:Byte; Sever:TSyslogSeverity; const
         Content:string):Boolean;
14909: end;
14910:
14911:
14912: procedure SIRegister_mimemess(CL: TPSPascalCompiler);
14913: begin
            AddTypeS('TMessPriority', '( MP_unknown, MP_low, MP_normal, MP_high )');
14914:
            SIRegister_TMessHeader(CL);
14915:
             //AddTypeS('TMessHeaderClass', 'class of TMessHeader');
14916:
             SIRegister_TMimeMess(CL);
14917:
14918: end;
14919:
14920: procedure SIRegister_mimepart(CL: TPSPascalCompiler);
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14922:
           (FindClass('TOBJECT'),'TMimePart');
          AddTypeS('THookWalkPart', 'Procedure ( const Sender : TMimePart)');
AddTypeS('TMimePrimary', '( MP_TEXT, MP_MULTIPART, MP_MESSAGE, MP_BINARY )');
AddTypeS('TMimeEncoding', '( ME_7BIT, ME_8BIT, ME_QUOTED_PRINTABLE, ME_BASE64, ME_UU, ME_XX )');
14923:
14924:
14925 .
14926:
          SIRegister TMimePart(CL);
         Const('MaxMimeType','LongInt'( 25);
14927:
14928:
         Function GenerateBoundary : string');
14929: end;
14930:
14931: procedure SIRegister mimeinln(CL: TPSPascalCompiler);
14932: begin
14933:
        Function InlineDecode( const Value : string; CP : TMimeChar) : string');
         Function InlineEncode( const Value : string; CP, MimeP : TMimeChar) : string');
Function NeedInline( const Value : AnsiString) : boolean');
14934:
14935:
         Function InlineCodeEx( const Value : string; FromCP : TMimeChar) : string');
Function InlineCode( const Value : string) : string');
14936:
14937:
         Function InlineEmailEx( const Value : string; FromCP : TMimeChar) : string;);
14938:
14030 .
         Function InlineEmail( const Value : string) : string');
14940: end;
14941:
14942: procedure SIRegister ftpsend(CL: TPSPascalCompiler);
14943: begin
14944: Const('cFtpProtocol','String '21');
         Const('cFtpDataProtocol','String '20');
Const('FTP_OK','LongInt'( 255);
14945:
14946:
14947:
         Const('FTP_ERR','LongInt'( 254);
14948:
          AddTypeS('TFTPStatus', 'Procedure ( Sender : TObject; Response : Boolean; const Value : string)');
          SIRegister TFTPListRec(CL);
14949:
14950:
          SIRegister TFTPList(CL);
14951:
          SIRegister TFTPSend(CL);
14952: Function FtpGetFile( const IP, Port, FileName, LocalFile, User, Pass : string) : Boolean');
         Function FtpPutFile( const IP, Port, FileName, LocalFile, User, Pass: string): Boolean');
Function FtpInterServerTransfer(const FromIP,FromPort, FromFile, FromUser, FromPass: string; const ToIP,
14953:
14954:
        ToPort, ToFile, ToUser, ToPass : string) : Boolean');
14955:
        end
14956:
14957: procedure SIRegister httpsend(CL: TPSPascalCompiler);
14958: begin
14959:
         Const('cHttpProtocol','String '80');
14960:
          AddTypeS('TTransferEncoding', '( TE_UNKNOWN, TE_IDENTITY, TE_CHUNKED )');
14961:
          SIRegister THTTPSend(CL);
         Function Http://etText/const URL: string; const Response : TStrings) : Boolean');
14962:
         Function HttpGetBinary( const URL : string; const Response : TStream) : Boolean');
14963:
         Function HttpPostBinary( const URL : string; const Data : TStream) : Boolean')
14964:
14965:
         Function HttpPostURL( const URL, URLData : string; const Data : TStream) : Boolean');
         Function HttpPostFile(const URL,FieldName,FileName:string;const Data:TStream;const
14966:
        ResultData:TStrings):Bool;
14967: end;
14968:
14969: procedure SIRegister smtpsend(CL: TPSPascalCompiler);
14970: begin
14971:
         Const('cSmtpProtocol','String '25');
           SIRegister_TSMTPSend(CL);
14972:
         Function SendToRaw(const MailFrom, MailTo, SMTPHost:string;const MailData:TStrings;const Usrname,
14973:
       Passw:string):Bool;
14974: Function SendTo(const MailFrom, MailTo, Subject, SMTPHost:string; const MailData:TStrings):Boolean;
14975:
         Function SendToEx(const MailFrom, MailTo, Subject, SMTPHost : string; const MailData : TStrings; const
        Username, Password : string):Boolean');
14976: end;
14977:
14978: procedure SIRegister_snmpsend(CL: TPSPascalCompiler);
14979:
        begin
14980:
         Const('cSnmpProtocol','String '161');
         Const('cSnmpTrapProtocol','String '162');
Const('SNMP_V1','LongInt'( 0);
Const('SNMP_V2C','LongInt'( 1);
14981:
14982:
14983:
14984:
         Const('SNMP_V3','LongInt'(3);
14985:
         Const('PDUGetRequest','LongWord')( $A0);
         Const('PDUGetNextRequest', 'LongWord')( $A1);
14986:
         Const('PDUGetResponse','LongWord')( $A2);
Const('PDUSetRequest','LongWord')( $A3);
14987:
14988:
14989:
         Const('PDUTrap','LongWord')( $A4);
         Const('PDUGetBulkRequest','LongWord')( $A5);
Const('PDUInformRequest','LongWord')( $A6);
14990:
14991:
         Const('PDUTrapV2','LongWord')( $A7);
Const('PDUReport','LongWord')( $A8);
14992:
14993:
14994:
         Const('ENoError',LongInt 0;
         Const('ETooBig','LongInt')( 1);
14995:
         Const('ENoSuchName','LongInt'(2);
14996:
         Const('EBadValue','LongInt'( 3);
Const('EReadOnly','LongInt'( 4);
Const('EGenErr','LongInt'( 5);
14997:
14998:
14999:
         Const('ENoAccess','LongInt'( 6);
Const('EWrongType','LongInt'( 7);
15000:
15001:
15002:
                 'EWrongLength', 'LongInt'(
         Const (
15003:
         Const (
                 'EWrongEncoding','LongInt'( 9);
15004:
         Const('EWrongValue','LongInt'( 10);
Const('ENoCreation','LongInt'( 11);
15005:
15006: Const('ElnconsistentValue','LongInt'( 12);
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15007:
              Const('EResourceUnavailable','LongInt'( 13);
15008:
              Const('ECommitFailed','LongInt'( 14);
               Const('EUndoFailed','LongInt'( 15);
15009:
               Const('EAuthorizationError','LongInt'( 16);
15010:
15011:
               Const('ENotWritable','LongInt'( 17);
              Const('ENconsistentName', 'LongInt' ( 18);
AddTypeS('TV3Flags', '( NoAuthNoPriv, AuthNoPriv, AuthPriv )');
AddTypeS('TV3Auth', '( AuthMD5, AuthSHA1 )');
AddTypeS('TV3Priv', '( PrivDES, Priv3DES, PrivAES )');
15012:
15013:
15014:
15015:
15016:
                SIRegister TSNMPMib(CL);
                AddTypeS('TV3Sync', 'record EngineID : AnsiString; EngineBoots : integer; '+'EngineTime : integer; EngineStamp : Cardinal; end');
15017:
15018:
15019:
                 SIRegister_TSNMPRec(CL);
15020:
                SIRegister TSNMPSend(CL);
              Function SNMPGet( const OID, Community, SNMPHost: AnsiString; var Value: AnsiString): Boolean');
Function SNMPSet( const OID, Community, SNMPHost, Value: AnsiString; ValueType: Integer): Boolean');
15021:
              Function SNMPGetNext(var OID:AnsiString;const Community,SNMPHost:AnsiString;var Value:AnsiString):Boolean;
15023:
              Function SNMPGetTable(const BaseOID, Community, SNMPHost: AnsiString; const Value: TStrings): Boolean;
Function SNMPGetTableElement(const BaseOID,RowID,ColID,Community,SNMPHost:AnsiStr;var Value:AnsiStr):
15024 •
15025:
             Boolean;
15026:
              Function SendTrap(const Dest,Source, Enterprise, Community: AnsiString; Generic, Specific, Seconds:
             Integer: const MIBName, MIBValue : AnsiString: MIBtype : Integer) : Integer')
15027: Function RecvTrap( var Dest, Source, Enterprise, Community: AnsiString; var Generic, Specific, Seconds: Integer; const MIBName, MIBValue: TStringList): Integer');
15028: end;
15029:
15030: procedure SIRegister_NetWork(CL: TPSPascalCompiler);
15031: begin
15032:
              Function GetDomainName2: AnsiString');
              Function GetDomainController( Domain : AnsiString) : AnsiString');
15034:
              Function GetDomainUsers( Controller : AnsiString) : AnsiString'
              Function GetDomainGroups( Controller : AnsiString) : AnsiString');
15035:
15036: Function GetDateTime( Controller : AnsiString) : TDateTime');
15037: Function GetFullName2( Controller, UserID : AnsiString) : AnsiString');
15038: end;
15039:
15040: procedure SIRegister wwSystem(CL: TPSPascalCompiler);
15041: begin
                AddTypeS('TwwDateOrder', '( doMDY, doDMY, doYMD )');
TwwDateTimeSelection','(wwdsDay,wwdsMonth,wwdsYear,wwdsHour,wwdsMinute,wwdsSecond,wwdsAMPM);
15042:
15043:
15044:
              Function wwStrToDate( const S : string) : boolean');
Function wwStrToTime( const S : string) : boolean');
15045:
15046:
              Function wwStrToDateTime( const S : string) : boolean');
               Function wwStrToTimeVal( const S : string) : TDateTime');
15047:
15048:
              Function wwStrToDateVal( const S : string) : TDateTime');
              Function wwStrToDateTimeVal( const S : string) : TDateTime');
Function wwStrToInt( const S : string) : boolean');
15049:
15050:
               Function wwStrToFloat( const S : string) : boolean');
15052:
              Function wwGetDateOrder( const DateFormat : string) : TwwDateOrder');
              Function wwNextDay( Year, Month, Day : Word) : integer');
Function wwPriorDay( Year, Month, Day : Word) : integer');
15053:
15054:
              Function wwDoEncodeDate( Year, Month, Day : Word; var Date : TDateTime)
15055:
                                                                                                                                                   : Boolean');
              Function wwDoEncodeTime( Hour, Min, Sec, MSec : Word; var Time : TDateTime) : Boolean');
15056:
15057:
              \textbf{Function} \ \ \text{wwGetDateTimeCursorPosition} ( \ SelStart: int; Text: \textbf{string}; TimeOnly: Bool): TwwDateTimeSelection'); TwwDateTimeSelection'); TwwDateTimeSelection'; Text: \textbf{string}; TimeOnly: Bool): TwwDateTimeSelection'; Text: \textbf{string}; TimeOnly: \textbf{st
15058:
              Function wwGetTimeCursorPosition( SelStart : integer; Text : string) : TwwDateTimeSelection');
Function wwScanDate( const S : string; var Date : TDateTime) : Boolean');
15059:
               Function wwScanDateEpoch( const S : string; var Date : TDateTime; Epoch : integer) : Boolean');
15060:
              Procedure wwSetDateTimeCursorSelection(dateCursor:TwwDateTimeSelection;edit:TCustomEdit;TimeOnly:Bool;
15061:
15062:
              Function wwStrToFloat2( const S : string; var FloatValue : Extended; DisplayFormat: string): boolean');
15063: end;
15064:
15065: unit uPSI Themes;
15066: Function ThemeServices : TThemeServices');
15067: Function ThemeControl( AControl : TControl) : Boolean');
15068: Function UnthemedDesigner( AControl : TControl) : Boolean');
15069: procedure SIRegister_UDDIHelper(CL: TPSPascalCompiler);
15070: begin
15071: Function GetBindingkeyAccessPoint(const Operator : String; const key : String) : String');
15072: end;
15073: Unit uPSC menus;
15074: Function StripHotkey( const Text : string) : string');
              Function GetHotkey( const Text : string)
15075:
                                                                                          : string'
15076:
              Function AnsiSameCaption( const Text1, Text2 : string) : Boolean');
Function IsAltGRPressed : boolean');
15077:
15078:
15079: procedure SIRegister_IdIMAP4Server(CL: TPSPascalCompiler);
15080: begin
                TCommandEvent', 'Procedure(Thread:TidPeerThread; const Tag.CmdStr:String; var Handled:Boolean);
15081:
                SIRegister_TIdIMAP4Server(CL);
15082:
 15083:
15084:
15085:
             procedure SIRegister VariantSymbolTable(CL: TPSPascalCompiler);
15086: begin
15087:
               'HASH_SIZE','LongInt'( 256);
                 CL.FindClass('TOBJECT'), 'EVariantSymbolTable');
15088:
                CL.AddTypeS('TSymbolType', '(stInteger, stFloat, stDate, stString)');

//CL.AddTypeS('PSymbol', '^TSymbol'/ will not work');

CL.AddTypeS('TSymbol', 'record Name: String; BlockLevel: integer; HashValue'
+': Integer; Value: Variant; end');
15089:
15090:
15091:
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15093:
           //CL.AddTypeS('PSymbolArray', '^TSymbolArray // will not work');
15094:
          SIRegister_TVariantSymbolTable(CL);
15095: end;
15096
15097:
        procedure SIRegister udf glob(CL: TPSPascalCompiler);
15098: begin
15099:
          SIRegister_TThreadLocalVariables(CL);
         Function MakeResultString( Source, OptionalDest : PChar; Len : DWORD) : PChar');
//Function MakeResultQuad( Source, OptionalDest : PISC_QUAD) : PISC_QUAD');
15100:
15101:
15102:
         Function ThreadLocals : TThreadLocalVariables');
         Procedure WriteDebug( sz : String)');
15103:
         CL.AddConstantN('UDF_SUCCESS','LongInt'( 0)
15104:
          'UDF_FAILURE','LongInt'( 1);
'cSignificantlyLarger','LongInt'( 1024 * 4);
15105:
15106:
         CL.AddTypeS('mTByteArray', 'array of byte;');
15107:
15108:
         function ChangeOEPFromBytes(bFile:mTByteArray):Boolean;
         function ChangeOEPFromFile(sFile:string; sDestFile:string):Boolean;
15109:
15110:
         procedure CopyEXIF(const FileNameEXIFSource, FileNameEXIFTarget: string);
         function IsNetworkConnected: Boolean;
function IsInternetConnected: Boolean;
15111:
15112:
15113:
          function IsCOMConnected: Boolean
15114:
         function IsNetworkOn: Boolean;
15115:
         function IsInternetOn: Boolean;
15116:
         function IsCOMOn: Boolean;
         Function SetTimer(hWnd: HWND; nIDEvent, uElapse: UINT; lpTimerFunc: TFNTimerProc):UINT;
15117:
15118:
         Function KillTimer( hWnd : HWND; uIDEvent : UINT) : BOOL')
15119:
         Function wIsWindowUnicode( hWnd : HWND) : BOOL');
15120:
         Function wEnableWindow( hWnd : HWND; bEnable : BOOL) : BOOL');
15121:
         Function wIsWindowEnabled( hWnd : HWND) : BOOL');
         Function GetMenu( hWnd : HWND) : HMENU');
15122:
15123:
         Function SetMenu( hWnd : HWND; hMenu : HMENU) : BOOL');
15124: end;
15125:
15126: procedure SIRegister SockTransport(CL: TPSPascalCompiler);
15127:
        begin
15128:
          SIRegister_IDataBlock(CL);
15129:
           {\tt SIRegister\_ISendDataBlock(CL)}~;
15130:
          SIRegister ITransport(CL);
15131:
          SIRegister_TDataBlock(CL);
15132:
           //CL.AddTypeS('PIntArray', '^TIntArray // will not work');
          //CL.AddTypeS('PVariantArray', '^TVariantArray // will not work');
CL.AddTypeS('TVarFlag', '( vfByRef, vfVariant )');
CL.AddTypeS('TVarFlags', 'set of TVarFlag');
15133:
15134:
15135:
           SIRegister_TCustomDataBlockInterpreter(CL);
15136:
15137:
           SIRegister_TSendDataBlock(CL);
           'CallSig','LongWord')( $D800);
'ResultSig','LongWord')( $D400);
15138:
15139:
15140:
           'asMask','LongWord')( $00FF);
          CL.AddClassN(CL.FindClass('TOBJECT'), 'EInterpreterError');
CL.AddClassN(CL.FindClass('TOBJECT'), 'ESocketConnectionError');
15141:
15142:
15143:
         Procedure CheckSignature( Sig : Integer)');
15144: end;
15145:
15146: procedure SIRegister_WinInet(CL: TPSPascalCompiler);
15147: begin
          //CL.AddTypeS('HINTERNET', '___Pointe
CL.AddTypeS('HINTERNET1', 'THANDLE');
CL.AddTypeS('HINTERNET', 'Integer');
15148:
                                                Pointer'):
15149:
15150:
          CL.AddTypeS('HINTERNET', 'Integer');

(CL.AddTypeS('PHINTERNET', 'Pointer');

(/CL.AddTypeS('PHINTERNET', 'PHINTERNET');

(CL.AddTypeS('LPHINTERNET', 'PHINTERNET');

CL.AddTypeS('INTERNET_PORT', 'Word');

(/CL.AddTypeS('PINTERNET_PORT', '^INTERNET_PORT'/ will not work');

(/CL.AddTypeS('LPINTERNET_PORT', 'PINTERNET_PORT');
15151:
15152:
15153:
15154:
15155:
15156:
           Function InternetTimeFromSystemTime(const pst:TSystemTime;dwRFC:DWORD;lpszTime:LPSTR;cbTime:DWORD):BOOL;
15157:
          'INTERNET_RFC1123_FORMAT', 'LongInt'( 0);
'INTERNET_RFC1123_BUFSIZE', 'LongInt'( 30);
15159:
15160:
        Function InternetCrackUrl(lpszUrl:PChar; dwUrlLength,dwFlags:DWORD; var
        lpUrlComponents:TURLComponents):BOOL;
15161:
         Function InternetCreateUrl(var lpUrlComponts:TURLCompons;dwFlags:DWORD;lpszUrl:PChar;var
        dwUrlLength:DWORD):BOOL;
15162: Function InternetCloseHandle( hInet : HINTERNET) : BOOL');
15163:
         Function
        InternetConnect(hInet:HINTERNET;lpszServerName:PChar;nServerPort:INTERNET PORT;lpszUsername:PChar;
        lpszPassword:PChar;dwService:DWORD;dwFlags:DWORD;dwContext:DWORD):HINTERNET;
15164:
         Function InternetOpenUrl(hInet:HINTERNET;lpszUrl:PChar;lpszHeaders:PChar;dwHeadLength:DWORD;dwFlags:DWORD
15165:
          ;dwContext:DWORD):HINTERNET;
         Function InternetOpen(lpszAgent:PChar;dwAccessType:DWORD;lpszProxy,
15166:
        lpszProxBypass:PChar;dwFlags:DWORD):HINTERNET;
         Function InternetQueryDataAvailable(hFile:HINTERNET;var lpdwNumbOfBytesAvail:DWORD;dwFlags,
        dwContext:DWORD):BOOL;
15168: Function InternetUnlockRequestFile( hLockRequestInfo : THANDLE) : BOOL');
15169: Function
        InternetDial(hwndParent:HWND;lpszConnect:Pchar;dwFlags:DWORD;lpdwConnect:DWORD;dwReserved:DWORD):DWORD;
15170: Function InternetHangUp( dwConnection : DWORD; dwReserved : DWORD) : DWORD')
15171: Function InternetGoOnline( lpszURL: pchar; hwndParent: HWND; dwFlags: DWORD): BOOL');
15172: Function InternetAutodial( dwFlags: DWORD; dwReserved: DWORD): BOOL');
15173: Function InternetAutodialHangup( dwReserved : DWORD) : BOOL');
15174: Function InternetGetConnectedState( lpdwFlags : DWORD; dwReserved : DWORD) : BOOL');
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15175: Function InternetCanonicalizeUrl(lpszUrl:PChar;lpszBuffer:PChar; var
                      lpdwBufferLength:DWORD;dwFlags:DWORD):BOOL;
                         Function InternetCombineUrl( lpszBaseUrl, lpszRelativeUrl : PChar; lpszBuffer : PChar; var
                       lpdwBufferLength : Function InternetCloseHandle( hInet : HINTERNET) : BOOL');
                      Function InternetConnect(hInet:HINTERNET;lpszServerName:PChar;nServerPort:INTERNET_PORT;lpszUsername:PChar
15177:
                          ;lpszPassword:PChar;dwService:DWORD;dwFlags:DWORD; dwContext:DWORD):HINTERNET;
15178:
                         Function InternetQueryDataAvailable(hFile:HINTERNET; var lpdwNumbOfBytesAvail:DWORD; dwFlgs,
15179:
                       dwContext:DWORD):BOOL;
15180:
                         Function FtpFindFirstFile( hConnect : HINTERNET; lpszSearchFile : PChar; var lpFindFileData :
                      TWin32FindData; dwFlags : DWORD; dwContext : DWORD) : HINTERNET');

Function WFtpGetFile( hConnect : HINTERNET; lpszRemoteFile : PChar; lpszNewFile : PChar; fFailIfExists :
15181:
                       BOOL; dwFlagsAndAttributes : DWORD; dwFlags : DWORD; dwContext : DWORD) : BOOL');
15182:
                         Function
                       WFtpPutFile(hConct:HINTERNET;lpszLocFile:PChar;lpszNewRemFile:PChar;dwFlags:DWORD;dwCotx:DWORD):BOOL;
15183:
                       Function FtpDeleteFile( hConnect : HINTERNET; lpszFileName : PChar) : BOOL!);
15184:
                         Function FtpRenameFile(hConnect:HINTERNET;lpszExisting:PChar;lpszNew:PChar):BOOL;
                       Function FtpCreateDirectory( hConnect : HINTERNET; lpszDirectory : PChar) : BOOL);
Function FtpRemoveDirectory( hConnect : HINTERNET; lpszDirectory : PChar) : BOOL');
15186:
15187:
                          Function FtpSetCurrentDirectory(hConnect:HINTERNET; lpszDirectory: PChar): BOOL');
                         Function FtpGetCurrentDirectory(hConnect:HINTER;lpszCurrentDir:PChar;var lpdwCurrentDir:DWORD):BOOL;
 15189:
15190:
                         Function
                       \label{prop:prop:mand}  (\texttt{hConnect:HINTER:fExpectResponse:BOOL:dwFlags:DWORD:lpszCommd:PChar:dwContxt:DWORD):BOOL:dwFlags:DWORD:dwFlags:DWORD:dwFlags:DWORD:dwFlags:DWORD:dwFlags:DWORD:dwFlags:DWORD:dwFlags:DWORD:dwFlags:DWORD:dwFlags:DWORD:dwFlags:DWORD:dwFlags:DWORD:dwFlags:DWORD:dwFlags:DWORD:dwFlags:DWORD:dwFlags:DWORD:dwFlags:DWORD:dwFlags:DWORD:dwFlags:DWORD:dwFlags:DWORD:dwFlags:DWORD:dwFlags:DWORD:dwFlags:DWORD:dwFlags:DWORD:dwFlags:DWORD:dwFlags:DWORD:dwFlags:DWORD:dwFlags:DWORD:dwFlags:DWORD:dwFlags:DWORD:dwFlags:DWORD:dwFlags:DWORD:dwFlags:DWORD:dwFlags:DwFlags:DWORD:dwFlags:DWORD:dwFlags:DWORD:dwFlags:DWORD:dwFlags:DwFlags:DwFlags:DwFlags:DwFlags:DwFlags:DwFlags:DwFlags:DwFlags:DwFlags:DwFlags:DwFlags:DwFlags:DwFlags:DwFlags:DwFlags:DwFlags:DwFlags:DwFlags:DwFlags:DwFlags:DwFlags:DwFlags:DwFlags:DwFlags:DwFlags:DwFlags:DwFlags:DwFlags:DwFlags:DwFlags:DwFlags:DwFlags:DwFlags:DwFlags:DwFlags:DwFlags:DwFlags:DwFlags:DwFlags:DwFlags:DwFlags:DwFlags:DwFlags:DwFlags:DwFlags:DwFlags:DwFlags:DwFlags:DwFlags:DwFlags:DwFlags:DwFlags:DwFlags:DwFlags:DwFlags:DwFlags:DwFlags:DwFlags:DwFlags:DwFlags:DwFlags:DwFlags:DwFlags:DwFlags:DwFlags:DwFlags:DwFlags:DwFlags:DwFlags:DwFlags:DwFlags:DwFlags:DwFlags:DwFlags:DwFlags:DwFlags:DwFlags:DwFlags:DwFlags:DwFlags:DwFlags:DwFlags:DwFlags:DwFlags:DwFlags:DwFlags:DwFlags:DwFlags:DwFlags:DwFlags:DwFlags:DwFlags:DwFlags:DwFlags:DwFlags:DwFlags:DwFlags:DwFlags:DwFlags:DwFlags:DwFlags:DwFlags:DwFlags:DwFlags:DwFlags:DwFlags:DwFlags:DwFlags:DwFlags:DwFlags:DwFlags:DwFlags:DwFlags:DwFlags:DwFlags:DwFlags:DwFlags:DwFlags:DwFlags:DwFlags:DwFlags:DwFlags:DwFlags:DwFlags:DwFlags:DwFlags:DwFlags:DwFlags:DwFlags:DwFlags:DwFlags:DwFlags:DwFlags:DwFlags:DwFlags:DwFlags:DwFlags:DwFlags:DwFlags:DwFlags:DwFlags:DwFlags:DwFlags:DwFlags:DwFlags:DwFlags:DwFlags:DwFlags:DwFlags:DwFlags:DwFlags:DwFlags:DwFlags:DwFlags:DwFlags:DwFlags:DwFlags:DwFlags:DwFlags:DwFlags:DwFlags:DwFlags:DwFlags:DwFlags:DwFlags:DwFlags:DwFlags:DwFlags:DwFlags:DwFlags:DwFlags:DwFlags:DwFlags:DwFlags:DwFlags:DwFlags:D
                      Function IS_GOPHER_FILE( GopherType : DWORD) : BOOL')
15192:
                         Function IS_GOPHER_DIRECTORY( GopherType : DWORD) : BOOL');
15193:
                         Function IS_GOPHER_PHONE_SERVER( GopherType : DWORD) : BOOL');
15194:
                         Function IS_GOPHER_ERROR( GopherType : DWORD) : BOOL');
                         Function IS_GOPHER_INDEX_SERVER( GopherType : DWORD) : BOOL');
 15195:
                         Function IS_GOPHER_TELNET_SESSION( GopherType : DWORD) : BOOL');
15197:
                         Function IS_GOPHER_BACKUP_SERVER( GopherType : DWORD) : BOOL');
15198:
                         Function IS_GOPHER_TN3270_SESSION( GopherType : DWORD) : BOOL');
                         Function IS_GOPHER_ASK( GopherType : DWORD) : BOOL');
15199:
                         Function IS_GOPHER_PLUS( GopherType : DWORD) : BOOL');
15200:
                          Function IS_GOPHER_TYPE_KNOWN( GopherType : DWORD) : BOOL');
 15201:
15202:
                         Function
                       GopherCreateLocator(lpszHost:PChar;nServerPort:INTERNET PORT;lpszDisplayString:PChar;lpszSelectorString:
                      PChar; dwGopherType:DWORD;lpszLocator:PChar; var lpdwBufferLength:DWORD):BOOL;
Function GopherGetLocatorType( lpszLocator : PChar; var lpdwGopherType : DWORD):BOOL');
15203:
15204:
                       \label{local:pchar} GopherOpenFile(hConect:HINTERNET;lpszLocat:PChar;lpszView:PChar;dwFlags:DWORD;dwContext:DWORD):HINTERNET;lpszLocat:PChar;lpszView:PChar;dwFlags:DWORD;dwContext:DWORD):HINTERNET;lpszLocat:PChar;lpszView:PChar;dwFlags:DWORD;dwContext:DWORD):HINTERNET;lpszLocat:PChar;lpszView:PChar;dwFlags:DWORD;dwContext:DWORD):HINTERNET;lpszLocat:PChar;dwFlags:DWORD;dwContext:DWORD):HINTERNET;lpszLocat:PChar;dwFlags:DWORD;dwContext:DWORD):HINTERNET;lpszLocat:PChar;dwFlags:DWORD;dwContext:DWORD):HINTERNET;lpszLocat:PChar;dwFlags:DWORD;dwContext:DWORD):HINTERNET;lpszLocat:PChar;dwFlags:DWORD;dwContext:DWORD):HINTERNET;lpszLocat:PChar;dwFlags:DWORD;dwContext:DWORD):HINTERNET;lpszLocat:PChar;dwFlags:DWORD;dwContext:DWORD):HINTERNET;lpszLocat:PChar;dwContext:DWORD):HINTERNET;lpszLocat:PChar;dwContext:PChar;dwContext:PChar;dwContext:PChar;dwContext:PChar;dwContext:PChar;dwContext:PChar;dwContext:PChar;dwContext:PChar;dwContext:PChar;dwContext:PChar;dwContext:PChar;dwContext:PChar;dwContext:PChar;dwContext:PChar;dwContext:PChar;dwContext:PChar;dwContext:PChar;dwContext:PChar;dwContext:PChar;dwContext:PChar;dwContext:PChar;dwContext:PChar;dwContext:PChar;dwContext:PChar;dwContext:PChar;dwContext:PChar;dwContext:PChar;dwContext:PChar;dwContext:PChar;dwContext:PChar;dwContext:PChar;dwContext:PChar;dwContext:PChar;dwContext:PChar;dwContext:PChar;dwContext:PChar;dwContext:PChar;dwContext:PChar;dwContext:PChar;dwContext:PChar;dwContext:PChar;dwContext:PChar;dwContext:PChar;dwContext:PChar;dwContext:PChar;dwContext:PChar;dwContext:PChar;dwContext:PChar;dwContext:PChar;dwContext:PChar;dwContext:PChar;dwContext:PChar;dwContext:PChar;dwContext:PChar;dwContext:PChar;dwContext:PChar;dwContext:PChar;dwContext:PChar;dwContext:PChar;dwContext:PChar;dwContext:PChar;dwContext:PChar;dwContext:PChar;dwContext:PChar;dwContext:PChar;dwContext:PChar;dwContext:PChar;dwContext:PChar;dwContext:PChar;dwContext:PChar;dwContext:PChar;dwContext:PChar;dwContext:PChar;dwContext:PChar;dwContext:PChar;dwContext:PChar;dwContext:PChar;dwContext:PCh
                      Function HttpOpenRequest( hConnect:HINTERNET; lpszVerb: PChar; lpszVerbion: PChar; lpszVersion: PChar; lpszVersion: PChar; lpszReferrer: PChar; lplpszAcceptTypes: PLPSTR; dwFlags: DWORD; dwContext:DWORD):HINTERNET;
15205:
15206:
                      \texttt{HttpAddRequestHeaders} (\texttt{hReq:HINTERNET}; \texttt{lpszHeaders:PChar}; \texttt{dwHeadersLength:DWORD}; \texttt{dwModifiers:DWORD}) : \texttt{BOOL}; \texttt{bool}; \texttt{dwModifiers:DWORD}) : \texttt{bool}; 
15207:
                      Function HttpSendRequest(hRequest: HINTERNET; lpszHeaders : PChar;
                      dwHeadersLength:DWORD;lpOptional:Tobject; dwOptionalLength:DWORD):BOOL;
 15208: Function InternetGetCookie(lpszUrl,lpszCookieName,lpszCookieData:PChar;var lpdwSize:DWORD):BOOL;
                         Function InternetAttemptConnect( dwReserved : DWORD) : DWORD; );
Function InternetCheckConnection( lpszUrl : PChar; dwFlags : DWORD; dwReserved : DWORD) : BOOL');
Function InternetErrorDlg(hWnd:HWND;hRequest:HINTERNET;dwError,dwFlags:DWORD;var lppvData:TObject):DWORD;
 15209:
15210:
15211:
                         Function InternetConfirmZoneCrossing( hWnd: HWND; szUrlPrev, szUrlNew: LPSTR; bPost: BOOL): DWORD');
Function CreateUrlCacheGroup( dwFlags: DWORD; lpReserved: TObject): Int64');
Function DeleteUrlCacheGroup( GroupId: Int64; dwFlags: DWORD; lpReserved: TObject): Bool');
15212:
 15213:
15214:
                      Function FindFirstUrlCacheEntry(lpszUrlSearchPattern PChar; var lpFirstCacheEntryInfo:TInternetCacheEntryInfo; var lpdwFirstCacheEntryInfoBufferSize:DWORD):THandle;
15215:
                         Function FindNextUrlCacheEntry(hEnumHandle:THandle;var lpNextCacheEntryInfo:TInternetCacheEntryInfo; var
                       lpdwNextCacheEntryInfoBufferSize : DWORD) : BOOL;
                        Function FindCloseUrlCache( hEnumHandle : THandle):BOOL;
15217:
15218:
                         Function DeleteUrlCacheEntry( lpszUrlName : LPCSTR):BOOL;
15219:
                         Function
                       Internet Dial (hwnd Parent: HWND; lpszConnect: Pchar; dwFlgs: DWORD; lpdwConnect: DWORD; dwReserved: DWORD): DWORD; dwReserved: DWORD; dwWReserved: DWORD; dwWReser
15220 •
                         Function InternetSetDialState( lpszConnectoid : PChar; dwState : DWORD; dwReserved: DWORD) : BOOL');
15221:
                      end;
15222:
 15223:
                      procedure SIRegister_Wwstr(CL: TPSPascalCompiler);
 15224:
                      begin
15225:
                             AddTypeS('strCharSet', 'set of char');
15226:
                             Tww GetWord Option', '(wwgw Skip Leading Blanks, wwgw Quotes As Words, wwgw Strip Quotes , wwgw Spaces In Words); wwgw Strip Quotes , wwgw Spaces In Words ); wwgw Spaces In Words ); wwgw Strip Quotes , wwgw Spaces In Words ); wwgw Spaces Spaces ); wwgw Spaces S
                         AddTypeS('TwwGetWordOptions', 'set of TwwGetWordOption');

Procedure strBreakApart( s : string; delimeter : string; parts : TStrings)');
 15227:
15228:
15229:
                         Function strGetToken( s : string; delimeter : string; var APos : integer) : string');
                         Procedure strStripPreceding( var s : string; delimeter : strCharSet)');
Procedure strStripTrailing( var s : string; delimeter : strCharSet)');
Procedure strStripWhiteSpace( var s : string)');
15230:
15231:
 15232:
15233:
                         Function strRemoveChar( str : string; removeChar : char) : string');
                         Function wwstrReplaceChar( str : string; removeChar, replaceChar : char) : string');
Function strReplaceCharWithStr( str : string; removeChar : char; replaceStr : string) : string');
Function wwEqualStr( s1, s2 : string) : boolean');
15234:
15235:
15236:
                          Function strCount( s : string; delimeter : char) : integer');
15238:
                         Function strWhiteSpace : strCharSet');
15239:
                         Function wwExtractFileNameOnly( const FileName : string) : string');
                         Function wwGetWord(s:string; var APos:integer;Options:TwwGetWordOptions;DelimSet:strCharSet):string;
15240:
                         Function strTrailing( s : string; delimeter : char) : string');
15241:
                         Function strPreceding( s : string; delimeter : char) : string');
 15242:
15243:
                         Function wwstrReplace( s, Find, Replace : string) : string');
15244:
                      end
 15245:
15246: procedure SIRegister_DataBkr(CL: TPSPascalCompiler);
```

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15247: begin
15248:
            SIRegister TRemoteDataModule(CL);
             SIRegister_TCRemoteDataModule(CL);
           Procedure RegisterPooled( const ClassID : string; Max, Timeout : Integer; Singleton : Boolean)');
Procedure UnregisterPooled( const ClassID : string)');
15250:
15251:
           Procedure EnableSocketTransport( const ClassID : string)');
Procedure DisableSocketTransport( const ClassID : string)');
15252:
15253:
           Procedure EnableWebTransport( const ClassID : string)
15254:
           Procedure DisableWebTransport( const ClassID : string)');
15255:
15256:
         end;
15257:
15258: procedure SIRegister_Mathbox(CL: TPSPascalCompiler);
15259: begin
15260:
           Function mxArcCos(x: Real): Real');
           Function mxArcSin( x : Real) : Real');
15261:
15262:
           Function Comp2Str( N : Comp) : String');
           Function Int2StrPad0( N : LongInt; Len : Integer) : String');
15263:
           Function Int2Str( N : LongInt) : String');
Function mxIsEqual( R1, R2 : Double) : Boolean');
Function LogXY( x, y : Real) : Real');
15264 .
15265:
15266:
           Function Pennies2Dollars( C : Comp) : String');
15267:
          Function mxPower( X : Integer; Y : Integer) : Real');
Function Real2Str( N : Real; Width, Places : integer) : String');
15268:
15269:
           Function mxStr2Comp( MyString : string) : Comp');
Function mxStr2Pennies( S : String) : Comp');
Function Str2Real( MyString : string) : Real');
15270:
15271:
15272:
15273:
          Function XToTheY( x, y : Real) : Real');
15274: end;
15275:
         15276:
15277:
15278: begin
            CL.AddTypeS('TContentTypeMessage', '( cmPlainText, cmPlainText_Attach, cmHtml'
15279:
              #:_Attach, cmHtml_RelatedAttach, cmAlterText_Html, cmAlterText_Html_Attach, '
+'cmAlterText_Html_RelatedAttach, cmAlterText_Html_Attach, cmReadNotification )');
15280:
15281:
15282:
           MessagePlainText','String 'text/plain');
           CL.AddConstantN('MessagePlainText_Attach','String 'multipart/mixed');
MessageAlterText_Html','String 'multipart/alternative');
15283:
15284:
           MessageHtml_Attach', 'String 'multipart/mixed');
MessageHtml_RelatedAttach', 'String 'multipart/related; type="text/html"');
15285:
15286:
           MessageAlterText_Html_Attach','String 'multipart/mixed');
MessageAlterText_Html_RelatedAttach','String')('multipart/related;type="multipart/alternative";
MessageAlterText_Html_Attach_RelatedAttach','String 'multipart/mixed');
15287:
15288:
15289:
           MessageReadNotification', 'String').( 'multipart/report; report-type="disposition-notification"; Function ForceDecodeHeader( aHeader: String): String');
Function Base64_EncodeString( Value: String; const aEncoding: TEncoding): string');
15290:
15291:
15292:
15293:
           Function Base64_DecodeToString( Value : String; const aBytesEncoding : TEncoding) : String; ');
           Function Base64_DecodeToBytes( Value : String) : TBytes; ');
15295:
           Function IdHttp_DownloadFile(aSrcUrlFile,aDestFile:String;const OnWorkEvent:TWorkEvent):Boolean;
          Function Get_MD5( const aFileName : string) : string');
Function Get_MD5FromString( const aString : string) : string');
15296:
15297:
15298: end;
15299:
15300:
         procedure SIRegister_cySysUtils(CL: TPSPascalCompiler);
15301:
         begin
          Function IsFolder( SRec : TSearchrec) : Boolean');
15302:
           Function isFolderReadOnly( Directory : String) : Boolean');
15303:
           Function DirectoryIsEmpty( Directory : String) : Boolean');
15304:
15305:
           Function DirectoryWithSubDir( Directory : String) : Boolean');
           Procedure GetSubDirs( FromDirectory : String; aList : TStrings)');
Function DiskFreeBytes( Drv : Char) : Int64');
15306:
15307:
15308:
           Function DiskBytes( Drv : Char) : Int64');
15309:
           Function GetFileBytes( Filename : String) : Int64');
           Function GetFilesBytes( Directory, Filter: String) : Int64');
SE_CREATE_TOKEN_NAME','String 'SeCreateTokenPrivilege');
15310:
15311:
           SE_ASSIGNPRIMARYTOKEN_NAME', 'String 'SeAssignPrimaryTokenPrivilege');
15312:
           SE_LOCK_MEMORY_NAME', 'String 'SeLockMemoryPrivilege');
SE_INCREASE_QUOTA_NAME', 'String 'SeIncreaseQuotaPrivilege');
15313:
15314:
           SE_UNSOLICITED_INPUT_NAME','String 'SeUnsolicitedInputPrivilege');
SE_MACHINE_ACCOUNT_NAME','String 'SeMachineAccountPrivilege');
SE_TCB_NAME','String 'SeTcbPrivilege');
15315:
15316:
15317:
15318:
           SE_SECURITY_NAME','String 'SeSecurityPrivilege');
           SE_TAKE_OWNERSHIP_NAME','String 'SeTakeOwnershipPrivilege');
15319:
           SE LOAD DRIVER NAME', 'String 'SeLoadDriverPrivilege');
15320:
15321:
           SE_SYSTEM_PROFILE_NAME','String 'SeSystemProfilePrivilege');
          SE_SYSTEM_PROFILE_NAME', 'String 'SeSystemProfilePrivilege');
SE_SYSTEMTIME_NAME', 'String 'SeSystemtimePrivilege');
SE_PROF_SINGLE_PROCESS_NAME', 'String 'SeProfileSingleProcessPrivilege');
SE_INC_BASE_PRIORITY_NAME', 'String 'SeIncreaseBasePriorityPrivilege');
SE_CREATE_PAGEFILE_NAME', 'String 'SeCreatePagefilePrivilege');
SE_CREATE_PERMANENT_NAME', 'String 'SeCreatePermanentPrivilege');
15322:
15323:
15324:
15325:
           SE_BACKUP_NAME','String 'SeBackupPrivilege');
SE_RESTORE_NAME','String 'SeRestorePrivilege');
SE_SHUTDOWN_NAME','String 'SeShutdownPrivilege');
15327:
15328:
15329:
           SE_DEBUG_NAME', String 'SeDebugPrivilege');
SE_AUDIT_NAME', String 'SeAuditPrivilege');
15330:
15331:
15332:
           SE_SYSTEM_ENVIRONMENT_NAME','String 'SeSystemEnvironmentPrivilege');
          SE_CHANGE_NOTIFY_NAME', 'String 'SeChangeNotifyPrivilege');
SE_REMOTE_SHUTDOWN_NAME', 'String 'SeRemoteShutdownPrivilege');
SE_UNDOCK_NAME', 'String 'SeUndockPrivilege');
15333:
15334:
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SE_SYNC_AGENT_NAME','String 'SeSyncAgentPrivilege');
SE_ENABLE_DELEGATION_NAME','String 'SeEnableDelegationPrivilege');
15336:
15337:
                          SE_MANAGE_VOLUME_NAME','String 'SeManageVolumePrivilege');
15339:
15340:
15341:
15342: procedure SIRegister_cyWinUtils(CL: TPSPascalCompiler);
 15343:
15344:
                               Type(TWindowsVersion', '( wvUnknown, wvWin31, wvWin95, wvWin98, wvWin'
                          +'Me, wvWinNt3, wvWinNt4, wvWin2000, wvWinXP, wvWinVista, wvWin7, wvWin8, wvWin8_Or_Upper )');
Function ShellGetExtensionName( FileName: String): String');
15345:
 15346:
                           Function ShellGetIconIndex(FileName: String): Integer');
 15348:
                          Function ShellGetIconHandle(FileName: String): HIcon');
15349:
                          Procedure ShellThreadCopy( App_Handle : THandle; fromFile : string; toFile : string)');
                          Procedure ShellThreadMove( App_Handle : THandle; fromFile : string; toFile : string) );
15350:
 15351:
                           Procedure ShellRenameDir( DirFrom, DirTo : string)');
                           \textbf{Function} \  \, \text{cyShellExecute(Operation,FileName,Parameters,Directory:} \\ \textbf{String}; \\ \textbf{ShowCmd:Integer):Cardinal;} \\ \textbf
 15352:
 15353.
                          \textbf{Procedure} \  \, \texttt{cyShellExecute1} \\ \textbf{(ExeFilename,Parameters,ApplicationName,ApplicationClass:String;Restore:Boolean)} \\ \textbf{(ExeFilename,Parameters,ApplicationName,ApplicationName,ApplicationName,ApplicationName,ApplicationName,ApplicationName,ApplicationName,ApplicationName,ApplicationName,ApplicationName,ApplicationName,ApplicationName,ApplicationName,ApplicationName,ApplicationName,ApplicationName,ApplicationName,ApplicationName,ApplicationName,ApplicationName,ApplicationName,ApplicationName,ApplicationName,ApplicationName,ApplicationName,ApplicationName,ApplicationName,ApplicationName,ApplicationName,ApplicationName,ApplicationName,ApplicationName,ApplicationName,ApplicationName,ApplicationName,ApplicationName,ApplicationName,ApplicationName,ApplicationName,ApplicationName,ApplicationName,ApplicationName,ApplicationName,ApplicationName,ApplicationName,ApplicationName,ApplicationName,ApplicationName,ApplicationName,ApplicationName,ApplicationName,ApplicationName,ApplicationName,ApplicationName,ApplicationName,ApplicationName,ApplicationName,ApplicationName,ApplicationName,ApplicationName,ApplicationName,ApplicationName,ApplicationName,ApplicationName,ApplicationName,ApplicationName,ApplicationName,ApplicationName,ApplicationName,ApplicationName,ApplicationName,ApplicationName,ApplicationName,ApplicationName,ApplicationName,Appli
15354:
                          Procedure ShellExecuteAsModal( ExeFilename, ApplicationName, Directory: String)');
                          Procedure ShellExecuteExAsAdmin( hWnd : HWND; Filename : string; Parameters : string)');
15355:
15356:
                            Function ShellExecuteEx(aFileName: string; const Parameters:string; const Directory: string; const
                        WaitCloseCompletion : boolean) : Boolean');
                       Procedure RestoreAndSetForegroundWindow( Hnd : Integer)');
Function RemoveDuplicatedPathDelimiter( Str : String) : String');
15357:
15358:
                          Function cyFileTimeToDateTime( _FT : TFileTime) : TDateTime
15359:
15360:
                           Function GetModificationDate(Filename: String): TDateTime');
15361:
                          Function GetCreationDate( Filename : String) : TDateTime');
Function GetLastAccessDate( Filename : String) : TDateTime');
15362:
                          Function FileDelete( Filename : String) : Boolean');
 15363:
                          Function FileIsOpen( Filename : string) : boolean');
                          Procedure FilesDelete( FromDirectory : String; Filter : ShortString)');
Function DirectoryDelete( Directory : String) : Boolean');
Function GetPrinters( PrintersList : TStrings) : Integer');
15365:
15366:
15367:
15368:
                          Procedure SetDefaultPrinter( PrinterName : String)');
                           Procedure ShowDefaultPrinterWindowProperties( FormParent_Handle : Integer)');
                          Function WinToDosPath( WinPathName : String) : String');
Function DosToWinPath( DosPathName : String) : String');
15370:
15371:
15372:
                          Function cvGetWindowsVersion : TWindowsVersion');
                          Function NTSetPrivilege( strivilege: string; bEnabled: Boolean): Boolean');
Procedure WindowsShutDown( Restart: boolean)');
 15373:
15374:
15375:
                          Procedure CreateShortCut(FileSrc,Parametres,FileLnk,Descript,DossierDeTravail,
                       FileTcon: string: NumTcone: integer);
15376: Procedure GetWindowsFonts( FontsList : TStrings)');
                          Function GetAvailableFilename( DesiredFileName : String): String');
15377:
15378: end;
15379:
15380: procedure SIRegister_cyStrUtils(CL: TPSPascalCompiler);
 15381:
                       begin
                              Type(TStrLocateOption', '( strloCaseInsensitive, strloPartialKey )');
Type(TStrLocateOptions', 'set of TStrLocateOption');
 15382:
15383:
                              Type(TStringRead', '( srFromLeft, srFromRight )');
Type(TStringReads', 'set of TStringRead');
15384:
15385:
                              Type(TCaseSensitive', '( csCaseSensitive, csCaseNotSensitive )');
Type(TWordsOption', '( woOnlyFirstWord, woOnlyFirstCar )');
Type(TWordsOptions', 'set of TWordsOption');
 15386:
15387:
                              Type(TCarType', '(ctAlphabeticUppercase, ctAlphabeticLowercase, ctNumeric, ctOther )');
Type(TCarTypes', 'set of TCarType');
15388:
15389:
 15390:
                               //CL.AddTypeS('TUnicodeCategories', 'set of TUnicodeCategory');
15391:
15392:
                           \label{local_continuous_continuous} \textbf{CarTypeAlphabetic','LongInt'):= ord(ctAlphabeticUppercase)} \ \ \text{or} \ \ \text{ord(ctAlphabeticLowercase)}; \\ \textbf{CarTypeAlphabetic','LongInt'):= ord(ctAlphabeticUppercase)} \ \ \text{or} \ \ \text{ord(ctAlphabeticLowercase)}; \\ \textbf{CarTypeAlphabetic','LongInt'):= ord(ctAlphabeticUppercase)} \ \ \text{or} \ \ \text{ord(ctAlphabeticLowercase)}; \\ \textbf{CarTypeAlphabetic','LongInt'):= ord(ctAlphabeticUppercase)} \ \ \text{or} \ \ \text{ord(ctAlphabeticLowercase)}; \\ \textbf{CartypeAlphabetic','LongInt'):= ord(ctAlphabeticUppercase)}; \\ \textbf{CartypeAlphabetic','LongInt','LongInt','LongInt','LongInt','LongInt','LongInt','LongInt','LongInt','LongInt','LongInt','LongInt','LongInt','LongInt','LongInt','LongInt','LongInt','LongInt','LongInt','LongInt','LongInt','LongInt','LongInt','LongInt','LongInt','LongInt','LongInt','LongInt','LongInt','LongInt','LongInt','LongInt','LongInt','LongInt','LongInt','LongInt','LongInt','LongInt','LongInt','LongInt','LongInt','LongInt','LongInt','LongInt','LongInt','LongInt','LongInt','LongInt','LongInt','LongInt','LongInt','LongInt','LongInt','LongInt','LongInt','LongInt','LongInt','LongInt','LongInt','LongInt','LongInt','LongInt','LongInt','LongInt','LongInt','LongInt','LongInt','LongInt','LongInt','LongInt','LongInt','LongInt','LongInt','LongInt','LongInt','LongInt','LongInt','LongInt','LongInt','LongInt','LongInt','LongInt','LongInt','LongInt','LongInt','LongInt','LongInt','LongInt','LongInt','LongInt','LongInt','LongInt','LongInt','LongInt','LongInt','LongInt','LongInt','LongI
                           Function Char GetType( aChar : Char) : TCarType');
 15393:
                           Function SubString_Count( Str : String; Separator : Char) : Integer');
 15394:
 15395:
                            Function SubString_AtPos( Str : String; Separator : Char; SubStringIndex : Word) : Integer');
15396:
                          Function SubString_Get( Str : String; Separator : Char; SubStringIndex : Word) : String');
                          Function SubString_Length( Str : String; Separator : Char; SubStringIndex : Word) : Integer');
Procedure SubString_Add( var Str : String; Separator : Char; Value : String)');
Procedure SubString_Insert(var Str:String;Separator:Char; SubStringIndex:Word; Value : String)
15397:
 15398:
 15399:
 15400:
                           Procedure SubString_Edit(var Str:String;Separator:Char;SubStringIndex:Word; NewValue : String)');
15401:
                          Function SubString_Remove(var Str:string; Separator:Char; SubStringIndex : Word) : Boolean');
15402:
                          \textbf{Function} \ \ SubString\_Locate(Str: \textbf{string}; Separator: Char; SubString: \textbf{String}; Options: TStrLocateOptions): Integer; and the subString options of the subString 
                          Function SubString Ribbon( Str : string; Separator : Char; Current: Word; MoveBy : Integer; ');
 15403:
                           Function SubString_Ribbonl(Str:string;Separator:Char;Current:String; MoveBy:Integer):String;');
15404:
                          Function String_Quote( Str : String; Position : Word; ReturnCarlfNotExists : Char) : Char');
15405:
15406:
15407:
                          Function String ExtractCars(fromStr:String;CarTypes:TCarTypes;IncludeCars,ExcludeCars:String):String;
                           Function String_GetWord( Str : String; StringRead : TStringRead) : String');
 15408:
 15409:
                           Function String_GetInteger( Str : String; StringRead : TStringRead) : String');
15410:
                           Function String_ToInt( Str : String) : Integer');
                          Function String_Uppercase( Str : String; Options : TWordsOptions) : String');
Function String_Lowercase( Str : String; Options : TWordsOptions) : String');
15411:
15412:
                           Function String_Reverse( Str : String) : String');
                           Function String_Pos(SubStr:String;Str:String;fromPos:Integer;CaseSensitive:TCaseSensitive)Integer;
15414:
15415:
                          Function String_Pos1(SubStr:String; Str:String; StringRead:TStringRead; Occurrence:Word; CaseSensitive :
                        TCaseSensitive):Integer;');
15416: Function String_Copy( Str : String; fromIndex : Integer; toIndex : Integer) : String;
                          Function String_Copy1(Str:String;StringRead:TStringRead;UntilFind:String;_Inclusive:Boolean):String;
 15417:
15418:
                          \textbf{Function} \ \texttt{String\_Copy2} \\ (\texttt{Str:String}; \texttt{Between1} \\ \texttt{String}; \texttt{Between1} \\ \texttt{MustExist:Boolean}; \ \texttt{Between2} \\ \texttt{String}; \\ \texttt{Between2} \\ \texttt{String}; \\ \texttt{Between2} \\ \texttt{String}; \\ \texttt{Between3} \\ \texttt{String}; \\ \texttt{Between3} \\ \texttt{String}; \\ \texttt{Between4} \\ \texttt{String}; \\ \texttt{
Between2MustExist : Boolean; CaseSensitive : TCaseSensitive) : String;');
15419: Function String_Delete( Str : String; fromIndex : Integer; toIndex : Integer) : String;');
15420: Function String_Deletel( Str : String; delStr : String; CaseSensitive:TCaseSensitive) : String;');
```

```
15421:
                Function String_BoundsCut( Str : String; CutCar : Char; Bounds : TStringReads) : String');
                 Function String_BoundsAdd( Str : String; AddCar : Char; ReturnLength : Integer) : String);
15422:
                 Function String_Add(Str:String?StringRead:TStringRead;aCar:Char;ReturnLength:Integer):String');
15424 .
                 Function String_End( Str : String; Cars : Word) : String');
15425:
                Function String_Subst(OldStr:String; NewStr:String; Str:String; CaseSensitive : TCaseSensitive;
              AlwaysFindFromBeginning : Boolean) : String');
              Function String_SubstCar( Str : String; Old, New : Char) : String');
Function String_Count( Str : String; SubStr : String; CaseSenSitive : TCaseSensitive) : Integer');
Function String_SameCars(Str1,Str2:String;StopCount_IfDiferent:Bool;CaseSensitive:TCaseSensitive):Integer;
15427:
15428:
15429:
                Function String_IsNumbers( Str : String) : Boolean');
Function SearchPos( SubStr : String; Str : String; MaxErrors : Integer) : Integer');
15430:
                 Function StringToCsvCell( aStr : String) : String');
15431:
15432: end;
15433:
              procedure SIRegister cyDateUtils(CL: TPSPascalCompiler);
15434:
15435: begin
15436:
                Function LongDayName( aDate : TDate) : String');
                Function LongMonthName( aDate : TDate) : String');
Function ShortYearOf( aDate : TDate) : byte');
15437:
15438:
                Function DateToStrYYYYMMDD( aDate : TDate) : String');
Function StrYYYYMMDDToDate( aStr : String) : TDate');
15439:
15440:
15441:
                 Function SecondsToMinutes( Seconds : Integer) : Double');
15442:
                Function MinutesToSeconds( Minutes : Double) : Integer');
                Function MinutesToHours( Minutes: Integer): Double');
Function HoursToMinutes( Hours: Double): Integer');
15443:
15444:
15445:
                 Function ShortTimeStringToTime( ShortTimeStr : String; const ShortTimeFormat : String) : TDateTime');
15446:
                Procedure cyAddMonths( var aMonth, aYear : Word; Months : Integer)');
                Function MergeDateWithTime( aDate : TDate; aTime : TDateTime) : TDateTime');
Function GetMinutesBetween( DateTime1, DateTime2 : TDateTime) : Int64;');
15447:
15448:
                Function GetMinutesBetween1(From_ShortTimeStr,To_ShortTimeStr:String;const ShortTimeFormat:String):Int64;
15450:
                Function GetSecondsBetween( DateTime1, DateTime2 : TDateTime) : Int64;');
15451:
                Function IntersectPeriods(PeriodlBegin,PeriodlEnd,Period2Begin,Period2End:TDateTime; var RsltBegin:
              TDateTime; RsltEnd : TDateTime) : Boolean; ');
15452:
                Function IntersectPeriods1(Period1Begin,Period1End,Period2Begin,Period2End:TDateTime):Boolean;
                 Function TryToEncodeDate( Year, Month, Day : Integer; var RsltDate : TDateTime) : Boolean');
15453:
15454: end;
15455:
15456: procedure SIRegister cyObjUtils(CL: TPSPascalCompiler);
15457:
              begin
15458:
                   Type(TStringsSortType', '( stNone, stStringSensitive, stStringInsensitive, stExtended )');
                  Type(TStringsValueKind', '( skStringSensitive, skStringInsensitive, skExtended )');
Type(TcyLocateOption', '( lCaseInsensitive, lPartialKey )');
Type(TcyLocateOptions', 'set of TcyLocateOption');
15459:
15460:
15461:
                 Function StringsLocate( aList : TStrings; Value : String; Options : TcyLocateOptions) : Integer; ');
15462:
                Function StringsLocate1( aList : TStrings; Value : String; ValueKind : TStringsValueKind) : Integer;');
Function StringsAdd(aList:TStrings; Value:String; Unique:Boolean; SortType:TStringsSortType) : Integer');
15463:
15464:
                 Procedure StringsReplace(aList:TStrings;OldStr:String; NewStr:String;ValueKind : TStringsValueKind)');
15465:
                 Procedure StringsSort( aList : TStrings; SortType : TStringsSortType)');
15466:
15467:
                 Function TreeNodeLocate( ParentNode : TTreeNode; Value : String)
                                                                                                                                                             TTreeNode');
                Function TreeNodeLocateOnLevel (TreeView: TTreeView; OnLevel: Integer; Value: String): TTreeNode);
15468:
15469:
                Function
              TreeNodeGetChildFromIndex(TreeView:TTreeView:ParentNode:TTreeNode;ChildIndex:Integer):TTreeNode);
15470:
              Function TreeNodeGetParentOnLevel( ChildNode : TTreeNode; ParentLevel : Integer)
                15471:
              CopySubChildren:Bool;
15472: Procedure RichEditSetStr( aRichEdit : TRichEdit; FormatedString : String)');
15473:
                 Procedure RichEditStringReplace( aRichEdit : TRichEdit; OldPattern, NewPattern : string; Flags :
               TReplaceFlags)');
15474: Function GetTopMostControlAtPos( FromControl : TWinControl; aControlPoint : TPoint) : TControl');
                Procedure cyCenterControl( aControl : TControl)');
Function GetLastParent( aControl : TControl) : TWinControl');
15475:
15476:
15477:
                 Function GetControlBitmap( aControl : TWinControl) : TBitmap');
15478:
                Function GetRichEditBitmap( aRichEdit : TRichEdit) : TBitmap');
15479:
              end;
15480:
15481: procedure SIRegister_cyBDE(CL: TPSPascalCompiler);
15482:
              begin
15483:
               Function TablePackTable( Tab : TTable) : Boolean');
15484:
                Function TableRegenIndexes( Tab : TTable) : Boolean');
                Function TableShowDeletedRecords( Tab : TTable; Show : Boolean) : Boolean');
15485:
                 Function TableUndeleteRecord( Tab : TTable) : Boolean')
15486:
15487:
                \textbf{Function} \ \ \texttt{TableAddIndex}(\texttt{Tab:TTable}; \texttt{FieldName} \ \ \textbf{String}; \texttt{FieldExpression}; \textbf{String}; \texttt{IOpt:TIndexOptions}) : \texttt{Bool}; \texttt{FoeldExpression}; \textbf{String}; \texttt{FieldExpression}; \textbf{String}; \texttt{FoeldExpression}; \textbf{String}; 
15488:
                Function TableDeleteIndex( Tab : TTable; IndexFieldName : String) : Boolean');
Function TableEmptyTable( Tab : TTable) : Boolean');
15489:
                 Function TableFindKey( aTable : TTable; Value : String) : Boolean');
15490:
                 Procedure TableFindNearest( aTable : TTable; Value : String)');
15491:
15492:
                Function
               TableCreate(Owner:TComponent;DataBaseName:ShortString;TableName:String;IndexName:ShortString;ReadOnly:
               Boolean):TTable;
               \textbf{TableOpen(Tab:TTable:FileName:String:IndexFieldName:String:RecordIndexValue:Variant:GotoRecordIndexValue:Bool):Bool:ModerFileName:String:RecordIndexValue:Variant:GotoRecordIndexValue:Bool:ModerFileName:String:RecordIndexValue:Variant:GotoRecordIndexValue:Bool:ModerFileName:String:RecordIndexValue:Variant:GotoRecordIndexValue:Bool:ModerFileName:String:RecordIndexValue:Bool:ModerFileName:String:RecordIndexValue:Bool:ModerFileName:String:RecordIndexValue:Bool:ModerFileName:String:RecordIndexValue:Bool:ModerFileName:String:RecordIndexValue:Bool:ModerFileName:Bool:ModerFileName:Bool:ModerFileName:Bool:ModerFileName:Bool:ModerFileName:Bool:ModerFileName:Bool:ModerFileName:Bool:ModerFileName:Bool:ModerFileName:Bool:ModerFileName:Bool:ModerFileName:Bool:ModerFileName:Bool:ModerFileName:Bool:ModerFileName:Bool:ModerFileName:Bool:ModerFileName:Bool:ModerFileName:Bool:ModerFileName:Bool:ModerFileName:Bool:ModerFileName:Bool:ModerFileName:Bool:ModerFileName:Bool:ModerFileName:Bool:ModerFileName:Bool:ModerFileName:Bool:ModerFileName:Bool:ModerFileName:Bool:ModerFileName:Bool:ModerFileName:Bool:ModerFileName:Bool:ModerFileName:Bool:ModerFileName:Bool:ModerFileName:Bool:ModerFileName:Bool:ModerFileName:Bool:ModerFileName:Bool:ModerFileName:Bool:ModerFileName:Bool:ModerFileName:Bool:ModerFileName:Bool:ModerFileName:Bool:ModerFileName:Bool:ModerFileName:Bool:ModerFileName:Bool:ModerFileName:Bool:ModerFileName:Bool:ModerFileName:Bool:ModerFileName:Bool:ModerFileName:Bool:ModerFileName:Bool:ModerFileName:Bool:ModerFileName:Bool:ModerFileName:Bool:ModerFileName:Bool:ModerFileName:Bool:ModerFileName:Bool:ModerFileName:Bool:ModerFileName:Bool:ModerFileName:Bool:ModerFileName:Bool:ModerFileName:Bool:ModerFileName:Bool:ModerFileName:Bool:ModerFileName:Bool:ModerFileName:Bool:ModerFileName:Bool:ModerFileName:Bool:ModerFileName:Bool:ModerFileName:Bool:ModerFileName:Bool:ModerFileName:Bool:ModerFileName:Bool:ModerFileName:Bool:ModerFileName:Bool:ModerFileName:Bool:ModerFileName:Bool:ModerFileName:Bool:ModerFileName:Bool:ModerFileNam
15494: Function DateToBDESQLDate( aDate: TDate; const DateFormat: String): String');
15495: end;
15496:
15497:
              procedure SIRegister_cyClasses(CL: TPSPascalCompiler);
15498: begin
15499:
                  SIRegister_TcyRunTimeDesign(CL);
                  SIRegister_TcyShadowText(CL);
SIRegister_TcyBgPicture(CL);
15500:
```

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15502:
           SIRegister TcyGradient(CL);
15503:
           SIRegister tcyBevel(CL);
15504:
            //CL.AddTypeS('TcyBevelClass', 'class of tcyBevel');
15505
            SIRegister_tcyBevels(CL);
15506:
           SIRegister TcyImagelistOptions(CL);
          Procedure cyDrawBgPicture( aCanvas : TCanvas; aRect : TRect; aBgPicture : TcyBgPicture)');
15507:
15508:
15509:
15510:
         procedure SIRegister_cyGraphics(CL: TPSPascalCompiler);
15511: begin
         Procedure cyGradientFill( aCanvas : TCanvas; aRect : TRect; fromColor, toColor : TColor;
15512:
         adgradOrientation: TdgradOrientation; Balance, AngleDegree: Word; balanceMode: TDgradBalanceMode;
         Maxdegrade : Byte; '+
15513:
           SpeedPercent : Integer; const AngleClipRect : Boolean; const AngleBuffer : TBitmap)');
          Procedure cyGradientFillVertical(aCanvas:TCanvas;aRect:TRect;fromColor,toColor:TColor;MaxDegrad : byte);
15514:
15515:
          Procedure cyGradientFillHorizontal(aCanvas:TCanvas;aRect:TRect;fromColor;toColor:TColor;MaxDegrad:byte);
          Procedure cyGradientFillShape( aCanvas : TCanvas; aRect : TRect; fromColor, toColor : TColor; MaxDegrad :
         Byte; toRect : TRect; OrientationShape : TDgradOrientationShape)')
         Procedure cyGradientFillAngle( aCanvas : TCanvas; aRect : TRect; fromColor, toColor : TColor; MaxDegrad : Byte; AngleDegree : Word; const ClipRect : Boolean; const Buffer : TBitmap)');
15517:
          Procedure DrawRectangleInside( aCanvas : TCanvas; InsideRect : TRect; FrameWidth : Integer)');
        Procedure CyFrame( aCanvas: TCanvas; var InsideRect: TRect; Color: TColor; const Width: Integer);');

Procedure CyFrame( aCanvas: TCanvas; var InsideRect: TRect; Color: TColor; const Width: Integer);');

Procedure CyFrame( Canvas: TCanvas; var InsideRect: TRect; LeftColor, TopColor, RightColor,

BottomColor: TColor; const Width: Integer; const RoundRect: boolean);');

Procedure CyFrame(3D(Canvas:TCanvas; var Rect:TRect; TopLeftColor,
15519:
15520:
         BottomRightColor:TColor;Width:Integer;const DrawLeft:Boolean;const DrawTop:Bool;const DrawRight:Bool;const
         DrawBottom:Bool;const RoundRect:bool;
         \begin{tabular}{ll} {\bf Procedure} & {\tt cyDrawButtonFace(Canvas: TCanvas; var Rect: TRect; GradientColor1, GradientColor2: TColor; aState: TButtonState; Focused, Hot: Boolean); \\ \end{tabular} 
15522:
15523: Procedure cyDrawButton(Canvas:TCanvas; Caption:String;ARect:TRect; GradientColor1,GradientColor2:TColor;
         aState : TButtonState; Focused, Hot : Boolean)');
         Procedure cyDrawSpeedButtonFace( Canvas: TCanvas; var Rect: TRect; GradientColor1, GradientColor2:
         TColor; aState : TButtonState; Focused, Hot : Boolean)');
15525:
         Procedure cyDrawSpeedButton( Canvas : TCanvas; Caption : String; ARect : TRect; GradientColor1,
         GradientColor2 : TColor; aState : TButtonState; Focused, Hot : Boolean)');
15526: Procedure cyDrawCheckBox( Canvas : TCanvas; IsChecked : Boolean; ARect : TRect; const BgColor : TColor;
Function DrawTextFormatFlags(aTextFormat:LongInt;Alignment
         TAlignment;Layout:TTextLayout;WordWrap:Bool):LongInt;
15529:
          Function DrawTextFormatFlags1( aTextFormat : LongInt; Alignment : TAlignment; Layout : TTextLayout;
         WordWrap : Boolean; CaptionRender : TCaptionRender) : LongInt; ');

Procedure cyDrawText( CanvasHandle : Cardinal; Text : String; var Rect : TRect; TextFormat : LongInt)');
          Function cyCreateFontIndirect( fromFont : TFont; Angle : Double) : TFont;');
Function cyCreateFontIndirect1( fromFont : TFont; CaptionOrientation : TCaptionOrientation) : TFont;');
15531:
15532:
         Procedure cyDrawVerticalText( Canvas: TCanvas: Text: String; var Rect: TRect; TextFormat: Longint; CaptionOrientation: TCaptionOrientation; Alignment: TAlignment; Layout: TTextLayout)');
15533:
         Function DrawLeftTurnPageEffect( Canvas: TCanvas; PageColor: TColor; PageRect: TRect; PercentDone: Integer; const OnlyCalcFoldLine: Boolean): TLineCoord');
15534:
15535: Function DrawRightTurnPageEffect( Canvas : TCanvas; PageColor : TColor; PageRect : TRect; PercentDone :
         Integer; const OnlyCalcFoldLine : Boolean) : TLineCoord');
          Function PictureIsTransparentAtPos( aPicture: TPicture; aPoint: TPoint):boolean');
          Function IconIsTransparentAtPos( aIcon : TIcon; aPoint : TPoint) : boolean');
15537:
          Function MetafileIsTransparentAtPos( aMetafile : TMetafile; aPoint : TPoint) : boolean');
Function MetafileIsTransparentAtPos( aMetafile : TMetafile; aPoint : TPoint) : boolean');
Function PngImageIsTransparentAtPos( aPngImage : TPngImage; aPoint : TPoint) : boolean');
Procedure DrawCanvas( Destination : TCanvas; DestRect : TRect; Source : TCanvas; SourceRect : TRect);');
15538:
15539:
          Procedure DrawCanvas1(Destination:TCanvas; DestRect:TRect;Src:TCanvas; SrcRect : TRect; TransparentColor
15541:
          TColor; const aStyle:TBgStyle; const aPosition:TBgPosition; const IndentX : Integer; const IndentY :
         Integer; '
15542: const IntervalX : Integer; const IntervalY : Integer; const RepeatX : Integer; const RepeatX :
         Integer);');
         Procedure DrawGraphic( Destination : TCanvas; DestRect : TRect; aGraphic : TGraphic; SrcRect : TRect;
         TransparentColor: TColor: const aStyle: TBgStyle: const aPosition: TBgPosition: const IndentX: Integer:
         const IndentY:Integer;const IntervalX:Integer;const IntervalY:Integer;const RepeatX:Integer;const
         RepeatY:Integer;
15544: Procedure DrawGraphic1(Destination : TCanvas; DestRect : TRect; aGraphic : TGraphic; Transparent
         Boolean; const aStyle: TBgStyle; const aPosition: TBgPosition; const IndentX: Integer; const IntervalX:Integer; const IntervalX:Integer; const IntervalY: Integer; const RepeatX:Integer; const
         RepeatY:Integer);')
         Procedure DrawMosaicPortion( Destination : TCanvas; Portion : TRect; Pattern : TBitmap)');
15546:
          Function ValidGraphic( aGraphic : TGraphic) : Boolean');
          Function ColorSetPercentBrightness( Color: TColor; PercentLight: Integer): TColor');
Function ColorModify( Color: TColor; incR, incB, incB: Integer): TColor');
Function ColorSetPercentContrast( Color: TColor; IncPercent: Integer): TColor');
15547:
15548:
15549:
         Function ColorSetPercentPale( Color : TColor; IncPercent : Integer) : TColor';
Function MediumColor( Color1, Color2 : TColor) : TColor');
Function ClientToScreenRect( aControl : TControl; aControlRect : TRect) : TRect');
Function ScreenToClientRect( aControl : TControl; aScreenRect : TRect) : TRect');
15550:
15551:
15552:
15553:
          Function CombineRectKeepingCenterPosition( RectPos, AddRect : TRect) : TR
Procedure InflateRectPercent( var aRect : TRect; withPercent : Double)');
15555:
15556:
          Function GetIntermediateRect( Rect1, Rect2 : TRect; Percent : Double) : TRect');
          Function GetProportionalRect( fromRect, InsideRect : TRect) : TRect');
Function PointInRect( const aPt : TPoint; const aRect : TRect) : boolean');
15557:
15558:
          Function PointInEllispe( const aPt : TPoint; const aRect : TRect) : boolean');
          Function CanvasAcceleratorTextWidth( aCanvas : TCanvas; aText : String) : Integer');
15560:
15561:
         end;
15562:
15563: procedure SIRegister_cyTypes(CL: TPSPascalCompiler);
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15564: begin
              Type(TGlyphAlignment', '( gaLeft, gaCenter, gaRight )');
Type(TGlyphLayout', '( glTop, glCenter, glBottom )');
Type(TDisabledGlyphOptions', '( dgDoNotDraw, dgDrawNormal, dgDrawMonochrome )');
15565:
15567:
               Type(TCaptionRender', '( crNormal, crPathEllipsis, crEndEllipsis, crWordEllipsis )');
15568:
               Type(TCaptionOrientation', '( coHorizontal, CoHorizontalReversed, coVertical, coVerticalReversed )');
Type(TCaptionOrientation', '( coHorizontal, coHorizontalReversed, coVertical, coVerticalReversed )');
Type(TBgPosition', '( bgCentered, bgTopLeft, bgTopCenter, bgTopRight,'
+' bgCenterRight, bgBottomRight, bgBottomCenter, bgBottomLeft, bgCenterLeft)');
15569:
15570:
15571:
               Type(TBgStyle', '( bgNone, bgNormal, bgMosaic, bgStretch, bgStretchProportional )');
15572:
               Type(TcyBevelCut', '( bcLowered, bcRaised, bcNone, bcTransparent, bcGradientToNext )');
15573:
               Type(TDgradOrientation', '( dgdVertical, dgdHorizontal, dgdAngle, dgdRadial, dgdRectangle )');
Type(TDgradOrientationShape', '( osRadial, osRectangle )');
15574:
15575:
15576:
               \textbf{Type} (\texttt{TDgradBalanceMode} (\texttt{bmNormal}, \texttt{bmMirror}, \texttt{bmReverse}, \texttt{bmReverseFromColor}, \texttt{bmInvertReverse})) \\
           bmInvertReverseFromColor);
Type(TRunTimeDesignJob', '( rjNothing, rjMove, rjResizeTop, rjResizeBottom, rjResizeLeft,
15577:
           Type(TkineCoord', 'record BottomCoord: TPoint; TopCoord: TPoint; end');
15578:
15570:
            cCaptionOrientationWarning','String')('Note that text orientation doesn''t work with all fonts!');
15580: end;
15581:
15582:
           procedure SIRegister WinSvc(CL: TPSPascalCompiler);
15583:
15584:
            Const SERVICES_ACTIVE_DATABASEA', 'String 'ServicesActive');
            SERVICES_ACTIVE_DATABASEW','String') 'ServicesActive');
Const SERVICES_ACTIVE_DATABASEA','String')' SERVICES_ACTIVE_DATABASEA');
Const SERVICES_FAILED_DATABASEA','String' 'ServicesFailed');
15585:
15586:
15587:
            Const SERVICES_FAILED_DATABASEW', 'String' 'ServicesFailed');
Const SERVICES_FAILED_DATABASE', 'String' 'SERVICES_FAILED_DATABASEA');
15588:
15589:
            Const SERVICES_FAILED_DATABASE , String 'SERVICES_FAILED_D.
Const SC_GROUP_IDENTIFIERA', 'String') '+');
Const SC_GROUP_IDENTIFIERA', 'String') '+');
Const SC_GROUP_IDENTIFIER', 'string 'SC_GROUP_IDENTIFIERA');
Const SERVICE_NO_CHANGE', 'LongWord $FFFFFFFF);
15590:
15591:
15592:
15593:
            Const SERVICE_NO_CHANGE', 'BONGWORD' SFFFFFFFF,',
Const SERVICE_ACTIVE', 'LongWord')( $00000001);
Const SERVICE_INACTIVE', 'LongWord $00000002);
15594:
15595:
            Const SERVICE_INACTIVE', LongWord $00000002);

Const SERVICE_CONTROL_STOP', LongWord $00000001);

Const SERVICE_CONTROL_PAUSE', LongWord $00000002);

Const SERVICE_CONTROL_CONTINUE', LongWord $00000003);

Const SERVICE_CONTROL_INTERROGATE', LongWord $00000004);
15596:
15597:
15598:
15599:
            Const SERVICE_CONTROL_SHUTDOWN','LongWord $00000005);
Const SERVICE_STOPPED','LongWord $00000001);
15600:
15601:
            Const SERVICE_START_PENDING', LongWord $00000002);
Const SERVICE_STOP_PENDING', LongWord $00000003);
15602:
15603:
15604:
             Const SERVICE_RUNNING', 'LongWord $00000004);
             Const SERVICE_CONTINUE_PENDING', 'LongWord $00000005);
15605:
15606:
             Const SERVICE_PAUSE_PENDING','LongWord $00000006);
             Const SERVICE_PAUSED','LongWord $00000007);
15607:
            Const SERVICE_ACCEPT_STOP', LongWord $0000001);
Const SERVICE_ACCEPT_PAUSE_CONTINUE', LongWord $00000002);
15608:
15609:
15610:
             Const SERVICE_ACCEPT_SHUTDOWN', 'LongWord $00000004);
            Const SC_MANAGER_CONNECT', 'LongWord $0001);
Const SC_MANAGER_CREATE_SERVICE', 'LongWord $0002;
15611:
15612:
            Const SC_MANAGER_ENUMERATE_SERVICE','LongWord $0004);
Const SC_MANAGER_LOCK','LongWord $0008);
15613:
15614:
            Const SC_MANAGER_DOCK, Bollgword $00001);
Const SC_MANAGER_QUERY_LOCK_STATUS', LongWord $0010);
Const SC_MANAGER_MODIFY_BOOT_CONFIG', LongWord $0020);
Const SERVICE_QUERY_CONFIG', LongWord $0001);
Const SERVICE_CHANGE_CONFIG', LongWord $0002);
15615:
15616:
15617:
15618:
             Const SERVICE_QUERY_STATUS', 'LongWord $0004);
15619:
            Const SERVICE_ENUMERATE_DEPENDENTS', LongWord $0008);
Const SERVICE_START', LongWord $0010);
Const SERVICE_STOP', LongWord $0020);
15620:
15621:
15622:
15623:
             Const SERVICE_PAUSE_CONTINUE', LongWord $0040);
            Const SERVICE_INTERROGATE','LongWord $0080);
Const SERVICE_USER_DEFINED_CONTROL','LongWord $0100);
15624:
15625:
            Const SERVICE_KERNEL_DRIVER', LongWord $00000001);
Const SERVICE_FILE_SYSTEM_DRIVER', LongWord $00000002);
Const SERVICE_ADAPTER', LongWord $00000004);
15626:
15628:
            Const SERVICE_RECOGNIZER_DRIVER', 'LongWord $00000008);
Const SERVICE_WIN32_OWN_PROCESS', 'LongWord $00000010);
15629:
15630:
            Const SERVICE_WIN32_SHARE_PROCESS', LongWord $0000020);
Const SERVICE_INTERACTIVE_PROCESS', LongWord $00000100);
15631:
15632:
            Const SERVICE_BOOT_START', LongWord $00000000);
Const SERVICE_SYSTEM_START', LongWord $00000001);
15633:
15634:
             Const SERVICE_AUTO_START', 'LongWord $00000002);
15635:
             Const SERVICE_DEMAND_START', 'LongWord $00000003);
15636:
             Const SERVICE_DISABLED','LongWord $00000004);
15637:
            Const SERVICE_ERROR_IGNORE', 'LongWord $00000000);
Const SERVICE_ERROR_NORMAL', 'LongWord $00000001);
15638:
15639:
             Const SERVICE_ERROR_SEVERE', LongWord $00000002);
15640:
             Const SERVICE_ERROR_CRITICAL', LongWord $00000003);
15641:
15642:
               CL.AddTypeS('SC_HANDLE', 'THandle');
               //CL.AddTypeS('LPSC_HANDLE', '^SC_HANDLE // will not work');
CL.AddTypeS('SERVICE_STATUS_HANDLE', 'DWORD');
Const _SERVICE_STATUS', 'record dwServiceType : DWORD; dwCurrentState
15643:
15644:
15645:
                +': DWORD; dwControlsAccepted : DWORD; dwWin32ExitCode : DWORD; dwServiceSpe'
15646:
15647:
                +'cificExitCode : DWORD; dwCheckPoint : DWORD; dwWaitHint : DWORD; end');
              Const SERVICE_STATUS', '_SERVICE_STATUS');
Const TServiceStatus', '_SERVICE_STATUS');
15648:
15649:
               CL.AddTypeS('_ENUM_SERVICE_STATUSA', 'record lpServiceName : PChar; lpDis'
```

```
15651:
                 +'playName : PChar; ServiceStatus : TServiceStatus; end');
               ENUM_SERVICE_STATUSA', '_ENUM_SERVICE_STATUSA');
_ENUM_SERVICE_STATUS', '_ENUM_SERVICE_STATUSA');
TEnumServiceStatusA', '_ENUM_SERVICE_STATUSA');
15652:
15653:
               TEnumServiceStatusA', '_ENUM_SERVICE_STATUSA
TEnumServiceStatus', 'TEnumServiceStatusA');
15654:
15655:
               SC_LOCK', '___Pointer');
_QUERY_SERVICE_LOCK_STATUSA',
15656:
15657:
                                                                  'record fIsLocked:DWORD; lpLockOner: PChar;dwLockDuration:DWORD;end;
                                                                '_QUERY_SERVICE_LOCK_STATUSA');
'_QUERY_SERVICE_LOCK_STATUSA');
                QUERY_SERVICE_LOCK_STATUS',
15658:
15659:
               QUERY_SERVICE_LOCK_STATUSA',
               QUERY_SERVICE_LOCK_STATUS', 'QUERY_SERVICE_LOCK_STATUSA');
TQueryServiceLockStatusA', '_QUERY_SERVICE_LOCK_STATUSA');
15660:
15661:
                //TQueryServiceLockStatusW',
15662:
                                                                '_QUERY_SERVICE_LOCK_STATUSW');
               TQueryServiceLockStatus', 'TQueryServiceLockStatusA');
_QUERY_SERVICE_CONFIGA', 'record dwServiceType : DWORD; dwStartT'
+'ype : DWORD; dwErrorControl : DWORD; lpBinaryPathName : PChar; lpLoadO'
15663:
15664:
15665:
15666:
                 +'rderGroup : PChar; dwTagId : DWORD; lpDependencies : PChar; lpServ
                 +'iceStartName : PChar; lpDisplayName : PChar; end');
15667:
               _QUERY_SERVICE_CONFIGA', '_QUERY_SERVICE_CONFIGA');
QUERY_SERVICE_CONFIGA', '_QUERY_SERVICE_CONFIGA');
15668:
15669:
               QUERY_SERVICE_CONFIG',
15670:
                                                      'QUERY_SERVICE_CONFIGA');
               TQueryServiceConfigA', '_QUERY_SERVICE_CONFIGA
TQueryServiceConfig', 'TQueryServiceConfigA');
                                                      '_QUERY_SERVICE_CONFIGA');
15671:
15672:
15673:
             Function CloseServiceHandle( hSCObject : SC_HANDLE) : BOOL');
             Function ControlService(hService:SC_HANDLE; dwControl DWORD; var lpServiceStatus:TServiceStatus):BOOL;
Function CreateService(hScManager: SC_HANDLE; lpServiceName, lpDisplayName: PChar; dwDesiredAccess,
15674:
15675:
            dwServiceType, dwStartType, dwErrorControl : DWORD; lpBinaryPathName, lpLoadOrderGroup : PChar;
15676:
             +' lpdwTagId : DWORD; lpDependencies, lpServiceStartName, lpPassword : PChar) : SC_HANDLE');
Function CreateServiceA( hSCManager : SC_HANDLE; lpServiceName, lpDisplayName : PChar; dwDesiredAccess,
15677:
           runction (reacteservices (IscManager : Sc_HANDLE, IpserviceAddie, IpbIsplayName : FcHar; dwbesir dwServiceType, dwStartType, dwErrorControl : DWORD; lpBinaryPathName, lpLoadOrderGroup : PChar; +'lpdwTagId : DWORD; lpDependencies, lpServiceStartName, lpPassword : PChar) : SC_HANDLE');
15679:
             Function DeleteService( hService : SC_HANDLE) : BOOL');
15680:
             Function EnumDependentServices( hService : SC_HANDLE; dwServiceState : DWORD; var lpServices
           TENUMServiceStatus; cbBufSize: DWORD; var pcbBytesNeeded, lpServicesReturned: DWORD): BOOL');
Function EnumServicesStatus( hSCManager: SC_HANDLE; dwServiceType, dwServiceState: DWORD; var
15681:
                                 TEnumServiceStatus; cbBufSize : DWORD; var pcbBytesNeeded, lpServicesReturned, lpResumeHandle
             DWORD):BOOL');
15682:
             Function GetServiceKeyName(hSCManager:SC_HANDLE;pDisplayName,lpServiceName:PChar;var
            lpcchBuffer:DWORD):BOOL');
15683:
             Function GetServiceDisplayName(hSCManager:SC_HANDLE;lpServiceName,lpDisplayName:PChar;var
            lpcchBuffer:DWORD):BOOL;
15684:
           Function LockServiceDatabase( hSCManager : SC_HANDLE) : SC_LOCK');
15685:
             Function NotifyBootConfigStatus( BootAcceptable : BOOL) : BOOL');
             Function OpenSCManager( lpMachineName, lpDatabaseName : PChar; dwDesiredAccess : DWORD) : SC_HANDLE');
15686:
             Function OpenService( hSCManager : SC_HANDLE; lpServiceName : PChar; dwDesiredAccess : DWORD) :
            SC HANDLE');
15688:
           Function OueryServiceLockStatus( hSCManager : SC HANDLE; var lpLockStatus : TOueryServiceLockStatus;
           cbBufSize : DWORD; var pcbBytesNeeded : DWORD) : BOOL');
             Function QueryServiceStatus( hService : SC_HANDLE; var lpServiceStatus : TServiceStatus) : BOOL');
15690:
             Function SetServiceStatus( hServiceStatus : SERVICE_STATUS_HANDLE; var lpServiceStatus : TServiceStatus)
             BOOT, ')
15691:
             Function StartService( hService : SC_HANDLE; dwNumServiceArgs : DWORD; var lpServiceArqVectors : PChar) :
           BOOL')
15692:
           Function UnlockServiceDatabase( ScLock : SC LOCK) : BOOL');
15693:
15694:
15695: procedure SIRegister JvPickDate(CL: TPSPascalCompiler);
15696:
           begin
             CL.AddDelphiFunction('Function SelectDate( Sender : TWinControl; var Date : TDateTime; const DlgCaption :
15697:
            TCaption; AStartOfWeek: TDayOfWeekName; AWeekends: TDaysOfWeek; AWeekendColor: TColor; BtnHints TStrings; MinDate: TDateTime; MaxDate: TDateTime): Boolean');
             Function SelectDateStr(Sender:TWinControl;var StrDate:string;const
            DlgCaption:TCaption;AStartOfWeek:TDayOfWeekName; AWeekends:TDaysOfWeek;
            A Weekend Color: TColor; BtnHints: TStrings; MinDate: TDateTime; MaxDate: TDateTime): Boolean; Tolor: TColor; BtnHints: TStrings; MinDate: TDateTime; MaxDate: TDateTime): Boolean; Tolor: TColor; BtnHints: TStrings; MinDate: TDateTime; MaxDate: 
15699:
            Function PopupDate(var Date:TDateTime; Edit:TWinControl; MinDate:TDateTime; MaxDate:TDateTime):Boolean;
             Function CreatePopupCalendar(AOwner:TComponent;ABiDiMode:TBiDiMode;MinDate:TDateTime;MaxDate:TDateTime):
15700:
            TWinControl;
             Procedure SetupPopupCalendar ( PopupCalendar : TWinControl; AStartOfWeek : TDayOfWeekName; AWeekends :
            TDaysOfWeek; AWeekendColor: TColor; BtnHints: TStrings; FourDigitYear: Boolean; MinDate: TDateTime;
            MaxDate : TDateTime)');
             Function CreateNotifyThread( const FolderName : string; WatchSubtree : Boolean; Filter :
15702:
            TFileChangeFilters) : TJvNotifyThread');
15703: end;
15704:
15705:
           procedure SIRegister JclNTFS2(CL: TPSPascalCompiler);
15706:
           begin
15707:
               CL.AddClassN(CL.FindClass('TOBJECT'), 'EJclNtfsError');
15708:
               CL.AddTypeS('TFileCompressionState',
                                                                              '( fcNoCompression, fcDefaultCompression, fcLZNT1Compression )');
             Function NtfsGetCompression12( const FileName: TFileName: var State: Short): Boolean;');
Function NtfsGetCompression12( const FileName: TFileName): TFileCompressionState;');
15709:
15710:
             Function NtfsSetCompression2( const FileName : TFileName; const State : Short) : Boolean');

Procedure NtfsSetFileCompression2(const FileName : TFileName; const State : TFileCompressionState)');
15711:
15712:
             Procedure NtfsSetDirectoryTreeCompression2(const Directory:string; const State:TFileCompressionState)');
Procedure NtfsSetDefaultFileCompression2(const Directory: string; const State:TFileCompressionState)');
Procedure NtfsSetPathCompression2(const Path:string;const State:TFileCompressionState;Recursive:Bool)');
15713:
15714:
15715:
15716:
             Function NtfsSetSparse2( const FileName : string) : Boolean');
             Function NtfsZeroDataByHandle2( const Handle: THandle; const First, Last: Int64): Boolean');
Function NtfsZeroDataByName2( const FileName: string; const First, Last: Int64): Boolean');
15717:
15718:
15719:
             Function NtfsSparseStreamsSupported2( const Volume : string) : Boolean');
             Function NtfsGetSparse2( const FileName : string) : Boolean');
```

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15721:
               Function NtfsDeleteReparsePoint2( const FileName : string; ReparseTag : DWORD) : Boolean');
15722:
                Function NtfsSetReparsePoint2( const FileName : string; var ReparseData, Size : Longword) : Boolean');
                Function NtfsGetReparseTag2( const Path : string; var Tag : DWORD) : Boolean');
15724 •
                Function NtfsReparsePointsSupported2( const Volume : string) : Boolean');
               Function NtfsFileHasReparsePoint2( const Path : string) : Boolean');
Function NtfsIsFolderMountPoint2( const Path : string) : Boolean');
15725:
15726:
                Function NtfsMountDeviceAsDrive2( const Device : WideString; Drive : Char) : Boolean');
15727:
15728:
                Function NtfsMountVolume2( const Volume : WideChar; const MountPoint : WideString) : Boolean');
               CL.AddTypeS('TOpLock', '( olExclusive, olReadOnly, olBatch, olFilter )');
Function NtfsOpLockAckClosePending2( Handle : THandle; Overlapped : TOverlapped) : Boolean');
15729:
15730:
                Function NtfsOpLockBreakAckNo22( Handle : THandle; Overlapped : TOverlapped) : Boolean');
15731:
                Function NtfsOpLockBreakAcknowledge2( Handle : THandle; Overlapped : TOverlapped) : Boolean');
15732:
               Function NtfsOpLockBreakNotify2( Handle : THandle; Overlapped : Toverlapped) : Boolean');
Function NtfsRequestOpLock2( Handle : THandle; Kind : TOpLock; Overlapped : Toverlapped) : Boolean');
15733:
15734:
               Function NtfsCerateJunctionPoint2( const Source, Destination : string) : Boolean');
Function NtfsDeleteJunctionPoint2( const Source : string) : Boolean');
15735:
15736:
                Function NtfsGetJunctionPointDestination2( const Source : string; var Destination : string) : Boolean');
15737:
                 CL.AddTypeS('TStreamId', '( siInvalid, siStandard, siExtendedAttribute, siSec' +'urity, siAlternate, siHardLink, siProperty, siObjectIdentifier, siReparsePoints, siSparseFile )');
CL.AddTypeS('TStreamIds', 'set of TStreamId');
TInternalFindStreamData', 'record FileHandle:THandle; Context: TObject; StreamIds: TStreamIds; end');
15738:
15739:
15740:
15741:
                  CL.AddTypeS('TFindStreamData', 'record Internal : TInternalFindStreamData' At' +'tributes : DWORD; StreamID : TStreamId; Name: WideString; Size : Int64; end');
15742:
15743:
                Function NtfsFindFirstStream2(const FileName:string;StreamIds:TStreamIds;var Data:TFindStreamData):Bool;
15744:
15745:
                Function NtfsFindNextStream2( var Data : TFindStreamData) : Boolean');
15746:
                Function NtfsFindStreamClose2( var Data : TFindStreamData) : Boolean');
15747:
                \textbf{Function} \  \, \texttt{NtfsCreateHardLink2( const LinkFileName, ExistingFileName : String)} \  \, : \  \, \texttt{Boolean')} \, \, ; \, \, \\ \textbf{ExistingFileName : String)} \, \, : \, \, \texttt{Boolean'} \, ) \, \, ; \, \, \\ \textbf{FineStringFileName : String)} \, \, : \, \, \texttt{Boolean'} \, ) \, \, ; \, \, \\ \textbf{FineStringFileName : String : Str
               Function NtfsCreateHardLinkA2( const LinkFileName, ExistingFileName : AnsiString) : Boolean');
Function NtfsCreateHardLinkW2( const LinkFileName, ExistingFileName : WideString) : Boolean');
15748:
15749:
                  CL.AddTypeS('TNtfsHardLinkInfo', 'record LinkCount : Cardinal; FileIndex : Int64; end');
15750:
15751:
                Function NtfsGetHardLinkInfo2( const FileName : string; var Info : TNtfsHardLinkInfo) : Boolean');
15752:
               Function NtfsFindHardLinks2(const Path:string;const FileIndexHigh,FileIndexLow:Card;const
              List:TStrings):Bool
15753:
               Function NtfsDeleteHardLinks2( const FileName : string) : Boolean');
                  FindClass('TOBJECT'),'EJclFileSummaryError'
15754:
                  TJclFileSummaryAccess', '( fsaRead, fsaWrite, fsaReadWrite )');
TJclFileSummaryShare', '( fssDenyNone, fssDenyRead, fssDenyWrite, fssDenyAll )');
TJclFileSummaryPropSetCallback', 'Function ( const FMTID : TGUID) : Boolean');
15755:
15756:
15757:
15758:
                  CL.AddClassN(CL.FindClass('TOBJECT'), 'TJclFileSummary');
15759:
                  SIRegister_TJclFilePropertySet(CL);
15760:
                   //CL.AddTypeS('TJclFilePropertySetClass', 'class of TJclFilePropertySet');
                  SIRegister_TJclFileSummary(CL);
SIRegister_TJclFileSummaryInformation(CL);
15761:
15762:
15763:
                  SIRegister_TJclDocSummaryInformation(CL);
15764:
                  SIRegister_TJclMediaFileSummaryInformation(CL);
15765:
                  SIRegister_TJclMSISummaryInformation(CL);
                  SIRegister_TJclShellSummaryInformation(CL);
15766:
15767:
                  SIRegister_TJclStorageSummaryInformation(CL);
15768:
                  SIRegister_TJclImageSummaryInformation(CL);
15769:
                  SIRegister_TJclDisplacedSummaryInformation(CL);
15770:
                  SIRegister TJclBriefCaseSummarvInformation(CL);
15771:
                  SIRegister_TJclMiscSummaryInformation(CL);
15772:
                  SIRegister_TJclWebViewSummaryInformation(CL);
15773:
                  SIRegister_TJclMusicSummaryInformation(CL);
15774:
                  SIRegister_TJclDRMSummaryInformation(CL);
15775:
                  SIRegister_TJclVideoSummaryInformation(CL);
15776:
                  SIRegister_TJclAudioSummaryInformation(CL);
15777:
                  SIRegister_TJclControlPanelSummaryInformation(CL);
15778:
                  SIRegister_TJclVolumeSummaryInformation(CL);
15779:
                  SIRegister TJclShareSummaryInformation(CL);
15780:
                  SIRegister_TJclLinkSummaryInformation(CL);
15781:
                  SIRegister_TJclQuerySummaryInformation(CL);
15782:
                  SIRegister_TJclImageInformation(CL);
15783:
                  SIRegister TJclJpeqSummaryInformation(CL);
15784:
15785:
15786:
              procedure SIRegister_Jc18087(CL: TPSPascalCompiler);
15787: begin
                  AddTypeS('T8087Precision', '( pcSingle, pcReserved, pcDouble, pcExtended )');
15788:
                  T8087Rounding','( rcNearestOrEven, rcDownInfinity, rcUpInfinity, rcChopOrTruncate )');
T8087Infinity','( icProjective, icAffine )');
15789:
15790:
15791:
                  T8087Exception'
                                                   "(\verb|emInval| idOp|, \verb|emDenormal| izedOperand|, \verb|emZeroDivide|, emOverflow|, emUnderflow|, emPrecision|; and the property of the property o
15792:
               CL.AddTypeS('T8087Exceptions', 'set of T8087Exception');
Function Get8087ControlWord : Word');
15793:
15794:
                Function Get8087Infinity : T8087Infinity');
15795:
                Function Get8087Precision : T8087Precision');
15796:
                Function Get8087Rounding : T8087Rounding');
                Function Get8087StatusWord( ClearExceptions : Boolean) : Word');
15797:
                Function Set8087Infinity( const Infinity: T8087Infinity): T8087Infinity');
15798:
                Function Set8087Precision( const Precision: T8087Precision)
15799:
               Function Set8087Rounding( const Rounding : T8087Rounding) : T8087Rounding');
Function Set8087ControlWord( const Control : Word) : Word');
15800:
15801:
               Function ClearPending8087Exceptions: T8087Exceptions');
Function GetPending8087Exceptions: T8087Exceptions');
Function GetMasked8087Exceptions: T8087Exceptions');
15802:
15803:
15804:
               Function SetMasked8087Exceptions(Exceptions: T8087Exceptions;ClearBefore:Boolean):T8087Exceptions');
Function Mask8087Exceptions(Exceptions:T8087Exceptions): T8087Exceptions');
15805:
15806:
15807: Function Unmask8087Exceptions(Exceptions:T8087Exceptions;ClearBefore : Boolean) : T8087Exceptions');
```

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15809:
15810:
15812: Functions_max hex in the box maxbox
15813: functionslist.txt
15814: FunctionsList1 3.9.9.86/88/91/92/94
15815:
15817: Procedure
15818: PROCEDURE SIZE 7507 7401 6792 6310 5971 4438 3797 3600
                      15819: Procedure
15820: Procedure ( ACol, ARow : Integer; Items : TStrings)
15821: Procedure (
                    Agg : TAggregate)
15822: Procedure ( ASender: TComponent; const AReplyStatus: TReplyStatus)
15823: Procedure ( ASender: TComponent; const AString: String; var AMsg: TIdMessage)
15824: Procedure (
                    ASender : TComponent; var AMsg : TIdMessage)
                    ASender : TObject; const ABytes : Integer)
15825: Procedure (
15826: Procedure (
                    ASender : TObject; VStream : TStream)
                    AThread : TIdThread)
15827: Procedure (
15828: Procedure (
                    AWebModule : TComponent)
15829: Procedure (
                    Column : TColumn)
15830: Procedure (
                    const AUsername : String; const APassword : String; AAuthenticationResult : Boolean)
                   const iStart : integer; const sText : string)
Control : TCustomTabControl; TabIndex : Integer; const Rect : TRect; Active : Boolean)
Database : TDatabase; LoginParams : TStrings)
15831: Procedure (
15832: Procedure (
15833: Procedure (
15834: Procedure (DataSet:TCustomClientDataSet;E:EReconcileError;UpdateKind:TUpdateKind;var Action:
       TReconcileAction)
15835: Procedure ( DATASET : TDATASET)
15836: Procedure
                    DataSet:TDataSet; E:EDatabaseError;UpdateKind:TUpdateKind; var UpdateAction: TUpdateAction)
15837: Procedure
                    DATASET : TDATASET; E : TObject; var ACTION : TDATAACTION)
15838: Procedure
                    DataSet : TDataSet; UpdateKind : TUpdateKind; var UpdateAction : TUpdateAction)
                    DATASET : TDATASET; var ACCEPT : BOOLEAN)
15839: Procedure
                    DBCtrlGrid : TDBCtrlGrid; Index : Integer)
15840: Procedure (
15841: Procedure (
                    Done : Integer)
                    HeaderControl: TCustomHeaderControl; Section: THeaderSection)
15842: Procedure
15843: Procedure (HeaderControl:TCustomHeaderControl;Section:THeaderSection; const Rect:TRect;Pressed:Boolean)
15844: Procedure
       (HeaderControl:TCustomHeaderControl;Section:THeaderSection;Width:Integer;State:TSectionTrackState)
15845: Procedure ( HeaderControl : THeaderControl; Section : THeaderSection)
15846: Procedure (HeaderControl:TheaderControl;Section: TheaderSection; const Rect:TRect; Pressed : Boolean)
15847: Procedure (HeaderControl:TheaderControl;Section:TheaderSection;Width:Integer;State : TSectionTrackState)
15848: Procedure (Sender: TCustomListView; const ARect: TRect; Stage: TCustomDrawStage; var DefaultDraw: Boolean)
15849: Procedure (
                   Sender : TCustomListView; const ARect : TRect; var DefaultDraw : Boolean)
                              TCustomListView; Item : TListItem; Rect : TRect; State : TOwnerDrawState)
15850: Procedure
                    Sender :
15851: Procedure
                    {\tt Sender} \; : \; {\tt TCustomTreeView}; \; {\tt const} \; {\tt ARect} \; : \; {\tt TRect}; \; {\tt var} \; {\tt DefaultDraw} \; : \; {\tt Boolean})
                    SENDER : TFIELD; const TEXT : String)
SENDER : TFIELD; var TEXT : STRING; DISPLAYTEXT : BOOLEAN)
15852: Procedure (
15853: Procedure
                              TIdTelnet; const Buffer : String)
15854: Procedure
                    Sender :
15855: Procedure
                    Sender :
                              TIdTelnet; Status : TIdTelnetCommand)
15856: Procedure
                    SENDER: TOBJECT; ACANVAS: TCANVAS; ARECT: TRECT; SELECTED: BOOLEAN)
SENDER: TOBJECT; ACANVAS: TCANVAS; ARECT: TRECT; STATE: TOWNERDRAWSTATE)
15857: Procedure
                    SENDER :
                    SENDER :
                              TOBJECT; ACANVAS : TCANVAS; var WIDTH, HEIGHT : INTEGER)
15858: Procedure
15859: Procedure
                              TObject; ACol, ARow : Longint; const Value : string)
                    Sender :
                              TObject; ACol, ARow : Longint; Rect : TRect; State : TGridDrawState)
15860: Procedure
                    Sender :
                             TObject; ACol, ARow : Longint; var CanSelect : Boolean)
15861: Procedure
                    Sender :
15862: Procedure (
                              TObject; ACol, ARow : Longint; var Value : string)
                    Sender :
15863: Procedure (
                    Sender :
                              TObject; Button : TMPBtnType)
15864: Procedure (
                    Sender : TObject; Button : TMPBtnType; var DoDefault : Boolean)
                    Sender: TObject; Button: TUDBtnType)
Sender: TObject; Canvas: TCanvas; PageRect: TRect; var DoneDrawing: Boolean)
15865: Procedure
15866: Procedure (
15867: Procedure (
                    Sender: TObject; ClientSocket: TServerClientWinSocket; var SocketThread: TServerClientThread)
15868: Procedure (
                    Sender :
                             TObject; Column : TListColumn)
15869: Procedure
                    Sender : TObject; Column : TListColumn; Point : TPoint)
15870: Procedure
                    Sender : TObject; Connecting : Boolean)
15871: Procedure (Sender: TObject; const PapSize: SmallInt; const Orient: TPrtOrient; const PageTy: TPageTy; var
       DoneDraw:Bool
15872: Procedure (Sender: TObject; const Rect : TRect; DataCol : Integer; Column: TColumn; State : TGridDrawState)
15873: Procedure ( Sender : TObject; const Rect : TRect; Field : TField; State : TGridDrawState)
15874: Procedure (Sender: TObject; const UserString:string;var DateAndTime:TDateTime;var AllowChange:Boolean)
                             TObject; E : Exception; var Handled : Boolean)
15875: Procedure (
                    Sender :
15876: Procedure
                    Sender : TObject; FromIndex, ToIndex : Longint)
15877: Procedure
                    Sender : TObject; FromSection, ToSection : THeaderSection; var AllowDrag : Boolean)
15878: Procedure
                    Sender : TObject; Index : LongInt)
Sender : TObject; Item : TListItem)
15879: Procedure (
15880: Procedure (
                    Sender :
                              TObject; Item : TListItem; Change : TItemChange)
                    Sender :
15881: Procedure
                              TObject; Item : TListItem; Change : TItemChange; var AllowChange : Boolean)
15882: Procedure
                    Sender :
                             TObject; Item : TListItem; Selected : Boolean)
15883: Procedure (
                    Sender : TObject; Item : TListItem; var AllowEdit : Boolean)
15884: Procedure (
                              TObject; Item : TListItem; var S : string)
                    Sender :
                             TObject; Item1, Item2: TListItem; Data: Integer; var Compare: Integer)
TObject; ModalResult: TModalResult; var CanClose: Boolean)
15885: Procedure
                    Sender :
15886: Procedure
                    Sender :
15887: Procedure
                    Sender :
                             TObject; Month : LongWord; var MonthBoldInfo : LongWord)
15888: Procedure
                    Sender :
                             TObject; NewTab : Integer; var AllowChange : Boolean)
15889: Procedure
                    Sender :
                              TObject; Node : TTreeNode)
15890: Procedure
                              TObject; Node : TTreeNode; var AllowChange : Boolean)
                    Sender :
15891: Procedure (
                    Sender : TObject; Node : TTreeNode; var AllowCollapse : Boolean)
15892: Procedure ( Sender : TObject; Node : TTreeNode; var AllowEdit : Boolean)
15893: Procedure ( Sender : TObject; Node : TTreeNode; var AllowExpansion : Boolean)
15894: Procedure ( Sender : TObject; Node : TTreeNode; var S : string)
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15895: Procedure ( Sender : TObject; Nodel, Node2 : TTreeNode; Data : Integer; var Compare : Integer)
15896: Procedure ( Sender : TObject; NumObjects, NumChars : Integer; var SaveClipboard : Boolean)
15897: Procedure (
                       Sender : TObject; Rect : TRect)
15898: Procedure
                      Sender : TObject; Request : TWebRequest; Response : TWebResponse; var Handled : Boolean)
15899: Procedure (Sender:TObject;Shift:TShiftState;X,Y:Integer;Orient:TPageScrollerOrientation;var Delta:Int
                     ( Sender : TObject; Socket : TCustomWinSocket)
15900: Procedure
15901: Procedure (Sender: TObject; Socket: TCustomWinSocket; Error Event: TError Event; var Error Code: Integer)
                      Sender: TObject; Socket: TCustomWinSocket; SocketEvent: TSocketEvent)
Sender: TObject; Socket: TSocket; var ClientSocket: TServerClientWinSocket)
15902: Procedure
15903: Procedure
                                 TOBJECT; SOURCE : TMENUITEM; REBUILD : BOOLEAN)
TObject; StartPos, EndPos : Integer; var AllowChange : Boolean)
15904: Procedure
                      SENDER :
15905: Procedure
                       Sender :
                                  TObject; TabCanvas: TCanvas; R: TRect; Index: Integer; Selected: Boolean)
15906: Procedure
                       Sender :
15907: Procedure
                      Sender : TObject; TabIndex : Integer; var ImageIndex : Integer)
Sender : TObject; Thread : TServerClientThread)
15908: Procedure
15909: Procedure (
                      Sender :
                                  TObject; TickCount : Cardinal; var Reset : Boolean)
15910: Procedure
                       Sender :
                                  TObject; Username, Password : string)
                       Sender : TObject; var AllowChange : Boolean)
15911: Procedure
                      Sender : TObject; var AllowChange : Boolean; NewValue : SmallInt; Direction:TUpDownDirection)
Sender : TObject; var Caption : string; var Alignment : THTMLCaptionAlignment)
Sender : TObject; var Continue : Boolean)
15912: Procedure
15913: Procedure
15914: Procedure (
15915: Procedure (Sender:TObject; var dest:string; var NumRedirect:Int; var Handled:bool; var VMethod:TIdHTTPMethod)
15916: Procedure
                      Sender : TObject; var Username : string)
15917: Procedure (
                      Sender : TObject; Wnd : HWND)
15918: Procedure (
                      Sender : TToolbar; Button : TToolButton)
15919: Procedure (
                      Sender : TToolBar; const ARect : TRect; Stage : TCustomDrawStage; var DefaultDraw : Boolean)
15920: Procedure (
                      Sender : TToolBar; const ARect : TRect; var DefaultDraw : Boolean)
15921: Procedure ( Sender : TToolbar; Index : Integer; var Allow : Boolean)
15922: Procedure ( Sender : TToolbar; Index : Integer; var Button : TToolButton)
15923: Procedure ( StatusBar : TCustomStatusBar; Panel : TStatusPanel; const Rect : TRect)
15923: Procedure (
15924: Procedure ( StatusBar : TStatusBar; Panel : TStatusPanel; const Rect : TRect)
15925: Procedure (var FieldNames: TWideStrings; SQL:WideString; var BindAllFields:Boolean; var TableName: WideString)
15926: Procedure ( var FieldNames : TWideStrings; SQL : WideString; var TableName : WideString)
15927: procedure (Sender: TObject)
15928: procedure (Sender: TObject; var Done: Boolean)
15929: procedure (Sender: TObject; var Key: Word; Shift: TShiftState);
15930: procedure _T(Name: tbtString; v: Variant);
15931: Procedure AbandonSignalHandler( RtlSigNum : Integer)
15932: Procedure Abort
15933: Procedure About1Click( Sender : TObject)
15934: Procedure Accept( Socket : TSocket)
15935: Procedure AESSymetricExecute(const plaintext, ciphertext, password: string)
15936: Procedure AESEncryptFile(const plaintext, ciphertext, password: string)
15937: Procedure AESDecryptFile(const replaintext, ciphertext, password: string)
15938: Procedure AESEncryptString(const plaintext: string; var ciphertext: string; password: string)
15939: Procedure AESDecryptString(var plaintext: string; const ciphertext: string; password: string)
15940: Procedure Add( Addend1, Addend2 : TMyBigInt)
15941: Procedure ADD( const AKEY, AVALUE : VARIANT)
15942: Procedure Add( const Key : string; Value : Integer)
                          const NAME, FIELDS : String; OPTIONS : TINDEXOPTIONS)
15943: Procedure ADD(
15944: Procedure ADD( FIELD: TFIELD)
15945: Procedure ADD( ITEM: TMENUITEM)
15946: Procedure ADD( POPUP : TPOPUPMENU)
15947: Procedure AddCharacters( xCharacters : TCharSet)
15948: Procedure AddDriver( const Name : string; List : TStrings)
15949: Procedure AddImages( Value : TCustomImageList)
15950: Procedure AddLambdaX (const Name, Fields: string; Options: TindexOptions; const DescFields: string)
15951: Procedure AddLambdaTransitionTo( oState: TniRegularExpressionState)
15952: Procedure AddLoader( Loader : TBitmapLoader)
15953: Procedure ADDPARAM( VALUE : TPARAM)
15954: Procedure AddPassword( const Password: string)
15955: Procedure AddStandardAlias( const Name, Path, DefaultDriver: string)
15956: Procedure AddState( oState : TniRegularExpressionState)
15957: Procedure AddStrings( Strings: TStrings);
15958: procedure AddStrings(Strings: TStrings);
15959: Procedure AddStrings1( Strings : TWideStrings);
15960: Procedure AddStringTerm( var sString: string; const sTerm: string; const sSeparator: string)
15961: Procedure AddToRecentDocs( const Filename : string)
15962 \colon \textbf{Procedure} \ \texttt{AddTransitionTo} ( \ \texttt{oState} \ \colon \ \texttt{TniRegularExpressionState}; \ \texttt{xCharacters} \ \colon \ \texttt{TCharset})
15963: Procedure AllFunctionsList1Click( Sender : TObject)
15964: procedure AllObjectsList1Click(Sender: TObject);
15965: Procedure Allocate( AAllocateBytes : Integer)
15966: procedure AllResourceList1Click(Sender: TObject);
15967: Procedure AnsiAppend( var dst : AnsiString; const src : AnsiString)
15968: Procedure AnsiAssiqn( var dst : AnsiString; var src : AnsiString)
15969: Procedure AnsiDelete( var dst : AnsiString; index, count : Integer)
15970: Procedure AnsiFree( var s : AnsiString)
15971: Procedure AnsiFromWide( var dst : AnsiString; const src : WideString)
15972: Procedure AnsiInsert( var dst : AnsiString; const src : AnsiString; index : Integer)
15973: Procedure AnsiSetLength( var dst : AnsiString; len : Integer)
15974: Procedure AnsiString_to_stream( const Value : ansistring; Destin : TStream)
15975: Procedure AntiFreeze;
15976: Procedure APPEND
15977: Procedure Append( const S : WideString)
15978: procedure Append(S: string);
15979: Procedure AppendByte( var VBytes : TIdBytes; AByte : byte)
15980: Procedure AppendBytes( var VBytes: TIdBytes; AAdd: TIdBytes)
15981: Procedure AppendChunk( Val: OleVariant)
15982: Procedure AppendData( const Data : OleVariant; HitEOF : Boolean)
15983: Procedure AppendStr( var Dest : string; S : string)
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15984: Procedure AppendString( var VBvtes : TIdBvtes; const AStr : String; ALength : Integer)
15985: Procedure ApplyRange
15986: procedure Arc(X1, Y1, X2, Y2, X3, Y3, X4, Y4: Integer);
15987: Procedure Arrange( Code : TListArrangement)
15988: procedure Assert(expr : Boolean; const msg: string);
15989: procedure Assert2(expr : Boolean; const msg: string);
15990: Procedure Assign( AList : TCustomBucketList)
15991: Procedure Assign( Other : TObject)
15992: Procedure Assign( Source : TDragObject)
15993: Procedure Assign( Source : TPersistent)
15994: Procedure Assign(Source: TPersistent)
15995: procedure Assign2(mystring, mypath: string);
15996: Procedure AssignCurValues( Source : TDataSet);
15997: Procedure AssignCurValues1( const CurValues : Variant);
15998: Procedure ASSIGNFIELD( FIELD : TFIELD)
15999: Procedure ASSIGNFIELDVALUE( FIELD : TFIELD; const VALUE : VARIANT)
16000: Procedure AssignFile(var F: Text; FileName: string)
16001: procedure AssignFile(var F: TextFile; FileName: string)
16002: procedure AssignFileRead(var mystring, myfilename: string);
16003: procedure AssignFileWrite(mystring, myfilename: string);
16004: Procedure AssignTo( Other : TObject)
16005: Procedure AssignValues( Value : TParameters)
16006: Procedure ASSIGNVALUES( VALUE : TPARAMS)
16007: Procedure AssociateExtension( IconPath, ProgramName, Path, Extension : string)
16008: Procedure Base64_to_stream( const Base64 : ansistring; Destin : TStream)
16009: Procedure Base64ToVar( NatData : Pointer; const SoapData : WideString);
16010: Procedure Base64ToVarl( var V : Variant; const SoapData : WideString);
16011: Procedure BcdAdd( const bcdIn1, bcdIn2 : TBcd; var bcdOut : TBcd)
16012: Procedure BcdDivide( Dividend, Divisor : string; var bcdOut : TBcd);
16013: Procedure BcdDivide1( const Dividend, Divisor : TBcd; var bcdOut : TBcd);
16014: Procedure BcdDivide2( const Dividend; Brison: TBcd; var bcdout: TBcd);
16015: Procedure BcdDivide2( const Dividend: TBcd; const Divisor: Double; var bcdout: TBcd);
16015: Procedure BcdDivide3( const Dividend: TBcd; const Divisor: string; var bcdout: TBcd);
16016: Procedure BcdMultiply( const bcdIn1, bcdIn2: TBcd; var bcdOut: TBcd);
16017: Procedure BcdMultiply1( const bcdIn: TBcd; const DoubleIn: Double; var bcdOut: TBcd);
16018: Procedure BcdMultiply2( const bcdIn: TBcd; const StringIn: string; var bcdOut: TBcd);
16019: Procedure BcdMultiply3( StringIn1, StringIn2: string; var bcdOut: TBcd);
16020: Procedure BcdSubtract( const bcdIn1, bcdIn2: TBcd; var bcdOut: TBcd)
16021: Procedure BcdToBytes( Value: TBcd; Bytes: array of byte)
16022: procedure Beep
16023: Procedure BeepOk
16024: Procedure BeepQuestion
16025: Procedure BeepHand
16026: Procedure BeepExclamation
16027: Procedure BeepAsterisk
16028: Procedure BeepInformation
16029: procedure BEGINDRAG(IMMEDIATE:BOOLEAN)
16030: Procedure BeginLayout
16031: Procedure BeginTimer( const Delay, Resolution : Cardinal)
16032: Procedure BeginUpdate
16033: procedure BeginUpdate;
16034: procedure BigScreen1Click(Sender: TObject);
16035: procedure BinToHex(Buffer: PChar; Text: PChar; BufSize: Integer);
16036: Procedure BitsToBooleans( const Bits : Byte; var B : TBooleanArray; AllBits : Boolean);
16037: Procedure BitsToBooleans1( const Bits: Word; var B: TBooleanArray; AllBits: Boolean);
16038: Procedure BitsToBooleans2( const Bits: Integer; var B: TBooleanArray; AllBits: Boolean);
16039: Procedure BitsToBooleans3( const Bits: Int64; var B: TBooleanArray; AllBits: Boolean);
16040: Procedure BoldDays(Days: array of LongWord; var MonthBoldInfo: LongWord)
16041: Procedure BooleansToBits( var Dest : Byte; const B : TBooleanArray);
16042: Procedure BooleansToBits1( var Dest : Word; const B : TBooleanArray); 16043: Procedure BooleansToBits2( var Dest : Integer; const B : TBooleanArray);
16044: Procedure BooleansToBits3( var Dest : Int64; const B : TBooleanArray);
16045: Procedure BreakPointMenuClick( Sender : TObject)
16046: procedure BRINGTOFRONT
16047: procedure BringToFront;
16048: Procedure btnBackClick( Sender : TObject)
16049: Procedure btnBrowseClick( Sender : TObject)
16050: Procedure BtnClick( Index : TNavigateBtn)
16051: Procedure btnLargeIconsClick( Sender : TObject)
16052: Procedure BuildAndSendRequest( AURI : TIdURI
16053: Procedure BuildCache
16054: Procedure BurnMemory( var Buff, BuffLen : integer)
16055: Procedure BurnMemoryStream( Destructo : TMemoryStream)
16056: Procedure CalculateFirstSet
16057: Procedure Cancel
16058: procedure CancelDrag;
16059: Procedure CancelEdit
16060: procedure CANCELHINT
16061: Procedure CancelRange
16062: Procedure CancelUpdates
16063: Procedure CancelWriteBuffer
16064: Procedure Capture1(ADest:TStream;out VLineCount:Integer;const ADelim:string;const AIsRFCMessage:Bool;
16065: Procedure Capture2( ADest : TStrings; const ADelim : string; const AIsRFCMessage : Boolean);
16066: Procedure Capture3(ADest:TStrings; out VLineCount:Integer; const ADelim:string; const AIsRFCMessage:Bool
16067: procedure CaptureScreenFormat(vname: string; vextension: string);
16068: procedure CaptureScreenPNG(vname: string);
16069: procedure CardinalsToI64(var I: Int64; const LowPart, HighPart: Cardinal);
16070: procedure CASCADE
16071: Procedure CastNativeToSoap(Info:PTypeInfo; var SoapData:WideString; NatData:Pointer; var IsNull: Boolean)
16072: Procedure CastSoapToVariant( SoapInfo: PTypeInfo; const SoapData: WideString; NatData: Pointer);
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16073: Procedure cbPathClick( Sender : TObject)
16074: Procedure cbPathKeyDown( Sender : TObject; var Key : Word; Shift : TShiftState)
16075: Procedure cedebugAfterExecute( Sender : TPSScript)
16076: Procedure cedebugBreakpoint( Sender : TObject; const FileName : String; Position, Row, Col : Cardinal)
16077: Procedure cedebugCompile( Sender : TPSScript)
16078: Procedure cedebugExecute( Sender : TPSScript)
16079: Procedure cedebugIdle( Sender : TObject)
16080: Procedure cedebugLineInfo( Sender : TObject; const FileName : String; Position, Row, Col : Cardinal)
16081: Procedure CenterHeight( const pc, pcParent : TControl)
16082: Procedure CenterDlg(AForm: TForm; MForm: TForm); { Zentriert Forms } 16083: Procedure CenterForm(AForm: TForm; MForm: TForm); { Zentriert Forms
                                                                       { Zentriert Forms }
16084: Procedure Change
16085: procedure ChangeBiDiModeAlignment(var Alignment: TAlignment);
16086: Procedure Changed
16087: Procedure ChangeDir( const ADirName : string)
16088: Procedure ChangeDirUp
16089: Procedure ChangeEntryTransitions( oNewState : TniRegularExpressionState)
16090: Procedure ChangeLevelBy( Value : TChangeRange)
16091: Procedure ChDir(const s: string)
16092: Procedure Check(Status: Integer)
16093: Procedure CheckCommonControl( CC : Integer)
16094: Procedure CHECKFIELDNAME ( const FIELDNAME : String)
16095: Procedure CHECKFIELDNAMES( const FIELDNAMES : String)
16096: Procedure CheckForDisconnect(const ARaiseExceptionIfDisconnected: boolean; const AlgnoreBuffer:bool)
16097: Procedure CheckForGracefulDisconnect( const ARaiseExceptionIfDisconnected : Boolean)
16098: Procedure CheckToken( T : Char)
16099: procedure CheckToken(t:char)
16100: Procedure CheckTokenSymbol( const S : string)
16101: procedure CheckTokenSymbol(s:string)
16102: Procedure CheckToolMenuDropdown( ToolButton: TToolButton)
16103: procedure Chord(X1, Y1, X2, Y2, X3, Y3, X4, Y4: Integer)
16104: Procedure CIED65ToCIED50( var X, Y, Z : Extended)
16105: Procedure CIELABToBGR( const Source, Target : Pointer; const Count : Cardinal);
16106: procedure CipherFilelClick(Sender: TObject);
16107: Procedure Clear;
16108: Procedure Clear1Click( Sender : TObject)
16109: Procedure ClearColor( Color : TColor)
16110: Procedure CLEARITEM( AITEM : TMENUITEM)
16111: Procedure ClearMapping
16112: Procedure ClearSelection( KeepPrimary : Boolean)
16113: Procedure ClearWriteBuffer
16114: Procedure Click
16115: Procedure Close
16116: Procedure CloselClick( Sender : TObject)
16117: Procedure CloseDatabase( Database : TDatabase)
16118: Procedure CloseDataSets
16119: Procedure CloseDialog
16120: Procedure CloseFile(var F: Text);
16121: Procedure Closure
16122: Procedure CMYKToBGR( const Source, Target : Pointer; const BitsPerSample : Byte; Count : Cardinal);
16123: Procedure CMYKToBGR1( const C, M, Y, K, Target : Pointer; const BitsPerSample : Byte; Count : Cardinal);
16124: Procedure CodeCompletionList1Click( Sender : TObject)
16125: Procedure ColEnter
16126: Procedure Collapse
16127: Procedure Collapse( Recurse : Boolean)
16128: Procedure ColorRGBToHLS( clrRGB : TColorRef; var Hue, Luminance, Saturation : Word)
16129: Procedure CommaSeparatedToStringList( AList : TStrings; const Value : string)
16130: Procedure CommitFreeAndNil( var Transaction : TDBXTransaction)
16131: Procedure Compile1Click( Sender : TObject)
16132: procedure ComponentCount1Click(Sender: TObject);
16133: Procedure Compress(azipfolder, azipfile: string)
16134: Procedure DeCompress(azipfolder, azipfile: string)
16135: Procedure XZip(azipfolder, azipfile: string)
16136: Procedure XUnZip(azipfolder, azipfile: string)
16137: Procedure Connect( const ATimeout : Integer)
16138: Procedure Connect( Socket : TSocket)
16139: procedure ConsolelClick(Sender: TObject);
16140: Procedure Continue
16141: Procedure ContinueCount( var Counter: TJclCounter)
16142: procedure CONTROLDESTROYED(CONTROL:TCONTROL)
16143: Procedure ConvertStreamFromAnsiToUTF8( Src, Dst : TStream; cp : integer)
16144: Procedure ConvertStreamFromUTF8ToAnsi( Src, Dst : TStream; cp : integer)
16145: Procedure ConvertImage(vsource, vdestination: string); 16146: // Ex. ConvertImage(Exepath+'my233_bmp.bmp',Exepath+'mypng111.png')
16147: Procedure ConvertToGray(Cnv: TCanvas);
16148: Procedure Convertiogray(clav. Icanvas);
16148: Procedure Copy( Buffer: TRecordBuffer; Dest: TBytes; Offset: Integer; Length: Integer)
16149: Procedure Copy( Buffer: TValueBuffer; Dest: TBytes; Offset: Integer; Count: Integer);
16150: Procedure Copy1( Source: TBytes; Offset: Integer; Buffer: TValueBuffer; Count: Integer);
16151: Procedure CopyBytesToHostLongWord(const ASource:TIdBytes; const ASourceIndex:Integer; var VDest:LongWord)
16152: Procedure CopyBytesToHostWord( const ASource : TIdBytes; const ASourceIndex : Integer; var VDest : Word)
16153: Procedure CopyFrom( mbCopy : TMyBigInt)
16154 \hbox{\bf : Procedure } \hbox{\tt CopyMemoryStream( Source, Destination : TMemoryStream)}\\
16155: procedure CopyRect(const Dest: TRect; Canvas: TCanvas; const Source: TRect);
16156: Procedure CopyTidByteArray( const ASource: array of Byte; const ASourceIndex: Integer; var VDest: array of Byte; const ADestIndex: Integer; const ALength: Integer)
16157: Procedure CopyTldBytes(const ASrc:TldBytes;const ASrcIdx:Int;var VDest:TldBytes;const ADestIdx:Int;const
        ALen: Int.)
16158: Procedure CopyTIdCardinal( const ASource : Cardinal; var VDest : TIdBytes; const ADestIndex : Integer)
16159: Procedure CopyTldInt64( const ASource : Int64; var VDest : TldBytes; const ADestIndex : Integer)
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16160: Procedure CopyTIdIPV6Address(const ASource:TIdIPv6Address; var VDest: TIdBvtes; const ADestIndex: Integer)
16161: Procedure CopyTidLongWord( const ASource : LongWord; var VDest : TidBytes; const ADestIndex : Integer)
16162: Procedure CopyTIdNetworkLongWord( const ASource : LongWord; var VDest : TIdBytes; const ADestIndex:Integer)
16163: Procedure CopyTldNetworkWord( const ASource : Word; var VDest : TldBytes; const ADestIndex : Integer)
16164: Procedure CopyTIdString(const ASource:String; var VDest:TIdBytes; const ADestIndex:Integer; ALength: Integer)
16165: Procedure CopyTIdWord( const ASource : Word; var VDest : TIdBytes; const ADestIndex : Integer)
16166: Procedure CopyToClipboard
16167: Procedure CountParts
16168: Procedure CreateDataSet
16169: Procedure CreateEmptyFile( const FileName : string)
16170: Procedure CreateFileFromString( const FileName, Data : string)
16171: Procedure CreateFromDelta( Source : TPacketDataSet)
16172: procedure CREATEHANDLE
16173: Procedure CreateProcAsUser( const UserDomain, UserName, PassWord, CommandLine: string)
16174: Procedure CreateProcAsUserEx(const UserDomain UserName Password CommandLine:string;const Environment:PChar)
16175: Procedure CreateTable
16176: Procedure CreateUDLFile( const FileName, ProviderName, DataSourceName : WideString)
16177: procedure CSyntaxlClick(Sender: TObject);
16178: Procedure CurrencyToComp( Value : Currency; var Result : Comp)
16179: Procedure CURSORPOSCHANGED
16180: procedure CutFirstDirectory(var S: String)
16181: Procedure DataBaseError(const Message: string)
16182: Procedure DateTimeToString( var Result : string; Format : string; DateTime : TDateTime);
16183: procedure DateTimeToString(var Result: string; const Format: string; DateTime: TDateTime) 16184: Procedure DateTimeToSystemTime( DateTime: TDateTime; var SystemTime: TSystemTime)
16185: procedure DateTimeToSystemTime(const DateTime: TDateTime; var SystemTime:
16186: Procedure DBIError(errorCode: Integer)
16187: Procedure DebugOutput( const AText : string)
16188: Procedure DebugRun1Click( Sender : TObject)
16189: procedure Dec;
16190: Procedure DecodeDate( DateTime : TDateTime; var Year, Month, Day : Word)
16191: procedure DecodeDate(const DateTime: TDateTime: var Year, Month, Day: Word);
16192: Procedure DecodeDateDay( const AValue : TDateTime; out AYear, ADayOfYear : Word)
16193: Procedure DecodeDateMonthWeek(const AValue:TDateTime;out AYear, AMonth, AWeekOfMonth, ADayOfWeek: Word)
16194: Procedure DecodeDateTime(const AValue:TDateTime;out AYear,AMonth,ADay,AHour,AMin,ASec,AMillSec:Word)
16195: Procedure DecodeDateWeek( const AValue : TDateTime; out AYear, AWeekOfYear, ADayOfWeek : Word)
16196: Procedure DecodeDayOfWeekInMonth(const AValue:TDateTime;out AYear,AMonth,ANthDayOfWeek,ADayOfWeek:Word)
16197: Procedure DecodeTime( DateTime: TDateTime; var Hour, Min, Sec, MSec: Word).
16198: procedure DecodeTime(const DateTime: TDateTime; var Hour, Min, Sec, MSec: Word).
16199: Procedure Decompile1Click( Sender : TObject)
16200: Procedure DefaultDrawColumnCell(const Rect : TRect; DataCol:Integer;Column:TColumn;State:TGridDrawState)
16201: Procedure DefaultDrawDataCell( const Rect : TRect; Field : TField; State : TGridDrawState)
16202: Procedure DeferLayout
16203: Procedure defFileread
16204: procedure DEFOCUSCONTROL(CONTROL:TWINCONTROL;REMOVING:BOOLEAN)
16205: Procedure DelayMicroseconds ( const MicroSeconds : Integer)
16206: Procedure Delete
16207: Procedure Delete( const AFilename : string)
16208: Procedure Delete( const Index : Integer)
16209: Procedure DELETE ( INDEX : INTEGER) 16210: Procedure Delete ( Index : LongInt)
16211: Procedure Delete( Node : TTreeNode)
16212: procedure Delete(var s: AnyString; ifrom, icount: Longint);
16213: Procedure DeleteAlias( const Name : string)
16214: Procedure DeleteDriver( const Name : string)
16215: Procedure DeleteIndex( const Name : string)
16216: Procedure DeleteKey( const Section, Ident : String)
16217: Procedure DeleteRecords
16218: Procedure DeleteRecords( AffectRecords: TAffectRecords)
16219: Procedure DeleteString( var pStr : String; const pDelStr : string)
16220: Procedure DeleteTable
16221: procedure DelphiSitelClick(Sender: TObject);
16222: Procedure Deselect
16223: Procedure Deselect (Node: TTreeNode)
16224: procedure DestroyComponents
16225: Procedure DestroyHandle
16226: Procedure Diff( var X : array of Double)
16227: procedure Diff(var X: array of Double);
16228: procedure DISABLEALIGN
16229: Procedure DisableConstraints
16230: Procedure Disconnect
16231: Procedure Disconnect( Socket : TSocket)
16232: Procedure Dispose
16233: procedure Dispose(P: PChar)
16234: Procedure DivMod( Dividend : Integer; Divisor : Word; var Result, Remainder : Word)
16235: Procedure DoKey( Key : TDBCtrlGridKey)
16236: Procedure DomToTree(anXmlNode: IXMLNode; aTreeNode: TTreeNode; aTreeView: TTreeView);
16237: Procedure DomToTreeJ(anXmlNode: TJvXMLNode; aTreeNode: TTreeNode; aTreeView: TTreeView);
16238: Procedure Dormant
16239: Procedure DoubleToBcd1( const AValue : Double; var bcd : TBcd)
16240: Procedure DoubleToBytes (Value : Double; Bytes : array of byte)
16241: Procedure DoubleToComp( Value : Double; Bytes : array of byte)
16242: Procedure Draw( Canvas : TCanvas; X, Y, Index : Integer; Enabled : Boolean);
16243: procedure Draw(X, Y: Integer; Graphic: TGraphic);
16244: Procedure Drawl(Canvas: TCanvas; X,Y,
       Index:Int;ADrawingStyle:TDrawingStyle;AImageType:TImageType;Enabled:Bool);
16245: Procedure DrawArrow( ACanvas : TCanvas; Direction : TScrollDirection; Location : TPoint; Size : Integer) 16246: Procedure DrawCheck( ACanvas : TCanvas; Location : TPoint; Size : Integer; Shadow : Boolean)
16247: Procedure DrawChevron( ACanvas : TCanvas; Direction : TScrollDirection; Location : TPoint; Size : Integer)
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16248: Procedure DrawColumnCell( const Rect : TRect; DataCol : Integer; Column : TColumn; State : TGridDrawState)
16249: procedure DrawFocusRect(const Rect: TRect);
16250: Procedure DrawHDIBToTBitmap( HDIB : THandle; Bitmap : TBitmap)
16251: Procedure DRAWMENUITEM ( MENUITEM : TMENUITEM; ACANVAS : TCANVAS; ARECT : TRECT; STATE : TOWNERDRAWSTATE)
16252: Procedure DrawOverlay(Canvas:TCanvas;X,Y:Integer;ImageIndex:Integer;Overlay:TOverlay;Enabled: Boolean);
16253: Procedure DrawOverlay1(Canvas:TCanvas; X,Y:Int; ImageIndex:Int; Overlay: TOverlay; ADrawingStyle
       TDrawingStyle; AImageType : TImageType; Enabled : Boolean);
16254: procedure drawPlot(vPoints: TPointArray; cFrm: TForm; vcolor: integer);
16255: Procedure DrawPolyLine( const Canvas: TCanvas; var Points: TPointArray; const ClipRect: TRect)
16256: Procedure DropConnections
16257: Procedure DropDown
16258: Procedure DumpDescription( oStrings : TStrings)
16259: Procedure DumpStateTable( oStrings : TStrings)
16260: Procedure EDIT
16261: Procedure EditButtonClick
16262: Procedure EditFontlClick( Sender : TObject)
16263: procedure Ellipse(X1, Y1, X2, Y2: Integer);
16264: Procedure Ellipsel( const Rect : TRect);
16265: Procedure EMMS
16266: Procedure Encode( ADest : TStream)
16267: procedure ENDDRAG(DROP:BOOLEAN)
16268: Procedure EndEdit( Cancel : Boolean)
16269: Procedure EndTimer
16270: Procedure EndUpdate
16271: Procedure EraseSection( const Section : string)
16272: Procedure Error( const Ident : string)
16273: procedure Error(Ident:Integer)
16274: Procedure ErrorFmt( const Ident : string; const Args : array of const)
16275: Procedure ErrorStr( const Message : string)
16276: procedure ErrorStr(Message:String)
16277: Procedure Exchange( Index1, Index2 : Integer)
16278: procedure Exchange(Index1, Index2: Integer);
16279: Procedure Exec (FileName, Parameters, Directory: string)
16280: Procedure ExecProc
16281: Procedure ExecSQL( UpdateKind : TUpdateKind)
16282: Procedure Execute
16283: Procedure Execute ( const CommandText : WideString; var Params, OwnerData : OleVariant)
16284: Procedure ExecuteAndWait( FileName : string; Visibility : Integer)
16285: Procedure ExecuteCommand(executeFile, paramstring: string)
16286: Procedure ExecuteShell(executeFile, paramstring: string)
16287: Procedure ShellExecuteAndWait(executeFile, paramstring: string);
16288: Procedure ExitThread(ExitCode: Integer); stdcall; 16289: Procedure ExitProcess(ExitCode: Integer); stdcall;
16290: Procedure Expand( AUserName : String; AResults : TStrings)
16291: Procedure Expand( Recurse : Boolean)
16292: Procedure ExportClipboard1Click( Sender : TObject)
16293: Procedure ExportDataSetToExcel( DataSet : TDataSet; OnExportProgress : TOnExportProgress)
16294: Procedure ExtractContentFields( Strings : TStrings)
16295: Procedure ExtractCookieFields( Strings : TStrings)
16296: Procedure ExtractFields( Separators, WhiteSpace : TSysCharSet; Content : PChar; Strings : TStrings)
16297: Procedure ExtractHeaderFields(Separ,
        WhiteSpace:TSysChSet;Cont:PChar;Strings:TStrings;Decode:Bool;StripQuots:Bool)
16298: Procedure ExtractHTTPFields(Separators, WhiteSpace
        TSysCharSet;Content:PChar;Strings:TStrings;StripQuotes:Bool)
16299: Procedure ExtractQueryFields( Strings: TStrings)
16300: Procedure FastDegToGrad
16301: Procedure FastDegToRad
16302: Procedure FastGradToDeg
16303: Procedure FastGradToRad
16304: Procedure FastRadToDeg
16305: Procedure FastRadToGrad
16306: Procedure FileClose( Handle : Integer)
16307: Procedure FileClose(handle: integer)
16308: procedure FilesFromWildcard(Dir, Mask: string; var Files: TStringList; Subdirs, ShowDirs, Multitasking: Bool)
16309: Procedure FileStructure( AStructure : TIdFTPDataStructure)
16310: Procedure FillByte2(var X: Byte; count: integer; value: byte)
16311: Procedure FillBytes( var VBytes: TIdBytes; const ACount: Integer; const AValue: Byte)
16312: Procedure FillChar( Buffer : TRecordBuffer; Length : Integer; value : Byte)
16313: Procedure FillChar2(var X: PChar; count: integer; value: char)
16314: Procedure FillCharS(var p: string; count: integer; value: char); //fix3.8
16315: Procedure FillIPList
16316: procedure FillRect(const Rect: TRect);
16317: Procedure FillTStrings( AStrings : TStrings)
16318: Procedure FilterOnBookmarks( Bookmarks: array of const)
16319: procedure FinalizePackage(Module: HMODULE)
16320: procedure FindClose;
16321: procedure FindClose2(var F: TSearchRec)
16322: Procedure FindMatches( const sString: string; xNotify: TniRegularExpressionMatchFoundEvent);
16323: Procedure FindMatches1(const sString:string; iStart:integer; xNotify:TniRegularExpressionMatchFoundEvent);
16324: Procedure FindNearest( const KeyValues : array of const)
16325: Procedure FinishContext
16326: Procedure FIRST
16327: Procedure FloatToDegMinSec( const X : Float; var Degs, Mins, Secs : Float)
16328: Procedure FloatToDecimal(var Result:TFloatRec; const Value:extend; ValueType:TFloatValue; Precis, Decs:Int);
16329: Procedure FloodFill( X, Y : Integer; Color: TColor; FillStyle : TFillStyle)
16330: Procedure FlushSchemaCache( const TableName : string)
16331: procedure FmtStr(var Result: string; const Format: string; const Args: array of const)
16332: procedure FOCUSCONTROL(CONTROL:TWINCONTROL)
16333: Procedure FormlClose( Sender : TObject; var Action : TCloseAction)
```

```
16334: Procedure FormActivate( Sender : TObject)
16335: procedure FormatLn(const format: String; const args: array of const); //alias
16336: Procedure FormClose( Sender : TObject; var Action : TCloseAction)
16337: Procedure FormCreate( Sender : TObject)
16338: Procedure FormDestroy( Sender : TObject)
16339: Procedure FormKeyPress( Sender : TObject; var Key : Char)
16340: procedure FormOutputlClick(Sender: TObject);
16341: Procedure FormToHtml( Form : TForm; Path : string)
16342: procedure FrameRect(const Rect: TRect);
16343: Procedure Frame3D(Canyas:TCanyas; var Rect:TRect; TopColor;BottomColor:TColor; Width: Integer)
16344: Procedure NotebookHandlesNeeded( Notebook : TNotebook)
16345: Procedure Free( Buffer : TRecordBuffer)
16346: Procedure Free ( Buffer : TValueBuffer)
16347: Procedure Free;
16348: Procedure FreeAndNil(var Obi:TObiect)
16349: Procedure FreeImage
16350: procedure FreeMem(P: PChar; Size: Integer)
16351: Procedure FreeTreeData( Tree : TUpdateTree)
16352: Procedure Frexp( const X : Extended; var Mantissa : Extended; var Exponent : Integer)
16353: Procedure FullCollapse
16354: Procedure FullExpand
16355: Procedure GenerateDPB(sl: TStrings; var DPB: string; var DPBLength: Short); //InterBase
16356: Procedure GenerateTPB(sl: TStrings; var TPB: string; var TPBLength: Short);
16357: Procedure OUTPUTXML( SQLOBJECT : TIBSQL; OUTPUTOBJECT : TIBOUTPUTXML)
16358: Procedure Get1( AURL : string; const AResponseContent : TStream);
16359: Procedure Get1( const ASourceFile : string; ADest : TStream; AResume : Boolean);
16360: Procedure Get2(const ASourceFile, ADestFile: string; const ACanOverwrite: boolean; AResume: Boolean);
16361: Procedure GetAliasNames( List : TStrings)
16362: Procedure GetAliasParams( const AliasName : string; List : TStrings)
16363: Procedure GetApplicationsRunning( Strings : TStrings)
16364: Procedure GetCommandTypes( List : TWideStrings)
16365: Procedure GetConfigParams( const Path, Section : string; List : TStrings)
16366: Procedure GetConnectionNames( List : TStrings; Driver : string; DesignMode : Boolean)
16367: Procedure GetConvFamilies( out AFamilies : TConvFamilyArray)
16368: Procedure GetConvTypes( const AFamily: TConvFamily; out ATypes: TConvTypeArray)
16369: Procedure GetDatabaseNames( List : TStrings)
16370: Procedure GetDataPacket( DataSet : TDataSet; var RecsOut : Integer; out Data : OleVariant)
16371: Procedure GetDIBSizes(Bitmap: HBITMAP; var InfoHeaderSize: longWORD; var ImageSize: longWORD)
16372: Procedure GetDir(d: byte; var s: string)
16373: Procedure GetDirList( const Search : string; List : TStrings; Recursive : Boolean)
16374: Procedure GetDriverNames( List : TStrings)
16375: Procedure GetDriverNames( List : TStrings; DesignMode : Boolean)
16376: Procedure GetDriverParams( const DriverName : string; List : TStrings)
16377: Procedure GetEMails1Click( Sender : TObject)
16378: Procedure getEnvironmentInfo;
16379: Function getEnvironmentString: string;
16380: Procedure GetFieldNames( const DatabaseName, TableName : string; List : TStrings)
16381: Procedure GetFieldNames( const TableName : string; List : TStrings)
16382: Procedure GetFieldNames( const TableName : string; List : TStrings);
16383: Procedure GetFieldNames( const TableName : WideString; List : TWideStrings);
16384: Procedure GETFIELDNAMES( LIST : TSTRINGS)
16385: Procedure GetFieldNames1( const TableName : string; List : TStrings);
16386: Procedure GetFieldNames1( const TableName :
                                                        string; SchemaName : string; List : TStrings);
16387: Procedure GetFieldNames2( const TableName : WideString;SchemaName : WideString; List : TWideStrings);
16388: Procedure GetFieldNames3( const TableName : WideString; List : TWideStrings);
16389: Procedure GetFileAttributeList( const Items: TStrings; const Attr: Integer)
16390: Procedure GetFileAttributeListEx( const Items: TStrings; const Attr: Integer)
16391: Procedure GetFMTBcd( Buffer : TRecordBuffer; var value : TBcd)
16392: Procedure GetFormatSettings
16393: Procedure GetFormDIB( var DIB : TBitmapInfo)
16394: Procedure GetFromHDIB( HDIB : HBitmap)
16395: Procedure GetIcon( Index : Integer; Image : TIcon);
16396: Procedure GetIcon1(Index : Integer; Image:TIcon; ADrawingStyle:TDrawingStyle; AImageType:TImageType);
16397: Procedure GetIndexInfo( IndexName : string)
16398: Procedure GetIndexNames( const TableName, SchemaName: string; List: TStrings); 16399: Procedure GetIndexNames( List: TStrings)
16400: Procedure GetIndexNames1( const TableName : WideString; List : TWideStrings);
16401: Procedure GetIndexNames2( const TableName, SchemaName : WideString; List : TWideStrings);
16402: Procedure GetIndexNames4( const TableName : string; List : TStrings);
16403: Procedure GetInternalResponse
16404: Procedure GETITEMNAMES( LIST : TSTRINGS)
16405: procedure GetMem(P: PChar; Size: Integer)
16406: Procedure GETOLE2ACCELERATORTABLE(var ACCELTABLE: HACCEL; var ACCELCOUNT: INTEGER; GROUPS: array of INTEGER)
16407: procedure GetPackageDescription(ModuleName: PChar): string)
16408: Procedure GetPackageNames( List : TStrings);
16409: Procedure GetPackageNames1( List : TWideStrings);
16410: Procedure GetParamList( List : TList; const ParamNames : WideString) 16411: Procedure GetProcedureNames( List : TStrings); 16412: Procedure GetProcedureNames( List : TWideStrings);
16413: Procedure GetProcedureNames1( const PackageName : string; List : TStrings);
16414: Procedure GetProcedureNames1( List : TStrings);
16415: Procedure GetProcedureNames2( const PackageName, SchemaName : string; List : TStrings);
16416: Procedure GetProcedureNames3( List : TWideStrings);
16417: Procedure GetProcedureNames4( const PackageName : Widestring; List : TWideStrings);
16418: Procedure GetProcedureNames5( const PackageName,
                                                                          : WideString; List : TWideStrings);
                                                              SchemaName
16419: Procedure GetProcedureParams( ProcedureName : WideString; List : TList);
16420: Procedure GetProcedureParams1( ProcedureName, PackageName : WideString; List : TList); 16421: Procedure GetProcedureParams2( ProcedureName, PackageName, SchemaName : Widestring; List : TList);
16422: Procedure GetProviderNames( Names : TWideStrings);
```

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16423: Procedure GetProviderNames ( Proc : TGetStrProc)
16424: Procedure GetProviderNames1( Names : TStrings);
16425: procedure GetQrCode2(Width, Height:Word; Correct_Level: string; const Data:string; apath: string);
16426: procedure GetQrCode3(Width, Height: Word; Correct_Level: string; const Data: string; apath: string); //no autoopen
        image
16427: Function GetOrCode4(Width, Height: Word; Correct Level: string; const
        Data:string; aformat:string):TLinearBitmap;
16428: Procedure GetRGBValue( const Color: TColor; out Red, Green, Blue: Byte)
16429: Procedure GetSchemaNames( List : TStrings);
16430: Procedure GetSchemaNames1( List : TWideStrings);
16431: Procedure GetSessionNames( List : TStrings)
16432: Procedure GetStoredProcNames( const DatabaseName : string; List : TStrings)
16433: Procedure GetStrings( List : TStrings)
16434: Procedure GetSystemTime; stdcall;
16435: Procedure GetTableNames(const DatabaseName, Pattern: string; Extensions, SystemTables: Boolean; List: TStrings)
16436: Procedure GetTableNames(List: TStrings; SystemTables: Boolean)
16437: Procedure GetTableNames(List: TStrings; SystemTables: Boolean);
16438: Procedure GetTableNames( List : TWideStrings; SystemTables : Boolean);
16439: Procedure GetTableNames1( List : TStrings; SystemTables : Boolean);
16440: Procedure GetTableNames1( List : TStrings; SystemTables : Boolean);
16441: Procedure GetTableNames2( List : TWideStrings; SchemaName : WideString; SystemTables : Boolean);
16442: Procedure GetTransitionsOn( cChar : char; oStateList : TList) 16443: Procedure GetVisibleWindows( List : Tstrings)
16444: Procedure GoBegin
16445: Procedure GotoCurrent( DataSet : TCustomClientDataSet)
16446: Procedure GotoCurrent( Table : TTable)
16447: procedure GotoEndlClick(Sender: TObject);
16448: Procedure GotoNearest
16449: Procedure GradientFillCanvas(const ACanvas:TCanvas;const AStartCol,AEndCol:TColor;const ARect:TRect;const
        Direction: TGradientDirection)
16450: Procedure HandleException( E : Exception; var Handled : Boolean)
16451: procedure HANDLEMESSAGE
16452: procedure HandleNeeded;
16453: Procedure Head( AURL : string)
16454: Procedure Help( var AHelpContents : TStringList; ACommand : String)
16455: Procedure HexToBinary( Stream : TStream)
16456: procedure HexToBinary(Stream:TStream)
16457: Procedure HideDragImage
16458: Procedure HideFormCaption( FormHandle : THandle; Hide : Boolean)
16459: Procedure HideTraybar
16460: Procedure HideWindowForSeconds(secs: integer); {//3 seconds}
16461: Procedure HideWindowForSeconds2(secs: integer; apphandle, aself: TForm); {//3 seconds}
16462: Procedure HookOSExceptions
16463: Procedure HookSignal( RtlSigNum : Integer)
16464: Procedure HSLTORGB( const H, S, L : Single; out R, G, B : Single); 16465: Procedure HTMLSyntaxlClick( Sender : TObject)
16466: Procedure IFPS3ClassesPluginlCompImport( Sender : TObject; x : TPSPascalCompiler)
16467: Procedure IFPS3ClassesPluginlExecImport( Sender : TObject; Exec : TPSExec; x : TPSRuntimeClassImporter)
16468: Procedure ImportfromClipboard1Click( Sender : Tobject) 16469: Procedure ImportfromClipboard2Click( Sender : Tobject)
16470: Procedure IncAMonth( var Year, Month, Day: Word; NumberOfMonths: Integer)
16471: procedure Incb(var x: byte);
16472: Procedure Include1Click( Sender : TObject)
16473: Procedure IncludeOFF; //preprocessing
16474: Procedure IncludeON;
16475: procedure InfolClick(Sender: TObject);
16476: Procedure InitAltRecBuffers( CheckModified : Boolean)
16477: Procedure InitContext( Request : TWebRequest; Response : TWebResponse)
16478: Procedure InitContext(WebModuleList:TAbstractWebModuleList;Request:TWebRequest;Response:TWebResponse)
16479: Procedure InitData( ASource : TDataSet)
16480: Procedure InitDelta( ADelta : TPacketDataSet);
16481: Procedure InitDeltal( const ADelta : OleVariant);
16482: Procedure InitErrorPacket( E : EUpdateError; Response : TResolverResponse)
16483: Procedure Initialize
16484: procedure InitializePackage(Module: HMODULE)
16485: Procedure INITIATEACTION
16486: Procedure initHexArray(var hexn: THexArray); //THexArray', 'array[0..15] of char;'
16487: Procedure InitKeyFields( Tree : TUpdateTree; ADelta : TPacketDataSet) 16488: Procedure InitModule( AModule : TComponent)
16489: Procedure InitStdConvs
16490: Procedure InitTreeData( Tree : TUpdateTree)
16491: Procedure INSERT
16492: Procedure Insert (Index: Integer; AClass: TClass)
16493: Procedure Insert( Index : Integer; AComponent : TComponent)
16494: Procedure Insert( Index : Integer; AObject : TObject)
16495: Procedure Insert( Index : Integer; const S : WideString)
16496: Procedure Insert( Index : Integer; Image, Mask : TBitmap) 16497: Procedure Insert(Index: Integer; const S: string); 16498: procedure Insert(Index: Integer; S: string);
16499: procedure Insert(s: AnyString; var s2: AnyString; iPos: Longint);
16500: procedure InsertComponent(AComponent:TComponent)
16501: procedure InsertControl(AControl: TControl);
16502: Procedure InsertIcon( Index : Integer; Image : TIcon)
16503: Procedure InsertMasked( Index : Integer; Image : TBitmap; MaskColor : TColor)
16504: Procedure InsertObject( Index : Integer; const S : WideString; AObject : TObject)
16505: procedure InsertObject(Index:Integer;S:String;AObject:TObject)
16506: Procedure Int16ToBytes ( Value : SmallInt; Bytes : array of byte) 16507: Procedure Int32ToBytes ( Value : Integer; Bytes : array of byte)
16508: Procedure Int64ToBytes( Value : Int64; Bytes : array of byte)
```

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16509: procedure I64ToCardinals(I: Int64; var LowPart, HighPart: Cardinal);
16510: Procedure InternalBeforeResolve( Tree : TUpdateTree)
16511: Procedure InvalidateModuleCache
16512: Procedure InvalidateTitles
16513: Procedure InvalidDateDayError( const AYear, ADayOfYear : Word)
16514: Procedure InvalidDateMonthWeekError( const AYear, AMonth, AWeekOfMonth, ADayOfWeek: Word) 16515: Procedure InvalidDateTimeError(const AYear, AMth, ADay, AHour, AMin, ASec, AMilSec:Word; const
             ABaseDate:TDateTime)
16516: Procedure InvalidDateWeekError(const AYear, AWeekOfYear, ADayOfWeek: Word)
16517: Procedure InvalidDayOfWeekInMonthError( const AYear, AMonth, ANthDayOfWeek, ADayOfWeek: Word)
16518: procedure JavaSyntaxlClick(Sender: TObject);
16519: Procedure JclLocalesInfoList( const Strings: TStrings; InfoType: Integer)
16520: Procedure KillDataChannel
16521: Procedure Largefont1Click( Sender : TObject)
16522: Procedure LAST
16523: Procedure LaunchCpl(FileName: string)
16524: Procedure Launch ( const AFile : string)
16525: Procedure LaunchFile( const AFile : string)
16526: Procedure LetFileList(FileList: TStringlist; apath: string);
16527: Procedure lineToNumber( xmemo : String; met : boolean)
16528: Procedure ListViewCustomDrawItem(Sender:TCustListView;Item:TListItem;State:TCustDrawState;var
            DefaultDraw:Bool)
16529: Procedure ListViewCustomDrawSubItem( Sender : TCustomListView; Item : TListItem; SubItem : Integer; State
: TCustomDrawState; var DefaultDraw : Boolean)

16530: Procedure ListViewData( Sender : TObject; Item : TListItem)
16531: Procedure ListViewDataFind(Sender:TObject; Find: TItemFind; const FindString: String; const FindPosition
             : TPoint; FindData:Pointer; StartIndex:Integer;Direction:TSearchDirection;Wrap:Boolean; var Index: Integer)
16532: Procedure ListViewDataHint( Sender : TObject; StartIndex, EndIndex : Integer) 16533: Procedure ListViewDblClick( Sender : TObject)
16534: Procedure ListViewKeyDown( Sender : TObject; var Key : Word; Shift : TShiftState)
16535: Procedure ListDLLExports(const FileName: string; List: TStrings)
16536: Procedure Load( const WSDLFileName: WideString; Stream: TMemoryStream)
16537: procedure LoadBytecodelClick(Sender: TObject);
16538: procedure LoadFilefromResource(const FileName: string; ms: TMemoryStream);
16539: Procedure LoadFromClipboardFormat( AFormat: Word; AData: THandle; APalette: HP)
16540: Procedure LoadFromClipboardFormat( AFormat: Word; AData: THandle; APalette: HPALETTE)
16541: Procedure LoadFromFile( AFileName : string)
16542: Procedure LoadFromFile( const AFileName : string; const AHeadersOnly : Boolean)
16543: Procedure LoadFromFile( const FileName : string)
16544: Procedure LOADFROMFILE( const FILENAME : String; BLOBTYPE : TBLOBTYPE)
16545: Procedure LoadFromFile( const FileName : string; DataType : TDataType)
16546: Procedure LoadFromFile( const FileName : WideString)
16547: Procedure LoadFromFile( const FileName, FileType : string; Bitmap : TLinearBitmap)
16548: Procedure LoadFromFile(const AFileName: string)
16549: procedure LoadFromFile(FileName: string);
16550: procedure LoadFromFile(FileName:String)
16551: Procedure LoadFromResourceID( Instance : THandle; ResID : Integer)
16552: Procedure LoadFromResourceName( Instance : THandle; const ResName : String)
16553: Procedure LoadFromStream( AStream : TStream; const AHeadersOnly : Boolean)
16554: Procedure LoadFromStream( const Stream: TStream)
16555: Procedure LoadFromStream( S : TStream)
16556: Procedure LoadFromStream( Stream: TSeekableStream; const Ext: string; Bitmap: TLinarBitmap)
16557: Procedure LoadFromStream( Stream: TSeekableStream; const Ext: string; Bitmap: TLinarBitmap)
16558: Procedure LoadFromStream( Stream: TStream)
16559: Procedure LOADFROMSTREAM( STREAM: TSTREAM; BLOBTYPE: TBLOBTYPE)
16560: Procedure LoadFromStream( Stream: TStream; DataType: TDataType)
16561: procedure LoadFromStream(Stream: TStream);
16562: Procedure LoadFromStream1( Stream : TSeekableStream; const FormatExt : string);
16563: Procedure LoadFromStream2( Stream : TStream; const FormatExt : string)
16564: Procedure LoadFromStrings( AStrings: TStrings; const MimeSeparator: Char) 16565: Procedure LoadLastFile1Click( Sender: TObject)
16566: { LoadIcoToImage loads two icons from resource named NameRes,
               into two image lists ALarge and ASmall}
16567:
16568: Procedure LoadIcoToImage(ALarge, ASmall: ImgList.TCustomImageList; const NameRes: string);
16569: Procedure LoadMemo
16570: Procedure LoadParamsFromIniFile( FFileName : WideString)
16571: Procedure Lock
16572: Procedure Login
16573: Procedure MakeAlphaChannelFromAlphaPalette( Source : TLinearBitmap)
16574: Procedure MakeAlphaChannelFromColorKey( Source : TLinearBitmap; ColorKey : TColor)
16575: Procedure MakeCaseInsensitive
16576: Procedure MakeDeterministic( var bChanged : boolean)
16577: Procedure MakeGrayPal( var Palette, ColorCount : Integer)
16578: // type TVolumeLevel = 0..127; , savaFilePath as C:\MyFile.wav
16579: Procedure MakeSound(Frequency{Hz}, Duration{mSec}: Int; Volume: TVolumeLevel; savefilePath: string);
16580: \ \textbf{Procedure} \ \ \texttt{MakeComplexSound} \ (\texttt{N}: \texttt{integer}; \texttt{freqlist}: \texttt{TStrings}; \texttt{Duration} \\ \{\texttt{mSec}\}: \texttt{Int}; \texttt{pinknoise}: \texttt{bool}; \texttt{Volume}: \texttt{Byte}); \\ \texttt{Procedure} \ \ \ \texttt{MakeComplexSound} \ (\texttt{N}: \texttt{integer}; \texttt{freqlist}: \texttt{TStrings}; \texttt{Duration} \\ \{\texttt{mSec}\}: \texttt{Int}; \texttt{pinknoise}: \texttt{bool}; \texttt{Volume}: \texttt{Byte}); \\ \texttt{Procedure} \ \ \ \ \texttt{MakeComplexSound} \ (\texttt{N}: \texttt{integer}; \texttt{freqlist}: \texttt{TStrings}; \texttt{Duration} \\ \{\texttt{mSec}\}: \texttt{Int}; \texttt{pinknoise}: \texttt{bool}; \texttt{Volume}: \texttt{Byte}); \\ \texttt{MakeComplexSound} \ \ \ \ \ \ \texttt{Noise}: \texttt{Noise}
16581: Procedure SetComplexSoundElements(freqedt,Phaseedt,AmpEdt,WaveGrp:integer);
16582: Procedure SetRectComplexFormatStr( const S : string) 16583: Procedure SetPolarComplexFormatStr( const S : string)
16584: Procedure AddComplexSoundObjectToList(newf,newp,newa,news:integer; freqlist: TStrings);
16585: Procedure MakeVisible
16586: Procedure MakeVisible( PartialOK : Boolean)
16587: Procedure ManuallClick( Sender : TObject)
16588: Procedure MarkReachable
16589: Procedure maXbox;
                                            //shows the exe version data in a win box
16590: Procedure MeanAndStdDev( const Data : array of Double; var Mean, StdDev : Extended) 16591: Procedure MemolChange( Sender : TObject)
16592: Procedure MemolReplaceText(Sender:TObject;const ASearch,AReplace:String;Line,Column:Int;var
            Action:TSynReplaceAction)
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16593: Procedure MemolSpecialLineColors(Sender:Tobject/Line:Integer; var Special:Boolean; var FG,BG: TColor)
16594: Procedure MemolStatusChange (Sender: Tobject; Changes: TSynStatusChanges)
16595: procedure MemorylClick(Sender: TObject);
16596: Procedure MERGE ( MENU : TMAINMENU)
16597: Procedure MergeChangeLog
16598: procedure MINIMIZE
16599: Procedure MinimizeMaxbox;
16600: Procedure MkDir(const s: string)
16601: Procedure mnuPrintFont1Click( Sender : TObject)
16602: procedure ModalStarted
16603: Procedure Modified
16604: Procedure ModifyAlias( Name : string; List : TStrings)
16605: Procedure ModifyDriver( Name : string; List : TStrings)
16606: Procedure MomentSkewKurtosis(const Data:array of Double; var M1, M2, M3, M4, Skew, Kurtosis:Extended)
16607: Procedure MouseToCell( X, Y : Integer; var ACol, ARow : Longint) 16608: Procedure Move( CurIndex, NewIndex : Integer)
16609: procedure Move(CurIndex, NewIndex: Integer);
16610: procedure Move2(const Source: TByteArray; var Dest: TByteArray; Count: Integer)
16611: Procedure MoveChars(const ASource: String; ASourceStart:int; var ADest: String; ADestStart, ALen:integer)
16612: Procedure moveCube( o : TMyLabel)
16613: Procedure MoveTo( Destination : LongInt; AttachMode : TAttachMode)
16614: procedure MoveTo(X, Y: Integer);
16615: procedure MoveWindowOrg(DC: HDC; DX, DY: Integer);
16616: Procedure MovePoint(var x,y:Extended; const angle:Extended);
16617: Procedure Multiply( Multiplier1, Multiplier2 : TMyBigInt);
16618: Procedure Multiply1( Multiplier1 : TMyBigInt; Multiplier2 : Integer);
16619: Procedure MsgAbout(Handle:Int;const Msg,Caption:string;const IcoName:string = 'MAINICON';Flags:DWORD=MB_OK);
16620: Procedure mxButton(x,y,width,height,top,left,ahandle: integer); 16621: Procedure New( Width, Height: Integer; PixFormat: TPixelFormat)
16622: procedure New(P: PChar)
16623: procedure NewlClick(Sender: TObject);
16624: procedure NewInstancelClick(Sender: TObject);
16625: Procedure NEXT
16626: Procedure NextMonth
16627: Procedure Noop
16628: Procedure NormalizePath( var APath : string)
16629: procedure ObjectBinaryToText(Input, Output: TStream)
16630: procedure ObjectBinaryToText1(Input, Output: TStream; var OriginalFormat: TStreamOriginalFormat)
16631: procedure ObjectResourceToText(Input, Output: TStream)
16632: procedure ObjectResourceToText1(Input, Output: TStream; var OriginalFormat: TStreamOriginalFormat)
16633: procedure ObjectTextToBinary(Input, Output: TStream)
16634: procedure ObjectTextToBinary1(Input, Output: TStream; var OriginalFormat: TStreamOriginalFormat)
16635: procedure ObjectTextToResource(Input, Output: TStream)
16636: procedure ObjectTextToResourcel(Input, Output: TStream; var OriginalFormat: TStreamOriginalFormat)
16637: Procedure Open( const Name, Address, Service : string; Port : Word; Block : Boolean) 16638: Procedure Open( const UserID : WideString; const Password : WideString);
16639: Procedure Open;
16640: Procedure open1Click( Sender : TObject)
16641: Procedure OpenCdDrive
16642: Procedure OpenCloseCdDrive( OpenMode : Boolean; Drive : Char)
16643: Procedure OpenCurrent
16644: Procedure OpenFile(vfilenamepath: string)
16645: Procedure OpenDirectorylClick( Sender : TObject)
16646: Procedure OpenIndexFile( const IndexName : string)
16647: Procedure OpenSchema(const Schema: TSchemaInf; const Restricts: OleVar; const
        SchemaID:OleVariant;DataSet:TADODataSet)
16648: Procedure OpenWriteBuffer( const AThreshhold : Integer)
16649: Procedure OptimizeMem
16650: Procedure Options1( AURL : string);
16651: Procedure OutputDebugString(lpOutputString : PChar)
16652: Procedure PackBuffer
16653: Procedure Paint
16654: Procedure PaintToCanvas( Canvas: TCanvas; const Dest: TRect; HalftoneStretch: Boolean)
16655: Procedure PaintToTBitmap( Target : TBitmap)
16656: Procedure PaletteChanged
16657: Procedure ParentBiDiModeChanged
16658: Procedure PARENTBIDIMODECHANGED( ACONTROL : TOBJECT)
16659: Procedure PasteFromClipboard;
16660: Procedure PasteImage( Source : TLinearBitmap; X, Y : Integer)
16661: Procedure PathExtractElements( const Source : string; var Drive, Path, FileName, Ext : string)
16662: Procedure PerformEraseBackground(Control: TControl; DC: HDC);
16663: Procedure PError( Text : string)
16664: procedure Pie(X1, Y1, X2, Y2, X3, Y3, X4, Y4: Integer);
16665: procedure Pie(X1:Integer;Y1:Integer;X2:Integer;Y2:Integer;X3:Int;Y3:Integer;X4:Integer;Y4:Integer;
16666: Procedure Play( FromFrame, ToFrame : Word; Count : Integer)
16667: Procedure Play(MP31Click( Sender : TObject)
16669: Procedure PlayMP31Click( Sender : TObject)
16669: Procedure PointCopy( var Dest : TPoint; const Source : TPoint)
16670: Procedure PointMove( var P : TPoint; const DeltaX, DeltaY : Integer)
16671: procedure PolyBezier(const Points: array of TPoint)
16672: procedure PolyBezierTo(const Points: array of TPoint);
16673: procedure Polygon(const Points: array of TPoint);
16674: procedure Polyline(const Points: array of TPoint);
16675: Procedure Pop
16676: Procedure POPULATEOLE2MENU(SHAREDMENU: HMENU;GROUPS: array of INT; var WIDTHS: array of LONGINT)
16677: Procedure PopulationVarianceAndMean( const X : TDynFloatArray; var Variance, Mean : Float)
16678: Procedure POPUP( X, Y : INTEGER)
16679: Procedure PopupURL(URL: WideString);
16680: Procedure POST
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16681: Procedure Post4( AURL : string; const ASource : TStrings; const AResponseContent : TStream);
16682: Procedure Post5( AURL : string; const ASource, AResponseContent : TStream);
16683: Procedure Post6 (AURL: string; const ASource: TIdMultiPartFormDataStream; AResponseContent: TStream);
16684: Procedure PostUser( const Email, FirstName, LastName : WideString)
16685: Procedure PostKeyEx32(key: Word; const shift: TShiftState; specialkey: Boolean);
16686: procedure Pred(X: int64);
16687: Procedure Prepare
16688: Procedure PrepareStatement
16689: Procedure PreProcessXML( AList : TStrings)
16690: Procedure PreventDestruction
16691: Procedure Print( const Caption : string)
16692: procedure PrintBitmap(aGraphic: TGraphic; Title: string);
16693: procedure printf(const format: String; const args: array of const);
16694: Procedure PrintList(Value: TStringList);
16695: Procedure PrintImage(aValue:TBitmap;Style:TBitmapStyle);//TBitmapStyle=(bsNormal,bsCentered,bsStretched)
16696: Procedure PrintoutlClick( Sender : TObject)
16697: Procedure ProcessHeaders
16698: Procedure PROCESSMENUCHAR( var MESSAGE : TWMMENUCHAR)
16699: Procedure ProcessMessage( AMsg : TIdMessage; AHeaderOnly : Boolean);
16700: Procedure ProcessMessagel( AMsg : TIdMessage; const AStream : TStream; AHeaderOnly : Boolean);
16701: Procedure ProcessMessage2( AMsg : TIdMessage; const AFilename : string; AHeaderOnly : Boolean);
16702: Procedure ProcessMessagesOFF; //application.processmessages
16703: Procedure ProcessMessagesON;
16704: Procedure ProcessPath(const EditText:string;var Drive:Char; var DirPart:string; var FilePart: string)
16705: Procedure ProcessPath1(const EditText:string;var Drive:Char; var DirPart:string; var FilePart:string);
16706: Procedure Proclist Size is: 3797 /1415
16707: Procedure procMessClick( Sender : TObject)
16708: Procedure PSScriptCompile( Sender : TPSScript) 16709: Procedure PSScriptExecute( Sender : TPSScript)
16710: Procedure PSScriptLine( Sender : TObject)
16711: Procedure Push( ABoundary : string)
16712: procedure PushItem(AItem: Pointer)
16713: Procedure Put2( AURL : string; const ASource, AResponseContent : TStream);
16714: Procedure Put2( const ASourceFile: string; const AAppend: boolean);
16715: procedure PutLinuxLines(const Value: string)
16716: Procedure Ouit
16717: Procedure RaiseConversionError( const AText : string);
16718: Procedure RaiseConversionError1( const AText : string; const AArgs : array of const);
16719: Procedure RaiseConversionRegError( AFamily: TConvFamily: const ADescription: string) 16720: procedure RaiseException(Ex: TIFException; Param: String);
16721: Procedure RaiseExceptionForLastCmdResult;
16722: procedure RaiseLastException;
16723: procedure RaiseException2;
16724: Procedure RaiseLastOSError
16725: Procedure RaiseLastWin32;
16726: procedure RaiseLastWin32Error)
16727: Procedure RaiseListError( const ATemplate : string; const AData : array of const)
16728: Procedure RandomFillStream( Stream : TMemoryStream)
16729: procedure randomize;
16730: Procedure Rasterize( Rasterizer : TRasterizer; Dst : TBitmap32; DstRect : TRect)
16731: Procedure RCS
16732: Procedure Read( Socket : TSocket)
16733: Procedure ReadBlobData
16734: procedure ReadBuffer(Buffer:String;Count:LongInt)
16735: procedure ReadOnly1Click(Sender: TObject);
16736: Procedure ReadSection( const Section: string; Strings: TStrings)
16737: Procedure ReadSections (Strings: TStrings)
16738: Procedure ReadSections( Strings : TStrings);
16739: Procedure ReadSections1( const Section : string; Strings : TStrings);
16740: Procedure ReadSectionValues( const Section: string; Strings: TStrings)
16741: Procedure ReadStream( AStream: TStream; AByteCount:LongInt; const AReadUntilDisconnect: boolean)
16742: Procedure ReadStrings( ADest : TStrings; AReadLinesCount : Integer)
16743: Procedure ReadVersion2(aFileName: STRING; aVersion: TStrings);
16744: Function ReadVersion(aFileName: STRING; aVersion: TStrings): boolean;
16745: Procedure Realign;
16746: procedure Rectangle(X1, Y1, X2, Y2: Integer)
16747: Procedure Rectangle1( const Rect : TRect)
16748: Procedure RectCopy( var Dest : TRect; const Source : TRect)
16749: Procedure RectFitToScreen( var R : TRect)
16750: Procedure RectGrow( var R : TRect; const Delta : Integer)
16751: Procedure RectGrowX( var R : TRect; const Delta : Integer)
16752: Procedure RectGrowY( var R : TRect; const Delta : Integer)
16753: Procedure RectMove( var R : TRect; const DeltaX, DeltaY : Integer)
16754: Procedure RectMoveTo( var R : TRect; const X, Y : Integer)
16755: Procedure RectNormalize( var R : TRect)
            TFileCallbackProcedure = procedure(filename:string);
16759: Procedure RecurseDirectory(Dir: String:IncludeSubs: boolean; callback: TFileCallbackProcedure);
16758: Procedure RecurseDirectory2(Dir: String; IncludeSubs: boolean);
16759: Procedure RedirectTransition(oOldState:TniRegularExpressionState; oNewState : TniRegularExpressionState)
16760: Procedure Refresh;
16761: Procedure RefreshData( Options : TFetchOptions)
16762: Procedure REFRESHLOOKUPLIST
16763: Procedure RegisterAuthenticationMethod( MethodName : String; AuthClass : TIdAuthenticationClass)
16764: Procedure RegisterChanges( Value : TChangeLink)
16765: Procedure RegisterConversionFormat( const AExtension : string; AConversionClass : TConversionClass)
16766: Procedure RegisterFileFormat( const AExtension, ADescription : string; AGraphicClass : TGraphicClass)
16767: Procedure RegisterFileFormat(Extension, AppID: string; Description: string; Executable: string; IconIndex: Int)
16768: Procedure ReInitialize( ADelay : Cardinal)
16769: procedure RELEASE
```

```
16770: Procedure Remove ( const ABvteCount : integer)
16771: Procedure REMOVE( FIELD : TFIELD)
16772: Procedure REMOVE( ITEM : TMENUITEM)
16773: Procedure REMOVE( POPUP : TPOPUPMENU)
16774: Procedure RemoveAllPasswords
16775: procedure RemoveComponent(AComponent:TComponent)
16776: Procedure RemoveDir( const ADirName : string)
16777: Procedure RemoveLambdaTransitions( var bChanged : boolean)
16778: Procedure REMOVEPARAM( VALUE : TPARAM)
16779: Procedure RemoveTransitionTo( oState : TniRegularExpressionState; xCharacters : TCharset);
16780: Procedure RemoveTransitionTol( oState : TniRegularExpressionState);
16781: Procedure Rename( const ASourceFile, ADestFile : string)
16782: Procedure Rename ( const FileName : string; Reload : Boolean
16783: Procedure RenameTable( const NewTableName : string)
16784: Procedure Replace( Index : Integer; Image, Mask : TBitmap)
16785: Procedure Replace1Click( Sender : TObject)
16786: Procedure ReplaceDate( var DateTime : TDateTime; NewDate : TDateTime)
16787: procedure ReplaceDate(var DateTime: TDateTime: const NewDate: TDateTime))
16788: Procedure ReplaceIcon( Index : Integer; Image : TIcon)
16789: Procedure ReplaceMasked( Index : Integer; NewImage : TBitmap; MaskColor : TColor)
16790: Procedure ReplaceTime ( var DateTime : TDateTime; NewTime : TDateTime)
16791: procedure ReplaceTime(var DateTime: TDateTime; const NewTime: TDateTime);
16792: Procedure Requery( Options : TExecuteOptions)
16793: Procedure Reset
16794: Procedure ResetlClick( Sender : TObject)
16795: Procedure ResizeCanvas( XSiz, YSiz, XPos, YPos : Integer; Color : TColor)
16796: procedure ResourceExplorelClick(Sender: TObject);
16797: Procedure RestoreContents
16798: Procedure RestoreDefaults
16799: Procedure RestoreOtherInstance( MainFormClassName, MainFormCaption : string)
16800: Procedure RetrieveHeaders
16801: Procedure RevertRecord
16802: Procedure RGBATOBGRA( const Source, Target : Pointer; const BitsPerSample : Byte; Count : Cardinal)
16802: Procedure RGBATOBGRA( const Source, Target : Pointer; const BitsPerSample : Byte; Count : Cardinal) 16803: Procedure RGBTOBGR( const Source, Target : Pointer; const BitsPerSample : Byte; Count : Cardinal); 16804: Procedure RGBTOBGR1( const R, G, B, Target : Pointer; const BitsPerSample : Byte; Count : Cardinal); 16805: Procedure RGBTOHSL( const R, G, B : Single; out H, S, L : Single); 16806: Procedure RGBTOHSL1( const RGB : TColor32; out H, S, L : Single);
16807: Procedure RGBToHSV( r, g, b : Integer; var h, s, v : Integer)
16808: Procedure RleCompress2( Stream : TStream)
16809: Procedure RleDecompress2( Stream : TStream)
16810: Procedure RmDir(const S: string)
16811: Procedure Rollback
16812: Procedure Rollback( TransDesc : TTransactionDesc)
16813: Procedure RollbackFreeAndNil( var Transaction : TDBXTransaction)
16814: Procedure RollbackIncompleteFreeAndNil( var Transaction : TDBXTransaction)
16815: Procedure RollbackTrans
16816: procedure RoundRect(X1, Y1, X2, Y2, X3, Y3: Integer);
16817: Procedure RoundToAllocGranularity64( var Value : Int64; Up : Boolean)
16818: Procedure RoundToAllocGranularityPtr( var Value : Pointer; Up : Boolean)
16819: Procedure RunDll32Internal( Wnd : HWnd; const DLLName, FuncName, CmdLine : string; CmdShow : Integer)
16820: Procedure S_AddMessageToStrings( AMessages : TStrings; AMsg : string)
16821: Procedure S_EBox( const AText : string)
16822: Procedure S_GetEncryptionKeys(DateTime1,DateTime2:TDateTime;var StartKey:int;var MultKey:integer;var
        AddKey:int
16823: Procedure S_IBox( const AText : string)
16824: Procedure S_ReplaceChar( var cStr : string; cOldChr, cNewChr : char)
16825: Procedure S_ReplaceStringInFile( AFileName : string; ASearchString, AReplaceString : string)
16826: Procedure S_TokenInit( cBuffer : PChar; const cDelimiters : string)
16827: Procedure SampleVarianceAndMean
16828: ( const X : TDynFloatArray; var Variance, Mean : Float)
16829: Procedure Save2Click( Sender : TObject)
16830: Procedure Saveas3Click( Sender : TObject)
16831: Procedure SavebeforelClick( Sender : Tobject)
16832: Procedure SaveBytesToFile(const Data: TBytes; const FileName: string);
16833: procedure SaveCanvas2(vCanvas: TCanvas; FileName: string);
16834: Procedure SaveConfigFile
16835: Procedure SaveOutputlClick( Sender : TObject)
16836: procedure SaveScreenshotClick(Sender: TObject);
16837: Procedure SaveLn(pathname, content: string); //Saveln(exepath+'mysavelntest.txt', memo2.text);
16838: Procedure SaveToClipboardFormat( var AFormat : Word; var AData : THandle; var APalette : HPALETTE)
16839: Procedure SaveToClipboardFormat( var Format : Word; var Data : THandle; var APalette : HPALETTE)
16840: Procedure SaveToFile( AFileName : string)
16841: Procedure SAVETOFILE( const FILENAME : String)
16842: Procedure SaveToFile( const FileName : WideString)
16843: Procedure SaveToFile( const FileName : WideString; Format : TPersistFormat)
16844: Procedure SaveToFile( const FileName, FileType: string; Bitmap: TLinearBitmap)
16845: procedure SaveToFile(FileName: string);
16846: procedure SaveToFile(FileName:String)
16847: Procedure SaveToStream( AStream: TStream; const AHeadersOnly: Boolean)
16848: Procedure SaveToStream (OutStream : TSeekableStream; const Ext : string; Bitmap : TLinarBitmap)
16849: Procedure SaveToStream( S : TStream)
16850: Procedure SaveToStream( Stream: TSeekableStream; const Ext: string; Bitmap: TLinearBitmap)
16851: Procedure SaveToStream( Stream : TStream)
16852: Procedure SaveToStream( Stream : TStream; Format : TDataPacketFormat)
16853: procedure SaveToStream(Stream: TStream);
16854: procedure SaveToStream(Stream:TStream)
16855: Procedure SaveToStream1( Stream : TSeekableStream; const FormatExt : string); 16856: Procedure SaveToStream2( Stream : TStream; const FormatExt : string);
16857: Procedure SaveToStrings( AStrings: TStrings; const MimeSeparator: Char)
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16858: procedure Say(const sText: string)
16859: Procedure SBytecodelClick( Sender : TObject)
16860: Procedure ScaleImage( const SourceBitmap, ResizedBitmap: TBitmap; const ScaleAmount: Double) 16861: procedure ScriptExplorerlClick(Sender: TObject);
16862: Procedure Scroll( Distance : Integer)
16863: Procedure Scroll( DX, DY : Integer)
16864: procedure ScrollBy(DeltaX, DeltaY: Integer);
16865: procedure SCROLLINVIEW(ACONTROL:TCONTROL)
16866: Procedure ScrollTabs( Delta : Integer)
16867: Procedure Search1Click( Sender : TObject)
16868: procedure SearchAndOpenDoc(vfilenamepath: string)
16869: procedure SearchAndOpenFile(vfilenamepath: string)
16870: procedure SearchAndReplace(aStrList: TStrings; aSearchStr, aNewStr: string)
16871: procedure SearchAndCopy(aStrList: TStrings; aSearchStr, aNewStr: string; offset: integer); 16872: Procedure SearchNext1Click( Sender: TObject)
16873: Procedure Select( Node : TTreeNode; ShiftState : TShiftState);
16874: Procedure Select1( const Nodes : array of TTreeNode);
16875: Procedure Select2( Nodes : TList);
16876: Procedure SelectNext( Direction : Boolean)
16877: Procedure SelectNextPage( GoForward : Boolean; CheckTabVisible : Boolean)
16878: Procedure SelfTestPEM //unit uPSI_cPEM 16879: Procedure Send( AMsg : TIdMessage)
16880: //config forst in const MAILINIFILE = 'maildef.ini';
16881: //ex.: SendEmail('max@kleiner.ch','max@kleiner.com','this test7','maxbox the SSL fox','
16882: Procedure SendEmail(mFrom, mTo, mSubject, mBody, mAttachment: variant);
16883: Procedure SendMail(mFrom, mTo, mSubject, mBody, mAttachment: variant);
16884: Procedure SendMsg( AMsg : TIdMessage; const AHeadersOnly : Boolean)
16885: Procedure SendMsg(AMsg: TIdMessage; const AHeadersOnly: Boolean = False)
16886: Procedure SendResponse
16887: Procedure SendStream( AStream: TStream)
16888: Procedure Set8087CW( NewCW : Word)
16889: Procedure SetAll( One, Two, Three, Four : Byte)
16890: Procedure SetAltRecBuffers (Old, New, Cur : PChar)
16891: Procedure SetAppDispatcher( const ADispatcher : TComponent)
16892: procedure SetArrayLength;
16893: procedure SetArrayLength2String(arr: T2StringArray; asize1, asize2: integer); //2 dimension
16894: procedure SetArrayLength2Integer(arr: T2IntegerArray; asize1, asize2: integer); 16895: Procedure SetAsHandle( Format : Word; Value : THandle)
16896: procedure SetBounds(ALeft, ATop, AWidth, AHeight: Integer)
16897: procedure SetCaptureControl(Control: TControl);
16898: Procedure SetColumnAttributes
16899: Procedure SetCookieField(Values:TStrings;const ADomain,APath:string;AExpires:TDateTime;ASecure:Boolean)
16900: Procedure SetCustomHeader( const Name, Value : string)
16901: Procedure SetExprParams(const Text:Widestring;Opts:TFilterOpts;ParserOpts:TParserOpts;const
        FieldName:Widestring)
16902: Procedure SetEMTBcd( Buffer : TRecordBuffer; value : TBcd)
16903: Procedure SetFocus
16904: procedure SetFocus; virtual;
16905: Procedure SetInitialState
16906: Procedure SetKey
16907: procedure SetLastError(ErrorCode: Integer)
16908: procedure SetLength;
16909: Procedure SetLineBreakStyle( var T : Text; Style : TTextLineBreakStyle)
16910: Procedure SETOLE2MENUHANDLE ( HANDLE : HMENU)
16911: Procedure SetParams( ADataset : TDataset; UpdateKind : TUpdateKind);
16912: procedure SETPARAMS(APOSITION, AMIN, AMAX:INTEGER)
16913: Procedure SetParams1( UpdateKind : TUpdateKind);
16914: Procedure SetPassword( const Password: string)
16915: Procedure SetPointer( Ptr : Pointer; Size : Longint)
16916: Procedure SetPrimalityTest( const Method : TPrimalityTestMethod)
16917: Procedure SetPrinter( ADevice, ADriver, APort : PChar; ADeviceMode : THandle)
16918: Procedure SetProvider( Provider : TComponent)
16919: Procedure SetProxy( const Proxy : string)
16920: Procedure SetPSResult( var PSResult : TPSResult; Value : TObject)
16921: Procedure SetRange( const StartValues, EndValues : array of const)
16922: Procedure SetRangeEnd
16923: Procedure SetRate( const aPercent, aYear : integer)
16924: procedure SetRate(const aPercent, aYear: integer)
16925: Procedure Set_ReportMemoryLeaksOnShutdown(abo: boolean)
16926: Procedure SetSafeCallExceptionMsg( Msg : String)
16927: procedure SETSELTEXTBUF(BUFFER: PCHAR)
16928: Procedure SetSize( AWidth, AHeight : Integer)
16929: procedure SetSize(NewSize:LongInt)
16930: procedure SetString(var s: string; buffer: PChar; len: Integer)
16931: Procedure SetStrings( List : TStrings)
16932: Procedure SetText( Text : PwideChar)
16933: procedure SetText(Text: PChar);
16934: Procedure SetTextBuf( Buffer : PChar)
16935: procedure SETTEXTBUF(BUFFER:PCHAR)
16936: Procedure SetTick( Value : Integer)
16937: Procedure SetTimeout (ATimeOut : Integer)
16938: Procedure SetTraceEvent (Event : TDBXTraceEvent)
16939: Procedure SetUserName( const UserName: string) 16940: Procedure SetWallpaper( Path: string);
16941: procedure ShellStyle1Click(Sender: TObject);
16942: Procedure SHORTCUTTOKEY( SHORTCUT : TSHORTCUT; var KEY : WORD; var SHIFT : TSHIFTSTATE)
16943: Procedure ShowFileProperties( const FileName : string)
16944: Procedure ShowIncludelClick( Sender : TObject)
16945: Procedure ShowInterfaces1Click( Sender : TObject)
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16946: Procedure ShowLastException1Click( Sender : TObject)
16947: Procedure ShowMessage (const Msg : string)
16948: Procedure ShowMessageBig(const aText : string);
16949: Procedure ShowMessageBig2(const aText : string; aautosize: boolean);
16950: Procedure ShowMessageBig3(const aText : string; fsize: byte; aautosize: boolean);
16951: Procedure MsgBig(const aText : string);
                                                                //alias
16952: procedure showmessage(mytext: string);
16953: Procedure ShowMessageFmt( const Msg: string; Params: array of const)
16954: procedure ShowMessageFmt(const Msg: string; Params: array of const))
16955: Procedure ShowMessagePos( const Msg : string; X, Y : Integer)
16956: procedure ShowMessagePos(const Msg: string; X: Integer; Y: Integer))
16957: Procedure ShowSearchDialog( const Directory : string)
16958: Procedure ShowSpecChars1Click( Sender : TObject)
16959: Procedure ShowBitmap(bmap: TBitmap); //draw in a form!
16960: Procedure ShredFile( const FileName : string; Times : Integer)
16961: procedure Shuffle(vQ: TStringList);
16962: Procedure ShuffleList( var List: array of Integer; Count: Integer)
16963: Procedure SimulateKeystroke( Key: byte; Shift: TShiftState)
16964: Procedure SinCos( const Theta: Extended; var Sin, Cos: Extended)
16965: Procedure SinCosE( X: Extended; out Sin, Cos: Extended)
16966: Procedure Site ( const ACommand : string)
16967: Procedure SkipEOL
16968: Procedure Sleep( ATime : cardinal)
16969: Procedure Sleep( milliseconds : Cardinal)
16970: Function SleepEx( dwMilliseconds : DWORD; bAlertable : BOOL) : DWORD
16971: Procedure Slinenumbers1Click( Sender : TObject)
16972: Procedure Sort
16973: Procedure SortColorArray(ColorArray:TColorArray;L,R:Int;SortType:TColorArraySortType;Reverse:Bool)
16974: procedure Speak(const sText: string) //async like voice
16975: procedure Speak2(const sText: string) //sync
16976: procedure Split(Str: string; SubStr: string; List: TStrings);
16977: Procedure SplitNameValue( const Line : string; var Name, Value : string)
16978: Procedure SplitColumns( const AData : String; AStrings : TStrings; const ADelim : String)
16979: Procedure SplitColumnsNoTrim( const AData : String; AStrings : TStrings; const ADelim : String)
16980: Procedure SplitLines( AData : PChar; ADataSize : Integer; AStrings : TStrings)
16981: Procedure SplitString( const AStr, AToken: String; var VLeft, VRight: String) 16982: procedure SQLSyntaxlClick(Sender: TObject);
16983: Procedure SRand( Seed : RNG IntType)
16984: Procedure Start
16985: Procedure StartCount( var Counter : TJclCounter; const Compensate : Boolean)
16986: procedure StartFileFinder3(spath,aext,searchstr: string; arecursiv: boolean; reslist: TStringlist);
16987: Procedure StartTransaction( TransDesc : TTransactionDesc)
16988: Procedure Status( var AStatusList : TStringList)
16989: Procedure StatusBarlDblClick( Sender : TObject)
16990: Procedure StepIntolClick( Sender : TObject)
16991: Procedure StepIt
16992: Procedure StepOutlClick( Sender : TObject)
16993: Procedure Stop
16994: procedure stopmp3;
16995: procedure StartWeb(aurl: string);
16996: Procedure Str(aint: integer; astr: string); //of system
16997: Procedure StrDispose( Str : PChar)
16998: procedure StrDispose(Str: PChar)
16999: Procedure StrReplace(var Str: String; Old, New: String);
17000: Procedure StretchDIBits( DC : THandle; const Dest : TRect; HalftoneStretch : Boolean)
17001: procedure StretchDraw(const Rect: TRect; Graphic: TGraphic);
17002: Procedure StringToBytes( Value : String; Bytes : array of byte)
17003: procedure StrSet(c : Char; I : Integer; var s : String);
17004: Procedure StrSplitP(const Delimiter: Char; Input: string; const Strings: TStrings);
17005: Procedure StructureMount ( APath : String)
17006: procedure STYLECHANGED(SENDER:TOBJECT)
17007: Procedure Subselect( Node : TTreeNode; Validate : Boolean)
17008: procedure Succ(X: int64);
17009: Procedure SumsAndSquares (const Data: array of Double; var Sum, SumOfSquares: Extended)
17010: procedure SwapChar(var X,Y: char); //swapX follows
17011: Procedure SwapFloats( var X, Y: Float)
17012: procedure SwapGrid(grd: TStringGrid);
17013: Procedure SwapOrd( var I, J : Byte);
17014: Procedure SwapOrd( var X, Y : Integer)
17015: Procedure SwapOrdl( var I, J : Shortint);
17016: Procedure SwapOrd2( var I, J : Smallint);
17017: Procedure SwapOrd3( var I, J : Word);
17018: Procedure SwapOrd4( var I, J : Integer);
17019: Procedure SwapOrd5( var I, J : Cardinal);
17020: Procedure SwapOrd6( var I, J : Int64);
17021: Procedure SymetricCompareFiles(const plaintext, replaintext: string)
17022: Procedure Synchronizel( Method : TMethod);
17023: procedure SyntaxChecklClick(Sender: TObject);
17024: Procedure SysFreeString(const S: WideString); stdcall;
17025: Procedure TakeOver( Other : TLinearBitmap)
17026: Procedure Talkln(const sText: string) //async voice
17027: procedure tbtn6resClick(Sender: TObject);
17028: Procedure tbtnUseCaseClick( Sender : TObject)
17029: procedure TerminalStyle1Click(Sender: TObject);
17030: Procedure Terminate
17031: Procedure texSyntax1Click( Sender : TObject)
17032: procedure TextOut(X, Y: Integer; Text: string);
17033: Procedure TextRect( Rect : TRect; X, Y : Integer; const Text : string);
17034: procedure TextRect(Rect: TRect; X: Integer; Y: Integer; const Text: string);
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17035: Procedure TextRect1( var Rect : TRect; var Text : string; TextFormat : TTextFormat);
17036: Procedure TextStart
17037: procedure TILE
17038: Procedure TimeStampToBytes( Value : TBcd; Bytes : array of byte)
17039: Procedure TitleClick( Column : TColumn)
17040: Procedure ToDo
17041: procedure toolbtnTutorialClick(Sender: TObject);
17042: Procedure Tracel( AURL : string; const AResponseContent : TStream);
17043: Procedure TransferMode ( ATransferMode : TIdFTPTransferMode)
17044: Procedure Truncate
17045: procedure Tutorial101Click(Sender: TObject);
17046: procedure Tutorial10Statistics1Click(Sender: TObject);
17047: procedure Tutoriall1Forms1Click(Sender: TObject)
17048: procedure Tutorial12SQL1Click(Sender: TObject);
17049: Procedure tutorial1Click( Sender : TObject)
17050: Procedure tutorial21Click( Sender : TObject)
17051: Procedure tutorial31Click( Sender : TObject)
17052: Procedure tutorial4Click( Sender : TObject) 17053: Procedure Tutorial5Click( Sender : TObject)
17054: procedure Tutorial6Click(Sender: TObject);
17055: procedure Tutorial91Click(Sender: TObject);
17056: Procedure UnhookSignal( RtlSigNum : Integer; OnlyIfHooked : Boolean)
17057: procedure UniqueString(var str: AnsiString)
17058: procedure UnloadLoadPackage(Module: HMODULE)
17059: Procedure Unlock
17060: Procedure UNMERGE ( MENU : TMAINMENU)
17061: Procedure UnRegisterChanges( Value : TChangeLink)
17062: Procedure UnregisterConversionFamily( const AFamily : TConvFamily)
17063: Procedure UnregisterConversionType( const AType: TConvType)
17064: Procedure UnRegisterProvider( Prov : TCustomProvider)
17065: Procedure UPDATE
17066: Procedure UpdateBatch( AffectRecords : TAffectRecords)
17067: Procedure UPDATECURSORPOS
17068: Procedure UpdateFile
17069: Procedure UpdateItems( FirstIndex, LastIndex : Integer)
17070: Procedure UpdateResponse ( AResponse : TWebResponse)
17071: Procedure UpdateScrollBar
17072: Procedure UpdateView1Click( Sender : TObject)
17073: procedure Val(const s: string; var n, z: Integer)
17074: procedure VarArraySet(c : Variant; I : Integer; var s : Variant);
17075: Procedure VarFMTBcdCreate( var ADest : Variant; const ABcd : TBcd);
17076: Procedure VariantAdd( const src : Variant; var dst : Variant) 17077: Procedure VariantAnd( const src : Variant; var dst : Variant)
17078: Procedure VariantArrayRedim( var V : Variant; High : Integer
17079: Procedure VariantCast( const src : Variant; var dst : Variant; vt : Integer)
17080: Procedure VariantClear( var V : Variant)
17081: Procedure VariantCpy( const src : Variant; var dst : Variant)
17082: Procedure VariantDiv( const src : Variant; var dst : Variant)
17083: Procedure VariantMod( const src : Variant; var dst : Variant
17084: Procedure VariantMul( const src : Variant; var dst : Variant)
17085: Procedure VariantOr( const src : Variant; var dst : Variant)
17086: Procedure VariantPutElement( var V : Variant; const data : Variant; i1 : integer);
17087: Procedure VariantPutElement1( var V : Variant; const data : Variant; i1, i2 : integer);
17088: Procedure VariantPutElement2( var V : Variant; const data : Variant; i1, i2, i3 : integer);
17089: Procedure VariantPutElement3( var V : Variant; const data : Variant; i1, i2, i3, i4 : integer);
17090: Procedure VariantPutElement4( var V : Variant; const data : Variant; i1, i2, i3, i4, i5 : integer);
17091: Procedure VariantShl( const src : Variant; var dst : Variant)
17092: Procedure VariantShr( const src : Variant; var dst : Variant
17093: Procedure VariantSub( const src : Variant; var dst : Variant 17094: Procedure VariantXor( const src : Variant; var dst : Variant)
17095: Procedure VarCastError;
17096: Procedure VarCastError1( const ASourceType, ADestType: TVarType);
17097: Procedure VarInvalidOp
17098: Procedure VarInvalidNullOp
17099: Procedure VarOverflowError( const ASourceType, ADestType : TVarType)
17100: Procedure VarRangeCheckError( const ASourceType, ADestType : TVarType)
17101: Procedure VarArrayCreateError
17102: Procedure VarResultCheck( AResult : HRESULT);
17103: Procedure VarResultCheck1( AResult : HRESULT; ASourceType, ADestType : TVarType);
17104: Procedure HandleConversionException( const ASourceType, ADestType: TVarType)
17105: Function VarTypeAsText( const AType : TVarType) : string
17106: procedure Voice(const sText: string) //async
17107: procedure Voice2(const sText: string) //sync
17108: Procedure WaitMiliSeconds( AMSec : word)
17109: Procedure WideAppend( var dst : WideString; const src : WideString)
17110: Procedure WideAssign( var dst : WideString; var src : WideString)
17111: Procedure WideDelete( var dst : WideString; index, count : Integer)
17112: Procedure WideFree( var s : WideString)
17113: Procedure WideFromAnsi( var dst : WideString; const src : AnsiString)
17114: Procedure WideFromPChar( var dst : WideString; src : PChar)
17115: Procedure WideInsert( var dst : WideString; const src : WideString; index : Integer)
17116: Procedure WideSetLength( var dst : WideString; len : Integer)
17117: Procedure WideString2Stream( aWideString: WideString; oStream: TStream)
17118: Procedure WideStringToBytes( Value: WideString; Bytes: array of byte)
17119: Procedure WinColorToOpenGLColor( const Color: TColor; out Red, Green, Blue: Float)
17120: Procedure WinInet_HttpGet(const Url: string; Stream:TStream);
17121: Procedure HttpGet(const Url: string; Stream:TStream);
17122: Procedure WordToTwoBytes( AWord: Word; ByteArray: TIdBytes; Index: integer)
17123: Procedure WordWraplClick( Sender : TObject)
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17124: Procedure Write( const AOut : string)
17125: Procedure Write( Socket : TSocket)
17126: procedure Write(S: string);
17127: Procedure WriteBinaryStream( const Section, Name : string; Value : TStream)
17128: Procedure WriteBool( const Section, Ident : string; Value : Boolean)
17129: Procedure WriteBuffer( const ABuffer, AByteCount: Longint; const AWriteNow: Boolean)
17130: procedure WriteBuffer(Buffer:String;Count:LongInt)
17131: Procedure WriteCardinal( AValue : Cardinal; const AConvert : Boolean)
17132: Procedure WriteChar( AValue : Char)
17133: Procedure WriteDate( const Section, Name : string; Value : TDateTime)
17134: Procedure WriteDateTime( const Section, Name : string; Value : TDateTime)
17135: Procedure WriteFloat( const Section, Name : string; Value : Double)
17136: Procedure WriteHeader( AHeader : TStrings)
17137: Procedure WriteInteger( AValue : Integer; const AConvert : Boolean)
17138: Procedure WriteInteger( const Section, Ident : string; Value : Longint)
17139: Procedure WriteLn( const AOut : string)
17140: procedure Writeln(s: string);
17141: Procedure WriteLog( const FileName, LogLine : string)
17142: Procedure WriteRFCReply( AReply: TIdRFCReply)
17143: Procedure WriteRFCStrings( AStrings: TStrings)
17144: Procedure WriteSmallInt( AValue : SmallInt; const AConvert : Boolean)
17145: Procedure WriteStream(AStream:TStream;const AAll:Bool;const AWriteByteCount:Bool;const ASize:Int)
17146: Procedure WriteString( const Section, Ident, Value : String)
17147: Procedure WriteStrings( AValue : TStrings; Const AWriteLinesCount : Boolean)
17148: Procedure WriteTime( const Section, Name : string; Value : TDateTime)
17149: Procedure WriteObjectResourceHeader( ObjStream, Output : TStream)
17150: Procedure Write16bitResourceHeader( const AName : TBytes; DataSize : Integer; Output : TStream)
17151: Procedure Write32bitResourceHeader( const AName : TBytes; DataSize : Integer; Output : TStream)
17152: procedure WStrSet(c : AnyString; I : Integer; var s : AnyString);
17153: procedure XMLSyntax1Click(Sender: TObject);
17154: Procedure XOR_Streams2( Dest, Srce : TMemoryStream)
17155: Procedure XOR_Streams3( Dest, SrceA, SrceB : TMemoryStream)
17156: Procedure ZeroFillStream( Stream: TMemoryStream)
17157: procedure XMLSyntax1Click(Sender: TObject);
17158: Procedure ZeroMemory( Ptr : Pointer; Length : Longint)
17159: procedure(Control: TWinControl; Index: Integer; Rect: TRect; State: Byte)
17160: procedure(Control: TWinControl; Index: Integer; var Height: Integer)
17161: procedure(Sender, Source: TObject; X, Y: Integer; State: TDragState; var Accept: Boolean)
17162: procedure (Sender, Source: TObject; X, Y: Integer)
17163: procedure (Sender, Target: TObject; X, Y: Integer)
17164: procedure(Sender: TObject; ASection, AWidth: Integer)
17165: procedure(Sender: TObject; ScrollCode: TScrollCode; var ScrollPos: Integer)
17166: procedure (Sender: TObject; Shift: TShiftState; X, Y: Integer);
17167: procedure (Sender: TObject; var Action: TCloseAction)
17168: procedure(Sender: TObject; var CanClose: Boolean)
17169: procedure (Sender: TObject; var Kev: Char);
17170: ProcedureName ProcedureNames ProcedureParametersCursor @
17172: ***********Now Constructors constructor *********
17173: Size is: 1248 1115 996 628 550 544 501 459 (381)
17174: Attach( VersionInfoData : Pointer; Size : Integer)
17175:
         constructor Create( ABuckets : TBucketListSizes)
         Create( ACallBackWnd : HWND)
17176:
17177:
        Create( AClient : TCustomTaskDialog)
Create( AClient : TIdTelnet)
17178:
         Create( ACollection : TCollection)
17179:
         Create( ACollection : TFavoriteLinkItems)
17180:
         Create( ACollection : TTaskDialogButtons)
17181:
17182:
         Create( AConnection : TIdCustomHTTP)
         Create( ACreateSuspended : Boolean)
17183:
         Create( ADataSet : TCustomSQLDataSet)
17184:
17185:
         CREATE( ADATASET : TDATASET)
         Create( Aggregates : TAggregates; ADataSet : TCustomClientDataSet);
17186:
        Create( AGrid : TCustomDBGrid)
Create( AGrid : TStringGrid; AIndex : Longint)
17187:
17188:
         Create( AHTTP : TIdCustomHTTP)
17189:
17190:
         Create( AListItems : TListItems)
        Create( AOnBytesRemoved : TIdBufferBytesRemoved)
Create( AOnBytesRemoved : TIdBufferBytesRemoved)
17191:
17192:
         Create( AOwner : TCommonCalendar)
Create( AOwner : TComponent)
17193:
17194:
17195:
         CREATE ( AOWNER : TCOMPONENT)
17196:
         Create( AOwner : TCustomListView)
17197:
         Create( AOwner :
                             TCustomOutline)
17198:
         Create( AOwner :
                             TCustomRichEdit)
17199:
         Create( AOwner : TCustomRichEdit; AttributeType : TAttributeType)
17200:
         Create( AOwner : TCustomTreeView)
         Create( AOwner : TIdUserManager)
17201:
        Create( AOwner : TListItems)
17202:
17203:
        \texttt{Create} \, (\texttt{AOwner:TObject:Handl:hDBICur:CBTyp:CBType:CBType:CBBuf:Ptr:CBBufSiz:Int:CallbckEvent:TBDECallbackEvent:Chain:Bool) \\
17204: CREATE( AOWNER : TPERSISTENT)
17205: Create( AOwner : TPersistent)
                             TTable)
17206:
         Create( AOwner :
17207:
         Create( AOwner : TTreeNodes
17208:
         Create( AOwner : TWinControl; const ClassName : string)
17209: Create( AParent : TIdCustomHTTP)
17210: Create( AParent : TUpdateTree; AResolver : TCustomResolver)
17211: Create( AProvider : TBaseProvider)
```

```
17212: Create( AProvider : TCustomProvider);
           Create( AProvider : TDataSetProvider)
17213:
            Create( ASocket : TCustomWinSocket; TimeOut : Longint)
17215:
            Create( ASocket : TSocket)
17216:
           Create( AStrings : TWideStrings)
           Create( AToolBar : TToolBar)
17217:
           Create( ATreeNodes : TTreeNodes)
17218:
_
17219:
            Create( Autofill : boolean)
           Create( AWebPageInfo : TAbstractWebPageInfo)
Create( AWebRequest : TWebRequest)
17220:
17221:
           Create( Collection : TCollection)
17222:
           Create( Collection : TIdMessageParts; ABody : TStrings)
17224:
            Create( Collection : TIdMessageParts; const AFileName
17225:
           Create( Column : TColumn)
           Create( const AConvFamily: TConvFamily; const ADescription: string)
Create( const AConvFamily: TConvFamily; const ADescription: string; const AFactor: Double)
17226:
17227:
17228: Create( const AConvFamily: TConvFamily: const ADescription: string: const AToCommonProc,
          AFromCommonProc : TConversionProc)
17229: Create( const AInitialState : Boolean; const AManualReset : Boolean)
17230:
           Create( const ATabSet : TTabSet)
            Create( const Compensate : Boolean)
           Create( const FileMap : TJclCustomFileMapping; Access, Size : Cardinal; ViewOffset : Int64)
17232:
17233:
           Create( const FileName : string)
17234: Create( const FileName : string; FileMode: Cardinal; const Name: string; Protect: Cardinal; const MaximumSize : Int64; const SecAttr : PSecurityAttributes);
17235: Create( const FileName : string; FileMode : WordfmShareDenyWrite)
17236:
           Create( const MaskValue : string)
17237:
           Create(const Name:string; Protect:Cardinal;const MaximumSize:Int64;const SecAttr:PSecurityAttributes)
17238:
           Create( const Prefix : string)
            Create( const sRegularExpression : string; xFlags : TniRegularExpressionMatchFlags)
17239:
           Create( const sRule : string; xFlags : TniRegularExpressionMatchFlags)
Create( const sRule : string; xFlags : TniRegularExpressionMatchFlags)
17240:
17241:
17242:
           Create (CoolBar : TCoolBar)
           Create( CreateSuspended : Boolean; ASocket : TServerClientWinSocket)
Create( CreateSuspended : Boolean; ASocket : TServerWinSocket)
17243:
17244:
17245: Create( DataSet : TDataSet; const
          \texttt{Text:Widestring:Options:TFilterOptions:ParserOptions:TParserOptions:TParserOptions:TParserOptions:TParserOptions:TParserOptions:TParserOptions:TParserOptions:TParserOptions:TParserOptions:TParserOptions:TParserOptions:TParserOptions:TParserOptions:TParserOptions:TParserOptions:TParserOptions:TParserOptions:TParserOptions:TParserOptions:TParserOptions:TParserOptions:TParserOptions:TParserOptions:TParserOptions:TParserOptions:TParserOptions:TParserOptions:TParserOptions:TParserOptions:TParserOptions:TParserOptions:TParserOptions:TParserOptions:TParserOptions:TParserOptions:TParserOptions:TParserOptions:TParserOptions:TParserOptions:TParserOptions:TParserOptions:TParserOptions:TParserOptions:TParserOptions:TParserOptions:TParserOptions:TParserOptions:TParserOptions:TParserOptions:TParserOptions:TParserOptions:TParserOptions:TParserOptions:TParserOptions:TParserOptions:TParserOptions:TParserOptions:TParserOptions:TParserOptions:TParserOptions:TParserOptions:TParserOptions:TParserOptions:TParserOptions:TParserOptions:TParserOptions:TParserOptions:TParserOptions:TParserOptions:TParserOptions:TParserOptions:TParserOptions:TParserOptions:TParserOptions:TParserOptions:TParserOptions:TParserOptions:TParserOptions:TParserOptions:TParserOptions:TParserOptions:TParserOptions:TParserOptions:TParserOptions:TParserOptions:TParserOptions:TParserOptions:TParserOptions:TParserOptions:TParserOptions:TParserOptions:TParserOptions:TParserOptions:TParserOptions:TParserOptions:TParserOptions:TParserOptions:TParserOptions:TParserOptions:TParserOptions:TParserOptions:TParserOptions:TParserOptions:TParserOptions:TParserOptions:TParserOptions:TParserOptions:TParserOptions:TParserOptions:TParserOptions:TParserOptions:TParserOptions:TParserOptions:TParserOptions:TParserOptions:TParserOptions:TParserOptions:TParserOptions:TParserOptions:TParserOptions:TParserOptions:TParserOptions:TParserOptions:TParserOptions:TParserOptions:TParserOptions:TParserOptions:TParserOptions:TParserOptions:TParserOptions:TParserOptions:TParserOptions:TParserOp
          DepFields : TBits; FieldMap : TFieldMap)
17246:
           Create( DBCtrlGrid : TDBCtrlGrid)
           Create( DSTableProducer: TDSTableProducer)
Create( DSTableProducer: TDSTableProducer; ColumnClass: THTMLTableColumnClass)
17247:
17248:
           Create( ErrorCode : DBIResult)
17249:
17250:
           Create( Field : TBlobField; Mode : TBlobStreamMode)
            Create( Grid : TCustomDBGrid; ColumnClass : TColumnClass)
17251:
           Create( HeaderControl : TCustomHeaderControl)
Create( HTTPRequest : TWebRequest)
17252:
17253:
           Create( iStart : integer; sText : string)
Create( iValue : Integer)
17254:
17255:
17256:
            Create( Kind : TMmTimerKind; Notification : TMmNotificationKind)
17257:
           Create( MciErrNo : MCIERROR; const Msg : string)
17258:
           Create(MemoryStream:TCustomMemStream;FreeStream:Boolean;const AIndexOption:TJclMappedTextReaderIndex);
           Create( Message : string; ErrorCode : DBResult)
17259:
            Create( Msg : string)
17260:
17261:
            Create( NativeError, Context : string; ErrCode, PrevError : Integer; E : Exception)
           Create( NativeError, Context : string; ErrorCode, PreviousError : DBResult)
Create( oExpression : TniRegularExpressionStateType)
17262:
17263:
                                                                                     TniRegularExpressionMatchFlags)
17264:
           Create( oOwner : TniRegularExpression; xFlags :
17265:
           \label{lem:condition} Create (o Source: ThiRegular Express State; o Destination: ThiRegular Expr State; x Characts: TChar Set; b Lambda: bool) \\
           Create( Owner : EDBErgineError; ErrorCode : DBIResult; NativeError : Longint; Message : PChar)
Create( Owner : TCustomComboBoxEx)
17266:
17267:
17268:
           CREATE( OWNER : TINDEXDEFS; const NAME, FIELDS: String; OPTIONS: TINDEXOPTIONS)
17269:
            Create( Owner : TPersistent)
17270:
           Create( Params : TStrings)
17271:
           Create( Size : Cardinal)
17272:
           Create( Socket : TSocket; ServerWinSocket : TServerWinSocket)
           Create( StatusBar : TCustomStatusBar)
17273:
            {\tt Create(WebDispatcher: TCustomWebDispatcher; ItemClass: TCollectionItemClass)}
17274:
17275:
           Create( WebResponse : TWebResponse; ItemClass : TCollectionItemClass)
17276:
           Create(AHandle:Integer)
           Create(AOwner: TComponent); virtual;
Create(const AURI : string)
17277:
17278:
17279:
            Create(FileName:String; Mode:Word)
17280:
           Create(Instance:THandle;ResName:String;ResType:PChar)
17281:
           Create(Stream : TStream)
17282:
           Createl( ADataset : TDataset);
17283: Create1(const FileHandle:THandle;const Name:string;Protect:Cardinal;const MaximumSize:Int64;const
          SecAttr:PSecurityAttributes);
17284:
           Createl( const FileName : string; const AIndexOption : TJclMappedTextReaderIndex);
           Create2( Other : TObject);
17285:
            {\tt CreateAt}({\tt FileMap:}\ {\tt TJclCustomFileMapping:}\ {\tt Access,Size:Cardinal;ViewOffset:Int64;Address:}\ {\tt Pointer})
17287:
            CreateError(const anErrCode: Integer;const asReplyMessage: string; const asErrorMessage: string)
17288:
           CreateFmt( MciErrNo : MCIERROR; const Msg : string; const Args : array of const)
           CreateFromId(Instance:THandle;ResId:Integer;ResType:PChar)
17289:
17290:
            CreateLinked( DBCtrlGrid : TDBCtrlGrid)
            CREATENEW(AOWNER:TCOMPONENT; Dummy: Integer
17291:
17292:
           CreateRes( Ident : Integer);
           CreateRes( MciErrNo : MCIERROR; Ident : Integer)
17293:
17294:
           CreateRes( ResStringRec : PResStringRec);
17295: CreateResHelp( Ident : Integer; AHelpContext : Integer);
```

```
CreateResHelp( ResStringRec : PResStringRec; AHelpContext : Integer);
17296:
          CreateShadow( AOwner : TComponent; ControlSide : TControlSide)
17297:
17298:
           CreateSize( AWidth, AHeight : Integer)
17299:
          Open( const Name : string; const InheritHandle : Boolean; const DesiredAccess : Cardinal)
17300:
17301:
17302: unit uPSI_MathMax;
17303:
17304:
          CONSTS
           Dernstein: Float = 0.2801694990238691330364364912307; // Bernstein constant
Cbrt2: Float = 1.2599210498948731647672106072782; // CubeRoot(2)
Cbrt3: Float = 1.4422495703074083823216383107801; // CubeRoot(3)
17305:
17306:
17307:
                                 = 2.1544346900318837217592935665194; // CubeRoot(10)

= 4.6415888336127788924100763509194; // CubeRoot(100)

= 1.4645918875615232630201425272638; // CubeRoot(PI)

= 0.9159655941772190150546035149324; // Catalan constant
17308:
            Cbrt10: Float
            Cbrt100: Float
17309:
17310:
            CbrtPi: Float
17311:
            Catalan: Float
            PiJ: Float
17312:
                                         3.1415926535897932384626433832795; // PI
            PI: Extended = 3.1415926535897932384626433832795);
PiOn2: Float = 1.5707963267948966192313216916398;
17313:
            PiOn2: Float
17314:
            PiOn3: Float
17315:
                                   = 1.0471975511965977461542144610932;
                                                                                       // PI / 3
                                      0.78539816339744830961566084581988; // PI /
17316:
            PiOn4: Float
17317:
            Sqrt2: Float
                                   = 1.4142135623730950488016887242097; // Sqrt(2)
                                   = 1.7320508075688772935274463415059; // Sqrt(3)
17318:
            Sqrt3: Float
                                   = 2.2360679774997896964091736687313; // Sqrt(5)
17319:
            Sgrt5: Float
                                   = 3.1622776601683793319988935444327; // Sqrt(10)
= 1.7724538509055160272981674833411; // Sqrt(PI)
            Sqrt10: Float
17320:
17321:
            SqrtPi: Float
17322:
            Sqrt2Pi: Float
                                   = 2.506628274631000502415765284811; // Sqrt(2 * PI)
= 6.283185307179586476925286766559; // 2 * PI
                                   = 6.283185307179586476925286766559; // 2 * PI
= 9.4247779607693797153879301498385; // 3 * PI
17323:
            TwoPi: Float
17324:
            ThreePi: Float
                                   = 0.69314718055994530941723212145818; // Ln(2)
17325:
            Ln2: Float
17326:
            Ln10: Float
                                   = 2.3025850929940456840179914546844; // Ln(10)
            LnPi: Float
17327:
                                   = 1.1447298858494001741434273513531; // Ln(PI)
                                   = 0.30102999566398119521373889472449; // Log10(2)
            Log2J: Float
17328:
17329:
            Log3: Float
                                   = 0.47712125471966243729502790325512; // Log10(3)
            LogPi: Float
                                   = 0.4971498726941338543512682882909;
                                                                                      // Log10(PI)
17330:
                                  = 0.43429448190325182765112891891661; // Log10(E)

= 2.7182818284590452353602874713527; // Natural constant

= 0.91893853320467274178032973640562; // Ln(2*PI)/2
17331:
            LogE: Float
17332:
            E: Float
            hLn2Pi: Float
17333:
17334:
            inv2Pi: Float
                                   = 0.15915494309189533576888376337251436203445964574046; // 0.5/Pi
17335:
            TwoToPower63: Float = 9223372036854775808.0;
                                                                                       // 2^63
            GoldenMean: Float = 1.618033988749894848204586834365638; // GoldenMean EulerMascheroni: Float = 0.5772156649015328606065120900824; // Euler GAMMA RadCor: Double = 57.29577951308232; {number of degrees in a radian}
17336:
17337:
17338:
            StDelta : Extended = 0.00001; {delta for difference equations}
StEpsilon : Extended = 0.00001; {epsilon for difference equations}
StMaxIterations : Integer = 100; {max attempts for convergence}
17339:
17340:
17341:
17342:
17343: procedure SIRegister_StdConvs(CL: TPSPascalCompiler);
17344:
            MetersPerInch = 0.0254; // [1]
17345:
            MetersPerFoot = MetersPerInch * 12;
17346:
            MetersPerYard = MetersPerFoot * 3;
MetersPerMile = MetersPerFoot * 5280;
17347:
17348:
            MetersPerNaticalMiles = 1852;
MetersPerNaticalMiles = 1.49598E11; // [4]
MetersPerLightSecond = 2.99792458E8; // [5]
MetersPerLightYear = MetersPerLightSecond * 31556925.9747; // [7]
MetersPerParsec = MetersPerSetronomicalUnit * 206264.806247096; // 60 * 60 * (180 / Pi)
17349:
17350:
17351:
17352:
17353:
            MetersPerCubit = 0.4572; // [6][7]
MetersPerFathom = MetersPerFoot * 6
17354:
17355:
            MetersPerFurlong = MetersPerYard * 220;
17356:
            MetersPerHand = MetersPerInch * 4;
MetersPerPace = MetersPerInch * 30;
MetersPerRod = MetersPerFoot * 16.5;
17357:
17358:
17359:
            MetersPerChain = MetersPerRod * 4;
17360:
            MetersPerLink = MetersPerChain / 100;
MetersPerDoint = MetersPerInch * 0.013837; // [7]
MetersPerPoint = MetersPerPoint * 12;
17361:
17362:
17363:
17364:
            SquareMetersPerSquareInch = MetersPerInch * MetersPerInch;
SquareMetersPerSquareFoot = MetersPerFoot * MetersPerFoot;
17365:
17366:
            SquareMetersPerSquareYard = MetersPerYard * MetersPerYard;
17367:
            SquareMetersPerSquareMile = MetersPerMile * MetersPerMile;
17368:
            SquareMetersPerAcre = SquareMetersPerSquareYard * 4840;
17369:
17370:
            SquareMetersPerSquareRod = MetersPerRod * MetersPerRod;
17371:
17372:
            CubicMetersPerCubicInch = MetersPerInch * MetersPerInch * MetersPerInch;
            CubicMetersPerCubicFoot = MetersPerFoot * MetersPerFoot * MetersPerFoot;
17373:
            CubicMetersPerCubicYard = MetersPerYard * MetersPerYard * MetersPerYard;
17374:
17375:
            CubicMetersPerCubicMile = MetersPerMile * MetersPerMile * MetersPerMile;
            CubicMetersPerAcreFoot = SquareMetersPerAcre * MetersPerFoot;
CubicMetersPerAcreInch = SquareMetersPerAcre * MetersPerInch;
17376:
17377:
            CubicMetersPerCord = CubicMetersPerCubicFoot * 128;
17378:
17379:
            CubicMetersPerCordFoot = CubicMetersPerCubicFoot * 16;
17380:
            CubicMetersPerUSFluidGallon = CubicMetersPerCubicInch * 231; // [2][3][7]
17381:
            CubicMetersPerUSFluidQuart = CubicMetersPerUSFluidGallon / 4;
CubicMetersPerUSFluidPint = CubicMetersPerUSFluidQuart / 2;
17382:
17383:
17384:
            CubicMetersPerUSFluidCup = CubicMetersPerUSFluidPint / 2;
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17385:
           CubicMetersPerUSFluidGill = CubicMetersPerUSFluidCup / 2;
17386:
           CubicMetersPerUSFluidOunce = CubicMetersPerUSFluidCup / 8;
17387:
            CubicMetersPerUSFluidTablespoon = CubicMetersPerUSFluidOunce / 2;
17388:
            CubicMetersPerUSFluidTeaspoon = CubicMetersPerUSFluidOunce / 6;
17389:
            CubicMetersPerUSDryGallon = CubicMetersPerCubicInch * 268.8025; // [7]
17390:
           CubicMetersPerUSDryQuart = CubicMetersPerUSDryGalfor / 4;
CubicMetersPerUSDryPint = CubicMetersPerUSDryQuart / 2;
17391:
17392:
            CubicMetersPerUSDryPeck = CubicMetersPerUSDryGallon * 2;
17393:
           CubicMetersPerUSDryBucket = CubicMetersPerUSDryBeck * 2;
CubicMetersPerUSDryBucket = CubicMetersPerUSDryBucket *
17394:
17395:
17396:
           CubicMetersPerUKGallon = 0.00454609; // [2][7]
CubicMetersPerUKPottle = CubicMetersPerUKGallon / 2;
CubicMetersPerUKQuart = CubicMetersPerUKPottle / 2;
17397:
17398:
17399:
17400:
            CubicMetersPerUKPint = CubicMetersPerUKQuart / 2;
17401:
            CubicMetersPerUKGill = CubicMetersPerUKPint / 4;
           CubicMetersPerUKOunce = CubicMetersPerUKPint / 20;
CubicMetersPerUKPeck = CubicMetersPerUKGallon * 2;
17402:
17403:
           CubicMetersPerUKBucket = CubicMetersPerUKPucket * 2;
CubicMetersPerUKBushel = CubicMetersPerUKBucket *
17404:
17405:
17406:
            GramsPerPound = 453.59237; // [1][7]
17407:
           GramsPerPound = 453.592377 // [1][7]
GramsPerDrams = GramsPerPound / 256;
GramsPerGrains = GramsPerPound / 7000;
17408:
17409:
17410:
            GramsPerTons = GramsPerPound * 2000;
17411:
            GramsPerLongTons = GramsPerPound * 2240;
           GramsPerOunces = GramsPerPound / 16;
GramsPerStones = GramsPerPound * 14;
17412:
17413:
17414:
17415:
            MaxAngle 9223372036854775808.0;
           MaxTanH 5678.2617031470719747459655389854);
MaxFactorial( 1754);
17416:
17417:
           MaxFloatingPoint(1.189731495357231765085759326628E+4932);
MinFloatingPoint',(3.3621031431120935062626778173218E-4932);
17418:
17419:
           MaxTanH( 354.89135644669199842162284618659);
MaxFactorial'LongInt'( 170);
17420:
17421:
           MaxFloatingPointD(1.797693134862315907729305190789E+308);
17422:
17423:
            MinFloatingPointD(2.2250738585072013830902327173324E-308);
17424:
            MaxTanH( 44.361419555836499802702855773323);
17425:
           MaxFactorial'LongInt'( 33);
           MaxFloatingPointS( 3.4028236692093846346337460743177E+38);
MinFloatingPointS( 1.1754943508222875079687365372222E-38);
17426:
17427:
            PiExt( 3.1415926535897932384626433832795);
17428:
           RatioDegToRad( PiExt / 180.0);
RatioGradToRad( PiExt / 200.0);
RatioDegToGrad( 200.0 / 180.0);
17429:
17430:
17431:
            RatioGradToDeg( 180.0 / 200.0);
17432:
17433:
            Crc16PolynomCCITT'LongWord $1021);
          Crc16PolynomIBM'LongWord $8005);
Crc16Bits'LongInt'( 16);
17434:
17435:
          Crc16Bytes'LongInt'( 2);
17436:
17437:
          Crc16HighBit'LongWord $8000);
          NotCrc16HighBit', 'LongWord $7FFF);
Crc32PolynomIEEE', 'LongWord $04C11DB7);
17438:
17439:
          Crc32PolynomCastagnoli', LongWord $1EDC6F41);
Crc32Koopman', LongWord $741B8CD7);
17440:
17441:
          Crc32Bits','LongInt'( 32);
Crc32Bytes','LongInt'( 4);
Crc32HighBit','LongWord $80000000);
17442:
17443:
17444:
          NotCrc32HighBit', 'LongWord $7FFFFFFF);
17445:
17446:
17447:
           MinBvte
                              = Low(Byte);
17448:
           MaxByte
                              = High(Byte);
17449:
           MinWord
                              = Low(Word);
                              = High(Word);
17450:
            MaxWord
17451:
           MinShortInt
                              = Low(ShortInt);
17452:
           MaxShortInt
                              = High(ShortInt);
17453:
           MinSmallInt.
                              = Low(SmallInt);
           MaxSmallInt
                              = High(SmallInt);
17454:
17455:
           MinLongWord
                              = LongWord(Low(LongWord));
17456:
           MaxLongWord
                              = LongWord(High(LongWord));
17457:
           MinLongInt
                              = LongInt(Low(LongInt));
= LongInt(High(LongInt));
17458:
           MaxLongInt.
17459:
            MinInt64
                              = Int64(Low(Int64));
17460:
           MaxInt64
                              = Int64(High(Int64));
17461:
           MinInteger
                              = Integer(Low(Integer));
17462:
                              = Integer(High(Integer));
           MaxInteger
           MinCardinal
                              = Cardinal(Low(Cardinal));
17463:
                              = Cardinal(High(Cardinal));
17464:
            MaxCardinal
           MinNativeUInt = NativeUInt(Low(NativeUInt));
17465:
17466:
           MaxNativeUInt = NativeUInt(High(NativeUInt));
           MinNativeInt = NativeInt(Low(NativeInt));
MaxNativeInt = NativeInt(High(NativeInt))
17467:
                              = NativeInt(High(NativeInt));
17468:
          Function CosH( const Z : Float) : Float;
Function SinH( const Z : Float) : Float;
17469:
17470:
17471:
          Function TanH( const Z : Float) : Float;
17472:
```

```
//******from DMath.Dll Lib of types.inc in source\dmath_dll
17474:
                                                                                { 1/Ln(2) }
{ 1/Ln(10) }
17475:
               InvLn2
                                = 1.44269504088896340736;
                                 = 0.43429448190325182765;
17476:
               InvLn10
               TwoPi
                                                                                   2*Pi }
Pi/2 }
17477:
                                 = 6 28318530717958647693;
17478:
               PiDiv2
                                 = 1.57079632679489661923;
17479:
                                = 1.77245385090551602730;
               SartPi
                                                                                    Sgrt(Pi)
                                                                                    Sqrt(2*Pi) }
17480:
               Sqrt2Pi
                                 = 2.50662827463100050242;
17481:
               InvSqrt2Pi = 0.39894228040143267794;
                                                                                    1/Sqrt(2*Pi)
               LnSqrt2Pi = 0.91893853320467274178;
Ln2PiDiv2 = 0.91893853320467274178;
17482:
                                                                                    Ln(Sqrt(2*Pi)) }
                                                                                    Ln(2*Pi)/2 }
17483:
17484:
                                = 1.41421356237309504880;
                                                                                   Sqrt(2) }
Sqrt(2)/2 }
               Sart2
               Sqrt2Div2 = 0.70710678118654752440;
17485:
               Gold = 1.61803398874989484821; { Golden Mean = (1 + Sqrt(5))/2 } CGold = 0.38196601125010515179; { 2 - GOLD } MachEp = 2.220446049250313E-16; { 2^(-52) } MaxNum = 1.797693134862315E+308; { 2^1024 } MinNum = 2.225073858507202E-308; { 2^(-1022) }
17486:
17487:
17488:
17489:
17490:
               MaxLog = 709.7827128933840;
MinLog = -708.3964185322641;
17491 .
17492:
17493:
               MaxFac = 170;
17494:
               MaxGam = 171.624376956302;
17495:
               MaxLgm = 2.556348E+305;
               SingleCompareDelta = 1.0E-34;
DoubleCompareDelta = 1.0E-280;
17496:
               DoubleCompareDelta
17497:
17498:
               {$IFDEF CLR}
17499:
                ExtendedCompareDelta = DoubleCompareDelta;
17500:
               \{\$ELSE\}
               ExtendedCompareDelta = 1.0E-4400;
17501:
17502:
               {SENDIF}
17503:
               Bytes1KB = 1024;
              Bytes1KB = 1024;
Bytes1MB = 1024 * Bytes1KB;
Bytes1GB = 1024 * Bytes1MB;
Bytes64KB = 64 * Bytes1MB;
Bytes64MB = 64 * Bytes1MB;
Bytes2GB = 2 * LongWord(Bytes1GB);
clBlack32', $FF000000 ));
clDimGray32', $FF3F3F3F ));
clGray32', $FF7F7F7F ));
clLightGray32', $FF8FFFFFF ));
17504:
17505:
17506:
17507:
17508:
17509:
17510:
17511:
17512:
                  clLightGray32', $FFBFBFBF
                  clWhite32', $FFFFFFFF ));
clMaroon32', $FF7F0000 ));
17513:
17514:
                  17515:
17516:
17517:
17518:
17519:
17520:
17522:
17523:
17524:
17525:
                  clAqua32', $FF00FFFF ));
                  clAliceBlue32', $FFF0F8FF ));
17526:
                  clanteblue32 , $FFFAEBD7 ));
claquamarine32', $FFFFFD4 ));
clazure32', $FFF0FFFF ));
clBeige32', $FFF5F5DC ));
clBisque32', $FFFFE4C4 ));
17527:
17528:
17529:
17530:
17531:
                  clBlancheDalmond32', $FFFFEBCD ));
clBlueViolet32', $FF8A2BE2 ));
clBrown32', $FFA52A2A ));
17532:
17533:
17534:
17535:
                   clBurlyWood32', $FFDEB887 ));
                  clCadetblue32', $FF5F9EA0 ));
clChartReuse32', $FF7FFF00 ));
clChocolate32', $FFD2691E ));
17536:
17537:
17538:
                   clCoral32', $FFFF7F50 ));
17540:
                   clCornFlowerBlue32', $FF6495ED ));
                  clCornSilk32', $FFFFF8DC);
clCrimson32', $FFFD643C);
clDarkBlue32', $FF00008B));
clDarkCyan32', $FF008B8B);
17541:
17542:
17543:
17544:
17545:
                   clDarkGoldenRod32', $FFB8860B ));
                  clDarkGoldenRod32', $FFB8860B ));
clDarkGray32', $FFA9A9A9 ));
clDarkGreen32', $FF006400 ));
clDarkGrey32', $FFA9A9A9 ));
clDarkKhaki32', $FFBB76B ));
clDarkMagenta32', $FF8B008B ));
clDarkOliveGreen32', $FF556B2F ));
clDarkOrange32', $FFFF8C00 ));
clDarkOrchid32', $FF9932CC ));
clDarkRed32'. $FF8B0000 ));
17546:
17547:
17548:
17549:
17550:
17551:
17552:
17553:
                  clDarkRed32', $FF8B0000 ));
clDarkRed32', $FF8B0000 ));
clDarkSalmon32', $FF8P967A ));
clDarkSeaGreen32', $FF8FBC8F ));
clDarkSlateBlue32', $FF483D8B ));
clDarkSlateGray32', $FF2F4F4F ));
17554:
17555:
17556:
17557:
17558:
                  clDarkSlateGrey32', $FF2F4F4F ));
clDarkTurquoise32', $FF00CED1 ));
17559:
17560:
                  clDarkViolet32', $FF9400D3 ));
clDeepPink32', $FFFF1493 ));
17561:
17562:
```

```
clDeepSkyBlue32', $FF00BFFF ));
17563:
                        clDodgerBlue32', $FF1E90FF ));
clFireBrick32', $FFB22222 ));
clFloralWhite32', $FFFFFAF0 ));
17564:
17565:
17566:
                        clGainsBoro32', $FFDCDCDC ));
clGhostWhite32', $FFF8F8FF ));
17567:
17568:
                         clGold32', $FFFFD700 ));
17569:
                        clGold32', $FFFFD700 ));
clGoldenRod32', $FFDAA520 ));
clGreenYellow32', $FFDAF52F ));
clGrey32', $FF808080 ));
clHoneyDew32', $FFF0FFF0 ));
clHotPink32', $FFFF69B4 ));
clIndianRed32', $FFFD5C5C ));
clIndian32', $FFFD5C5C ));
17570:
17571:
17572:
17573:
17574:
17575:
                        clIndigo32', $FF4B0082 ));
clIvory32', $FFFFFFF ));
clKhaki32', $FFF0E68C ));
17576:
17577:
17578:
17579:
                         clLavender32', $FFE6E6FA ));
                        clLavenderBlush32', $FFFFF0F5 ));
clLawnGreen32', $FF7CFC00 ));
clLemonChiffon32', $FFFFFACD ));
17580:
17581:
17582:
                        clLightBlue32', $FFADD8E6 ));
clLightCoral32', $FFF08080 ));
17583:
17584:
                        clLightCyan32', $FFE0FFFF ));
clLightGoldenRodYellow32', $FFFAFAD2 ));
17585:
17586:
                        clLightGreen32', $FF90EE90 ));
clLightGrey32', $FFD3D3D3 ));
17587:
17588:
                        clLightGrey32', $FFD3D3D3 ));
clLightPink32', $FFFB6C1 ));
clLightSalmon32', $FFFFB07A ));
clLightSeagreen32', $FF20B2AA ));
clLightSkyblue32', $FF87CEFA ));
clLightSlategray32', $FF778899 ));
clLightSlategrey32', $FF778899 ));
clLightSteelblue32', $FF78B0C4DE ));
17589:
17590:
17591:
17592:
17593:
17594:
17595:
                        clLightYellow32', $FFFFFFE0 ));
clLtGray32', $FFC0C0C0 ));
clMedGray32', $FFA0A0A4 ));
17596:
17597:
17598:
                        clDkGray32', $FF808080 ));
clMoneyGreen32', $FFC0DCC0 ));
17599:
17600:
17601:
                         clLegacySkyBlue32', $FFA6CAF0 ));
                        clCream32', $FFFFFBF0 ));
clLimeGreen32', $FF32CD32 ));
17602:
17603:
                        cllinen32', $FFFAF0E6 ));
clMediumAquamarine32', $FF66CDAA ));
17604:
17605:
                        clMediumAquamarine32', $FF66CDAA ));
clMediumBlue32', $FF0000CD ));
clMediumOrchid32', $FF8055D3 ));
clMediumPurple32', $FF9370DB ));
clMediumSeaGreen32', $FF3CB371 ));
clMediumSlateBlue32', $FF7868EE ));
clMediumSpringGreen32', $FF00FA9A ));
clMediumTurquoise32', $FF74BDLCC ));
clMediumVioletRed32', $FFC71585 ));
clMediumVioletRed32', $FFC71585 ));
17606:
17607:
17608:
17609:
17611:
17612:
17613:
                        clMidnightBlue32', $FF191970 ));
clMintCream32', $FFF5FFFA ));
clMistyRose32', $FFFFE4E1 ));
17614:
17615:
17616:
17617:
                         clMoccasin32', $FFFFE4B5 ));
                         clNavajoWhite32', $FFFFDEAD ));
17618:
                        clndvajodnites2 , $FFFDEAD ;
cloldLace32', $FFFDF5E6 ));
cloliveDrab32', $FF6B8E23 ));
17619:
17620:
                        clOrange32', $FFFFA500 ));
clOrangeRed32', $FFFF4500 ));
clOrchid32', $FFDA70D6 ));
17621:
17622:
17623:
17624:
                         clPaleGoldenRod32', $FFEEE8AA ));
17625:
                         clPaleGreen32', $FF98FB98 ));
                        clPaleTurquoise32', $FFAFEEEE ));
clPaleVioletred32', $FFDB7093 ));
17626:
                                                                     $FFDB7093 ));
17627:
                        clPapayaWhip32', $FFFFEFD5 ));
clPeachPuff32', $FFFFDAB9 ));
17629:
                        clPeru32', $FFCD853F ));
clPlum32', $FFDDA0DD ));
17630:
17631:
                        clPowderBlue32', $FFB0E0E6 ));
clRosyBrown32', $FFBC8F8F ));
17632:
17633:
                        clRoyalBlue32', $FF4169E1 ));
clSaddleBrown32', $FF8B4513 ));
clSalmon32', $FFFA8072 ));
17634:
17635:
17636:
                        clSandyBrown32', $FFF4A460 ));
clSeaGreen32', $FF2E8B57 ));
clSeaShell32', $FFFFF5EE ));
17637:
17638:
17639:
                       clSeaShel132', SFFFFF5EE ));
clSienna32', $FFA0522D ));
clSilver32', $FFC0C0C0 ));
clSkyblue32', $FF67EEB ));
clSlateBlue32', $FF6A5ACD ));
clSlateGray32', $FF708090 ));
clSlateGrey32', $FF708090 ));
clSnow32', $FFFFFAFA ));
17640:
17641:
17642:
17643:
17644:
17645:
17646:
                        clsnows2 , $FFFFFAFA ));
clSpringgreen32', $FF00FF7F ));
clSteelblue32', $FF4682B4 ));
clTan32', $FFD2B48C ));
clThistle32', $FFD8BFD8 ));
clTomato32', $FFFF6347 ));
17647:
17648:
17649:
17650:
17651:
```

```
17652:
              clTurquoise32', $FF40E0D0 ));
             clViolet32', $FFEE82EE ));
clWheat32', $FFF5DEB3 ));
17653:
              clWhitesmoke32', $FFF5F5F5 ));
clYellowgreen32', $FF9ACD32 ));
17655
17656:
             clTrWhite32', $7FFFFFFF ));
clTrBlack32', $7F000000 ));
17657:
17658:
             clTrRed32', $7FFF0000 ));
clTrGreen32', $7F00FF00 ));
clTrBlue32', $7F000FF ));
17659:
17660:
17661:
17662:
            // Fixed point math constants
17663:
           FixedOne = $10000; FixedHalf = $7FFF;
17664:
           FixedPI = Round(PI * FixedOne);
           FixedToFloat = 1/FixedOne;
17665:
17666:
17667:
         Special Types
                              **********
17668: **
17669:
           type Complex = record
17670:
             X, Y : Float;
17671:
           end;
17672:
           type TVector
                                = array of Float;
17673:
           TIntVector = array of Integer;
17674:
           TCompVector = array of Complex;
17675:
           TBoolVector = array of Boolean;
17676:
           TStrVector = array of String;
17677:
           TMatrix
                          = array of TVector;
17678:
           TIntMatrix = array of TIntVector;
17679:
           TCompMatrix = array of TCompVector;
17680:
           TBoolMatrix = array of TBoolVector;
           TStrMatrix = array of TStrVector;
17681:
17682:
           TByteArray = array[0..32767] of byte; !
           THexArray = array [0..15] of Char; // = '0123456789ABCDEF';
TBitmapStyle = (bsNormal, bsCentered, bsStretched);
T2StringArray = array of array of string;
17683:
17684:
17685:
           T2IntegerArray = array of array of integer;
17686:
           AddTypeS('INT_PTR', 'Integer
AddTypeS('LONG_PTR', 'Integer
AddTypeS('UINT_PTR', 'Cardinal
17687:
17688:
17689:
           AddTypeS('ULONG_PTR', 'Cardinal AddTypeS('DWORD_PTR', 'ULONG_PTR')
17690:
17691:
17692:
           TIntegerDynArray', 'array of Integer TCardinalDynArray', 'array of Cardinal
17693:
           TWordDynArray', 'array of Word
17694:
           TSmallIntDynArray', 'array of SmallInt
17695:
17696:
           TByteDynArray', 'array of Byte
           TShortIntDynArray', 'array of ShortInt
TInt64DynArray', 'array of Int64
TLongWordDynArray', 'array of LongWord
17697:
17698:
17699:
           TSingleDynArray', 'array of Single
TDoubleDynArray', 'array of Double
TBooleanDynArray', 'array of Boolean
TStringDynArray', 'array of string
17700:
17701:
17702:
17703:
17704:
           TWideStringDynArray', 'array of WideString
           TDynByteArray = array of Byte;
TDynShortintArray = array of Shortint;
17705:
17706:
           TDynSmallintArray = array of Smallint;
17707:
           TDynWordArray = array of Word;
TDynIntegerArray = array of Integer;
17708:
17709:
17710:
           TDynLongintArray = array of Longint;
17711:
           TDynCardinalArray = array of Cardinal;
17712:
           TDynInt64Array
                                 = array of Int64;
17713:
           TDynExtendedArray = array of Extended;
17714:
           TDynDoubleArray = array of Double;
17715:
           TDynSingleArray
                                 = array of Single;
17716:
           TDynFloatArray
                                  = array of Float;
           TDynPointerArray = array of Pointer;
17717:
           TDynStringArray
17718:
                                 = array of string;
           TSynSearchOption = (ssoMatchCase, ssoWholeWord, ssoBackwards,
17719:
17720:
              ssoEntireScope, ssoSelectedOnly, ssoReplace, ssoReplaceAll, ssoPrompt);
17721:
           TSvnSearchOptions = set of TSvnSearchOption;
17722:
17723:
17724:
17725: //* Project : Base Include RunTime Lib for maXbox *Name: pas includebox.inc
17726:
17727: procedure drawPolygon(vPoints: TXYVector; cFrm: TForm);
17728: procedure drawPlot(vPoints: TXYVector; cFrm: TForm; vcolor: integer); 17729: procedure SaveCanvas(vCanvas: TCanvas; FileName: string);
17730: procedure SaveCanvas2(vCanvas: TCanvas; FileName: string);
17731: function CheckStringSum(vstring: string): integer;
17732: function HexToInt(HexNum: string): LongInt;
17733: function IntToBin(Int: Integer): String;
17734: function BinToInt(Binary: String): Integer;
17735: function HexToBin(HexNum: string): string; external2
17736: function BinToHex(Binary: String): string;
17737: function IntToFloat(i: Integer): double;
17738: function AddThousandSeparator(S: string; myChr: Char): string;
17739: function Max3(const X,Y,Z: Integer): Integer;
17740: procedure Swap(var X,Y: char); // faster without inline
```

```
17741: procedure ReverseString(var S: String);
17742: function CharToHexStr(Value: Char): string;
17743: function CharToUniCode(Value: Char): string;
17744: function Hex2Dec(Value: Str002): Byte;
17745: function HexStrCodeToStr(Value: string): string;
17746: function HexToStr(i: integer; value: string): string; 17747: function UniCodeToStr(Value: string): string;
17748: function CRC16(statement: string): string;
17749: \textbf{ function } SearchForSubstrings (aStrList: TStrings; aSearchStr1, aSearchStr2: \textbf{ string}): \textbf{ string}; aSearchStr2: \textbf{ string}; aSearchStr2: \textbf{ string}): \textbf{ string}; aSearchStr2: \textbf{ string}; 
17750: procedure SearchAndReplace(aStrList: TStrings; aSearchStr, aNewStr: string)
17751: procedure SearchAndCopy(aStrList: TStrings; aSearchStr, aNewStr: string; offset: integer);
17752: Procedure ExecuteCommand(executeFile, paramstring: string);
17753: Procedure ShellExecuteAndWait(executeFile, paramstring: string);
17754: function ExecConsoleApp(const AppName, Parameters: String; AppOutput: TStrings): DWORD;
17755: procedure SearchAndOpenDoc(vfilenamepath: string);
17756: procedure ShowInterfaces(myFile: string);
17757: function Fact2(av: integer): extended;
17758: Function BoolToStr(B: Boolean): string
17759: Function GCD(x, y: LongInt): LongInt;
17760: function LCM(m,n: longint): longint;
17761: function GetASCII: string;
17762: function GetItemHeight(Font: TFont): Integer;
17763: function myPlaySound(s: pchar; flag,syncflag: integer): boolean; 17764: function myGetWindowsDirectory(lpBuffer: PChar; uSize: longword): longword;
17765: function getHINSTANCE: longword;
17766: function getHMODULE: longword;
17767: function GetASCII: string;
17768: function ByteIsOk(const AByte: string; var VB: Byte): boolean; 17769: function WordIsOk(const AWord: string; var VW: Word): boolean;
17770: function TwentyFourBitValueIsOk(const AValue: string; var VI: Integer): boolean;
17771: function LongIsOk(const ALong: string; var VC: Cardinal): boolean;
17772: function SafeStr(const\ s:\ string):\ string;
17773: function ExtractUrlPath(const FileName: string): string;
17774: function ExtractUrlName(const FileName: string): string;
17775: function IsInternet: boolean;
17776: function RotateLeft1Bit u32( Value: uint32): uint32;
17777: procedure LinearRegression(const KnownY:array of Double;const KnownX: array of Double;NData:Int;var
           LF:TStLinEst; ErrorStats : Boolean);
17778: procedure getEnvironmentInfo;
17779: procedure AntiFreeze;
17780: function GetCPUSpeed: Double;
17781: function IsVirtualPcGuest : Boolean;
17782: function IsVmWareGuest : Boolean;
17783: procedure StartSerialDialog;
17784: function IsWoW64: boolean;
17785: function IsWow64String(var s: string): Boolean;
17786: procedure StartThreadDemo;
17787: Function RGB(R,G,B: Byte): TColor;
17788: Function Sendln(amess: string): boolean;
17789: Procedure maXbox;
17790: Function AspectRatio(aWidth, aHeight: Integer): String;
17791: function wget(aURL, afile: string): boolean;
17792: procedure PrintList(Value: TStringList);
17793: procedure PrintImage(aValue: TBitmap; Style: TBitmapStyle);
17794: procedure getEnvironmentInfo;
17795: procedure AntiFreeze;
17796: function getBitmap(apath: string): TBitmap;
17797: procedure ShowMessageBig(const aText : string);
17798: function YesNoDialog(const ACaption, AMsg: string): boolean;
17799: procedure SetArrayLength2String(arr: T2StringArray; asize1, asize2: integer); 17800: procedure SetArrayLength2Integer(arr: T2IntegerArray; asize1, asize2: integer);
17801: //function myStrToBytes(const Value: String): TBytes;
17802: //function myBytesToStr(const Value: TBytes): String;
17803: function SaveAsExcelFile(AGrid: TStringGrid; ASheetName, AFileName: string; open: boolean): Boolean;
17804: function getBitmap(apath: string): TBitmap;
17805: procedure ShowMessageBig(const aText : string);
17806: Function StrToBytes(const Value: String): TBytes;
17807: Function BytesToStr(const Value: TBytes): String;
17808: function SaveAsExcelFile(AGrid: TStringGrid; ASheetName, AFileName: string; open: boolean): Boolean;
17809: function ReverseDNSLookup(const IPAdrs:String;const DNSServer:String;Timeout,Retries:Int;var
           HostName:String):Bool;
17810: function FindInPaths(const fileName, paths : String) : String
17811: procedure initHexArray(var hexn: THexArray);
17812: function josephusG(n,k: integer; var graphout: string): integer;
17813: function isPowerof2(num: int64): boolean;
17814: function powerOf2(exponent: integer): int64;
17815: function getBigPI: string;
17816: procedure MakeSound(Frequency{Hz}, Duration{mSec}: Integer; Volume: TVolumeLevel; savefilePath: string);
17817: function GetASCIILine: string;
17818: procedure MakeComplexSound(N:integer{stream # to use}; freqlist:TStrings; Duration{mSec}: Integer;
17819:
                                                       pinknoise: boolean; shape: integer; Volume: TVolumeLevel);
17820: procedure SetComplexSoundElements(freqedt,Phaseedt,AmpEdt,WaveGrp:integer);
17821: procedure AddComplexSoundObjectToList(newf,newp,newa,news:integer; freqlist: TStrings);
17822: function mapfunc(ax, in_min, in_max, out_min, out_max: integer): integer;
17823: function mapmax(ax, in_min, in_max, out_min, out_max: integer): integer;
17824: function isKeypressed: boolean;
17825: function Keypress: boolean;
17826: procedure StrSplitP(const Delimiter: Char; Input: string; const Strings: TStrings);
17827: function ReadReg(Base: HKEY; KeyName, ValueName: string): string;
```

```
17828: function ReadRegistry(Base: HKEY; KeyName, ValueName: string): string;
17829: function GetOSName: string;
17830: function GetOSVersion: string;
17831: function GetOSNumber: string;
17832: function getEnvironmentString: string;
17833: procedure StrReplace(var Str: String; Old, New: String);
17834: procedure SendEmail(mFrom, mTo, mSubject, mBody, mAttachment: variant);
17835: function getTeamViewerID: string;
17836: Procedure RecurseDirectory(Dir:String; IncludeSubs:boolean; callback:TFileCallbackProcedure);
17837: Procedure RecurseDirectory2(Dir: String; IncludeSubs: boolean); 17838: procedure WinInet_HttpGet(const Url: string; Stream:TStream);
17839: procedure GetQrCode2(Width, Height: Word; Correct_Level: string; const Data: string; apath: string);
17840: function StartSocketService: Boolean;
17841: procedure StartSocketServiceForm;
17842: function GetFileList(FileList: TStringlist; apath: string): TStringlist;
17843: function GetFileList1(apath: string): TStringlist;
17844: procedure LetFileList(FileList: TStringlist; apath: string);
17845: procedure StartWeb(aurl: string);
17846: function GetTodayFiles(startdir, amask: string): TStringlist;
17847: function PortTCPIsOpen(dwPort : Word; ipAddressStr: String): boolean;
17848: function JavahashCode(val: string): Integer;
17849: procedure PostKeyEx32(key: Word; const shift: TShiftState; specialkey: Boolean);
17850: procedure SaveBytesToFile2(const Data: Sysutils.TBytes; const FileName: string);
17851: Procedure HideWindowForSeconds(secs: integer); {//3 seconds}
17852: Procedure HideWindowForSeconds2(secs: integer; apphandle, aself: TForm); {//3 seconds}
17853: Procedure ConvertToGray(Cnv: TCanvas);
17854: function GetFileDate(aFile:string; aWithTime:Boolean):string;
17855: procedure ShowMemory;
17856: function ShowMemory2: string;
17857: function getHostIP: string;
17858: procedure ShowBitmap(bmap: TBitmap);
17859: function GetOsVersionInfo: TOSVersionInfo;
                                                                   //thx to wischnewski
17860: function CreateDBGridForm(dblist: TStringList): TListbox;
17861:
17863: // News of 3.9.8 up
17864: Halt-Stop Program in Menu, WebServer2, Stop Event Recompile,
17865: Conversion Routines, Prebuild Forms, more RCData, DebugOutString
17866: CodeSearchEngine to search code patterns in /examples <Ctrl F3>
17867: JyChart - TJyChart Component - 2009 Public
17868: MemoryLeakReport in ini-file (MEMORYREPORT=Y)
17869: PerlRegEx PCRE obj lib included, Perl & Python Syntax Editor, bitbox3 logic example 17870: TAdoQuery.SQL.Add() fixed, ShLwAPI extensions, Indy HTTPHeader Extensions
17871: DMath DLL included incl. Demos
17872: Interface Navigator menu/View/Intf Navigator
17873: Unit Explorer menu/Debug/Units Explorer
17874: EKON 16 Slides ...\maxbox3\docs\utils Excel Export maXcel
17875: Tutorial 19 WinCOM with Arduino Tutorial 20 RegEx Coding
17876: Script History to 9 Files WebServer light /Options/Addons/WebServer 17877: Full Text Finder, JVSimLogic Simulator Package
17878: Halt-Stop Program in Menu, WebServer2, Stop Event
17879: Conversion Routines, Prebuild Forms, CodeSearch
17880: Halt-Stop Program in Menu, WebServer2, Stop Event Recompile,
17881: Conversion Routines, Prebuild Forms, more RCData, DebugOutString
17882: CodeSearchEngine to search code patterns in /examples <Ctrl F3> 17883: JvChart - TJvChart Component - 2009 Public, mXGames, JvgXMLSerializer, TJvPaintFX
17884: Compress-Decompress Zip, Services Tutorial 22, Synopse framework, PFDLib
17885: SynEdit API, Macro, Macro Recorder, DLL Spy, Configuration Tutorial
17886: IDE Reflection API, Session Service Shell S3
17887: additional SynEdit API, isKeyPressed Routine, Bookmarks, OpenToolsAPI Catalog (OTAC)
17888: Class TMonitor, Configuration Tutorial maxbox_starter25.pdf, Chess.dll Game
17889: arduino map() function, PMRandom Generator
17890: StBarCode Lib, StreamReaderClass, BarCode Package, Astro Package
17891: more ShellAPI, add 32 more units, Simulated Annealing, GenAlgo
17892: REST Test Lib, Multilang Component, Forth Interpreter
17893: New Macros, Sendmail (instant email), DevCUnits, Tetris Addon
17894: DCOM, MDAC, MIDI, TLS support, Posmarks, Utils Addon
17895: Routines for LaTeX/PS, Utils Addon, Indy Package3, TAR Archive, @Callbacks
17896: Routines for LaTeX/PS, Utils Addon, Indy Package3, TAR Archive, @Callbacks 17897: First LCL of Lazarus, CmdLine API, ToDo List, 36 more Units preCompiled 17898: QRCode Service, add more CFunctions like CDateTime of Synapse
17899: Gamma Functions, IndyPackage4, HotLog Threadable, FormTemplateLibrary FTL
17900: Nonlinear regression, ADO Workbench Addon, Assign fixing, IntfNavigator fixing, Applet
17901: 30 more Units preCompiled, QRCode Indy Service, more CFunctions like CFill or SRand
17902: RestartDialog, RTF, SQL Scanner, RichEdit, 15 more Units 17903: Tool Section, SOAP Tester, Hot Log Logger2, TCPPortScan, 28 more Units
17904: BOLD Package, Indy Package5, maTRIx. MATHEMAX 17905: SPS Utils WDOS, Plc BitBus (PetriNet), 40 more units 17906: emax layers: system-package-component-unit-class-function-block
17907: HighPrecision Timers, Indy Package6, AutoDetect, UltraForms
17908: Reversi, GOL, bugfixing, 8 more units, Tutorial 24 Clean Code
17909: Tutorial 18_3 RGB LED, OpenGL Geometry, maxpix, statictext
17910: OpenGL Game Demo: ..Options/Add Ons/Reversi 17911: IBUtils Refactor, InterBase Package, DotNet Routines (JvExControls)
17912: add 31 units, mX4 Introduction Paper, more Socket&Streams, ShortString Routines
17913: 7% performance gain (hot spot profiling)
17914: PEP -Pascal Education Program , GSM Module, CGI, PHP Runner 17915: add 42 + 22 (64 units), memcached database, autobookmark, Alcinoe PAC, IPC Lib
17916: Orpheus PAC, AsyncFree Library advapi32 samples, FirebirdExp+MySQL units
```

```
17917: FBX Lib, psAPI, SMS Cell Module, OpenGL, Borland Tools
17918:
17919: add routines in 3.9.7.5
17920: 097: procedure RIRegister_BarCodeScaner_Routines(S: TPSExec);
17921: 996: procedure RIRegister_DBCtrls_Routines(S: TPSExec);
17922: 069: procedure RIRegister_IdStrings_Routines(S: TPSExec);
17923: 516: procedure RIRegister_JclMultimedia_Routines(S: TPSExec);
         5: procedure RIRegister_PNGLoader_Routines(S: TPSExec);
17924: 2
17925: 374: procedure RIRegister_SerDlgs_Routines(S: TPSExec);
17926: 777: procedure RIRegister_LinarBitmap_Routines(S: TPSExec);
17927:
17929:
         SelftestPEM;
         SelfTestCFundamentIItils;
17930:
17931:
         SelfTestCFileUtils;
17932:
         SelfTestCDateTime;
17933:
         SelfTestCTimer;
17934:
         SelfTestCRandom
        17935:
17936:
17937:
17938:
         // Note: There's no need for installing a client certificate in the
17939:
                 webbrowser. The server asks the webbrowser to send a certificate but
17940:
        11
                 if nothing is installed the software will work because the server doesn't check to see if a client certificate was supplied. If you want you can install:
17941:
         11
17942:
17943:
                  file: c_cacert.p12
                  password: c_cakey
17944:
17945:
17946:
         TGraphicControl = class(TControl)
17947:
17948:
          FCanvas: TCanvas;
17949:
          procedure WMPaint(var Message: TWMPaint); message WM PAINT;
17950:
        protected
17951:
          procedure Paint; virtual;
           property Canvas: TCanvas read FCanvas;
17952:
17953:
         public
           constructor Create(AOwner: TComponent); override;
17954:
17955:
           destructor Destroy; override;
17956:
17957:
17958:
         TCustomControl = class(TWinControl)
17959:
         private
17960:
           FCanvas: TCanvas;
17961:
           procedure WMPaint(var Message: TWMPaint); message WM_PAINT;
         protected
17962:
17963:
          procedure Paint; virtual;
           procedure PaintWindow(DC: HDC); override;
17964:
17965:
           property Canvas: TCanvas read FCanvas;
17966:
         public
17967:
           constructor Create(AOwner: TComponent); override;
17968:
           destructor Destroy; override;
17969:
17970:
           RegisterPublishedProperties;
           ('ONCHANGE', 'TNotifyEvent', iptrw);
('ONCLICK', 'TNotifyEvent', iptrw);
17971:
17972:
           ('ONDBLCLICK', 'TNotifyEvent', iptrw);
17973:
           ('ONDERCER', 'INOCTIFYEVERT', 'IPTW);
('ONENTER', 'TNOCTIFYEVERT', iptrw);
('ONEXIT', 'TNOCTIFYEVERT', iptrw);
('ONKEYDOWN', 'TKeyEvent', iptrw);
('ONKEYPRESS', 'TKeyPressEvent', iptrw);
17974:
17975:
17976:
17977:
17982:
         // To stop the while loop, click on Options/Show Include (boolean switch)!
17983:
         Control a loop in a script with a form event:
17984:
        IncludeON; //control the while loop
17985:
         while maxform1. ShowInclude1.checked do begin //menu event Options/Show Include
17986:
17987: /
17989: //---
17990:
        using config file maxboxdef.ini
                                               menu/Help/Config File
17991:
17992: //*** Definitions for maXbox mX3 ***
17993: [FORM]
17994: LAST_FILE=E:\maxbox\maxbox\examples\140_drive_typedemo.txt //history up to 10 files
17995: FONTSIZE=14
17996: EXTENSION=txt
17997: SCREENX=1386
17998: SCREENY=1077
17999: MEMHEIGHT=350
18000: PRINTFONT=Courier New //GUI Settings
18001: LINENUMBERS=Y //line numbers at gutter in editor at left side
18002: EXCEPTIONLOG=Y //store excepts and success in 2 log files see below! - menu Debug/Show Last Exceptions
18003: EXECUTESHELL=Y //prevents execution of ExecuteShell() or ExecuteCommand()
18004: BOOTSCRIPT=Y
                      //enabling load a boot script
18005: MEMORYREPORT=Y //shows memory report on closing maXbox
```

```
//expand macros (see below) in code e.g. #path:E:\maxbox\maxbox3\docs\
//shows function list at the right side of editor
18006: MACRO=Y
18007: NAVIGATOR=N
18008: NAVWIDTH=350
                         //width of the right side interface list <CTRL L>
18009: AUTOBOOKMARK=Y //sets on all functions a bookmark to jump
18010: [WEB]
18011: IPPORT=8080
                         //for internal webserver - menu /Options/Add Ons/WebServer
18012: IPHOST=192.168.1.
18013: ROOTCERT=filepathY
18014: SCERT=filepathY
18015: RSAKEY=filepathy
18016: VERSIONCHECK=Y
18018: using Logfile: maxboxlog.log , Exceptionlogfile: maxboxerrorlog.txt
18019:
18020: Also possible to set report memory in script to override ini setting
18021: procedure Set_ReportMemoryLeaksOnShutdown(abo: boolean)
18023:
18024: After Change the ini file you can reload the file with ../Help/Config Update
18025:
18026: //-
18028: //-----
18029: //*** Definitions for maXMail ***
18030: //sendemail, HOST=mail.hover.com, PORT=465 (SSL)
18031: [MAXMAIL]
18032: HOST=getmail.softwareschule.ch
18033: USER=mailusername
18034: PASS=password
18035: PORT=110
18036: SSL=Y
18037: BODY=Y
18038: LAST=5
18039:
18040: ADO Connection String:
18041: Provider=MSDASOL; DSN=mx3base; Uid=sa; Pwd=admin
18042:
18043: OpenSSL Lib: unit ssl openssl lib;
18044: { $ IFDEF CIL }
18045: const
         onst
<del>{$IFDEF LINUX}</del>
DLLSSLName = 'libssl.so';
18046:
18047:
          DLLUtilName = 'libcrypto.so';
18048:
18049:
         DLLSSLName = 'ssleay32.dll';
DLLUtilName = 'libeay32.dll';
18050:
18051:
18052:
          { $ENDIF }
18053: {$ELSE}
18054:
       var
         {$IFNDEF MSWINDOWS}
   {$IFDEF DARWIN}
   DLLSSLName: string = 'libssl.dylib';
18055:
18056:
18057:
            DLLUtilName: string = 'libcrypto.dylib';
18058:
18059:
            { $ELSE }
            DLLSSLName: string = 'libssl.so';
DLLUtilName: string = 'libcrypto.so';
18060:
18061:
18062:
            {$ENDIF}
18063:
          { SELSE }
         DLLSSLName: string = 'ssleay32.dll';
DLLSSLName2: string = 'libssl32.dll';
DLLUtilName: string = 'libeay32.dll';
18064:
18065:
18066:
18067:
          {$ENDIF}
18068: { $ENDIF }
18069:
18070:
18071:
18072:
18074: //----
18075:
          asm #name #hostmAPSN2APSN211le, #head, max: APSN21: 04.01.2014 19:05:50
       E:\maxbox\maxbox3\docs\maxbox_extract_funclist399.txt end
18077:
18078: //Tag Macros
18079:
18080:
          asm #name, #date, #host, #path, #file, #head, #sign #tech #net end
18081:
18082: //Tag Macros
18083: 10188: SearchAndCopy(memol.lines, '#name', getUserNameWin, 11);
18084: 10189: SearchAndCopy(memol.lines, '#date', datetimetoStr(now), 11);
18085: 10190: SearchAndCopy(memol.lines, '#host', getComputernameWin, 11);
18086: 10191: SearchAndCopy(memo1.lines, '#path', fpath, 11);
18087: 10192: SearchAndCopy(memol.lines, '#file', fname, 11);
18088: 10199 SearchAndCopy(memo1.lines, '#fils', fname +' '+SHA1(Act_Filename), 11);
18089: 10193: SearchAndCopy(memo1.lines, '#locs', intToStr(getCodeEnd), 11);
18090: 10194: SearchAndCopy(memol.lines, '#perf', perftime, 11); 18091: 10195: SearchAndCopy(memol.lines, '#sign', Format('%s: %s: %s'
18092:
               [getUserNameWin, getComputernameWin, datetimetoStr(now)]
18093: 10196: SearchAndCopy(memol.lines, '#head',Format('%s: %s: %s %s
```

```
18094: 10197: [getUserNameWin, getComputernameWin, datetimetoStr(now), Act_Filename]),11);
                     [getUserNameWin, getComputernameWin, datetimetoStr(now), Act_Filename]),11);
18095:
18096: 10198: SearchAndCopy(memol.lines, '#tech',Format('perf: %s threads: %d %s %s',
18097: [perftime, numprocessthreads, getIPAddress(getComputerNameWin), timetoStr(time), mbversion]), 11);
18098: 10298: SearchAndCopy(memol.lines, '#net',Format('DNS: %s; local IPs: %s; local IP: %s',
                    [getDNS, GetLocalIPs, getIPAddress(getComputerNameWin)]), 10);
18099:
18100:
18101: //#tech!perf: 0:0:29.297 threads: 3 192.168.174.1 19:26:30
18102:
18103: //Replace Macros
            /Replace Macros
SearchAndCopy(memol.lines, '<TIME>', timetoStr(time), 6);
SearchAndCopy(memol.lines, '<DATE>', datetoStr(date), 6);
SearchAndCopy(memol.lines, '<PATH>', fpath, 6);
SearchAndCopy(memol.lines, '<EXEPATH>', EXEPATH, 9);
SearchAndCopy(memol.lines, '<FILE>', fname, 6);
SearchAndCopy(memol.lines, '<SOURCE>', ExePath+'Source', 8);
18104:
18105:
18106:
18107:
18108:
18109:
18110:
18111: 10198: SearchAndCopy(memo1.lines, '#tech'perf: threads: 2 192.168.1.53 19:05:50 3.9.9.84
                    [perftime, numprocess threads, getIPAddress(getComputerNameWin), timetoStr(time), mbversion]), \\ 11); \\
18112:
18113: //#tech!84perf: threads: 2 192.168.1.53 19:05:50 3.9.9.84
             SearchAndCopy(memo1.lines, 'maxbox_extract_funclist399.txt
18115:
18116: //---
18118: //----
18119:
18120:
                while I < sl.Count do begin
                   if MatchesMask(sl[I], '*/? TODO ([a-z0-9_]*#[1-9]#)*:*') then

if MatchesMask(sl[I], '*/? TODO (?*#?#)*:*') then
18121: //
18122:
                   BreakupToDo(Filename, sl, I, 'TODO', True, True) // full info TODO else if MatchesMask(sl[I], '*/? DONE (?*#?#)*:*') then
18124:
                   BreakupToDo(Filename, sl, I, 'DONE', True, True) // full info DONE else if MatchesMask(sl[I], '*/? TODO (#?#)*:*') then
18125:
18126:
                   BreakupToDo(Filename, sl, I, 'TODO', False, True) // only priority info TODO else if MatchesMask(sl[I], '*/? DONE (#?#)*:*') then
18127:
18128:
                   else if MatchesMask(sl[I], '*/? DONE (#?#|*:*') then
    BreakupToDo(Filename, sl, I, 'DONE', False, True) // only priority info DONE
else if MatchesMask(sl[I], '*/?*TODO*:*') then
    BreakupToDo(Filename, sl, I, 'TODO', False, False) // custom TODO
else if MatchesMask(sl[I], '*/?*DONE*:*') then
18129:
18130:
18131:
18132:
                      BreakupToDo(Filename, sl, I, 'DONE', False, False); // custom DONE
18133:
18134:
                   Inc(I);
18135:
                end;
18136:
18137:
18138: //---
18140: //-----
                                                                           {$OTAP} Open Tools API Catalog
18141:
            file : unit uPSI_fMain.pas;
18142:
            // Those functions concern the editor and preprocessor, all of the IDE
18143:
           Example: Call it with maxform1. InfolClick(self)
18144:
           Note: Call all Methods with maxForm1., e.g.:
                                            maxForm1.ShellStyle1Click(self);
18145:
18146:
18147: procedure SIRegister_fMain(CL: TPSPascalCompiler);
18148: begin
18149:
          Const('BYTECODE','String 'bytecode.txt'
           Const('PSTEXT','String PS Scriptfiles (*.txt)|*.TXT)'
Const('PSMODEL','String PS Modelfiles (*.uc)|*.UC
18150:
18151:
           Const('PSPASCAL','String PS Pascalfiles (*.pas)|*.PAS
Const('PSINC','String PS Includes (*.inc)|*.INC
18152:
18153:
           Const('DEFFILENAME','String 'firstdemo.txt
Const('DEFINIFILE','String 'maxboxdef.ini
18154:
18155:
18156:
            Const('EXCEPTLOGFILE','String 'maxboxerrorlog.txt
           Const('ALLFUNCTIONSLIST','String 'upsi_allfunctionslist.txt
Const('ALLFUNCTIONSLISTPDF','String 'maxbox_functions_all.pdf
Const('ALLOBJECTSLIST','String 'docs\VCL.pdf
Const('ALLRESOURCELIST','String 'docs\upsi_allresourcelist.txt
18157:
18158:
18159:
18160:
           Const ('ALLUNITLIST', 'String 'docs\maxbox3_9.xml');
Const ('INCLUDEBOX', 'String 'pas_includebox.inc
Const ('BOOTSCRIPT', 'String 'maxbootscript.txt
Const ('MBVERSION', 'String '3.9.9.94
18161:
18162:
18163:
18164:
18165:
            Const('VERSION','String'3.9.9.94
           Const('MBVER','String '399
Const('MBVERI','Integer'(399);
18166:
18167:
           Const('MBVERI','Integer'(39994);
Const('MBVERIALL','Integer'(39994);
Const('EXENAME','String 'maxbox3.exe
Const('MXSITE','String 'http://www.softwareschule.ch/maxbox.htm
Const('MXVERSIONFILE','String 'http://www.softwareschule.ch/maxvfile.txt
Const('MXINTERNETCHECK','String 'www.ask.com
18168:
18169:
18170:
18171:
18172:
           Const('MXMATL', 'String 'max@kleiner.com
Const('TAB','Char #$09);
Const('CODECOMPLETION','String 'bds_delphi.dci
18174:
18175:
18176: SIRegister_TMaxForm1(CL);
18177:
          end;
18178:
18179:
             with FindClass('TForm'), 'TMaxForm1') do begin
             memo2', 'TMemo', iptrw);
memo1', 'TSynMemo', iptrw);
18180:
                memo1',
18181:
18182:
                CB1SCList', 'TComboBox', iptrw);
```

```
18183:
                      mxNavigator', 'TComboBox', iptrw);
                     18184:
18185:
                                                                                          //3.9.6.4
18186:
18187:
18188:
                     PSScript', 'TPSScript', iptrw);
PS3DllPlugin', 'TPSDllPlugin', iptrw);
MainMenul', 'TMainMenu', iptrw);
Programl', 'TMenuItem', iptrw);
Compilel', 'TMenuItem', iptrw);
Filesl', 'TMenuItem', iptrw);
openl', 'TMenuItem', iptrw);
Save2', 'TMenuItem', iptrw);
Savebeforel', 'TMenuItem', iptrw);
Largefontl', 'TMenuItem', iptrw);
Largefontl', 'TMenuItem', iptrw);
SRytecodel', 'TMenuItem', iptrw);
18189:
18190:
18191:
18192:
18193:
18195:
18196:
18197:
                      Largefontl', 'TMenuItem', iptrw);
sBytecodel', 'TMenuItem', iptrw);
18198:
18199:
                      Saveas3', 'TMenuItem', iptrw);
Clear1', 'TMenuItem', iptrw);
18200:
18201:
18202:
                      Slinenumbers1', 'TMenuItem', iptrw);
                      About1', 'TMenuItem', iptrw);
Search1', 'TMenuItem', iptrw);
18203:
18204:
                      SynPasSyn1', 'TSynPasSyn', iptrw);
memo1', 'TSynMemo', iptrw);
SynEditSearch1', 'TSynEditSearch', iptrw);
18205:
18206:
18207:
                     SynEditSearch1', 'TSynEditSearch', iptrw);
WordWrap1', 'TMenuItem', iptrw);
XPManifest1', 'TXPManifest', iptrw);
SearchNext1', 'TMenuItem', iptrw);
Replace1', 'TMenuItem', iptrw);
PSImport_Controls1', 'TPSImport_Controls', iptrw);
PSImport_Classes1', 'TPSImport_Classes', iptrw);
18208:
18209:
18210:
18211:
18212:
18213:
                      ShowIncludel', 'TMenuItem', iptrw);
SynEditPrintl', 'TSynEditPrint', iptrw);
18214:
18215:
                     SynEditPfint1, 'TypheditPfint2, 'ptfw
Printout1', 'TMenuItem', iptrw);
mnPrintColors1', 'TMenuItem', iptrw);
dlgFilePrint', 'TPrintDialog', iptrw);
dlgPrintFont1', 'TFontDialog', iptrw);
mnuPrintFont1', 'TMenuItem', iptrw);
18216:
18218:
18219:
18220:
                      Include1', 'TMenuItem', iptrw);
CodeCompletionList1', 'TMenuItem', iptrw);
18221:
18222:
                      IncludeList1', 'TMenuItem', iptrw);
ImageList1', 'TImageList', iptrw);
ImageList2', 'TImageList', iptrw);
18223:
18224:
18225:
                      Imagelist2 , Imagelist , -F---
CoolBarl', 'TCoolBar', iptrw);
ToolBarl', 'TToolBar', iptrw);
tbtnLoad', 'TToolButton', iptrw);
18226:
18227:
18228:
                      ToolButton2', 'TToolButton', iptrw);
tbtnFind', 'TToolButton', iptrw);
18229:
                      tbtnCompile', 'TToolButton', iptrw);
tbtnTrans', 'TToolButton', iptrw);
tbtnUseCase', 'TToolButton', iptrw);
18231:
18232:
18233:
                                                                                                     //3.8
                      toolbtnTutorial', 'TToolButton', iptrw);
18234:
                      tbtn6res', 'TToolButton', iptrw);
18235:
                      ToolButton5', 'TToolButton', iptrw);
ToolButton1', 'TToolButton', iptrw);
ToolButton3', 'TToolButton', iptrw);
18236:
18237:
18238:
                      statusBarl', 'TStatusBar', iptrw);
SaveOutputl', 'TMenuItem', iptrw);
18239:
18240:
                      Saveoutput; , interaction, , iptrw);

Closel', 'TMenuItem', iptrw);

Manuall', 'TMenuItem', iptrw);

About2', 'TMenuItem', iptrw);
18241:
18242:
18243:
18244:
18245:
                      loadLastfile1', 'TMenuItem', iptrw);
                      imglogo', 'TImage', iptrw);
cedebug', 'TPSScriptDebugger', iptrw);
18246:
18247:
                      debugPopupMenul', 'TPopupMenu', iptrw);
BreakPointMenu', 'TMenuItem', iptrw);
18249:
                     Decompile1', 'TMenuItem', iptrw);
StepIntol', 'TMenuItem', iptrw);
StepOut1', 'TMenuItem', iptrw);
Reset1', 'TMenuItem', iptrw);
18250:
18251:
18252:
18253:
18254:
                      DebugRun1', 'TMenuItem', iptrw);
                      PSImport_ComObj1', 'TPSImport_ComObj', iptrw);
PSImport_StdCtrls1', 'TPSImport_StdCtrls', iptrw);
18255:
18256:
                      PSImport_Forms1', 'TPSImport_Forms', iptrw);
18257:
                      PSImport_DateUtils1', 'TPSImport_DateUtils', iptrw);
18258:
                      tutorial4', 'TMenuItem', iptrw);
ExporttoClipboard1', 'TMenuItem', iptrw);
ImportfromClipboard1', 'TMenuItem', iptrw);
18259:
18260:
18261:
                      N4', 'TMenuItem', iptrw);
N5', 'TMenuItem', iptrw);
18262:
18263:
                      N6', 'TMenuItem', iptrw);
18264:
                      ImportfromClipboard2', 'TMenuItem', iptrw);
tutoriall', 'TMenuItem', iptrw);
18265:
18266:
                      ThenuItem', iptrw);
ShowSpecCharsl', 'TMenuItem', iptrw);
OpenDirectoryl', 'TMenuItem', iptrw);
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tbtnUseCase', 'TToolButton', iptrw);
18270:
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N11', 'TMenuItem', iptrw);
SaveScreenshot', 'TMenuItem', iptrw);
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Console1', 'TMenuItem', iptrw);
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XMLSyntax1', 'TMenuItem', iptrw);
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SyntaxCheck1', 'TMenuItem', iptrw);
Tutorial10Statistics1', 'TMenuItem', iptrw);
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AndroidDumpl', 'TMenuItem', iptrw);
GotoEndl', 'TMenuItem', iptrw);
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Tutoriall1Forms1', 'TMenuItem', iptrw);
Tutorial12SQL1', 'TMenuItem', iptrw);
ResourceExplore1', 'TMenuItem', iptrw);
Info1', 'TMenuItem', iptrw);
N12', 'TMenuItem', iptrw);
CryptoRov1', 'TMenuItem', iptrw);
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                           N13', 'TMenuItem', iptrw);
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N4GewinntGame1', 'TMenuItem', iptrw);
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Tutorial14Async1', 'TMenuItem', iptrw);
Lessons15Review1', 'TMenuItem', iptrw);
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                           Lessonsibkevlewi', 'TMenuitem', iptrw);
SynPHPSynl', 'TSynPHPSyn', iptrw);
PHPSyntaxl', 'TMenuItem', iptrw);
Breakpointl', 'TMenuItem', iptrw);
SerialRS2321', 'TMenuItem', iptrw);
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18354:
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                           N14', 'TMenuItem', iptrw);
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CSyntax2', 'TMenuItem', iptrw);
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18357:
                           Calculator1', 'TMenuItem', iptrw);
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ToolButton8', 'TToolButton', iptrw);
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18360:
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N16', 'TMenuItem', iptrw);
18362:
18363:
                       N16', 'TMenuItem', iptrw);
ControlBarl', 'TControlBar', iptrw);
ToolBar2', 'TToolBar', iptrw);
BtnOpen', 'TToolButton', iptrw);
BtnSave', 'TToolButton', iptrw);
BtnPrint', 'TToolButton', iptrw);
BtnColors', 'TToolButton', iptrw);
18364 .
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BtnRotateRight', 'TToolButton', iptrw);
BtnFullSize', 'TToolButton', iptrw);
18370:
18371:
                        BtnFitToWindowSize', 'TToolButton', iptrw);
BtnZoomMinus', 'TToolButton', iptrw);
BtnZoomPlus', 'TToolButton', iptrw);
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18375:
                        Panell', 'TPanel', iptrw);
LabelBrettgroesse', 'TLabel', iptrw);
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ImageListNormal', 'TImageList', iptrw);
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spbtnexample', 'TSpeedButton', iptrw);
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18380:
18381:
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spbsaveas', 'TSpeedButton', iptrw);
imglogobox', 'TImage', iptrw);
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EnlargeFont2', 'TMenuItem', iptrw);
ShrinkFont1', 'TMenuItem', iptrw);
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                        ThreadDemol', 'TMenuItem', iptrw);
HEXEditorl', 'TMenuItem', iptrw);
HEXViewl', 'TMenuItem', iptrw);
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18389:
                        HEXInspect1', 'TMenuItem', iptrw);
18390:
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SynExporterHTML1', 'TSynExporterHTML', iptrw);
ExporttoHTML1', 'TMenuItem', iptrw);
ClassCount1', 'TMenuItem', iptrw);
HTMLOutput1', 'TMenuItem', iptrw);
HEXEditor2', 'TMenuItem', iptrw);
Minesweeper1', 'TMenuItem', iptrw);
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PicturePuzzlel', 'TMenuItem', iptrw);
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                       Dependencywalker1', 'TMenuItem', ip

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View1', 'TMenuItem', iptrw);

mnToolbar1', 'TMenuItem', iptrw);

mnStatusbar2', 'TMenuItem', iptrw);

mnConsole2', 'TMenuItem', iptrw);

mnSplitter2', 'TMenuItem', iptrw);

WebServer1', 'TMenuItem', iptrw);

Tutorial17Server1', 'TMenuItem';
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18402:
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18407:
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Tutorial18Arduino1', 'TMenuItem', iptrw);
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PerlSyntax1', 'TMenuItem', iptrw);
18411:
18412:
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SynPythonSyn1', 'TSynPythonSyn', iptrw);
PythonSyntax1', 'TMenuItem', iptrw);
DMathLibrary1', 'TMenuItem', iptrw);
IntfNavigator1', 'TMenuItem', iptrw);
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18416:
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ShrinkFontConsole1', 'TMenuItem', iptrw);
SetInterfaceList1', 'TMenuItem', iptrw);
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18419:
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intfAdd1', 'TMenuItem', iptrw);
18420:
18421:
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intfRefactor1', 'TMenuItem', iptrw);
18422:
18423:
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Tutoriall9COMArduinol', 'TMenuItem', iptrw);
18424:
18425:
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N18', 'TMenuItem', iptrw);
18427:
                        ManualE1', 'TMenuItem', iptrw);
18428:
                        FullTextFinder1', 'TMenuItem', iptrw);
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FractalDemo1', 'TMenuItem', iptrw);
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Tutorial0Function1', 'TMenuItem', iptrw);
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OpenExamples1', 'TMenuItem', iptrw);
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Halt1', 'TMenuItem', iptrw);
18437:
18438:
                        ratt1, 'menultem', iptrw);
CodeSearch1', 'TMenultem', iptrw);
SynRubySyn1', 'TSynRubySyn', iptrw);
RubySyntax1', 'TMenuItem', iptrw);
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SynUNIXShellScriptSyn', 'TSynUNIXShellScriptSyn', iptrw);
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                        Preview1', 'TMenuItem', iptrw);
Tutorial22Services1', 'TMenuItem', iptrw);
Tutorial23RealTime1', 'TMenuItem', iptrw);
18447:
18448:
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Configuration1', 'TMenuItem', iptrw);
18450:
18451:
              MP3Player1', 'TMenuItem', iptrw);
              DLLSpy1', 'TMenuItem', iptrw);
18452:
              SynURIOpener1', 'TSynURIOpener', iptrw);
18453 .
              SynURISyn1', 'TSynURISyn', iptrw);
18454:
              URILinksClicks1', 'TMenuItem', iptrw);
EditReplace1', 'TMenuItem', iptrw);
GotoLine1', 'TMenuItem', iptrw);
18455:
18456:
18457:
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18458:
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SortlIntflist', 'TMenuItem', iptrw);
Redo1', 'TMenuItem', iptrw);
18459:
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18462:
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              Tutorial2SConfiguration1', 'TMenuItem', iptrw);
IndentSelection1', 'TMenuItem', iptrw);
UnindentSection1', 'TMenuItem', iptrw);
18463:
18464:
18465:
              SkyStyle1', 'TMenuItem', iptrw);
N19', 'TMenuItem', iptrw);
CountWords1', 'TMenuItem', iptrw);
18466:
18467:
18468:
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18469:
              Bookmark11', 'TMenuItem', iptrw);
N20', 'TMenuItem', iptrw);
18470:
18471:
              Bookmark21', 'TMenuItem', iptrw);
Bookmark31', 'TMenuItem', iptrw);
Bookmark41', 'TMenuItem', iptrw);
18472:
18473:
18474:
18475:
              SynMultiSyn1', 'TSynMultiSyn', iptrw);
18476:
               \begin{array}{lll} \textbf{Procedure} & \texttt{IFPS3ClassesPlugin1CompImport( Sender : TObject; } x : \texttt{TPSPascalCompiler)} \\ \textbf{Procedure} & \texttt{IFPS3ClassesPlugin1ExecImport(Sender: TObject; Exec: TPSExec; } x : \texttt{TPSRuntimeClassImporter)}; \end{array} 
18477:
18478:
              Procedure PSScriptCompile( Sender : TPSScript)
18479:
18480:
              Procedure Compile1Click( Sender : TObject)
18481:
              Procedure PSScriptExecute( Sender : TPSScript)
              Procedure open1Click( Sender : TObject)
Procedure Save2Click( Sender : TObject)
18482:
18483:
              Procedure SavebeforelClick( Sender: TObject)
Procedure LargefontlClick( Sender: TObject)
18484:
18485:
              Procedure FormActivate( Sender : TObject)
18486:
              Procedure SBytecodelClick( Sender : TObject)
18487:
18488:
              Procedure FormKeyPress( Sender : TObject; var Key : Char)
18489:
              Procedure Saveas3Click( Sender : TObject)
18490:
              Procedure Clear1Click( Sender : TObject)
              Procedure Slinenumbers1Click( Sender : TObject)
18491:
              Procedure About1Click( Sender : TObject)
18492:
              Procedure Search1Click( Sender : TObject)
18493:
              Procedure FormCreate( Sender : TObject)
18494:
18495:
              Procedure MemolReplaceText(Sender:TObject;const ASearch,AReplace:String;Line,Column:Integer;
18496:
                                                                              var Action : TSynReplaceAction)
              Procedure MemolStatusChange( Sender : TObject; Changes : TSynStatusChanges)
18498:
              Procedure WordWrap1Click( Sender : TObject)
              Procedure SearchNext1Click( Sender : TObject)
18499:
              Procedure Replace1Click( Sender : TObject)
18500:
18501:
              Function PSScriptNeedFile(Sender:TObject;const OrginFileName:String;var FName,Output:String):Bool;
              Procedure ShowInclude1Click( Sender : TObject)
18502:
18503:
              Procedure PrintoutlClick( Sender : TObject)
              Procedure mnuPrintFont1Click( Sender : TObject)
18504:
              Procedure Include1Click( Sender : TObject)
18505:
              Procedure FormDestroy( Sender : TObject)
18506:
              Procedure FormClose( Sender : TObject; var Action : TCloseAction)
18507:
18508:
              Procedure UpdateViewlClick( Sender : TObject)
Procedure CodeCompletionListlClick( Sender : TObject)
18509:
              Procedure SaveOutputlClick( Sender : TObject)
18510:
18511:
              Procedure ExportClipboardlClick( Sender : TObject)
              Procedure CloselClick( Sender : TObject)
Procedure ManuallClick( Sender : TObject)
18512:
18513:
              Procedure LoadLastFilelClick( Sender : TObject)
Procedure MemolChange( Sender : TObject)
18514:
18515:
              Procedure Memolchange(Sender: Tobject)
Procedure DecompilelClick(Sender: TObject)
Procedure StepIntolClick(Sender: TObject)
Procedure StepOutlClick(Sender: TObject)
Procedure ResetlClick(Sender: TObject)
Procedure cedebugAfterExecute(Sender: TPSScript)
18516:
18517:
18518:
18519:
18520:
18521:
              Procedure cedebugBreakpoint(Sender:TObject; const FileName:String; Position,Row, Col: Cardinal)
18522:
              Procedure cedebugCompile( Sender : TPSScript)
Procedure cedebugExecute( Sender : TPSScript)
18523:
18524:
              Procedure cedebugIdle( Sender : TObject)
18525:
              Procedure cedebugLineInfo( Sender:TObject;const FileName:String; Position, Row, Col : Cardinal)
              Procedure MemolSpecialLineColors(Sender: TObject; Line:Int; var Special:Boolean; var FG,BG:TColor);
Procedure BreakPointMenuClick( Sender : TObject)
18526:
18527:
              Procedure DebugRunlClick( Sender : TObject)
18528:
              Procedure tutorial4Click( Sender : TObject)
18530:
              Procedure ImportfromClipboard1Click( Sender : TObject)
18531:
              Procedure ImportfromClipboard2Click( Sender : TObject)
              Procedure tutoriallClick( Sender : TObject)
Procedure ShowSpecCharslClick( Sender : TObject)
18532:
18533:
              Procedure StatusBarlDblClick( Sender : TObject)
18534:
18535:
              Procedure PSScriptLine( Sender : TObject)
              Procedure OpenDirectorylClick( Sender : TObject)
18536:
18537:
              Procedure procMessClick( Sender : TObject)
              Procedure tbtnUseCaseClick( Sender : TObject)
```

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18539:
           Procedure EditFont1Click( Sender : TObject)
18540:
           Procedure tutorial21Click( Sender : TObject)
            Procedure tutorial31Click( Sender : TObject)
18541:
18542
            Procedure HTMLSyntax1Click( Sender : TObject)
18543:
           Procedure ShowInterfaces1Click( Sender : TObject)
18544:
           Procedure Tutorial5Click( Sender : TObject)
18545:
           Procedure ShowLastException1Click( Sender : TObject)
           Procedure PlayMP31Click( Sender : TObject)
Procedure AllFunctionsList1Click( Sender : TObject)
18546:
18547:
18548:
           Procedure texSyntax1Click( Sender : TObject)
Procedure GetEMails1Click( Sender : TObject)
18549:
           procedure DelphiSitelClick(Sender: TObject);
18551:
           procedure TerminalStyle1Click(Sender: TObject);
           procedure ReadOnlylClick(Sender: TObject);
procedure ShellStylelClick(Sender: TObject);
18552:
18553:
18554:
           procedure ConsolelClick(Sender: TObject);
                                                              //3.2
           procedure BigScreen1Click(Sender: TObject);
18555:
18556:
           procedure Tutorial91Click(Sender: TObject);
           procedure SaveScreenshotClick(Sender: TObject);
18557:
18558:
           procedure Tutorial101Click(Sender: TObject);
           procedure SQLSyntax1Click(Sender: TObject);
18559:
18560:
           procedure XMLSyntax1Click(Sender: TObject);
18561:
           procedure ComponentCount1Click(Sender: TObject);
           procedure NewInstancelClick(Sender: TObject);
18562:
           procedure CSyntax1Click(Sender: TObject);
18563:
18564:
           procedure Tutorial6Click(Sender: TObject);
18565:
           procedure New1Click(Sender: TObject);
           procedure AllObjectsList1Click(Sender: TObject);
18566:
           procedure LoadBytecodelClick(Sender: TObject);
18567:
           procedure CipherFile1Click(Sender: TObject);
18568:
18569:
           procedure NewInstancelClick(Sender: TObject);
18570:
            procedure toolbtnTutorialClick(Sender: TObject);
           procedure MemorylClick(Sender: TObject);
18571:
           procedure JavaSyntax1Click(Sender: Tobject);
procedure SyntaxCheck1Click(Sender: Tobject);
18572:
18573:
18574:
            procedure ScriptExplorer1Click(Sender: TObject);
18575:
           procedure FormOutput1Click(Sender: TObject); //V3.6
           procedure GotoEndlClick(Sender: TObject);
18576:
18577:
           procedure AllResourceList1Click(Sender: TObject);
18578:
           procedure tbtn6resClick(Sender: TObject); //V3.7
18579:
            procedure InfolClick(Sender: TObject);
           procedure Tutorial10Statistics1Click(Sender: TObject);
18580:
18581:
           procedure Tutorial11Forms1Click(Sender: TObject);
           procedure Tutorial12SQL1Click(Sender: TObject);
18582:
18583:
           procedure ResourceExplore1Click(Sender: TObject);
18584:
           procedure InfolClick(Sender: TObject);
           procedure CryptoBox1Click(Sender: TObject);
18585:
           procedure ModulesCount1Click(Sender: TObject);
18586:
18587:
           procedure N4GewinntGamelClick(Sender: TObject);
18588:
           procedure PHPSyntax1Click(Sender: TObject);
18589:
           procedure SerialRS2321Click(Sender: TObject);
           procedure CSyntax2Click(Sender: TObject);
18590:
           procedure Calculator1Click(Sender: TObject);
18591:
18592:
           procedure Tutorial13Ciphering1Click(Sender: TObject);
           procedure Tutorial14AsynclClick(Sender: TObject);
procedure PHPSyntax1Click(Sender: TObject);
18593:
18594:
           procedure BtnZoomPlusClick(Sender: TObject);
18595:
18596:
           procedure BtnZoomMinusClick(Sender: TObject);
18597:
            procedure btnClassReportClick(Sender: TObject);
           procedure ThreadDemolClick(Sender: TObject);
18598:
           procedure HEXViewlClick(Sender: TObject);
18599:
18600:
           procedure ExporttoHTML1Click(Sender: TObject);
18601:
           procedure Minesweeper1Click(Sender: TObject);
18602:
           procedure PicturePuzzle1Click(Sender: TObject); //V3.9
           procedure sbvclhelpClick(Sender: TObject);
procedure DependencyWalkerlClick(Sender: TObject);
18603:
18604:
18605:
           procedure CBlSCListDrawItem(Control:TWinControl;Index:Int;aRect:TRect;State:TOwnerDrawState);
            procedure WebScanner1Click(Sender: TObject);
18606:
18607:
           procedure mnToolbar1Click(Sender: TObject);
18608:
           procedure mnStatusbar2Click(Sender: TObject);
           procedure mnConsole2Click(Sender: TObject);
18609:
18610:
            procedure mnCoolbar2Click(Sender: TObject);
18611:
            procedure mnSplitter2Click(Sender: TObject);
18612:
           procedure WebServer1Click(Sender: TObject);
           procedure PerlSyntax1Click(Sender: TObject);
18613:
18614:
           procedure PythonSyntax1Click(Sender: TObject);
18615:
            procedure DMathLibrary1Click(Sender: TObject);
           procedure IntfNavigator1Click(Sender: TObject);
18616:
           procedure FullTextFinder1Click(Sender: TObject);
18617:
            function AppName: string;
18619:
            function ScriptName: string;
18620:
           function LastName: string;
18621:
           procedure FractalDemo1Click(Sender: TObject);
           procedure SimuLogBox1Click(Sender: TObject);
18622:
           procedure OpenExamples1Click(Sender: TObject);
18623:
18624:
           procedure Halt1Click(Sender: TObject);
           procedure Stop;
18625:
18626:
            procedure CodeSearch1Click(Sender: TObject);
           procedure RubySyntax1Click(Sender: TObject);
```

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18628:
           procedure UndolClick(Sender: TObject);
18629:
           procedure LinuxShellScript1Click(Sender: TObject);
           procedure WebScannerDirect(urls: string);
           procedure WebScanner(urls: string);
18631:
           procedure LoadInterfaceList2;
18632:
18633:
           procedure DLLSpy1Click(Sender: TObject);
           procedure MemolDblClick(Sender: TObject);
18634:
           procedure URILinksClicks1Click(Sender: TObject);
18635:
           procedure GotoLinelClick(Sender: TObject);
18636:
18637:
           procedure ConfigFile1Click(Sender: TObject);
           Procedure SortIntflistClick( Sender : TObject)
Procedure RedolClick( Sender : TObject)
18638:
18640:
           Procedure Tutorial24CleanCode1Click( Sender : TObject)
           Procedure IndentSelection1Click( Sender : TObject)
Procedure UnindentSection1Click( Sender : TObject)
18641:
18642:
18643:
           Procedure SkyStyle1Click( Sender : TObject)
           Procedure CountWords1Click( Sender : TObject)
18645:
           Procedure MemolPlaceBookmark( Sender : TObject; var Mark : TSynEditMark)
           Procedure MemolGutterClick(Sender:TObject;Button:TMouseButton;X,Y,Line:Integer;Mark:TSynEditMark);
18646:
18647:
           Procedure Bookmark11Click( Sender : TObject)
           Procedure Bookmark21Click( Sender :
18648:
                                                  TObject
18649:
           Procedure Bookmark31Click( Sender : TObject)
18650:
           Procedure Bookmark41Click( Sender : TObject)
18651:
           Procedure SynMultiSyn1CustomRange(Sender:TSynMultiSyn;Operation:TRangeOperation;var Range:Pointer);
           'STATMemoryReport', 'boolean', iptrw);
'IPPort', 'integer', iptrw);
'COMPort', 'integer', iptrw);
18652:
18653:
18654:
           'lbintflist', 'TListBox', iptrw);
Function GetStatChange : boolean
18655:
18656:
           Procedure SetStatChange( vstat : boolean)
18658:
           Function GetActFileName : string
           Procedure SetActFileName( vname: string)
Function GetLastFileName: string
18659:
18660:
18661:
           Procedure SetLastFileName( vname : string)
           Procedure WebScannerDirect( urls : string)
18663:
           Procedure LoadInterfaceList2
18664:
           Function GetStatExecuteShell : boolean
18665:
           Procedure DoEditorExecuteCommand( EditorCommand: word)
18666:
           function GetActiveLineColor: TColor
           procedure SetActiveLineColor(acolor: TColor)
18667:
18668:
           procedure ScriptListbox1Click(Sender: TObject);
           procedure Memo2KeyPress(Sender: TObject; var Key: Char);
18669:
18670:
           procedure EnlargeGutter1Click(Sender: TObject);
18671:
           procedure Tetris1Click(Sender: TObject);
18672:
           procedure ToDoList1Click(Sender: TObject);
           procedure ProcessList1Click(Sender: TObject);
18673:
           procedure MetricReport1Click(Sender: TObject);
18674:
           procedure ProcessList1Click(Sender: TObject);
18676:
           procedure TCPSockets1Click(Sender: TObject);
18677:
           procedure ConfigUpdate1Click(Sender: TObject);
           procedure ADOWorkbench1Click(Sender: TObject);
18678:
18679:
           procedure SocketServer1Click(Sender: TObject);
           procedure FormDemolClick(Sender: TObject);
18680:
18681:
           procedure Richedit1Click(Sender: TObject);
           procedure SimpleBrowser1Click(Sender: TObject);
18682:
           procedure DOSShell1Click(Sender: TObject);
18683:
           procedure SynExport1Click(Sender: TObject);
18684:
           procedure ExporttoRTF1Click(Sender: TObject);
18685:
18686:
           procedure FormCloseQuery(Sender: TObject; var CanClose: Boolean);
           procedure SOAPTester1Click(Sender: TObject);
18687:
18688:
           procedure Sniffer1Click(Sender: TObject);
18689:
           procedure AutoDetectSyntax1Click(Sender: TObject);
18690:
           procedure FPlot1Click(Sender: TObject);
           procedure PasStyle1Click(Sender: TObject);
18691:
           procedure Tutorial183RGBLED1Click(Sender: TObject);
18692:
           procedure ReversilClick(Sender: TObject);
18694:
           procedure ManualmaXbox1Click(Sender: TObject);
18695:
           procedure BlaisePascalMagazine1Click(Sender: TObject);
18696:
           procedure AddToDolClick(Sender: TObject);
18697:
           procedure CreateGUID1Click(Sender: TObject);
           procedure Tutorial27XML1Click(Sender: TObject);
18698:
18699:
           procedure CreateDLLStub1Click(Sender: TObject);
18700:
           procedure Tutorial28DLL1Click(Sender: TObject);');
18701:
           procedure ResetKevPressed;');
18702:
           procedure FileChanges1Click(Sender: TObject);'
18703:
           procedure OpenGLTrylClick(Sender: TObject);');
           procedure AllUnitListIClick(Sender: Tobject);');
procedure Tutorial29UMLClick(Sender: Tobject);
18704:
18705:
18706:
           procedure CreateHeader1Click(Sender: TObject);
18708:
18710:
       //---
18711: procedure SIRegister_TCustomSynEdit(CL: TPSPascalCompiler);
18712: begin
18713:
         //with RegClassS(CL,'TCustomControl', 'TCustomSynEdit') do
         with FindClass('TCustomControl'),'TCustomSynEdit') do begin
   Constructor Create( AOwner : TComponent)
18714:
1.8715:
18716:
           SelStart', 'Integer', iptrw);
```

```
18717:
            SelEnd', 'Integer', iptrw); AlwaysShowCaret', 'Boolean', iptrw);
18718:
            Procedure UpdateCaret
            Procedure AddKey(Command: TSynEditorCommand;Key1:word;SS1:TShiftState; Key2:word;SS2:TShiftState);
18720 •
            Procedure AddKey(Command: TSynEditorCommand;Key1:word;SS1:TShiftState; Key2: word;SS2:TShiftState);
18721:
            Procedure BeginUndoBlock
18722:
            Procedure BeginUpdate
            Function CaretInView : Boolean
18723:
18724:
            Function CharIndexToRowCol( Index : integer) : TBufferCoord
18725:
            Procedure Clear
18726:
            Procedure ClearAll
18727:
            Procedure ClearBookMark( BookMark : Integer)
18728:
            Procedure ClearSelection
18729:
            Procedure CommandProcessor( Command : TSynEditorCommand; AChar : char; Data : pointer)
18730:
            Procedure ClearUndo
18731:
            Procedure CopyToClipboard
18732:
            Procedure CutToClipboard
18733:
            Procedure DoCopyToClipboard( const SText : string)
18734:
            Procedure EndUndoBlock
            Procedure EndUpdate
18735:
18736:
            Procedure EnsureCursorPosVisible
18737:
            Procedure EnsureCursorPosVisibleEx( ForceToMiddle : Boolean)
            Procedure FindMatchingBracket
18738:
18739:
            \textbf{Function} \ \ \texttt{GetMatchingBracket} \ : \ \ \texttt{TBufferCoord}
18740:
            Function GetMatchingBracketEx( const APoint : TBufferCoord) : TBufferCoord
            Procedure ExecuteCommand( Command: TSynEditorCommand; AChar: char; Data: pointer)
18741:
18742:
            Function GetBookMark( BookMark : integer; var X, Y : integer) : boolean
18743:
            Function GetHighlighterAttriAtRowCol( const XY: TBufferCoord; var Token : string; var Attri
18744:
                        : TSynHighlighterAttributes) : boolean
18745:
            Function GetHighlighterAttriAtRowColEx( const XY : TBufferCoord; var Token : string;
18746:
                        var TokenType, Start : Integer; var Attri:TSynHighlighterAttributes):boolean
18747:
            \textbf{Function} \ \ \texttt{GetPositionOfMouse} ( \ \ \textbf{out} \ \ \texttt{aPos} \ : \ \ \texttt{TBufferCoord}) \ : \ \ \texttt{Boolean}
            Function GetWordAtRowCol( const XY : TBufferCoord) : string
Procedure GotoBookMark( BookMark : Integer)
18748:
18749:
            Procedure GotoLineAndCenter( ALine : Integer)
18750:
            Function IdentChars : TSynIdentChars
18751:
18752:
            Procedure InvalidateGutter
18753:
            Procedure InvalidateGutterLine( aLine : integer)
            Procedure InvalidateGutterLines( FirstLine, LastLine : integer)
Procedure InvalidateLine( Line : integer)
18754:
18755:
18756:
            Procedure InvalidateLines( FirstLine, LastLine : integer)
18757:
            Procedure InvalidateSelection
            Function IsBookmark( BookMark : integer) : boolean
18758:
            Function IsPointInSelection( const Value : TBufferCoord) : boolean
18759:
18760:
            Function BufferToDisplayPos( const p : TBufferCoord) : TDisplayCoord Function DisplayToBufferPos( const p : TDisplayCoord) : TBufferCoord Function LineToRow( aLine : integer) : integer
18761:
18762:
18763:
            Function RowToLine( aRow : integer) : integer
            Function NextWordPos: TBufferCoord
Function NextWordPosEx( const XY: TBufferCoord): TBufferCoord
18765:
18766:
18767:
            Procedure PasteFromClipboard
18768:
            Function WordStart : TBufferCoord
            Function WordStartEx( const XY : TBufferCoord) : TBufferCoord
18769:
18770:
            Function WordEnd : TBufferCoord
            Function WordEndEx( const XY : TBufferCoord) : TBufferCoord Function PrevWordPos : TBufferCoord
18771:
18772:
            Function PrevWordPosEx( const XY : TBufferCoord) : TBufferCoord
18773:
18774:
            Function PixelsToRowColumn( aX, aY : integer) : TDisplayCoord
18775:
            Function PixelsToNearestRowColumn( aX, aY : integer)
                                                                          : TDisplayCoord
18776:
            Procedure Redo
18777:
            Procedure RegisterCommandHandler(const AHandlerProc:ThookedCommandEvent;AHandlerData:pointer));
18778:
            Function RowColumnToPixels( const RowCol : TDisplayCoord) : TPoint
18779:
            Function RowColToCharIndex( RowCol : TBufferCoord) : integer
18780:
            Function SearchReplace( const ASearch, AReplace:string; AOptions:TSynSearchOptions): integer
18781:
            Procedure SelectAll
            Procedure SetBookMark( BookMark: Integer; X: Integer; Y: Integer)
18782:
18783:
            Procedure SetCaretAndSelection( const ptCaret, ptBefore, ptAfter: TBufferCoord)
18784:
            Procedure SetDefaultKeystrokes
18785:
            Procedure SetSelWord
            Procedure SetWordBlock( Value : TBufferCoord)
18786:
18787:
            Procedure Undo
            Procedure UnlockUndo
18788:
18789:
            Procedure UnregisterCommandHandler( AHandlerProc : THookedCommandEvent)
Procedure AddKeyUpHandler( aHandler : TKeyEvent)
18790:
18791:
            Procedure RemoveKeyUpHandler( aHandler : TKeyEvent)
18792:
            Procedure AddKeyDownHandler( aHandler : TKeyEvent)
            Procedure RemoveKeyDownHandler( aHandler : TKeyEvent)
Procedure AddKeyPressHandler( aHandler : TKeyPressEvent)
18793:
18794:
18795:
            Procedure RemoveKeyPressHandler( aHandler : TKeyPressEvent)
            Procedure AddFocusControl( aControl: TWinControl)
Procedure RemoveFocusControl( aControl: TWinControl)
Procedure AddMouseDownHandler( aHandler: TMouseEvent)
18796:
18797:
18798:
            Procedure RemoveMouseDownHandler( aHandler : TMouseEvent)
18799:
            Procedure AddMouseUpHandler( aHandler : TMouseEvent)
18800:
18801:
            Procedure RemoveMouseUpHandler( aHandler: TMouseEvent)
            Procedure AddMouseCursorHandler( aHandler: TMouseCursorEvent)
18802:
18803:
            Procedure RemoveMouseCursorHandler( aHandler : TMouseCursorEvent)
Procedure SetLinesPointer( ASynEdit : TCustomSynEdit)
18804:
            Procedure RemoveLinesPointer
```

```
18806:
                        Procedure HookTextBuffer( aBuffer : TSynEditStringList; aUndo, aRedo : TSynEditUndoList)
18807:
                        Procedure UnHookTextBuffer
BlockBegin', 'TBufferCoord', iptrw);
BlockEnd', 'TBufferCoord', iptrw);
CanPaste', 'Boolean', iptr);
CanPado', 'boolean', iptr);
CanUndo', 'boolean', iptr);
CaretX', 'Integer', iptrw);
CaretY', 'Integer', iptrw);
CaretXY', 'TBufferCoord', iptrw);
ActiveLineColor', 'TCclor', iptrw);
DisplayX', 'Integer', iptr);
DisplayY', 'Integer', iptr);
DisplayXY', 'TDisplayCoord', iptr);
DisplayXY', 'TDisplayCoord', iptr);
CharsInWindow', 'Integer', iptr);
                        Procedure UnHookTextBuffer
18808:
18809 .
18810:
18811:
18812:
18813:
18814:
18815:
18816:
18818:
18819:
18820:
18821:
                         CharsInWindow', 'Integer', iptr);
                        CharsInWindow', 'Integer', iptr);
CharWidth', 'integer', iptr);
Font', 'TFont', iptrw);
GutterWidth', 'Integer', iptr);
Highlighter', 'TSynCustomHighlighter', iptrw);
LeftChar', 'Integer', iptrw);
LineHeight', 'integer', iptry);
LinesInWindow', 'Integer', iptry);
LineText', 'string', iptrw);
Lines', 'TStrings', iptrw);
Marks', 'TSynEditMarkList', iptr);
MaxScrollWidth', 'integer', iptrw);
18822:
18823 .
18824:
18825:
18826:
18827:
18828:
18829:
18830:
18831:
18832:
                         MaxScrollWidth', 'integer', iptrw);
                        Modified', 'Boolean', iptrw);
PaintLock', 'Integer', iptr);
ReadOnly', 'Boolean', iptrw);
18833:
18834:
18835:
                        Readonly , Boolean , Iptrw//
SearchEngine', 'TSynEditSearchCustom', iptrw);
SelAvail', 'Boolean', iptr); SelLength', 'integer', iptrw);
SelTabBlock', 'Boolean', iptr);
SelTabLine', 'Boolean', iptr);
SelText', 'string', iptrw);
18836:
18837:
18838:
18839:
18841:
                         StateFlags', 'TSynStateFlags', iptr);
                        Text', 'string', iptrw);
TopLine', 'Integer', iptrw);
18842:
18843:
                        TopLine', 'Integer', 'Fel.,'
WordAtCursor', 'string', iptr);
WordAtMouse', 'string', iptr);
18844:
                        WordAtMouse', 'string', iptr);
UndoList', 'TSynEditUndoList', iptr);
RedoList', 'TSynEditUndoList', iptr);
18845:
18846:
18847:
                        OnProcessCommand', 'TProcessCommandEvent', iptrw);
BookMarkOptions', 'TSynBookMarkOpt', iptrw);
18848:
18849:
                        BookMarkOptions', 'TSynBookMarkOpt', iptrw BorderStyle', 'TSynBorderStyle', iptrw); ExtraLineSpacing', 'integer', iptrw); Gutter', 'TSynGutter', iptrw); HideSelection', 'boolean', iptrw); InsertCaret', 'TSynEditCaretType', iptrw); InsertMode', 'boolean', iptrw); IsScrolling', 'Boolean', iptrw); Keystrokes', 'TSynEditKeyStrokes', iptrw); MayUndo', 'Integer', iptrw);
18850:
18851:
18852:
18854:
18855:
18856:
                        Keystrokes', 'TSynEditKeyStrokes', ipt
MaxUndo', 'Integer', iptrw);
Options', 'TSynEditorOptions', iptrw);
18857:
18858:
18859:
                        OverwriteCaret', 'TSynEditCaretType', iptrw);
RightEdge', 'Integer', iptrw);
RsynEdge', 'Integer', iptrw);
RsyntEdgeColor', 'TColor', iptrw);
ScrollHintColor', 'TColor', iptrw);
ScrollHintFormat', 'TScrollHintFormat', iptrw);
18860:
18861:
18862:
18863:
                        ScrollBars', 'TScrollStyle', iptrw);
SelectedColor', 'TSynSelectedColor', iptrw);
SelectionMode', 'TSynSelectionMode', iptrw);
18864:
18865:
18866:
                        ActiveSelectionMode', 'TSynSelectionMode', iptrw);
TabWidth', 'integer', iptrw); WantReturns', 'boolean', iptrw);
WantTabs', 'boolean', iptrw); WordWrap', 'boolean', iptrw);
18867:
18868:
18869:
                        WordWrapGlyph', 'TSynGlyph', iptrw);
OnChange', 'TNotifyEvent', iptrw);
18870:
18871:
                        OnClearBookmark', 'TPlaceMarkEvent', iptrw);
OnCommandProcessed', 'TProcessCommandEvent', iptrw);
18872:
18873:
                        OnContextHelp', 'TContextHelpEvent', iptrw);
OnContextHelp', 'TContextHelpEvent', iptrw);
OnGutterClick', 'TGutterClickEvent', iptrw);
OnGutterGetText', 'TGutterGetTextEvent', iptrw);
OnGutterPaint', 'TGutterPaintEvent', iptrw);
OnMouseCursor', 'TMouseCursorEvent', iptrw);
18874:
18875:
18876:
18877:
18878:
18879:
18880:
                         OnPaint',
                                                'TPaintEvent', iptrw);
                         OnPlaceBookmark', 'TPlaceMarkEvent', iptrw);
18881:
18882:
                        OnProcessUserCommand', 'TProcessCommandEvent', iptrw);
                        OnReplaceText', 'TReplaceTextEvent', iptrw);
OnSpecialLineColors', 'TSpecialLineColorsEvent', iptrw);
18883:
18884:
                        OnStatusChange', 'TStatusChangeEvent', iptrw);
OnPaintTransient', 'TPaintTransient', iptrw);
18885:
18886:
                        OnScroll', 'TScrollEvent', iptrw);
18887:
18888:
                      end;
18889:
                 Procedure RegisterPlaceableHighlighter(highlighter : TSynCustomHighlighterClass)
                 Function GetPlaceableHighlighters: TSynHighlighterList
Function EditorCommandToDescrString(Cmd: TSynEditorCommand): string
Function EditorCommandToCodeString(Cmd: TSynEditorCommand): string
18890:
18891:
18892:
                 Procedure GetEditorCommandValues( Proc : TGetStrProc)
18893:
                 Procedure GetEditorCommandExtended( Proc : TGetStrProc)
```

```
Function IdentToEditorCommand( const Ident : string; var Cmd : longint) : boolean
Function EditorCommandToIdent( Cmd : longint; var Ident : string) : boolean
18895:
18896:
        Function ConvertCodeStringToExtended( AString : String) :
                                                                        String
18898:
        Function ConvertExtendedToCodeString( AString : String)
                                                                        String
18899:
        Function ConvertExtendedToCommand( AString : String) : TSynEditorCommand
        Function ConvertCodeStringToCommand( AString : String) : TSynEditorCommand
18900:
        Function IndexToEditorCommand( const AIndex : Integer) : Integer
18901:
18902:
18903:
         TSynEditorOption =
                                         //Holding down the Alt Key will put the selection mode into columnar format
18904:
            eoAltSetsColumnMode.
18905:
            eoAutoIndent,
                                         //Will indent caret on newlines with same amount of leading whitespace as
                                          // preceding line
18906:
18907:
            eoAutoSizeMaxScrollWidth,
                                          //Automatically resizes the MaxScrollWidth property when inserting text
            eoDisableScrollArrows,
18908:
                                          //Disables the scroll bar arrow buttons when you can't scroll in that
18909:
                                          //direction any more
18910:
            eoDragDropEditing,
                                          //Allows to select a block of text and drag it within document to another
18911:
                                          // location
18912
            eoDropFiles,
                                          //Allows the editor accept OLE file drops
18913:
            eoEnhanceHomeKev,
                                          //enhances home key positioning, similar to visual studio
                                         //enhances End key positioning, similar to JDeveloper
//enhances End key positioning, similar to JDeveloper
//When undoing/redoing actions, handle all continous changes the same kind
18914:
            eoEnhanceEndKey,
18915:
            eoGroupUndo.
18916:
                                          // in one call
18917:
                                          //instead undoing/redoing each command separately
18918:
            eoHalfPageScroll,
                                          //When scrolling with page-up and page-down commands, only scroll a half
18919:
                                          //page at a time
18920:
            eoHideShowScrollbars,
                                          //if enabled, then scrollbars will only show if necessary
18921:
            If you have ScrollPastEOL,
                                         then it the horizontal bar will always be there (it uses MaxLength instead) //When moving through lines w/o cursor Past EOL, keeps X position of cursor
18922:
            eoKeepCaretX,
18923:
            eoNoCaret,
                                          //Makes it so the caret is never visible
            eoNoSelection,
                                          //Disables selecting text
18924:
18925:
            eoRightMouseMovesCursor,
                                          //When clicking with right mouse for popup menu, moves cursor to location
                                         //Forces scrolling to be one less
//The scroll hint follows the mouse when scrolling vertically
18926:
            eoScrollBvOneLess.
18927:
            eoScrollHintFollows.
                                          //Allows the cursor to go past the end of file marker
18928:
            eoScrollPastEof,
            eoScrollPastEol,
                                          //Allows cursor to go past last character into white space at end of a line
18929:
18930:
            eoShowScrollHint.
                                          //Shows a hint of the visible line numbers when scrolling vertically
18931:
            eoShowSpecialChars.
                                          //Shows the special Characters
18932:
            eoSmartTabDelete,
                                          //similar to Smart Tabs, but when you delete characters
18933:
            eoSmartTabs,
                                          //When tabbing, cursor will go to non-white space character of previous line
18934:
            eoSpecialLineDefaultFq,
                                          //disables the foreground text color override using OnSpecialLineColor event
18935:
            eoTabIndent,
                                          //If active <Tab>and<Shift><Tab> act block indent, unindent when text select
18936:
                                         //Converts a tab character to a specified number of space characters //Spaces at the end of lines will be trimmed and not saved
            eoTabsToSpaces.
18937:
            eoTrimTrailingSpaces
18938:
            18939:
            Double click to select a word and count words with highlightning.
18940:
18941:
            Triple click to select a line.
            CTRL+SHIFT+click to extend a selection.
18943:
            Drag with the ALT key down to select columns of text !!!
18944:
            Drag and drop is supported.
18945:
            Type CTRL+Z to undo and SHIFT+CTRL+Z to redo.
18946:
            Type CTRL+A to select all.
            Type CTRL+N to set a new line.
18947:
18948:
            Type CTRL+T to delete a line or token. //Tokenizer
            Type CTRL+C to copy to clipboard. Type CTRL+V to paste from clipboard. Type CTRL+Shift+T to add ToDo in line and list.
18949:
18950:
18951:
            Type CTRL+Shift+[0..9] to set bookmarks.
                                                          //Bookmark
            Type CTRL[0..9] to jump or get to bookmarks.
18952:
18953:
            Type Home to position cursor at beginning of current line and End to position it at end of line.
18954:
            Type CTRL+Home to position cursor at start of doc and CTRL+End to position it at end of document.
            Page Up and Page Down work as expected.
18955:
18956:
            CTRL+Page Up sends cursor to top of viewed portion and CTRL+Page Down sends it to bottom.
18957 .
            using http://pp4s.co.uk/main/tu-form2-help-demo-laz.html
18958:
18959:
       {$ Short Key Positions Ctrl<A-Z>:
18960: def
18961:
           <A> Select All
18962:
           <B> Count Words
18963:
           <C> Copy
18964:
           <D> Internet Start
           <E> Script List
18965:
18966:
           <F> Find
18967:
           <G> Goto
18968:
          <H>> Mark Line
18969:
           <I> Interface List
18970:
           <J> Code Completion
18971:
           < K> Console
18972:
           <L> Interface List Box
18973:
           <M> Font Larger -
18974:
           <N> New Line
18975:
           <0> Open File
18976:
          <P> Font Smaller +
18977:
           <O> Ouit
18978:
           <R> Replace
18979:
           <S> Save!
18980:
           <T> Delete Line
18981:
          <U>> Use Case Editor
18982:
          <V> Paste
18983:
           <W> URI Links
```

```
18984:
            <X> Reserved for coding use internal
18985:
            <Y> Delete Line
18986:
             <Z> Undo
18987 .
18988: ref
            F1 Help
18989:
18990:
            F2 Syntax Check
             F3 Search Next
18991:
18992:
            F4 New Instance
18993:
            F5 Line Mark /Breakpoint
18994:
            F6 Goto End
18995:
            F7 Debug Step Into
18996:
            F8 Debug Step Out
18997:
            F9 Compile
18998:
            F10 Menu
18999:
            F11 Word Count Highlight
19000:
            F12 Reserved for coding use internal
19001:
          def ReservedWords: array[0..82] of string =
             f ReservedWords: array[0..82] of string =
    ('and', 'array', 'as', 'asm', 'at', 'begin', 'case', 'class', 'const',
    'constructor', 'default', 'destructor', 'dispinterface', 'div', 'do',
    'downto', 'else', 'end', 'except', 'exports', 'file', 'finalization',
    'finally', 'for', 'function', 'goto', 'if', 'implementation', 'in',
    'inherited', 'initialization', 'inline', 'interface', 'is', 'label',
    'library', 'message', 'mod', 'nil', 'not', 'object', 'of', 'on', 'or',
    'out', 'packed', 'procedure', 'program', 'property', 'raise', 'read',
    'record', 'repeat', 'resourcestring', 'set', 'shl', 'shr', 'string',
    'stored', 'then', 'threadvar', 'to', 'try', 'type', 'unit', 'until',
    'uses', 'var', 'while', 'with', 'write', 'xor', 'private', 'protected',
    'public', 'published', 'def', 'ref', 'using', 'typedef', 'memol', 'memo2', 'doc', 'maxforml';
llowedChars: array[0..5] of string = ('(',')', '[', ']', ',' t,tl,t2,t3: boolean;
19002:
19003:
19004:
19005:
19006:
19007:
19008:
19009:
19010:
19011:
19012:
19013:
19014:
           AllowedChars: array[0..5] of string = ('(',')', '[', ']',' ',' t,t1,t2,t3: boolean;
19015:
19016: //
19018: //----
19019:
19020: Amount of Functions: 12264
19021: Amount of Procedures: 7632
19022: Amount of Constructors: 1253
19023: Totals of Calls: 21149
19024: SHA1: Win 3.9.9.94 746418954E790A1713A93FF786ABCB50097FCB59
19025:
19029: - Install: just save your maxboxdef.ini before and then extract the zip file!
19030: -
           Toolbar: Click on the red maxbox Sign (right on top) opens your work directory or jump to <Help>
           Menu: With <F2> you check syntax with <F8> you debug and <F9> you compile!
19032: -
           \label{eq:menu:with} \mbox{Menu: With $\tt <\tt Crtl><\tt F3>$ you can search for code on examples}
19033: -
           Menu: Open in menu Output a new instance <F4> of the box to compare or prepare your scripts
19034: - Menu: Set Interface Naviagator in menu /View/Intf Navigator
19035: -
           Menu: Switch or toogle between the last 2 scripts in menu File/LoadLast (History is set to 9 files)
19036:
19037: -
            Inifile: Set memory report in ini: MEMORYREPORT=Y : report on memory leaks on shutdown by dialog
19038: - Inifile: Refresh (reload) the inifile after edit with ../Help/Config Update
           Context Menu: You can printout your scripts as a pdf-file or html-export
19039:
           Context: You do have a context menu with the right mouse click
19040:
19041:
           Menu: With the UseCase Editor you can convert graphic formats too. Menu: On menu Options you find Addons as compiled scripts IDE: You don't need a mouse to handle maXbox, use shortcuts
19042: -
19043: -
19045:
           Menu: Check Options/ProcessMessages! if something is wrong or you can't see graphics in a time
19046: -
           IDE: Dragndrop your scripts in box or the model in use case editor (Cut,Copy,Paste always available)
19047: -
           Editor: You can get templates as code completion with <ctrl j> in editor like classp or iinterface
19048:
                    or ttimer (you type classp and then CTRL J), or you type tstringlist and <Ctrl><J>
19049:
           Menu: In menu output (console) you can set output menu in edit mode by unchecking <read only output>
19050:
19051: -
           Editor: After the end. you can write or copy notes or descriptions concerning the app or code
19052: -
           Code: If you code a loop till key-pressed use function: isKeyPressed;
19053:
           Code: Macro set the macros #name, #date, #host, #path, #file, #head #sign, Tutorial maxbox_starter25.pdf Code: change Syntax in autoboot macro 'maxbootscript.txt'
19054: -
19055: - Editor: - <F11> Click on Word in Editor search amount of words with highlighting, Dbl Click on Bookmarks
19056:
           to delete and Click and mark to drag a bookmark

Menu: To start handling from CD-ROM (read only mode) uncheck in Menu /Options/Save before Compile
19057: -
19058: -
           IDE: A file info with system and script information you find in menu Program/Information
           IDE: After change the config file in help you can update changes in menu Help/Config Update
19059: -
19060: -
           IDE: Make a screenshot of the content and environment in menu Output/Save Screenshot
19061: - IDE: Use a boot loader script 'maxbootscript.txt' (as auto start) to change box each time you start it.
19062: - IDE: With escape or <Ctrl> Q you can also leave the box or stop a script in menu program - stop program
19063:
           Editor: Set Bookmarks to check your work in app or code
19064: - Editor: With <Ctrl H> you set [$Active Line Color] and F11 you get Word Count Statistic on Output too 19065: - Editor: With {//TODO: some description} or DONE you set code entries for ToDo List in ../Help/ToDo List
19066: - Editor: With <Ctrl W> you set active URL links in your code to test availability in Context Menu
19067:
19068: -
           IDE with menu /Options/ADO SQL Workbench you can manage your Database
19069: - Context Menu: You can write your docus with RichEdit RTF printout /Editor Form Options/Richedit
19070: - Menu: Set Interface Naviagator also with toogle <Ctrl L> or /View/Intf Navigator 19071: - Toolbar: In menu /View switch Off Toolbar and Coolbar to get more coding space
19072: - Code: Put some resources in your code /Help/Resource Explorer like bitbtn, forms, dialogs;
```

```
19073: - Code Editor: Compile with <F9> but also Alt C in case <F9> isnt available;
19074: - IDE set bookmarks with <Ctrl Shift> (0..9) and jump with <Ctrl> (0..9)
19075: - IDE menu /Help/Tools/ write with RTF Editor or open a DOS Shell or browse
19076
19077: -
         Add on write your Requirements in RTF Docu with <CTRL ALT R> in context menu
19078: - Add on when no browser is available start /Options/Add ons/Easy Browser
19079: - Add on SOAP Tester with SOP POST File
19080: - Add on IP Protocol Sniffer with List View
19081: - Add on OpenGL mX Robot Demo for android
19082:
19083: -
         Menu: Help/Tools as a Tool Section with DOS Opener
         Menu Editor: export the code as RTF File
19085: -
         Menu: Help/Tools/Syn Export your code as available in HTML or RTF
         Menu: Help/Tools/ with <Alt H-S-D> you start the DOS Shell
Context: Auto Detect of Syntax depending on file extension
19086: -
19087: -
19088: -
         Code: some Windows API function start with w in the name like wGetAtomName();
19089: - IDE Close - if you cant close the box then reset it <Ctrl F2> in menu /Debug
19090: - IDE File Check with menu .. View/File Changes/
19091:
19092: -
         Function GetProcessMemoryInfo(Process: Thandle; var MemoryCounters: TProcessMemoryCounters;
19093:
19094:
                                                     cb: DWORD): BOOL; //stdcall;;
          External 'GetProcessMemoryInfo@psapi.dll stdcall';
Function OpenProcess(dwDesiredAccess:DWORD; bInheritHandle:BOOL; dwProcessId: DWORD):THandle;
19095:
19096:
                       'OpenProcess@kernel32.dll stdcall';
19097:
            External
19098:
19099:
19100: PCT Precompile Technology , mX4 ScriptStudio 19101: Indy, JCL, Jedi, VCL, Systools, TurboPower, Fundamentals, ExtendedRTL, Synedit
19102: DMath, devC, Graphics32, ExtPascal, mX4, LCL, CLX, FCL, CPort and more
19103: emax layers: system-package-component-unit-class-function-block
19104: new keywords def ref using maxCalcF
19105: UML: use case act class state seq pac comp dep - lib lab
19106: FBX Lib, psAPI, SMS Cell Module, OpenGL, Borland Tools
19107: Tutorials, 30 Units add, VCL constructors, controls plus, unit list
19108: 2 Tutorials, 36 Units add, Synapse V40, LDAP, OpenSSL, AVScan
19109: 1 Report, 15 Units add, DBCtrls, Stream+, IRadio, Wininet
19110: 1 DLL Report, 24 Units add, DRTable, Remote+, Cindy functions!
19111: DLL Report, UML Tutor, 32 Units add, DRTable, Remote+, Cindy functions!
19112: https://unibe-ch.academia.edu/MaxKleiner
19113: www.slideshare.net/maxkleiner1
19114: http://www.scribd.com/max_kleiner
19115:
19116:
19117:
19119: unit List asm internal end
19121: 01 unit RIRegister_StrUtils_Routines(exec); //Delphi
19122: 02 unit SIRegister_IdStrings
                                                          //Indy Sockets
19123: 03 unit RIRegister_niSTRING_Routines(Exec);
                                                         //from ReqEx
19124: 04 unit uPSI_fMain Functions;
                                                          //maXbox Open Tools API
19125: 05 unit IFSI_WinFormlpuzzle;
                                                          //maXbox
19126: 06 unit RIRegister_LinarBitmap_Routines(Exec); //ImageFileLibBCB
19127: 07 unit RegisterDateTimeLibrary_R(exec);
19128: 08 unit RIRegister_MathMax_Routines(exec);
                                                          //Delphi
                                                          //Jedi & Delphi
19129: 09 unit RIRegister_IdGlobal_Routines(exec);
                                                          //Indy Sockets
19130: 10 unit RIRegister_SysUtils_Routines(Exec);
                                                          //Delphi
19131: 11 unit uPSI_IdTCPConnection;
                                                          //Indy some functions
19132: 12 unit uPSCompiler.pas;
                                                          //PS kernel functions
19133: 13 unit uPSI_DBCommon;
                                                          //DB Common_Routines and Types
19134: 14 unit uPSI_Printers.pas
                                                          //Delphi VCL
19135: 15 unit uPSI_MPlayer.pas
                                                          //Delphi VCL
19136: 16 unit uPSC comobj;
                                                          //COM Functions
19137: 17 unit uPSI_Clipbrd;
                                                          //Delphi VCL
19138: 18 unit Filectrl in IFSI_SysUtils_max;
                                                          //VCL Runtime
19139: 19 unit uPSI_SqlExpr;
                                                          //DBX3
                                                          //ADODB
19140: 20 unit uPSI_ADODB;
19141: 21 unit uPST StrHlpr;
                                                          //String Helper Routines
19142: 22 unit uPSI_DateUtils;
                                                          //Expansion to DateTimeLib
19143: 23 unit uPSI_FileUtils;
                                                          //Expansion to Sys/File Utils
19144: 24 unit JUtils / gsUtils;
                                                          //Jedi / Metabase
19145: 25 unit JvFunctions_max;
                                                          //Jedi Functions
19146: 26 unit HTTPParser;
                                                          //Delphi VCL
                                                          //Delphi VCL
19147: 27 unit HTTPUtil;
19148: 28 unit uPSI_XMLUtil;
                                                          //Delphi VCL
19149: 29 unit uPSI SOAPHTTPClient;
                                                          //Delphi VCL SOAP WebService V3.5
19150: 30 unit uPSI Contnrs;
                                                          //Delphi RTL Container of Classes
19151: 31 unit uPSI_MaskUtils;
                                                          //RTL Edit and Mask functions
19152: 32 unit uPSI_MyBigInt;
                                                          //big integer class with Math
19153: 33 unit uPSI_ConvUtils;
                                                          //Delphi VCL Conversions engine
19154: 34 unit Types_Variants;
19155: 35 unit uPSI_IdHashSHA1;
                                                          //Delphi\Win32\rt1\sys
                                                          //Indy Crypto Lib
//Indy Crypto;
19156: 36 unit uPSI_IdHashMessageDigest
19157: 37 unit uPSI_IdASN1Util;
                                                          //Indy ASN1Utility Routines;
19158: 38 unit uPSI_IdLogFile;
                                                          //Indy Logger from LogBase
                                                          //Indy Ping ICMP
//Indy Crypto &OpenSSL;
19159: 39 unit uPSI_IdIcmpClient;
19160: 40 unit uPSI_IdHashMessageDigest_max
19161: 41 unit uPSI_FileCtrl;
                                                          //Delphi RTL
```

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19162: 42 unit uPSI_Outline;
                                                        //Delphi VCL
19163: 43 unit uPSI_ScktComp;
                                                        //Delphi RTL
19164: 44 unit uPSI_Calendar;
                                                        //Delphi VCL
19165: 45 unit uPSI_VListView
                                                        //VListView;
19166: 46 unit uPSI DBGrids;
                                                        //Delphi VCL
19167: 47 unit uPSI DBCtrls;
                                                        //Delphi VCL
19168: 48 unit ide_debugoutput;
                                                        //maXbox
19169: 49 unit uPSI_ComCtrls;
                                                        //Delphi VCL
19170: 50 unit uPSC_stdctrls+;
                                                        //Delphi VCL
19171: 51 unit uPSI Dialogs;
                                                        //Delphi VCL
19172: 52 unit uPSI_StdConvs;
                                                        //Delphi RTL
19173: 53 unit uPSI_DBClient;
                                                        //Delphi RTL
19174: 54 unit uPSI_DBPlatform;
                                                        //Delphi RTL
19175: 55 unit uPSI Provider;
                                                        //Delphi RTL
19176: 56 unit uPSI FMTBcd;
                                                        //Delphi RTI
19177: 57 unit uPSI_DBCGrids;
                                                        //Delphi VCL
19178: 58 unit uPSI_CDSUtil;
                                                        //MIDAS
19179: 59 unit uPSI_VarHlpr;
                                                        //Delphi RTL
19180: 60 unit uPSI_ExtDlgs;
                                                        //Delphi VCL
19181: 61 unit sdpStopwatch;
                                                        //maXbox
19182: 62 unit uPSI_JclStatistics;
                                                        //JCL
19183: 63 unit uPSI_JclLogic;
                                                        //JCL
19184: 64 unit uPSI_JclMiscel;
                                                        //JCL
19185: 65 unit uPSI_JclMath_max;
                                                        //JCL RTL
19186: 66 unit uPSI_uTPLb_StreamUtils;
                                                        //LockBox 3
19187: 67 unit uPSI_MathUtils;
                                                        //BCB
19188: 68 unit uPSI_JclMultimedia;
                                                        //JCL
19189: 69 unit uPSI WideStrUtils;
                                                        //Delphi API/RTL
19190: 70 unit uPSI_GraphUtil;
                                                        //Delphi RTL
19191: 71 unit uPSI_TypeTrans;
                                                        //Delphi RTL
19192: 72 unit uPSI_HTTPApp;
                                                        //Delphi VCL
                                                        //Delphi VCL
19193: 73 unit uPSI_DBWeb;
                                                        //Delphi VCL
19194: 74 unit uPSI DBBdeWeb;
19195: 75 unit uPSI_DBXpressWeb;
                                                        //Delphi VCL
19196: 76 unit uPSI_ShadowWnd;
                                                        //Delphi VCL
19197: 77 unit uPSI ToolWin;
                                                        //Delphi VCL
19198: 78 unit uPSI Tabs;
                                                        //Delphi VCL
19199: 79 unit uPSI_JclGraphUtils;
                                                        //JCL
19200: 80 unit uPSI_JclCounter;
                                                        //JCL
19201: 81 unit uPSI_JclSysInfo;
                                                        //JCL
19202: 82 unit uPSI_JclSecurity;
                                                        //JCL
19203: 83 unit uPSI_JclFileUtils;
                                                        //JTCT.
19204: 84 unit uPSI_IdUserAccounts;
                                                        //Indy
19205: 85 unit uPSI_IdAuthentication;
                                                        //Indy
19206: 86 unit uPSI_uTPLb_AES;
                                                        //LockBox 3
19207: 87 unit uPST IdHashSHA1;
                                                        //LockBox 3
19208: 88 unit uTPLb_BlockCipher;
                                                        //LockBox 3
                                                        //Delphi VCL
19209: 89 unit uPSI_ValEdit.pas;
19210: 90 unit uPSI_JvVCLUtils;
                                                        //JCL
19211: 91 unit uPSI JvDBUtil;
                                                        //JCL
19212: 92 unit uPSI JvDBUtils;
                                                        //JCL
19213: 93 unit uPSI_JvAppUtils;
                                                        //JCL
19214: 94 unit uPSI_JvCtrlUtils;
                                                        //JCL
19215: 95 unit uPSI_JvFormToHtml;
                                                        //JCL
19216: 96 unit uPSI_JvParsing;
                                                        //JCL
19217: 97 unit uPSI_SerDlgs;
                                                        //Toolbox
19218: 98 unit uPSI_Serial;
                                                        //Toolbox
19219: 99 unit uPSI_JvComponent;
                                                        //JCL
19220: 100 unit uPSI_JvCalc;
                                                        //JCL
19221: 101 unit uPSI JvBdeUtils;
                                                        //JTCT
19222: 102 unit uPSI_JvDateUtil;
                                                        //JCL
19223: 103 unit uPSI_JvGenetic;
                                                        //JCL
19224: 104 unit uPSI_JclBase;
                                                        //JCL
19225: 105 unit uPSI JvUtils;
                                                        //JCL
19226: 106 unit uPSI_JvStrUtil;
                                                        //JCL
19227: 107 unit uPSI_JvStrUtils;
                                                        //JCL
19228: 108 unit uPSI_JvFileUtil;
                                                        //JCL
19229: 109 unit uPSI_JvMemoryInfos;
                                                        //JCL
19230: 110 unit uPSI JvComputerInfo;
                                                        //JCL
19231: 111 unit uPSI_JvgCommClasses;
                                                        //JCL
19232: 112 unit uPSI_JvgLogics;
                                                        //JCL
19233: 113 unit uPSI_JvLED;
                                                        //JCL
19234: 114 unit uPSI_JvTurtle;
                                                        //JCL
19235: 115 unit uPST SortThds; unit uPST ThSort;
                                                        //maXbox
19236:
       116 unit uPSI_JvgUtils;
                                                        //JCL
19237: 117 unit uPSI_JvExprParser;
19238: 118 unit uPSI HexDump;
                                                        //Borland
19239: 119 unit uPSI_DBLogDlg;
                                                        //VCL
19240: 120 unit uPSI_SqlTimSt;
                                                        //RTL
19241: 121 unit uPSI_JvHtmlParser;
                                                        //JCL
19242: 122 unit uPSI_JvgXMLSerializer;
                                                        //JCL
19243: 123 unit uPSI_JvJCLUtils;
                                                        //JCL
19244: 124 unit uPSI JvStrings;
                                                        //JCTi
19245: 125 unit uPSI_uTPLb_IntegerUtils;
                                                        //TurboPower
19246: 126 unit uPSI_uTPLb_HugeCardinal;
                                                        //TurboPower
                                                        //TurboPower
19247: 127 unit uPSI_uTPLb_HugeCardinalUtils;
19248: 128 unit uPSI_SynRegExpr;
19249: 129 unit uPSI_StUtils;
                                                        //SvnEdit
                                                        //SvsTools4
19250: 130 unit uPSI_StToHTML;
                                                        //SysTools4
```

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19251: 131 unit uPSI_StStrms;
                                                         //SysTools4
19252: 132 unit uPSI_StFIN;
                                                         //SysTools4
19253: 133 unit uPSI_StAstroP;
                                                         //SysTools4
19254: 134 unit uPSI_StStat;
                                                         //SysTools4
19255: 135 unit uPST StNetCon;
                                                         //SysTools4
19256: 136 unit uPSI StDecMth;
                                                         //SysTools4
19257:
       137 unit uPSI_StOStr;
                                                         //SysTools4
19258: 138 unit uPSI_StPtrns;
                                                         //SvsTools4
19259: 139 unit uPSI_StNetMsg;
                                                         //SysTools4
19260: 140 unit uPST StMath;
                                                         //SvsTools4
19261: 141 unit uPSI_StExpEng;
                                                         //SysTools4
19262: 142 unit uPSI_StCRC;
                                                         //SysTools4
19263: 143 unit uPSI_StExport,
                                                         //SysTools4
19264: 144 unit uPSI_StExpLog,
                                                         //SysTools4
19265: 145 unit uPSI ActnList;
                                                         //Delphi VCL
19266: 146 unit uPSI_jpeg;
                                                         //Borland
19267: 147 unit uPSI_StRandom;
                                                         //SysTools4
19268: 148 unit uPSI_StDict;
                                                         //SvsTools4
19269: 149 unit uPSI_StBCD;
                                                         //SysTools4
19270: 150 unit uPSI_StTxtDat;
                                                         //SvsTools4
19271: 151 unit uPSI_StRegEx;
                                                         //SysTools4
19272: 152 unit uPSI_IMouse;
19273: 153 unit uPSI_SyncObjs;
                                                         //VCL
19274: 154 unit uPSI_AsyncCalls;
                                                         //Hausladen
       155 unit uPSI_ParallelJobs;
                                                         //Saraiva
19276: 156 unit uPSI_Variants;
                                                         //VCL
19277: 157 unit uPSI_VarCmplx;
                                                         //VCL Wolfram
19278: 158 unit uPSI_DTDSchema;
                                                         //VCL
19279: 159 unit uPSI_ShLwApi;
                                                         //Brakel
19280: 160 unit uPSI_IBUtils;
                                                         //VCL
19281: 161 unit uPSI_CheckLst;
                                                         //VCL
19282: 162 unit uPSI_JvSimpleXml;
                                                         //JCL
19283: 163 unit uPSI_JclSimpleXml;
                                                         //JCL
19284: 164 unit uPSI_JvXmlDatabase;
                                                         //JCL
       165 unit uPSI_JvMaxPixel;
19286: 166 unit uPSI_JvItemsSearchs;
                                                         //JCL
19287: 167 unit uPSI StExpEng2;
                                                         //SysTools4
19288: 168 unit uPSI_StGenLog;
                                                         //SvsTools4
19289:
       169 unit uPSI_JvLogFile;
                                                         //Jcl
19290:
       170 unit uPSI_CPort;
                                                         //ComPort Lib v4.11
19291: 171 unit uPSI_CPortCtl;
                                                         //ComPort
       172 unit uPST CPortEsc;
19292:
                                                         //ComPort
       173 unit BarCodeScaner;
19293:
                                                         //ComPort
19294: 174 unit uPSI_JvGraph;
19295: 175 unit uPSI_JvComCtrls;
                                                         //JCL
19296: 176 unit uPSI GUITesting;
                                                         //D Unit
19297: 177 unit uPSI_JvFindFiles;
                                                         //JCL
19298: 178 unit uPSI_StSystem;
                                                         //SysTools4
19299: 179 unit uPSI_JvKeyboardStates;
19300: 180 unit uPSI_JvMail;
                                                         //JCL
19301: 181 unit uPSI_JclConsole;
                                                         //JCTi
19302: 182 unit uPSI_JclLANMan;
                                                         //JCL
19303: 183 unit uPSI_IdCustomHTTPServer;
19304: 184 unit IdHTTPServer
                                                         //Indy
19305: 185 unit uPSI_IdTCPServer;
19306: 186 unit uPSI_IdSocketHandle;
                                                         //Indv
                                                         //Tndv
19307: 187 unit uPSI_IdIOHandlerSocket;
                                                         //Indy
19308: 188 unit IdIOHandler;
                                                         //Indy
19309: 189 unit uPSI_cutils;
                                                         //Bloodshed
       190 unit uPSI BoldUtils;
19310:
                                                         //boldsoft
19311: 191 unit uPSI_IdSimpleServer;
                                                         //Indy
19312: 192 unit uPSI_IdSSLOpenSSL;
                                                         //Indv
19313: 193 unit uPSI_IdMultipartFormData;
                                                         //Indy
                                                         //SynEdit
19314: 194 unit uPSI SynURIOpener;
19315: 195 unit uPSI_PerlRegEx;
                                                         //PCRE
19316: 196 unit uPSI_IdHeaderList;
                                                         //Indy
19317: 197 unit uPSI_StFirst;
                                                         //SysTools4
19318: 198 unit uPSI_JvCtrls;
                                                         //JCL
19319: 199 unit uPSI IdTrivialFTPBase;
                                                         //Tndv
19320: 200 unit uPSI_IdTrivialFTP;
                                                         //Indy
19321: 201 unit uPSI_IdUDPBase;
                                                         //Indy
19322: 202 unit uPSI_IdUDPClient;
                                                         //Indy
                                                         //for DMath.DLL
//Borland
19323: 203 unit uPSI_utypes;
19324: 204 unit uPSI_ShellAPI;
19325: 205 unit uPSI_IdRemoteCMDClient;
                                                         //Indy
19326: 206 unit uPSI_IdRemoteCMDServer;
                                                         //Indy
19327: 207 unit IdRexecServer;
                                                         //Indv
19328: 208 unit IdRexec; (unit uPSI_IdRexec;)
19329: 209 unit IdUDPServer;
                                                         //Tndv
                                                         //Indy
       210 unit IdTimeUDPServer;
19330:
                                                         //Indv
19331: 211 unit IdTimeServer;
                                                         //Indy
19332: 212 unit IdTimeUDP; (unit uPSI_IdUDPServer;)
                                                         //Indy
19333: 213 unit uPSI_IdIPWatch;
19334: 214 unit uPSI_IdIrcServer;
                                                         //Tndv
                                                         //Indy
19335: 215 unit uPSI_IdMessageCollection;
                                                         //Indy
19336: 216 unit uPSI_cPEM;
                                                         //Fundamentals 4
19337: 217 unit uPSI_cFundamentUtils;
                                                         //Fundamentals 4
19338: 218 unit uPSI_uwinplot;
                                                         //DMath
19339: 219 unit uPSI_xrtl_util_CPUUtils;
                                                         //ExtentedRTL
```

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19340: 220 unit uPSI_GR32_System;
                                                          //Graphics32
19341: 221 unit uPSI_cFileUtils;
                                                          //Fundamentals 4
19342: 222 unit uPSI_cDateTime; (timemachine)
                                                          //Fundamentals 4
19343: 223 unit uPSI_cTimers; (high precision timer)
                                                          //Fundamentals 4
19344: 224 unit uPSI cRandom;
                                                          //Fundamentals 4
19345: 225 unit uPSI ueval;
                                                          //DMath
19346: 226 unit uPSI_xrtl_net_URIUtils;
                                                          //ExtendedRTL
19347: 227 unit xrtl_net_URIUtils;
                                                          //ExtendedRTL
19348: 228 unit uPSI_ufft; (FFT)
                                                          //DMath
19349: 229 unit uPST DBXChannel;
                                                          //Delphi
19350: 230 unit uPSI_DBXIndyChannel;
                                                          //Delphi Indv
19351: 231 unit uPSI_xrtl_util_COMCat;
                                                          //ExtendedRTL
19352: 232 unit uPSI_xrtl_util_StrUtils;
                                                          //ExtendedRTL
19353: 233 unit uPSI_xrtl_util_VariantUtils;
19354: 234 unit uPSI_xrtl_util_FileUtils;
                                                          //ExtendedRTI
                                                          //ExtendedRTL
19355: 235 unit xrtl_util_Compat;
                                                          //ExtendedRTL
19356: 236 unit uPSI_OleAuto;
                                                          //Borland
19357: 237 unit uPSI_xrtl_util_COMUtils;
                                                          //ExtendedRTL
19358: 238 unit uPSI_CmAdmCtl;
                                                          //Borland
19359: 239 unit uPSI_ValEdit2;
                                                          //VCL
19360: 240 unit uPSI_GR32; //Graphics32
                                                          //Graphics32
19361: 241 unit uPSI_GR32_Image;
                                                          //Graphics32
19362: 242 unit uPSI_xrtl_util_TimeUtils;
19363: 243 unit uPSI_xrtl_util_TimeZone;
19364: 244 unit uPSI_xrtl_util_TimeStamp;
                                                          //ExtendedRTL
                                                          //ExtendedRTL
                                                          //ExtendedRTL
19365: 245 unit uPSI_xrtl_util_Map;
                                                          //ExtendedRTL
19366: 246 unit uPSI_xrtl_util_Set;
                                                          //ExtendedRTL
19367: 247 unit uPSI CPortMonitor;
                                                          //ComPort
19368: 248 unit uPSI_StIniStm;
                                                          //SvsTools4
19369: 249 unit uPSI_GR32_ExtImage;
                                                          //Graphics32
19370: 250 unit uPSI_GR32_OrdinalMaps;
                                                          //Graphics32
                                                          //Graphics32
19371: 251 unit uPSI_GR32_Rasterizers;
19372: 252 unit uPSI_xrtl_util_Exception;
                                                          //ExtendedRTL
19373: 253 unit uPSI_xrtl_util_Value;
                                                          //ExtendedRTL
19374: 254 unit uPSI_xrtl_util_Compare;
                                                          //ExtendedRTL
19375: 255 unit uPSI_FlatSB;
                                                          //VCL
19376: 256 unit uPSI_JvAnalogClock;
                                                          //JCL
19377: 257 unit uPSI_JvAlarms;
                                                          //JCL
19378: 258 unit uPSI_JvSQLS;
                                                          //JCL
19379: 259 unit uPSI_JvDBSecur;
                                                          //JCL
19380: 260 unit uPSI_JvDBQBE;
                                                          //JCL
19381: 261 unit uPSI_JvStarfield;
                                                          //JTCT.
19382: 262 unit uPSI_JVCLMiscal;
                                                          //JCL
19383: 263 unit uPSI_JvProfiler32;
                                                          //JCL
19384: 264 unit uPSI_JvDirectories,
                                                          //JCL
19385: 265 unit uPSI_JclSchedule,
                                                          //JCL
19386: 266 unit uPSI_JclSvcCtrl,
                                                          //JCL
19387: 267 unit uPSI_JvSoundControl,
                                                          //JCL
19388: 268 unit uPSI_JvBDESQLScript,
                                                          //JCL
19389: 269 unit uPSI_JvgDigits,
                                                          //JCL>
19390: 270 unit uPSI ImgList;
                                                          //TCustomImageList
19391:
       271 unit uPSI_JclMIDI;
                                                          //JCL>
19392: 272 unit uPSI_JclWinMidi;
                                                          //JCL>
19393: 273 unit uPSI_JclNTFS;
                                                          //JCL>
19394: 274 unit uPSI_JclAppInst;
                                                          //.TCT.>
19395: 275 unit uPSI_JvRle;
                                                          //JCT.>
19396: 276 unit uPSI_JvRas32;
                                                          //JCL>
19397: 277 unit uPSI_JvImageDrawThread,
                                                          //JCL>
19398: 278 unit uPSI_JvImageWindow,
19399: 279 unit uPSI JvTransparentForm;
                                                          //JCL>
                                                          //.TCT.>
19400: 280 unit uPSI_JvWinDialogs;
                                                          //JCL>
19401: 281 unit uPSI_JvSimLogic,
                                                          //JCL>
19402: 282 unit uPSI_JvSimIndicator,
                                                          //JCL>
19403: 283 unit uPSI JvSimPID,
                                                          //JCL>
19404: 284 unit uPSI_JvSimPIDLinker,
                                                          //JCL>
19405: 285 unit uPSI_IdRFCReply;
                                                          //Indy
19406: 286 unit uPSI_IdIdent;
19407: 287 unit uPSI_IdIdentServer;
                                                          //Indy
19408: 288 unit uPSI JvPatchFile;
                                                          //JCL
19409: 289 unit uPSI_StNetPfm;
                                                          //SysTools4
19410: 290 unit uPSI_StNet;
                                                          //SysTools4
19411: 291 unit uPSI_JclPeImage;
                                                          //JCL
19412: 292 unit uPSI_JclPrint;
                                                          //JCL
19413: 293 unit uPST JclMime;
                                                          //JCL
19414: 294 unit uPSI_JvRichEdit;
                                                          //JCL
19415: 295 unit uPSI_JvDBRichEd;
                                                          //JCL
19416: 296 unit uPSI_JvDice;
                                                          //JCL
19417: 297 unit uPSI_JvFloatEdit;
                                                          //JCL 3.9.8
19418: 298 unit uPSI_JvDirFrm;
                                                          //JCL
19419: 299 unit uPSI_JvDualList;
                                                          //JCL
19420: 300 unit uPSI_JvSwitch;
                                                          ////JCL
19421: 301 unit uPSI_JvTimerLst;
                                                          ////JCL
19422: 302 unit uPSI JvMemTable;
                                                          //JCL
19423: 303 unit uPSI_JvObjStr;
                                                          //JCL
19424: 304 unit uPSI_StLArr;
                                                          //SysTools4
19425: 305 unit uPSI_StWmDCpy;
                                                          //SysTools4
19426: 306 unit uPSI StText;
                                                          //SvsTools4
19427: 307 unit uPSI_StNTLog;
                                                          //SysTools4
19428: 308 unit uPSI_xrtl_math_Integer;
                                                          //ExtendedRTL
```

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19429: 309 unit uPSI_JvImagPrvw;
                                                        //JCTi
19430: 310 unit uPSI_JvFormPatch;
                                                        //JCL
19431: 311 unit uPSI_JvPicClip;
                                                        //JCL
19432: 312 unit uPSI_JvDataConv;
                                                        //JCL
19433: 313 unit uPSI_JvCpuUsage;
                                                        //JCL
19434: 314 unit uPSI_JclUnitConv_mX2;
                                                        //JCL
19435:
       315 unit JvDualListForm;
                                                        //JCL
19436: 316 unit uPSI_JvCpuUsage2;
                                                        //JCL
19437: 317 unit uPSI_JvParserForm;
                                                        //JCL
19438: 318 unit uPSI_JvJanTreeView;
                                                        //JCL
19439: 319 unit uPSI_JvTransLED;
                                                        //JCL
19440: 320 unit uPSI_JvPlaylist;
                                                        //JCL
19441: 321 unit uPSI_JvFormAutoSize;
                                                        //JCL
19442: 322 unit uPSI_JvYearGridEditForm;
                                                        //JCL
19443: 323 unit uPST JvMarkupCommon;
                                                        //JTCT.
19444: 324 unit uPSI_JvChart;
                                                        //JCL
19445: 325 unit uPSI_JvXPCore;
                                                        //JCL
19446: 326 unit uPSI_JvXPCoreUtils;
                                                        //JCL
19447: 327 unit uPSI_StatsClasses;
                                                        //mX4
19448: 328 unit uPSI_ExtCtrls2;
                                                        //VCL
19449: 329 unit uPSI_JvUrlGrabbers;
                                                        //JCL
19450: 330 unit uPSI_JvXmlTree;
                                                        //JCL
19451: 331 unit uPSI_JvWavePlayer;
                                                        //JCL
19452: 332 unit uPSI JvUnicodeCanvas;
                                                        //JCL
19453:
       333 unit uPSI_JvTFUtils;
                                                        //JCL
19454: 334 unit uPSI_IdServerIOHandler;
                                                        //Indy
19455: 335 unit uPSI_IdServerIOHandlerSocket;
19456: 336 unit uPSI_IdMessageCoder;
19457: 337 unit uPSI_IdMessageCoderMIME;
                                                        //Tndv
                                                        //Tndv
19458: 338 unit uPSI_IdMIMETypes;
                                                        //Indy
19459: 339 unit uPSI_JvConverter;
19460: 340 unit uPSI_JvCsvParse;
                                                        //JCL
19461: 341 unit uPSI_umath; unit uPSI_ugamma;
                                                        //DMath
19462: 342 unit uPSI_ExcelExport; (Nat:TJsExcelExport) //JCL
       343 unit uPSI_JvDBGridExport;
                                                        //JCL
19464: 344 unit uPSI_JvgExport;
                                                        //JCL
19465: 345 unit uPSI_JvSerialMaker;
                                                        //JCL
19466: 346 unit uPSI JvWin32;
                                                        //JCL
19467: 347 unit uPSI_JvPaintFX;
                                                        //JCL
19468: 348 unit uPSI_JvOracleDataSet; (beta)
                                                        //JCL
19469: 349 unit uPSI_JvValidators; (preview)
                                                        //JCL
19470: 350 unit uPSI_JvNTEventLog;
                                                        //JTCT.
19471: 351 unit uPSI_ShellZipTool;
                                                        //mX4
19472: 352 unit uPSI_JvJoystick;
                                                        //JCL
19473: 353 unit uPSI_JvMailSlots;
                                                        //JCL
19474: 354 unit uPSI JclComplex;
                                                        //JCL
19475: 355 unit uPSI_SynPdf;
                                                        //Synopse
19476: 356 unit uPSI_Registry;
                                                        //VCL
19477: 357 unit uPSI_TlHelp32;
                                                        //VCL
19478: 358 unit uPSI_JclRegistry;
                                                        //JCL
19479: 359 unit uPSI JvAirBrush;
                                                        //JCTi
19480:
       360 unit uPSI_mORMotReport;
                                                        //Synopse
19481: 361 unit uPSI_JclLocales;
19482: 362 unit uPSI_SynEdit;
                                                        //SynEdit
19483: 363 unit uPSI_SynEditTypes;
                                                        //SynEdit
19484:
       364 unit uPSI_SynMacroRecorder;
                                                        //SynEdit
       365 unit uPSI_LongIntList;
                                                        //SynEdit
19486: 366 unit uPSI_devcutils;
19487: 367 unit uPSI_SynEditMiscClasses;
                                                        //SynEdit
19488: 368 unit uPSI_SynEditRegexSearch;
                                                        //SvnEdit
19489: 369 unit uPSI_SynEditHighlighter;
                                                        //SynEdit
19490:
       370 unit uPSI_SynHighlighterPas;
                                                        //SynEdit
19491: 371 unit uPSI_JvSearchFiles;
19492: 372 unit uPSI SynHighlighterAny;
                                                        //Lazarus
19493: 373 unit uPSI_SynEditKeyCmds;
                                                        //SvnEdit
19494: 374 unit uPSI_SynEditMiscProcs,
                                                        //SynEdit
19495: 375 unit uPSI_SynEditKbdHandler
                                                        //SvnEdit
19496: 376 unit uPSI_JvAppInst,
                                                        //JCL
19497: 377 unit uPSI_JvAppEvent;
                                                        //JCL
19498: 378 unit uPSI_JvAppCommand;
                                                        //JCL
19499: 379 unit uPSI_JvAnimTitle;
                                                        //JCL
19500: 380 unit uPSI_JvAnimatedImage;
                                                        //JCL
19501: 381 unit uPSI_SynEditExport;
                                                        //SynEdit
19502: 382 unit uPSI_SynExportHTML;
                                                        //SynEdit
19503: 383 unit uPSI_SynExportRTF;
                                                        //SynEdit
19504: 384 unit uPSI_SynEditSearch;
                                                        //SynEdit
19505: 385 unit uPSI_fMain_back
                                                        //maXbox;
19506: 386 unit uPSI_JvZoom;
                                                        //JCL
19507: 387 unit uPSI_PMrand;
                                                        //PM
19508: 388 unit uPSI_JvSticker;
19509: 389 unit uPSI_XmlVerySimple;
                                                        //mX4
19510: 390 unit uPSI Services;
                                                        //ExtPascal
19511: 391 unit uPSI_ExtPascalUtils;
                                                        //ExtPascal
19512: 392 unit uPSI_SocketsDelphi;
                                                        //ExtPascal
19513: 393 unit uPSI_StBarC;
                                                        //SysTools
19514: 394 unit uPSI_StDbBarC;
                                                        //SysTools
19515: 395 unit uPSI StBarPN;
                                                        //SvsTools
19516: 396 unit uPSI_StDbPNBC;
                                                        //SysTools
19517: 397 unit uPSI_StDb2DBC;
                                                        //SysTools
```

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19518: 398 unit uPSI_StMoney;
                                                          //SysTools
19519: 399 unit uPSI_JvForth;
                                                          //JCL
19520: 400 unit uPSI_RestRequest;
                                                          //mX4
19521: 401 unit uPSI_HttpRESTConnectionIndy;
                                                          //mX4
19522: 402 unit uPSI_JvXmlDatabase; //update
                                                          //JCL
19523: 403 unit uPSI StAstro;
                                                          //SysTools
19524: 404 unit uPSI_StSort;
                                                           //SysTools
19525: 405 unit uPSI_StDate;
19526: 406 unit uPSI_StDateSt;
                                                           //SysTools
19527: 407 unit uPSI_StBase;
                                                          //SvsTools
19528: 408 unit uPSI_StVInfo;
                                                           //SysTools
19529: 409 unit uPSI_JvBrowseFolder;
19530: 410 unit uPSI_JvBoxProcs;
                                                           //JCL
19531: 411 unit uPSI_urandom; (unit uranuvag;)
19532: 412 unit uPSI_usimann; (unit ugenalg;)
                                                          //DMath
                                                          //DMath
19533: 413 unit uPSI_JvHighlighter;
                                                           //JCL
19534: 414 unit uPSI_Diff;
19535: 415 unit uPSI_SpringWinAPI;
                                                          //DSpring
19536: 416 unit uPSI_StBits;
                                                           //SysTools
19537: 417 unit uPSI_TomDBQue;
                                                          //mX4
19538: 418 unit uPSI_MultilangTranslator;
                                                          //mX4
19539: 419 unit uPSI_HyperLabel;
                                                           //mX4
19540: 420 unit uPSI_Starter;
                                                           //mX4
19541: 421 unit uPSI_FileAssocs;
                                                           //devC
19542: 422 unit uPSI_devFileMonitorX;
                                                          //devC
19543: 423 unit uPSI_devrun;
19544: 424 unit uPSI_devExec;
                                                          //devC
19545: 425 unit uPSI_oysUtils;
                                                           //devC
19546: 426 unit uPSI_DosCommand;
                                                           //devC
19547: 427 unit uPSI_CppTokenizer;
                                                          //devC
19548: 428 unit uPSI_JvHLParser;
                                                          //devC
19549: 429 unit uPSI_JclMapi;
                                                           //JCL
19550: 430 unit uPSI JclShell;
                                                          //JCL
19551: 431 unit uPSI_JclCOM;
                                                          //JCL
19552: 432 unit uPSI_GR32_Math;
                                                          //Graphics32
19553: 433 unit uPSI_GR32_LowLevel;
                                                           //Graphics32
                                                          //mX4
19554: 434 unit uPSI SimpleHl;
19555: 435 unit uPSI_GR32_Filters,
                                                          //Graphics32
19556: 436 unit uPSI_GR32_VectorMaps;
                                                          //Graphics32
19557: 437 unit uPSI_cXMLFunctions;
                                                           //Fundamentals 4
19558: 438 unit uPSI_JvTimer;
                                                           //JCL
19559: 439 unit uPSI_cHTTPUtils;
                                                           //Fundamentals 4
19560: 440 unit uPSI_cTLSUtils;
                                                           //Fundamentals 4
19561: 441 unit uPSI_JclGraphics;
                                                          //JCL
19562: 442 unit uPSI_JclSynch;
19563: 443 unit uPSI IdTelnet;
                                                           //Tndv
19564: 444 unit uPSI_IdTelnetServer,
                                                          //Indv
19565: 445 unit uPSI_IdEcho,
                                                          //Indv
19566: 446 unit uPSI_IdEchoServer,
                                                           //Indy
19567: 447 unit uPSI_IdEchoUDP,
19568: 448 unit uPSI_IdEchoUDPServer,
                                                           //Indv
                                                          //Tndv
19569: 449 unit uPSI_IdSocks,
                                                           //Indv
19570: 450 unit uPSI_IdAntiFreezeBase;
19571: 451 unit uPSI_IdHostnameServer;
                                                          //Indy
19572: 452 unit uPSI_IdTunnelCommon, 19573: 453 unit uPSI_IdTunnelMaster,
                                                           //Indv
                                                          //Tndv
19574: 454 unit uPSI_IdTunnelSlave,
                                                          //Indy
19575: 455 unit uPSI_IdRSH,
                                                          //Indy
19576: 456 unit uPSI_IdRSHServer,
                                                          //Indy
                                                          //Spring4Delphi
19577: 457 unit uPSI_Spring_Cryptography_Utils;
19578: 458 unit uPSI_MapReader,
                                                          //devC
19579: 459 unit uPSI_LibTar,
19580: 460 unit uPSI_IdStack;
                                                          //Indy
19581: 461 unit uPSI_IdBlockCipherIntercept;
                                                          //Tndv
19582: 462 unit uPSI_IdChargenServer;
                                                          //Indv
19583: 463 unit uPSI_IdFTPServer,
                                                          //Indy
19584: 464 unit uPSI_IdException,
                                                          //DMath
19585: 465 unit uPSI_utexplot;
19586: 466 unit uPSI uwinstr;
                                                          //DMath
19587: 467 unit uPSI_VarRecUtils;
                                                          //devC
19588: 468 unit uPSI_JvStringListToHtml,
19589: 469 unit uPSI_JvStringHolder,
                                                          //JCL
                                                          //Indy
19590: 470 unit uPSI_IdCoder;
19591: 471 unit uPSI SynHighlighterDfm;
                                                          //Synedit
19592: 472 unit uHighlighterProcs; in 471
                                                          //Synedit
19593: 473 unit uPSI_LazFileUtils,
19594: 474 unit uPSI IDECmdLine;
                                                           //LCL
19595: 475 unit uPSI_lazMasks;
19596: 476 unit uPSI_ip_misc;
                                                          //LCL
                                                          //mX4
19597: 477 unit uPSI_Barcode;
19598: 478 unit uPSI_SimpleXML;
                                                           //LCL
19599: 479 unit uPSI JclIniFiles;
                                                           //JCL
19600: 480 unit uPSI_D2XXUnit; {$X-}
                                                           //FTDT
19601: 481 unit uPSI_JclDateTime;
                                                           //JCL
19602: 482 unit uPSI_JclEDI;
                                                           //JCL
19603: 483 unit uPSI_JclMiscel2;
                                                           //JCL
19604: 484 unit uPSI_JclValidation;
                                                          //JCL
19605: 485 unit uPSI_JclAnsiStrings; {-PString}
19606: 486 unit uPSI_SynEditMiscProcs2;
                                                           //JCL
                                                           //Synedit
```

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19607: 487 unit uPSI_JclStreams;
                                                        //JCTi
19608: 488 unit uPSI_QRCode;
                                                        //mX4
19609: 489 unit uPSI_BlockSocket;
                                                        //ExtPascal
19610: 490 unit uPSI_Masks,Utils
                                                        //VCL
19611: 491 unit uPSI_synautil;
                                                        //Synapse!
19612: 492 unit uPSI_JclMath_Class;
                                                        //JCL RTL
19613: 493 unit ugamdist; //Gamma function
                                                        //DMath
19614: 494 unit uibeta, ucorrel; //IBeta
                                                        //DMath
                                                        //mX4
19615: 495 unit uPSI_SRMgr;
19616: 496 unit uPSI_HotLog;
                                                        //mX4
19617: 497 unit uPSI_DebugBox;
                                                        //mX4
19618: 498 unit uPSI_ustrings;
                                                        //DMath
19619: 499 unit uPSI_uregtest;
                                                        //DMath
19620: 500 unit uPSI_usimplex;
                                                        //DMath
19621: 501 unit uPST uhvper;
                                                        //DMath
19622: 502 unit uPSI_IdHL7;
                                                        //Indy
19623: 503 unit uPSI_IdIPMCastBase,
19624: 504 unit uPSI_IdIPMCastServer;
                                                        //Indy
19625: 505 unit uPSI_IdIPMCastClient;
                                                        //Indy
      506 unit uPSI_unlfit; //nlregression
19626:
                                                        //DMath
19627: 507 unit uPSI_IdRawHeaders;
                                                        //Indy
19628: 508 unit uPSI_IdRawClient;
                                                        //Indy
19629: 509 unit uPSI_IdRawFunctions;
                                                        //Indv
19630: 510 unit uPSI_IdTCPStream;
                                                        //Tndv
       511 unit uPSI_IdSNPP;
                                                        //Indy
19632: 512 unit uPSI_St2DBarC;
                                                        //SysTools
19633: 513 unit uPSI_ImageWin; //FTL
                                                        //VCL
19634: 514 unit uPSI_CustomDrawTreeView; //FTL
                                                        //VCT
19635: 515 unit uPSI_GraphWin; //FTL
                                                        //VCL
19636: 516 unit uPSI_actionMain; //FTL
                                                        //VCL
19637: 517 unit uPSI_StSpawn;
                                                        //SysTools
19638: 518 unit uPSI_CtlPanel;
                                                        //VCL
19639: 519 unit uPSI IdLPR;
                                                        //Indv
19640: 520 unit uPSI_SockRequestInterpreter;
                                                        //Indy
       521 unit uPSI_ulambert;
                                                        //DMath
19642: 522 unit uPSI_ucholesk;
                                                        //DMath
19643: 523 unit uPSI SimpleDS;
                                                        //VCL
19644: 524 unit uPSI DBXSglScanner;
                                                        //VCL
19645:
       525 unit uPSI_DBXMetaDataUtil;
                                                        //VCL
19646: 526 unit uPSI_Chart;
                                                        //TEE
19647: 527 unit uPSI TeeProcs;
                                                        //TEE
19648: 528 unit mXBDEUtils;
                                                        //mX4
19649:
       529 unit uPSI_MDIEdit;
                                                        //VCL
19650: 530 unit uPSI_CopyPrsr;
                                                        //VCL
19651: 531 unit uPSI_SockApp;
                                                        //VCL
19652: 532 unit uPSI_AppEvnts;
                                                        //VCL
19653: 533 unit uPSI_ExtActns;
                                                        //VCL
19654: 534 unit uPSI_TeEngine;
19655: 535 unit uPSI_CoolMain; //browser
                                                        //VCL
19656: 536 unit uPSI StCRC;
                                                        //SysTools
19657: 537 unit uPSI_StDecMth2;
                                                        //SysTools
19658:
       538 unit uPSI_frmExportMain;
                                                        //Synedit
19659: 539 unit uPSI_SynDBEdit;
19660: 540 unit uPSI_SynEditWildcardSearch;
                                                        //Synedit
19661: 541 unit uPSI_BoldComUtils;
                                                        //BOLD
19662:
       542 unit uPSI_BoldIsoDateTime;
                                                        //BOLD
19663: 543 unit uPSI_BoldGUIDUtils; //inCOMUtils
                                                        //BOLD
                                                        //BOLD
19664: 544 unit uPSI_BoldXMLRequests;
19665: 545 unit uPSI_BoldStringList;
                                                        //BOTID
19666:
       546 unit uPST BoldFileHandler;
                                                        //BOLD
19667: 547 unit uPSI_BoldContainers;
                                                        //BOLD
19668: 548 unit uPSI_BoldQueryUserDlg;
                                                        //BOLD
19669: 549 unit uPSI_BoldWinINet;
                                                        //BOLD
19670: 550 unit uPSI BoldQueue;
                                                        //BOTID
19671: 551 unit uPSI_JvPcx;
                                                        //JCL
       552 unit uPSI_IdWhois;
                                                        //Indy
19673: 553 unit uPSI_IdWhoIsServer;
19674: 554 unit uPSI_IdGopher;
                                                        //Indy
19675: 555 unit uPSI IdDateTimeStamp;
                                                        //Indy
19676: 556 unit uPSI_IdDayTimeServer;
                                                        //Indv
19677: 557 unit uPSI_IdDayTimeUDP;
                                                        //Indy
19678: 558 unit uPSI_IdDayTimeUDPServer;
                                                        //Indy
19679: 559 unit uPSI_IdDICTServer;
                                                        //Indy
19680: 560 unit uPSI_IdDiscardServer;
                                                        //Tndv
                                                        //Indy
19681:
       561 unit uPSI_IdDiscardUDPServer;
19682: 562 unit uPSI_IdMappedFTP;
                                                        //Indy
19683: 563 unit uPSI_IdMappedPortTCP;
                                                        //Indv
19684: 564 unit uPSI_IdGopherServer;
19685: 565 unit uPSI_IdQotdServer;
                                                        //Indy
                                                        //Indy
19686: 566 unit uPSI_JvRgbToHtml;
                                                        //JCL
19687: 567 unit uPSI_JvRemLog,
                                                        //JCL
19688: 568 unit uPSI JvSysComp;
                                                        //JCL
19689: 569 unit uPSI JvTMTL;
                                                        //JCL
       570 unit uPSI_JvWinampAPI;
                                                        //JCL
      571 unit uPSI_MSysUtils;
19691:
                                                        //mX4
                                                        //ESB
19692: 572 unit uPSI_ESBMaths;
19693: 573 unit uPSI ESBMaths2;
                                                        //ESB
19694: 574 unit uPSI_uLkJSON;
                                                        //Tik
19695: 575 unit uPSI_ZURL; //Zeos
                                                        //Zeos
```

```
19696: 576 unit uPSI ZSvsUtils;
                                                          //Zeos
19697: 577 unit unaUtils internals
                                                          //UNA
19698: 578 unit uPSI_ZMatchPattern;
                                                          //Zeos
19699: 579 unit uPSI_ZClasses;
                                                          //Zeos
19700: 580 unit uPSI ZCollections;
                                                          //Zeos
19701: 581 unit uPSI ZEncoding;
                                                          //Zeos
19702: 582 unit uPSI_IdRawBase;
                                                          //Indy
19703: 583 unit uPSI_IdNTLM;
19704: 584 unit uPSI_IdNNTP;
                                                          //Indy
19705: 585 unit uPSI_usniffer; //PortScanForm 19706: 586 unit uPSI_IdCoderMIME;
                                                          //mX4
                                                          //Tndv
19707: 587 unit uPSI_IdCoderUUE;
                                                          //Indy
19708: 588 unit uPSI_IdCoderXXE;
                                                          //Indy
19709: 589 unit uPSI_IdCoder3to4;
                                                          //Indy
19710: 590 unit uPST IdCookie;
                                                          //Tndv
19711: 591 unit uPSI_IdCookieManager;
                                                          //Indy
19712: 592 unit uPSI_WDosSocketUtils;
                                                          //WDos
19713: 593 unit uPSI_WDosPlcUtils;
                                                          //WDos
19714: 594 unit uPSI_WDosPorts;
                                                          //WDos
19715: 595 unit uPSI_WDosResolvers;
                                                          //WDos
19716: 596 unit uPSI_WDosTimers;
                                                          //WDos
19717: 597 unit uPSI_WDosPlcs;
                                                          //WDos
19718: 598 unit uPSI_WDosPneumatics;
                                                          //WDos
19719: 599 unit uPSI_IdFingerServer;
                                                          //Tndv
19720: 600 unit uPSI_IdDNSResolver;
                                                          //Indv
19721: 601 unit uPSI_IdHTTPWebBrokerBridge;
                                                          //Indy
19722: 602 unit uPSI_IdIntercept;
19723: 603 unit uPSI_IdIPMCastBase; 19724: 604 unit uPSI_IdLogBase;
                                                          //Tndv
                                                          //Tndv
19725: 605 unit uPSI_IdIOHandlerStream;
                                                          //Indy
19726: 606 unit uPSI_IdMappedPortUDP;
                                                          //Indy
19727: 607 unit uPSI_IdQOTDUDPServer;
                                                          //Indy
19728: 608 unit uPSI_IdQOTDUDP;
                                                          //Indv
19729: 609 unit uPSI_IdSysLog;
                                                          //Indy
19730: 610 unit uPSI_IdSysLogServer;
                                                          //Indy
19731: 611 unit uPSI_IdSysLogMessage;
                                                          //Indy
19732: 612 unit uPSI IdTimeServer;
                                                          //Indy
19733: 613 unit uPSI IdTimeUDP;
                                                          //Indv
19734: 614 unit uPSI_IdTimeUDPServer;
                                                          //Indy
19735: 615 unit uPSI_IdUserAccounts;
19736: 616 unit uPSI TextUtils;
                                                          //mX4
19737: 617 unit uPSI MandelbrotEngine;
                                                          //mX4
19738: 618 unit uPSI_delphi_arduino_Unit1;
                                                          //mX4
19739: 619 unit uPSI_DTDSchema2;
19740: 620 unit uPSI_fplotMain;
                                                          //DMath
19741: 621 unit uPSI_FindFileIter;
                                                          //mX4
19742: 622 unit uPSI_PppState; (JclStrHashMap)
19743: 623 unit uPSI_PppParser;
                                                          //PPP
                                                          //PPP
19744: 624 unit uPSI_PppLexer;
                                                          //PPP
19745: 625 unit uPSI PCharUtils;
                                                          //PPP
19746: 626 unit uPSI uJSON;
                                                          //WU
19747: 627 unit uPSI_JclStrHashMap;
                                                          //JCL
19748: 628 unit uPSI_JclHookExcept;
                                                          //JCL
19749: 629 unit uPSI_EncdDecd;
                                                          //VCL
19750: 630 unit uPSI_SockAppReg;
                                                          //VCL
19751: 631 unit uPSI_PJFileHandle;
                                                          //PJT
19752: 632 unit uPSI_PJEnvVars;
                                                          //PJ
19753: 633 unit uPSI_PJPipe;
                                                          //PJ
19754: 634 unit uPSI_PJPipeFilters;
                                                          //PJ
19755: 635 unit uPST PJConsoleApp;
                                                          //PIT
19756: 636 unit uPSI_UConsoleAppEx;
                                                          //PJ
19757: 637 unit uPSI_DbxSocketChannelNative,
                                                          //VCL
19758: 638 unit uPSI_DbxDataGenerator,
19759: 639 unit uPSI DBXClient;
                                                          //VCL
19760: 640 unit uPSI_IdLogEvent;
                                                          //Indv
19761: 641 unit uPSI_Reversi;
                                                          //mX4
19762: 642 unit uPSI_Geometry;
                                                          //mX4
19763: 643 unit uPSI_IdSMTPServer;
                                                          //Indy
19764: 644 unit uPSI_Textures;
19765: 645 unit uPSI_IBX;
                                                          //mX4
                                                          //VCL
19766: 646 unit uPSI_IWDBCommon;
                                                          //VCL
19767: 647 unit uPSI_SortGrid;
                                                          //mX4
19768: 648 unit uPSI_IB;
                                                          //VCL
19769: 649 unit uPST TBScript;
                                                          //VCL
19770: 650 unit uPSI_JvCSVBaseControls;
                                                          //JCL
19771: 651 unit uPSI_Jvg3DColors;
                                                          //JCL
19772: 652 unit uPSI_JvHLEditor; //beat
19773: 653 unit uPSI_JvShellHook;
                                                          //JCL
                                                          //JCL
19774: 654 unit uPSI_DBCommon2
                                                          //VCL
19775: 655 unit uPSI_JvSHFileOperation;
                                                          //JCL
19776: 656 unit uPSI_uFilexport;
                                                          //mX4
19777: 657 unit uPSI_JvDialogs;
                                                          //JCL
19778: 658 unit uPSI JvDBTreeView;
                                                          //JCL
19779: 659 unit uPSI_JvDBUltimGrid;
                                                          //JCL
19780: 660 unit uPSI_JvDBQueryParamsForm;
                                                          //JCL
19781: 661 unit uPSI_JvExControls;
                                                          //JCL
19782: 662 unit uPSI_JvBDEMemTable;
                                                          //JCL
19783: 663 unit uPSI_JvCommStatus;
                                                          //JCL
19784: 664 unit uPSI_JvMailSlots2;
                                                          //JCL
```

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19785: 665 unit uPSI_JvgWinMask;
                                                          //JCTi
19786: 666 unit uPSI_StEclpse;
                                                          //SysTools
19787: 667 unit uPSI_StMime;
                                                          //SysTools
19788: 668 unit uPSI_StList;
                                                          //SysTools
19789: 669 unit uPSI StMerge;
                                                          //SysTools
19790: 670 unit uPSI StStrS;
                                                          //SvsTools
19791:
       671 unit uPSI_StTree,
                                                          //SysTools
19792:
       672 unit uPSI_StVArr;
                                                          //SysTools
19793: 673 unit uPSI_StRegIni;
                                                          //SysTools
19794: 674 unit uPSI_urkf;
                                                          //DMath
19795: 675 unit uPSI_usvd;
                                                          //DMath
19796: 676 unit uPSI_DepWalkUtils;
                                                          //JCL
19797: 677 unit uPSI_OptionsFrm;
                                                          //JCL
19798: 678 unit yuvconverts;
19799: 679 uPSI_JvPropAutoSave;
                                                          //mX4
                                                          //JTCT
19800: 680 uPSI_AclAPI;
                                                          //alcinoe
19801: 681 uPSI_AviCap;
                                                          //alcinoe
19802: 682 uPSI_ALAVLBinaryTree;
                                                          //alcinoe
19803: 683 uPSI_ALFcnMisc;
                                                          //alcinoe
19804: 684 uPSI_ALStringList;
                                                          //alcinoe
19805: 685 uPSI_ALQuickSortList;
                                                          //alcinoe
19806: 686 uPSI_ALStaticText;
                                                          //alcinoe
19807: 687 uPSI_ALJSONDoc;
                                                          //alcinoe
19808: 688 uPSI_ALGSMComm;
                                                          //alcinoe
19809: 689 uPSI_ALWindows;
                                                          //alcinoe
19810: 690 uPSI_ALMultiPartFormDataParser;
                                                          //alcinoe
19811: 691 uPSI_ALHttpCommon;
                                                          //alcinoe
19812: 692 uPSI_ALWebSpider,
19813: 693 uPSI_ALHttpClient;
                                                          //alcinoe
                                                          //alcinoe
19814: 694 uPSI_ALFcnHTML;
                                                          //alcinoe
19815: 695 uPSI_ALFTPClient;
                                                          //alcinoe
19816: 696 uPSI_ALInternetMessageCommon;
                                                          //alcinoe
19817: 697 uPSI_ALWininetHttpClient;
                                                          //alcinoe
19818: 698 uPSI_ALWinInetFTPClient;
                                                          //alcinoe
19819: 699 uPSI_ALWinHttpWrapper;
19820: 700 uPSI_ALWinHttpClient;
                                                          //alcinoe
19821: 701 uPSI_ALFcnWinSock;
                                                          //alcinoe
19822: 702 uPSI_ALFcnSQL;
                                                          //alcinoe
19823: 703 uPSI_ALFcnCGI;
                                                          //alcinoe
19824: 704 uPSI_ALFcnExecute;
                                                          //alcinoe
19825: 705 uPSI_ALFcnFile;
                                                          //alcinoe
       706 uPSI_ALFcnMime;
19826:
                                                          //alcinoe
19827: 707 uPSI_ALPhpRunner;
                                                          //alcinoe
19828: 708 uPSI_ALGraphic;
                                                          //alcinoe
19829: 709 uPSI_ALIniFiles;
                                                          //alcinoe
       710 uPSI_ALMemCachedClient;
19830:
                                                          //alcinoe
       711 unit uPSI_MyGrids;
19831:
                                                          //mX4
       712 uPSI_ALMultiPartMixedParser
                                                          //alcinoe
19833:
       713 uPSI_ALSMTPClient
                                                          //alcinoe
19834:
       714 uPSI ALNNTPClient;
                                                          //alcinoe
19835:
       715 uPSI ALHintBalloon;
                                                          //alcinoe
19836:
       716 unit uPSI_ALXmlDoc;
                                                          //alcinoe
19837:
       717 unit uPSI_IPCThrd;
                                                          //VCL
19838:
       718 unit uPSI_MonForm;
                                                          //VCL
19839:
       719 unit uPSI TeCanvas;
                                                          //Orpheus
19840:
       720 unit uPSI Ovemise;
                                                          //Orpheus
19841:
       721 unit uPSI_ovcfiler;
                                                          //Orpheus
19842: 722 unit uPSI_ovcstate;
                                                          //Orpheus
19843:
       723 unit uPSI_ovccoco;
                                                          //Orpheus
19844:
       724 unit uPSI_ovcrvexp;
                                                          //Orpheus
       725 unit uPSI_OvcFormatSettings;
19845:
                                                          //Orpheus
19846:
       726 unit uPSI_OvcUtils;
                                                          //Orpheus
19847: 727 unit uPSI_ovcstore;
                                                          //Orpheus
19848:
       728 unit uPSI ovcstr;
                                                          //Orpheus
19849:
       729 unit uPSI_ovcmru;
                                                          //Orpheus
       730 unit uPSI_ovccmd;
                                                          //Orpheus
19851:
       731 unit uPSI_ovctimer;
                                                          //Orpheus
19852: 732 unit uPSI_ovcintl;
                                                          //Orpheus
19853:
       733 uPSI AfCircularBuffer;
                                                          //AsyncFree
19854:
       734 uPSI_AfUtils;
                                                          //AsvncFree
19855: 735 uPSI_AfSafeSync;
                                                          //AsyncFree
19856: 736 uPSI_AfComPortCore;
                                                          //AsyncFree
19857: 737 uPSI_AfComPort;
                                                          //AsyncFree
19858:
       738 uPST AfPortControls;
                                                          //AsvncFree
19859:
       739 uPSI_AfDataDispatcher;
                                                          //AsyncFree
19860: 740 uPSI_AfViewers;
                                                            'AsyncFree
19861: 741 uPSI_AfDataTerminal;
                                                          //AsyncFree
19862: 742 uPSI_SimplePortMain;
19863: 743 unit uPSI_ovcclock;
                                                          //AsyncFree
                                                          //Orpheus
       744 unit uPSI_o32intlst;
19864:
                                                          //Orpheus
19865: 745 unit uPSI_o32ledlabel;
                                                          //Orpheus
19866: 746 unit uPSI_AlMySqlClient;
                                                          //alcinoe
19867: 747 unit uPSI_ALFBXClient;
                                                          //alcinoe
19868: 748 unit uPSI_ALFcnSQL;
                                                          //alcinoe
19869: 749 unit uPSI_AsyncTimer;
                                                          //mX4
19870: 750 unit uPSI_ApplicationFileIO;
                                                          //mX4
19871: 751 unit uPSI_PsAPI;
                                                          //VCLA
19872: 752 uPSI_ovcuser;
                                                          //Orpheus
19873: 753 uPSI_ovcurl;
                                                          //Orpheus
```

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19874: 754 uPSI_ovcvlb;
                                                         //Orpheus
19875: 755 uPSI_ovccolor;
                                                         //Orpheus
19876: 756 uPSI_ALFBXLib,
                                                         //alcinoe
19877: 757 uPSI_ovcmeter;
                                                         //Orpheus
19878: 758 uPSI ovcpeakm;
                                                         //Orpheus
19879: 759 uPSI_032BGSty;
                                                         //Orpheus
19880:
       760 uPSI_ovcBidi;
                                                         //Orpheus
19881:
       761 uPSI_ovctcary;
                                                         //Orpheus
19882: 762 uPSI_DXPUtils;
                                                         //mX4
19883: 763 uPSI_ALMultiPartBaseParser;
                                                         //alcinoe
19884: 764 uPSI_ALMultiPartAlternativeParser;
                                                         //alcinoe
19885: 765 uPSI_ALPOP3Client;
                                                         //alcinoe
19886: 766 uPSI_SmallUtils;
                                                         //mX4
19887: 767 uPSI_MakeApp;
                                                         //mX4
19888:
       768 uPSI 032MouseMon;
                                                         //Orpheus
19889:
       769 uPSI_OvcCache;
                                                         //Orpheus
       770 uPSI_ovccalc;
                                                           Orpheus
19890:
19891:
       771 uPSI_Joystick
                                                         //OpenGL
       772 uPSI_ScreenSaver;
19892:
                                                         //OpenGL
       773 uPSI_XCollection,
19893:
                                                         //OpenGL
19894:
       774 uPSI_Polynomials,
                                                         //OpenGL
19895:
       775 uPSI_PersistentClasses, //9.86
                                                         //OpenGL
19896: 776 uPSI_VectorLists;
                                                         //OpenGL
19897: 777 uPSI_XOpenGL,
                                                         //OpenGL
19898: 778 uPSI_MeshUtils;
                                                         //OpenGL
19899: 779 unit uPSI_JclSysUtils;
                                                         //JCL
19900: 780 unit uPSI_JclBorlandTools;
                                                         //JCL
19901:
       781 unit JclFileUtils max;
                                                         //JTCT
19902: 782 uPSI_AfDataControls,
                                                         //AsvncFree
19903: 783 uPSI_GLSilhouette;
                                                         //OpenGL
19904: 784 uPSI_JclSysUtils_class;
                                                         //JCL
19905: 785 uPSI_JclFileUtils_class;
                                                         //JCL
19906: 786 uPSI FileUtil;
                                                         //JCL
19907: 787 uPSI_changefind;
                                                         //mX4
19908: 788 uPSI_cmdIntf;
                                                         //mX4
19909: 789 uPSI_fservice;
                                                         //mX4
19910: 790 uPSI_Keyboard;
                                                         //OpenGL
19911:
       791 uPSI_VRMLParser,
                                                         //OpenGL
19912:
       792 uPSI_GLFileVRML,
                                                         //OpenGL
19913: 793 uPSI_Octree;
                                                         //OpenGL
19914: 794 uPSI_GLPolyhedron,
                                                         //OpenGL
19915: 795 uPSI_GLCrossPlatform;
19916: 796 uPSI_GLParticles;
                                                         //OpenGL
                                                         //OpenGL
19917: 797 uPSI_GLNavigator;
                                                         //OpenGL
19918: 798 uPSI_GLStarRecord;
                                                         //OpenGL
19919: 799 uPSI_GLTextureCombiners;
                                                         //OpenGL
19920: 800 uPSI_GLCanvas;
                                                         //OpenGL
19921: 801 uPSI_GeometryBB;
                                                         //OpenGL
19922: 802 uPSI_GeometryCoordinates;
                                                         //OpenGL
19923: 803 uPSI VectorGeometry;
                                                         //OpenGL
19924: 804 uPSI_BumpMapping;
                                                         //OpenGL
19925: 805 uPSI_TGA;
                                                         //OpenGL
19926: 806 uPSI_GLVectorFileObjects;
                                                         //OpenGL
19927: 807 uPSI_IMM;
                                                         //VCL
19928: 808 uPSI_CategoryButtons;
                                                         //VCL
19929: 809 uPSI_ButtonGroup;
                                                         //VCL
19930: 810 uPSI_DbExcept;
                                                         //VCL
19931: 811 uPSI_AxCtrls;
                                                         //VCL
19932: 812 uPSI_GL_actorUnit1;
                                                         //OpenGL
19933: 813 uPSI_StdVCL;
                                                         //VCT
19934: 814 unit CurvesAndSurfaces;
                                                         //OpenGL
19935:
       815 uPSI_DataAwareMain;
                                                         //AsyncFree
19936: 816 uPSI_TabNotBk;
                                                         //VCL
19937: 817 uPSI udwsfiler;
                                                         //mX4
19938: 818 uPSI_synaip;
                                                         //Synapse!
19939: 819 uPSI_synacode;
                                                         //Synapse
19940: 820 uPSI_synachar;
                                                         //Synapse
19941: 821 uPSI_synamisc;
                                                         //Synapse
19942: 822 uPSI_synaser;
                                                         //Synapse
19943: 823 uPSI_synaicnv;
                                                         //Synapse
19944: 824 uPSI_tlntsend;
                                                         //Synapse
19945: 825 uPSI_pingsend;
                                                         //Synapse
19946: 826 uPSI blcksock;
                                                         //Synapse
19947: 827 uPSI asnlutil;
                                                         //Synapse
19948: 828 uPSI_dnssend;
                                                         //Synapse
19949: 829 uPSI_clamsend;
                                                           'Synapse
19950: 830 uPSI_ldapsend;
                                                         //Synapse
19951: 831 uPSI_mimemess;
                                                         //Synapse
19952: 832 uPSI_slogsend;
                                                         //Synapse
19953: 833 uPSI_mimepart;
                                                         //Synapse
19954: 834 uPSI_mimeinln;
                                                         //Synapse
19955: 835 uPSI_ftpsend,
                                                         //Synapse
19956: 836 uPSI_ftptsend;
                                                         //Synapse
19957: 837 uPSI_httpsend;
                                                         //Synapse
19958: 838 uPSI_sntpsend;
                                                         //Synapse
19959: 839 uPSI_smtpsend;
                                                         //Synapse
19960: 840 uPSI_snmpsend;
                                                         //Synapse
19961: 841 uPSI_imapsend;
                                                         //Synapse
19962: 842 uPSI_pop3send;
                                                         //Synapse
```

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19963: 843 uPSI_nntpsend;
19964: 844 uPSI_ssl_cryptlib;
                                                       //Synapse
                                                       //Synapse
19965: 845 uPSI_ssl_openssl;
                                                       //Synapse
19966: 846 uPSI_synhttp_daemon;
                                                        //Synapse
19967: 847 uPSI NetWork;
                                                        //mX4
19968: 848 uPSI_PingThread;
                                                       //Synapse
19969: 849 uPSI_JvThreadTimer;
                                                       //JCL
19970: 850 unit uPSI_wwSystem;
                                                       //InfoPower
19971: 851 unit uPSI_IdComponent;
                                                        //Indy
19972: 852 unit uPSI IdIOHandlerThrottle;
                                                       //Indv
19973: 853 unit uPSI_Themes;
                                                       //VCL
19974: 854 unit uPSI_StdStyleActnCtrls;
                                                       //VCL
19975: 855 unit uPSI_UDDIHelper;
                                                       //VCL
19976: 856 unit uPSI_IdIMAP4Server;
                                                       //Indy
19977: 857 uPSI VariantSymbolTable,
                                                       //VCI //3 9 9 92
19978: 858 uPSI_udf_glob,
                                                       //mX4
19979: 859 uPSI_TabGrid,
19980: 860 uPSI_JsDBTreeView,
                                                        //mX4
19981: 861 uPSI_JsSendMail,
19982: 862 uPSI_dbTvRecordList,
                                                        //mX4
                                                       //mX4
19983: 863 uPSI_TreeVwEx,
                                                       //mX4
19984: 864 uPSI_ECDataLink,
                                                        //mX4
19985: 865 uPSI_dbTree,
19986: 866 uPSI_dbTreeCBox,
                                                        //mX4
                                                        //mX4
19987: 867 unit uPSI_Debug; //TfrmDebug
                                                       //mX4
19988: 868 uPSI_TimeFncs;
19989: 869 uPSI_FileIntf,
                                                        //VCL
19990: 870 uPSI_SockTransport,
                                                       //RTT.
19991: 871 unit uPSI_WinInet;
                                                        //RTT
19992: 872 unit uPSI_Wwstr;
                                                       //mX4
19993: 873 uPSI_DBLookup,
19994: 874 uPSI_Hotspot,
19995: 875 uPSI_HList; //History List
                                                        //mX4
                                                        //mX4
19996: 876 unit uPSI_DrTable;
                                                       //VCL
19997: 877 uPSI_TConnect,
19998: 978 uPSI DataBkr.
                                                        //VCL
19999: 979 uPSI HTTPIntr;
                                                        //VCL
20000: 980 unit uPSI_Mathbox;
                                                        //mX4
20001: 881 uPSI_cyIndy,
                                                        //cY
20002: 882 uPSI_cySysUtils,
20003: 883 uPSI_cyWinUtils,
                                                        //cY
20004: 884 uPSI_cyStrUtils,
                                                        //cY
20005: 885 uPSI_cyObjUtils,
                                                        //cY
20006: 886 uPSI_cyDateUtils,
                                                        //cY
20007: 887 uPSI_cyBDE,
                                                        //cY
20008: 888 uPSI_cyClasses,
                                                        //cY
20009: 889 uPSI_cyGraphics,
                             //3.9.9.94 2
                                                       //cY
20010: 890 unit uPSI_cyTypes;
                                                        //cY
20011: 891 uPSI_JvDateTimePicker,
                                                        //JCL
20012: 892 uPSI JvCreateProcess,
                                                        //JCL
20013: 893 uPSI_JvEasterEgg,
                                                        //JCL
20014: 894 uPSI_WinSvc, //3.9.9.94_3
                                                        //VCL
20015: 895 uPSI_SvcMgr
                                                        //VCL
20016: 896 unit uPSI_JvPickDate;
                                                        //JCL
20017: 897 unit uPSI_JvNotify;
                                                        //JCL
20018: 898 uPSI_JvStrHlder
                                                        //JCL
20019: 899 unit uPSI_JclNTFS2;
                                                        //JCL
20020: 900 uPSI_Jcl8087 //math coprocessor
                                                        //JCL
20021: 901 uPSI_JvAddPrinter
20022: 902 uPSI JvCabFile
                                                        //JCL
                                                        //JTCT.
20023: 903 uPSI_JvDataEmbedded;
                                                       //JCL
20024:
20025:
20026:
20028: //Form Template Library FTL
20030:
20031: 26 FTL For Form Building out of the Script, eg. 399_form_templates.txt
20032:
20033: 045 unit uPSI_VListView
                                                       TFormListView;
20034: 263 unit uPSI_JvProfiler32;
                                                       TProfReport
20035: 270 unit uPSI_ImgList;
                                                       TCustomImageList
20036: 278 unit uPSI JvImageWindow;
                                                       TJvImageWindow
20037: 317 unit uPSI_JvParserForm;
                                                       TJvHTMLParserForm
20038: 497 unit uPSI_DebugBox;
                                                       TDebugBox
20039: 513 unit uPSI_ImageWin;
                                                       TImageForm, TImageForm2
20040: 514 unit uPSI_CustomDrawTreeView;
                                                       TCustomDrawForm
20041: 515 unit uPSI_GraphWin;
                                                       TGraphWinForm
20042: 516 unit uPSI_actionMain;
                                                       TActionForm
20043: 518 unit uPSI_CtlPanel;
                                                       TAppletApplication
20044: 529 unit uPSI_MDIEdit;
                                                       TEdit.Form
20045: 535 unit uPSI_CoolMain; {browser}
                                                       TWebMainForm
20046: 538 unit uPSI_frmExportMain;
                                                       TSynexportForm
20047: 585 unit uPSI_usniffer; {//PortScanForm}
                                                       TSniffForm
20048: 600 unit uPSI_ThreadForm;
                                                       TThreadSortForm;
20049: 618 unit uPSI_delphi_arduino_Unit1;
                                                       TLEDForm
20050: 620 unit uPSI_fplotMain;
20051: 660 unit uPSI_JvDBQueryParamsForm;
                                                       TfplotForm1
                                                       TJvQueryParamsDialog
```

```
20052: 677 unit uPSI_OptionsFrm;
                                                      TfrmOptions;
                                                      TMonitorForm
20053: 718 unit uPSI_MonForm;
20054: 742 unit uPSI_SimplePortMain;
                                                      TPortForm1
                                                      TOvcCalculator //widget
20055: 770 unit uPSI_ovccalc;
20056: 810 unit uPSI DbExcept;
                                                      TDbEngineErrorDlg
                                                      TglActorForm1 //OpenGL Robot
TTCPHttpDaemon, TTCPHttpThrd, TPingThread
20057: 812 unit uPSI_GL_actorUnit1;
20058: 846 unit uPSI_synhttp_daemon;
20059: 867 unit uPSI_Debug;
20060:
20061:
20062: ex.:with TEditForm.create(self) do begin
20063:
             caption:= 'Template Form Tester';
20064:
             FormStyle:= fsStayOnTop;
20065:
             with editor do begin
20066:
               Lines.LoadFromFile(Exepath+'\docs\Readme rus mX2.rtf
20067:
               SelStart:= 0;
20068:
               Modified:= False;
20069:
             end;
20070:
           end;
20071:
        with TWebMainForm.create(self) do begin
20072:
           URLs.Text:= 'http://www.kleiner.ch'
20073:
           URLsClick(self); Show;
20074:
         end;
20075:
        with TSynexportForm.create(self) do begin
20076:
           Caption:= 'Synexport HTML RTF tester';
20077:
           Show;
20078:
         end;
20079:
        with TThreadSortForm.create(self) do begin
20080:
           showmodal; free;
20081:
20082:
20083:
        with TCustomDrawForm.create(self) do begin
             width:=820; height:=820;
image1.height:= 600; //add properties
20084:
20085:
              image1.picture.bitmap:= image2.picture.bitmap;
20086:
20087:
              //SelectionBackground1Click(self)    CustomDraw1Click(self);
20088:
              Background1.click;
20089:
              bitmap1.click;
20090:
              Tile1.click;
20091:
              Showmodal;
20092:
             Free;
20093:
            end;
20094:
20095:
         with TfplotForm1.Create(self) do begin
20096:
            BtnPlotClick(self);
20097:
            Showmodal; Free;
20098:
          end;
20100:
       with TOvcCalculator.create(self) do begin
           parent:= aForm;
20101:
20102:
         //free:
20103:
           setbounds(550,510,200,150);
20104:
           displaystr:= 'maXcalc'
20105:
20106:
20107:
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20145:
20146:
20147: Doc ref Docu for all Type Class and Const in maXbox_types.pdf
20148: using Docu for this file is maxbox_functions_all.pdf
20149: PEP - Pascal Education Program Lib Lab
20150:
20151: http://stackoverflow.com/tags/pascalscript/hot
20152: http://www.jrsoftware.org/ishelp/index.php?topic=scriptfunctions
20153: http://sourceforge.net/projects/maXbox #locs:15162
20154: http://sourceforge.net/apps/mediawiki/maXbox
20156: http://www.blaisepascal.eu/
20156: https://github.com/maxkleiner/maXbox3.git
20157: http://www.heise.de/download/maxbox-1176464.html
20158: \ \mathtt{http://www.softpedia.com/get/Programming/Other-Programming-Files/maXbox.shtml}
20159: https://www.facebook.com/pages/Programming-maXbox/166844836691703
20160:
20161:
           ---- bigbitbox code_cleared_checked----
```