```
1: *************
 2: Constructor Function and Procedure List of maXbox 3.9.9
 4 .
 6: ref Help Extraxt of EXE Functions of maxbox3.exe BigBitBox API HEX in BOX
 9: File Size of EXE:19942400 V3.9.9.94 April 2014 To EKON/BASTA/JAX/IBZ/SWS
               *****Now the Funclist**
10:
11: Funclist Function : 12130 //10766 //10165 (7648)
15: Constructlist Constructor Size is: 1240 //995 //
16: def head:max: maXbox7: 29.03.2014 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: 20936! Constructor, Function and Procedure
21: AExtraxt of EXE Functions of maxbox3.exe, locs of file = 19910
22: ASize of EXE: 19942400 (16586240) (13511680) (13023744)
23: SHA1 Hash of maXbox 3.9.9.94: 780F1F749EFEFB5C0FAA09C51B6AB048C6A00CC6
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 : TSOLConnection
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
```

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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 \\
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;DlgType:MsgDlgType;Buttons:TMsgDlgButtons;HelpCtx:Longint)} : \ \texttt{Integer:MsgDlgType;DlgType;Buttons:TMsgDlgButtons;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:MsgDlgType;Buttons:HelpCtx:Longint)} : \ \texttt{Integer:MsgDlgType:MsgDlgType:MsgDlgType:MsgDlgType;Buttons:HelpCtx:Longint)} : \ \texttt{Integer:MsgDlgType:MsgDlgType:MsgDlgType:MsgDlgType;Buttons:HelpCtx:Longint)} : \ \texttt{Integer:MsgDlgType:MsgDlgType:MsgDlgType:MsgDlgType:MsgDlgType:MsgDlgType:MsgDlgType:MsgDlgType:MsgDlgType:MsgDlgType:MsgDlgType:MsgDlgType:MsgDlgType:MsgDlgType:MsgDlgType:MsgDlgType:MsgDlgType:MsgDlgType:MsgDlgType:MsgDlgType:MsgDlgType:MsgDlgType:MsgDlgType:MsgDlgType:MsgDlgType:MsgDlgType:MsgDlgType:MsgDlgType:MsgDlgType:MsgDlgType:MsgDlgType:MsgDlgType:MsgDlgType:MsgDlgType:MsgDlgType:MsgDlgType:MsgDlgType:MsgDlgType:MsgDlgType:MsgDlgType:MsgDlgType:MsgDlgType:MsgDlgType:MsgDlgType:MsgDlgType:MsgDlgType:MsgDlgType:MsgDlgType:MsgDlgType:MsgDlgType:MsgDlgType:MsgDlgType:MsgDlgType:MsgDlgType:MsgDlgType:MsgDlgType:MsgDlgType:MsgDlgType:MsgDlgType:MsgDlgType:MsgDlgType:MsgDlgType:MsgDlgType:MsgDlgType:MsgDlgType:MsgDlgType:MsgDlgType:MsgDlgType:MsgDlgType:MsgDlgType:MsgDlgType:MsgDlgType:MsgDlgType:MsgDlgType:MsgDlgType:MsgDlgType:MsgDlgType:MsgDlgType:MsgDlgType:MsgDlgType:MsgDlgType:MsgDlgType:MsgDlgType:MsgDlgType:MsgDlgType:MsgDlgType:MsgDlgType:MsgDlgType:MsgDlgType:MsgDlgType:MsgDlgTy
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 SetPrecisionTolerance : 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}; FormatSettings: \texttt{TFormatSettings}): \ \texttt{Extended}; FormatSettings: \texttt{TFormatSettings} : \ \texttt{Extended}; FormatSettings: \texttt{TFormatSettings} : \ \texttt{Extended}; FormatSettings 
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}; \\ 
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 String}; a \texttt{DigitGroupSymbol:Char}; a \texttt{DigitGroupSym
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}: \ \texttt{TTimeStamp}) \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;
```

```
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: Function TryConvTypeToFamily( const AFrom, ATo : TConvType; out AFamily : TConvFamily) : 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
2788: 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,0ldPattern, 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: TCanyas);
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').SetString();
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)
```

```
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').SetString( '0=0
           Const('sdfStandard16','String').SetString('''"'mm''/''dd''/''yyyy''"''
           Const('sdfStandard32','String').SetString(''''''dd/mm/yyyy''''
3236:
          Const('sdforacle','String').SetString( '"TO_DATE(''dd/mm/yyyyy"'', ''DD/MM/YYYY'')"
Const('sdforacle','String').SetString( ""TO_DATE(''"dd/mm/yyyyy"'', ''DD/MM/YYYY'')"
Const('sdforacle','String').SetString( ""CAST(''"mm"/"dd"/"yyyy"'' AS DATE)"
3237:
3238:
3239:
           Const('sdfMSSQL','String').SetString('"CONVERT(datetime, ''"mm"/"dd"/"yyyy"
3240:
          AddTypeS('Largeint', 'Longint
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)
3254:
          Procedure JIniWriteString( const FileName, Section, Line, Value : string)
          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').SetInt( 25569);
3263:
3264:
           \textbf{Function} \  \, \texttt{JEncodeDate(} \  \, \textbf{const} \  \, \texttt{Year} \  \, \texttt{:} \  \, \texttt{Integer;} \  \, \texttt{Month,} \  \, \texttt{Day} \  \, \texttt{:} \  \, \texttt{Word)} \  \, \texttt{:} \  \, \texttt{TDateTime}
          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);
3268:
           \textbf{Function} \ \texttt{CenturyOfDate}(\ \textbf{const} \ \texttt{DateTime} \ : \ \texttt{TDateTime}) \ : \ \texttt{Integer}
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
          Function JDayOfTheYear( const DateTime : TDateTime; var Year : Integer; Function DayOfTheYear1( const DateTime : TDateTime) : Integer;
3273:
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) : TDosDateTime
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:
        Function FirstWeekendDayl( const Year, Month : Integer) : 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
         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
3378:
3379:
         end;
3380:
3381:
       procedure SIRegister_JclAnsiStrings(CL: TPSPascalCompiler);
3382:
3383:
       begin
         //'AnsiSigns','Set').SetSet(['-', '+']);
'C1_UPPER','LongWord').SetUInt( $0001);
'C1_LOWER','LongWord').SetUInt( $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:
3393:
         'C1_ALPHA','LongWord').SetUInt( $0100);
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:
```

```
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:
3496:
             Function CharlsPunctuation( const C : AnsiChar) : Boolean
              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);
```

```
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
      {SIFDEF COMPILER3_UP}
{ TargetFileName - if FileName is ShortCut returns filename ShortCut linked to }
3811:
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: {SENDIF 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').SetInt( 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);
      { $IFDEF COMPILER4_UP
4093: function GetFileSize(const FileName: string): Int64;
4094: { SELSE
4095: function GetFileSize(const FileName: string): Longint;
4096: {$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: {$IFDEF COMPILER4_UP}
4110: function FileLock(Handle: Integer; Offset, LockSize: Int64): Integer; overload;
4111: { SENDIF }
4112: function FileUnlock(Handle: Integer; Offset, LockSize: Longint): Integer;
4113: ($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:
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
4147:
       Procedure VariantMod( const src : Variant; var dst : Variant
       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;
          ATransparent: Boolean; TransparentColor: TColor; DisabledMaskColor: TColor);
4204:
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\colon // parse a SQL style data string from positions 1, 4450\colon // 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); { $\frac{\{\$IFDEF SUPPORTS_INLINE\}{\$ENDIF}}}$
        SUPPORTS_INLINE }
4517: { FillNativeChar fills Buffer with Count NativeChars }
4518: procedure FillNativeChar(var Buffer; Count: Integer; const Value: Char); // D2009 internal error {$IFDEF}
       SUPPORTS_INLINE} inline; {$ENDIF SUPPORTS_INLINE}
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; { $ENDIF SUPPORTS_INLINE }
4521: { IsSubString() compares the sub string to the string. Indices are 1th based. }
4522: function IsSubString(const S: string; StartIndex: Integer; const SubStr: string): Boolean; 4523: { Spaces returns string consists on N space chars }
4524: function Spaces(const N: Integer): string;
4525: { AddSpaces adds spaces to string S, if its Length is smaller than N }
4526: function AddSpaces(const S: string; const N: Integer): string; 4527: function SpacesW(const N: Integer): WideString;
4528: function AddSpacesW(const S: WideString; const N: Integer): WideString;
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4529: { function LastDateRUS for russian users only } 4530: { returns date relative to current date: 'äâà ãíÿ íàçàā' }
4531: function LastDateRUS(const Dat: TDateTime): string;
           { CurrencyToStr format Currency, Cur, using ffCurrency float format}
4532:
4533: function CurrencyToStr(const Cur: Currency): string;
4534: { HasChar returns True, if Char, Ch, contains in string, S } 4535: function HasChar(const Ch: Char; const S: string): Boolean;
4536: function HasCharW(const Ch: WideChar; const S: WideString): Boolean; inline; ($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; ($ENDIF SUPPORTS_INLINE)
4551: TPixelFormat', '4552: TMappingMethod',
                                      '( pfDevice, pf1bit, pf4bit, pf8bit, pf24bit )
                                          '( mmHistogram, mmQuantize, mmTrunc784, mmTrunc666, mmTripel, mmGrayscale )
4553: Function GetBitmapPixelFormat(Bitmap: TBitmap): TPixelFormat 4554: Function GetPaletteBitmapFormat(Bitmap: TBitmap): TPixelFormat
4555: Procedure SetBitmapPixelFormat(Bitmap: TBitmap; PixelFormat: TPixelFormat; Method: TMappingMethod)
4556: \textbf{Function} \ \ \texttt{BitmapToMemoryStream} ( \texttt{Bitmap:TBitmap:PixelFormat:TPixelFormat:Method:TMappingMethod}) : \texttt{TMemoryStream} ( \texttt{Attention BitmapToMemoryStream} ( \texttt{Bitmap:TBitmap:PixelFormat:TPixelFormat:Method:TMappingMethod}) : \texttt{TMemoryStream} ( \texttt{BitmapToMemoryStream} ( \texttt{BitmapToMemorySt
4557: Procedure GrayscaleBitmap( Bitmap: TBitmap)
4558: Function BitmapToMemory( Bitmap: TBitmap; Colors: Integer): TStream
4559: Procedure SaveBitmapToFile( const Filename : string; Bitmap : TBitmap; Colors : Integer)
4560: Function ScreenPixelFormat :
                                                              TPixelFormat
4561: Function ScreenColorCount : Integer
4562: Procedure TileImage( Canvas : TCanvas; Rect : TRect; Image : TGraphic)
4563: Function ZoomImage( ImageW, ImageH, MaxW, MaxH : Integer; Stretch : Boolean) : TPoint
4564: //
                 SIRegister_TJvGradient(CL);
4565:
4567: procedure SetDelimitedText(List: TStrings; const Text: string; Delimiter: Char);
4568: const
4570:
              DefaultCaseSensitivity = False;
              {$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 - )
         {$IFDEF MSWINDOWS}
4671:
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 }
         { 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;
```

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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;
```

```
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;
       WordCount given a set of word delimiters, returns number of words in S. }
function WordPosition(const N: Integer; const S: string; const WordDelims: TSysCharSet): Integer;
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. }
```

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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{Int}; \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: // associates an extension to a specific program
4994: procedure AssociateExtension(const IconPath, ProgramName, Path, Extension: string);
4995: procedure AddToRecentDocs(const FileName: string);
4996: function GetRecentDocs: TStringList;
4997: { SENDIF MSWINDOWS }
4998: function CharlsMoney(const Ch: Char): Boolean;
          //function StrToCurrDef(const Str: string; Def: Currency): Currency;
5000: function IntToExtended(I: Integer): Extended;
5001: { GetChangedText works out the new text given the current cursor pos & the key pressed 5002: It is not very useful in other contexts, but in this unit as it is needed in both MemoEx and TypedEdit }
5003: function GetChangedText(const Text: string; SelStart, SelLength: Integer; Key: Char): string;
5004: function MakeYear4Digit(Year, Pivot: Integer): Integer;
5005: //function StrIsInteger(const S: string): Boolean;
5006: function StrIsFloatMoney(const Ps: string): Boolean;
5007: function StrIsDateTime(const Ps: string): Boolean;
5008: function PreformatDateString(Ps: string): string;
5009: function BooleanToInteger(const B: Boolean): Integer;
5010: function StringToBoolean(const Ps: string): Boolean;
5011: function SafeStrToDateTime(const Ps: string): TDateTime;
5012: function SafeStrToDate(const Ps: string): TDateTime;
5013: function SafeStrToTime(const Ps: string): TDateTime
5014: function StrDelete(const psSub, psMain: string): string;
5015: { returns the fractional value of pcValue} 5016: function TimeOnly(pcValue: TDateTime): TTime;
5017: { returns the integral value of pcValue }
5018: function DateOnly(pcValue: TDateTime): TDate;
5019: type TdtKind = (dtkDateOnly, dtkTimeOnly, dtkDateTime);
5020: const { TDateTime value used to signify Null value}
             NullEquivalentDate: TDateTime
5022: function DateIsNull(const pdtValue: TDateTime; const pdtKind: TdtKind): Boolean;
5023: // Replacement for Win32Check to avoid platform specific warnings in D6
5024: function OSCheck(RetVal: Boolean): Boolean;
5025: { Shortens a fully qualified Path name so that it can be drawn with a specified length limit.
5026:
              Same as FileCtrl.MinimizeName in functionality (but not implementation). Included here to
              not be forced to use FileCtrl unnecessarily }
5027:
5028: function MinimizeFileName(const FileName: string; Canvas: TCanvas; MaxLen: Integer): string; 5029: function MinimizeText(const Text: string; Canvas: TCanvas; MaxWidth: Integer): string;
5030: { MinimizeString trunactes long string, S, and appends'...'symbols, if Length of S is more than MaxLen } 5031: function MinimizeString(const S: string; const MaxLen: Integer): string;
5032: procedure RunDll32Internal(Wnd:THandle; const DLLName,FuncName,CmdLine:string;CmdShow:Integer=
          SW SHOWDEFAULT);
5033: { 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
5034: function GetDLLVersion(const DLLName: string; var pdwMajor, pdwMinor: Integer): Boolean;
5035: {SENDIF MSWINDOWS}
5036: procedure ResourceNotFound(ResID: PChar);
5037: function EmptyRect: TRect;
5038: function RectWidth(R: TRect): Integer;
5039: function RectHeight(R: TRect): Integer;
5040: function CompareRect(const R1, R2: TRect): Boolean;
5041: procedure RectNormalize(var R: TRect);
5042: function RectIsSquare(const R: TRect): Boolean;
5043: function RectSquare(var ARect: TRect; AMaxSize: Integer = -1): Boolean;
5044: //If AMaxSize = -1 ,then auto calc Square's max size 5045: \{\$ IFDEF MSWINDOWS\}
5046: procedure FreeUnusedOle;
5047: function GetWindowsVersion: string;
5048: function LoadDLL(const LibName: string): THandle;
5049: function RegisterServer(const ModuleName: string): Boolean;
5050: function UnregisterServer(const ModuleName: string): Boolean;
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5051: { $ENDIF MSWINDOWS }
5052: { String routines }
5053: function GetEnvVar(const VarName: string): string;
5054: function AnsiUpperFirstChar(const S: string): string; //follow Delphi 2009's example with "Ansi" prefix
5055: function StringToPChar(var S: string): PChar;
5056: function StrPAlloc(const S: string): PChar;
5057: procedure SplitCommandLine(const CmdLine: string; var ExeName, Params: string);
5058: function DropT(const S: string): string;
5059: { Memory routines }
5060: function AllocMemo(Size: Longint): Pointer;
5061: function ReallocMemo(fpBlock: Pointer; Size: Longint): Pointer;
5062: procedure FreeMemo(var fpBlock: Pointer);
5063: function GetMemoSize(fpBlock: Pointer): Longint;
5064: function CompareMem(fpBlock1, fpBlock2: Pointer; Size: Cardinal): Boolean;
5065: { Manipulate huge pointers routines }
5066: procedure HugeInc(var HugePtr: Pointer; Amount: Longint);
5067: procedure HugeDec(var HugePtr: Pointer; Amount: Longint);
5068: function HugeOffset(HugePtr: Pointer; Amount: Longint): Pointer;
5069: procedure HugeMove(Base: Pointer; Dst, Src, Size: Longint);
5070: procedure HMemCpy(DstPtr, SrcPtr: Pointer; Amount: Longint);
5071: function WindowClassName(Wnd: THandle): string;
5072: procedure SwitchToWindow(Wnd: THandle; Restore: Boolean);
5073: procedure ActivateWindow(Wnd: THandle);
5074: procedure ShowWinNoAnimate(Handle: THandle; CmdShow: Integer); 5075: procedure KillMessage(Wnd: THandle; Msg: Cardinal);
5076: { SetWindowTop put window to top without recreating window }
5077: procedure SetWindowTop(const Handle: THandle: const Top: Boolean);
5078: procedure CenterWindow(Wnd: THandle);
5079: function MakeVariant(const Values: array of Variant): Variant;
5080: { Convert dialog units to pixels and backwards }
5081:
5082: function DialogUnitsToPixelsX(DlgUnits: Word): Word;
5083: function DialogUnitsToPixelsY(DlgUnits: Word): Word;
5084: function PixelsToDialogUnitsX(PixUnits: Word): Word;
5085: function PixelsToDialogUnitsY(PixUnits: Word): Word
5086: { SENDIF MSWINDOWS }
5087: function GetUniqueFileNameInDir(const Path, FileNameMask: string): string;
5088: {SIFDEF BCB}
5089: function FindPrevInstance(const MainFormClass: ShortString; const ATitle: string): THandle;
5090: function ActivatePrevInstance(const MainFormClass: ShortString;const ATitle: string): Boolean;
5091: (SELSE)
5092: function FindPrevInstance(const MainFormClass, ATitle: string): THandle;
5093: function ActivatePrevInstance(const MainFormClass, ATitle: string): Boolean;
5095: { $IFDEF MSWINDOWS} 5096: { BrowseForFolderN
        BrowseForFolderNative displays Browse For Folder dialog )
5097: function BrowseForFolderNative(const Handle: THandle; const Title: string; var Folder: string): Boolean;
5098: { $ENDIF MSWINDOWS }
5099: procedure AntiAlias(Clip: TBitmap);
5100: procedure AntiAliasRect(Clip: TBitmap; XOrigin, YOrigin, XFinal, YFinal: Integer);
5101: procedure CopyRectDIBits(ACanvas: TCanvas; const DestRect: TRect;
        ABitmap: TBitmap; const SourceRect: TRect);
5102:
5103: function IsTrueType(const FontName: string): Boolean;
5104: // Removes all non-numeric characters from AValue and returns the resulting string
5105: function TextToValText(const AValue: string): string;
5106: Function ExecRegExpr( const ARegExpr, AInputStr : RegExprString) : boolean
5107: Procedure SplitRegExpr( const ARegExpr, AInputStr : RegExprString; APieces : TStrings)
5108: Function ReplaceRegExpr(const ARegExpr,AInputStr,
      AReplaceStr:RegExprString;AUseSubstitution:bool):RegExprString;
5109: Function QuoteRegExprMetaChars( const AStr : RegExprString) : RegExprString
5110: Function RegExprSubExpressions(const ARegExpr:string; ASubExprs:TStrings; AExtendedSyntax : boolean) :
Function JExtractYear( ADate : TDateTime) : Word 5114: Function JExtractMonth( ADate : TDateTime) : Word
       Function JExtractDay( ADate : TDateTime) : Word
       Function ExtractHours( ATime : TDateTime) : Word
5116:
5117:
       Function ExtractMins( ATime : TDateTime) : Word
       Function ExtractSecs( ATime : TDateTime) : Word
5118:
       Function ExtractMSecs( ATime : TDateTime) : Word
5119:
       Function FirstOfMonth( ADate : TDateTime) : TDateTime
5120:
5121:
       \textbf{Function} \ \ \texttt{GetDayOfNthDOW}(\ \ \texttt{Year}, \ \ \texttt{Month}, \ \ \texttt{DOW}, \ \ \texttt{N} \ : \ \ \texttt{Word}) \ : \ \ \texttt{Word}
       Procedure IncBorlDOW( var BorlDOW: Integer; N: Integer): Word
5122:
5123:
       Procedure IncDOW( var DOW : TTFDayOfWeek; N : Integer)
5124:
5125:
       Procedure IncDays( var ADate : TDateTime; N : Integer
5126:
       Procedure IncWeeks ( var ADate : TDateTime; N : Integer)
       Procedure IncMonths( var ADate : TDateTime; N : Integer)
5127:
       Procedure IncYears( var ADate : TDateTime; N : Integer)
5128:
       Function EndOfMonth( ADate : TDateTime) : TDateTime
       Function IsFirstOfMonth( ADate : TDateTime) : Boolean
Function IsEndOfMonth( ADate : TDateTime) : Boolean
Procedure EnsureMonth( Month : Word)
5130:
5131:
5132:
5133:
       Procedure EnsureDOW( DOW : Word)
       Function EqualDates( D1, D2 : TDateTime) : Boolean
5134:
       Function Lesser( N1, N2 : Integer) : Integer
Function Greater( N1, N2 : Integer) : Integer
5135:
5136:
Function GetDivLength (TotalLength, DivCount, DivNum: Integer): Integer 5138: Function GetDivNum( TotalLength, DivCount, X: Integer): Integer
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5139:
        Function GetDivStart( TotalLength, DivCount, DivNum : Integer) : Integer
        Function DOWToBorl( ADOW : TTFDayOfWeek) : Integer
5140:
        Function BorlToDOW( BorlDOW: Integer): TTFDayOfWeek
Function DateToDOW( ADate: TDateTime): TTFDayOfWeek
5142.
        Procedure CalcTextPos( HostRect : TRect; var TextLeft, TextTop:Integer; var TextBounds : TRect;
5143:
       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)
5145: Function JRectWidth( ARect: TRect): Integer
        Function JRectHeight( ARect : TRect) : Integer Function JEmptyRect : TRect
5146:
5147:
        Function IsClassByName(Obj: TObject; ClassName: string): Boolean
5149:
5150: procedure SIRegister MSysUtils(CL: TPSPascalCompiler);
5151: begin
5152:
        Procedure HideTaskBarButton( hWindow : HWND)
        Function msLoadStr( ID : Integer) : String
Function msFormat( fmt : String; params : array of const) : String
5153:
5154 .
        Function msFileExists( const FileName : String) : Boolean
5155:
5156:
        Function msIntToStr( Int : Int64) : String
        Function msStrPas( const Str : PChar) : String
        Function msRenameFile( const OldName, NewName : String) : Boolean
5158:
        Function CutFileName( s : String) : String
Function GetVersionInfo( var VersionString : String) : DWORD
5159:
5160:
        Function FormatTime( t : Cardinal) : String
5161:
        Function msCreateDir( const Dir : string) : Boolean
5162:
5163:
        Function SetAutoRun( NeedAutoRun : Boolean; AppName : String) : Boolean
5164:
        Function SetTreeViewStyle( const hTV : HWND; dwNewStyle : dword) : DWORD
        Function msStrLen( Str : PChar) : Integer
5165:
        Function msDirectoryExists( const Directory : String) : Boolean
5166:
5167:
        Function GetFolder( hWnd : hWnd; RootDir : Integer; Caption : String) : String
        Function SetBlendWindow( hWnd : HWND; AlphaBlend : Byte) : LongBool
Function EditWindowProc( hWnd : HWND; Msg : UINT; wParam : WPARAM; lParam : LPARAM) : LRESULT
Procedure SetEditWndProc( hWnd : HWND; ptr : TObject)
5168:
5169:
5170:
        Function GetTextFromFile(Filename : String) : string
5171:
5172:
        Function IsTopMost( hWnd : HWND) : Bool // 'LWA_ALPHA', 'LongWord').SetUInt( $00000002);
        Function msStrToIntDef( const s : String; const i : Integer) : Integer
Function msStrToInt( s : String) : Integer
5173:
5174:
5175:
        Function GetItemText( hDlg : THandle; ID : DWORD) : String
5176: end;
5177:
5178:
       procedure SIRegister ESBMaths2(CL: TPSPascalCompiler);
5179:
       begin
          //TDynFloatArray', 'array of Extended
5180:
         TDynLWordArray', 'array of LongWord
TDynLIntArray', 'array of LongInt
5181:
5182:
          TDynFloatMatrix', 'array of TDynFloatArray
TDynLWordMatrix', 'array of TDynLWordArray
5183:
5184:
5185:
          TDynLIntMatrix'
                               'array of TDynLIntArray
        Function SquareAll( const X : TDynFloatArray) : TDynFloatArray
Function InverseAll( const X : TDynFloatArray) : TDynFloatArray
5186:
5187:
        Function LnAll( const X : TDynFloatArray) : TDynFloatArray
5188:
        Function Log10All( const X : TDynFloatArray) : TDynFloatArray
5189:
5190:
        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:
        Function MultVectors (const X, Y : TDynFloatArray) : TDynFloatArray
5193:
        Function DotProduct( const X, Y : TDynFloatArray) : Extended
5194:
        5195:
5196:
        Procedure MatrixDimensions(const X:TDynFloatMatrix;var Rows,Columns:LongWord;var Rectangular:Boolean;
5197:
5198:
        Function MatrixIsSquare( const X : TDynFloatMatrix) : Boolean
5199:
        Function MatricesSameDimensions( const X, Y : TDynFloatMatrix) : Boolean
        Function AddMatrices( const X, Y : TDynFloatMatrix) : TDynFloatMatrix
Procedure AddToMatrix( var X : TDynFloatMatrix; const Y : TDynFloatMatrix)
Function SubtractMatrices( const X, Y : TDynFloatMatrix) : TDynFloatMatrix
5200:
5201:
5202:
        Procedure SubtractFromMatrix( var X : TDynFloatMatrix; const Y : TDynFloatMatrix)
5203:
        Function MultiplyMatrixByConst( const X : TDynFloatMatrix; const K : Extended) : TDynFloatMatrix

Procedure MultiplyMatrixByConst2( var X : TDynFloatMatrix; const K : Extended);

Function MultiplyMatrices( const X, Y : TDynFloatMatrix) : TDynFloatMatrix;

Function TransposeMatrix( const X : TDynFloatMatrix) : TDynFloatMatrix;
5204:
5205:
5206:
5207:
5208:
        Function GrandMean( const X : TDynFloatMatrix; var N : LongWord) : Extended
5209: end:
5210:
5211:
       procedure SIRegister_ESBMaths(CL: TPSPascalCompiler);
       begin
5212:
5213:
         'ESBMinSingle', 'Single').setExtended( 1.5e-45);
         'ESBMaxSingle', 'Single').setExtended( 3.4e+38);
5214:
         'ESBMinDouble', 'Double').setExtended( 5.0e-324);
5215:
          ESBMaxDouble','Double').setExtended( 1.7e+308);
5217:
        'ESBMinExtended','Extended').setExtended( 3.6e-4951);
         'ESBMaxExtended','Extended').setExtended( 1.1e+4932);
5218:
        'ESBMinCurrency','Currency').SetExtended( - 922337203685477.5807);
'ESBMaxCurrency','Currency').SetExtended( 922337203685477.5807);
5219:
5220:
         'ESBSqrt2','Extended').setExtended( 1.4142135623730950488);
5221:
5222:
        'ESBSqrt3', 'Extended').setExtended( 1.7320508075688772935);
        'ESBSgrt5', 'Extended').setExtended( 2.2360679774997896964);
'ESBSgrt10', 'Extended').setExtended( 3.1622776601683793320);
5223:
5224:
       'ESBSqrtPi','Extended').setExtended( 1.77245385090551602729);
```

```
5226:
           'ESBCbrt2', 'Extended').setExtended( 1.2599210498948731648);
           'ESBCbrt3','Extended').setExtended(1.442249570307403823);
'ESBCbrt10','Extended').setExtended(2.1544346900318837219);
'ESBCbrt100','Extended').setExtended(4.6415888336127788924);
5227:
5229:
           'ESBCbrtPi', 'Extended').setExtended( 1.4645918875615232630);
'ESBInvSqrt2', 'Extended').setExtended( 0.70710678118654752440);
5230:
5231:
            ESBInvSqrt3', 'Extended').setExtended( 0.57735026918962576451);
5232:
            ESBInvSqrt5', 'Extended').setExtended( 0.44721359549995793928);
5233:
           'ESBInvSqrtPi', 'Extended').setExtended( 0.56418958354775628695);
5234:
           'ESBInvCbrtPi', 'Extended').setExtended( 0.68278406325529568147);
5235:
           'ESBe', 'Extended').setExtended( 2.7182818284590452354);
'ESBe2', 'Extended').setExtended( 7.3890560989306502272);
5236:
5237:
           'ESBePi','Extended').setExtended( 23.140692632779269006);
'ESBePiOn2','Extended').setExtended( 4.8104773809653516555);
'ESBePiOn4','Extended').setExtended( 2.1932800507380154566);
5238:
5239:
5240:
           'ESBLn2', 'Extended').setExtended( 0.69314718055994530942);
'ESBLn10', 'Extended').setExtended( 2.30258509299404568402);
5241:
5242:
5243 .
           'ESBLnPi', 'Extended').setExtended( 1.14472988584940017414);
           ESBLog10Base2', 'Extended').setExtended( 1.144/270050494001/414);
'ESBLog10Base2', 'Extended').setExtended( 3.3219280948873623478);
'ESBLog2Base10', 'Extended').setExtended( 0.30102999566398119521);
5244:
5245:
             ESBLog3Base10','Extended').setExtended( 0.47712125471966243730);
5246:
           'ESBLogPiBase10','Extended').setExtended( 0.4971498726941339);
5247:
           'ESBLogEBasel0','Extended').setExtended( 0.43429448190325182765);
'ESBPi','Extended').setExtended( 3.1415926535897932385);
'ESBInvPi','Extended').setExtended( 3.1830988618379067154e-1);
5248:
5249:
5250:
5251:
           'ESBTwoPi', 'Extended').setExtended( 6.2831853071795864769);
5252:
           'ESBThreePi','Extended').setExtended( 9.4247779607693797153);
'ESBPi2','Extended').setExtended( 9.8696044010893586188);
'ESBPiToE','Extended').setExtended( 22.459157718361045473);
5253:
5254:
           'ESBPiOn2', 'Extended').setExtended( 1.5707963267948966192);
5255:
           'ESBPiOn3','Extended').setExtended( 1.0471975511965977462);
'ESBPiOn4','Extended').setExtended( 0.7853981633974483096);
5256:
5257:
           ESBTron4, Extended /.setExtended( 0.7653981633974463096);

'ESSBTreePiOn2', 'Extended').setExtended( 4.7123889803846898577);

'ESSBTourpiOn3', 'Extended').setExtended( 4.1887902047863909846);

'ESBTwoToPower63', 'Extended').setExtended( 9223372036854775808.0);

'ESBOneRadian', 'Extended').setExtended( 57.295779513082320877);

'ESBOneDegree', 'Extended').setExtended( 1.7453292519943297769E-2);
5258:
5259:
5260:
5261:
5262:
            ESBOneMinute', 'Extended').setExtended( 2.9088820866572159615E-4);
5263:
           'ESBOneSecond', 'Extended').setExtended( 4.8481368110953599359E-6);
'ESBGamma', 'Extended').setExtended( 0.57721566490153286061);
'ESBLnRt2Pi', 'Extended').setExtended( 9.189385332046727E-1);
5264:
5265:
5266:
            //LongWord', 'Cardinal
TBitList', 'Word
5267:
5268:
           Function UMul( const Num1, Num2 : LongWord) : LongWord
5269:
5270:
           \textbf{Function} \ \ \texttt{UMulDiv2p32} ( \ \ \textbf{const} \ \ \texttt{Num1} \ , \ \ \texttt{Num2} \ : \ \ \texttt{LongWord}) \ : \ \ \texttt{LongWord}
           Function UMulDiv( const Num1, Num2, Divisor : LongWord) : LongWord
5271:
           Function UMulMod( const Num1, Num2, Modulus : LongWord) : LongWord
5272:
           Function SameFloat( const X1, X2 : Extended) : Boolean
5273:
5274:
           Function FloatIsZero( const X : Extended) : Boolean
          Function FloatIsPositive( const X : Extended) : Boolean
Function FloatIsNegative( const X : Extended) : Boolean
5275:
5276:
5277:
           Procedure IncLim( var B : Byte; const Limit : Byte)
           Procedure IncLimSI( var B : ShortInt; const Limit : ShortInt)
5278:
5279:
           Procedure IncLimW( var B : Word; const Limit : Word)
          Procedure IncLimI( var B : Integer; const Limit : Integer)
Procedure IncLimL( var B : LongInt; const Limit : LongInt)
5280:
5281:
           Procedure DecLim( var B : Byte; const Limit : Byte)
5282:
           Procedure DecLimSI( var B : ShortInt; const Limit : ShortInt)
5283:
5284:
           Procedure DecLimW( var B : Word; const Limit : Word)
          Procedure DeclimI( var B : Integer; const Limit : Integer)

Procedure DecLimL( var B : LongInt; const Limit : LongInt)
5285:
5286:
          Function MaxB( const B1, B2 : Byte) : Byte
Function MinB( const B1, B2 : Byte) : Byte
5287:
5288:
          Function MaxSI( const B1, B2 : ShortInt) : ShortInt
Function MinSI( const B1, B2 : ShortInt) : ShortInt
5289:
5290:
           Function MaxW( const B1, B2 : Word) : Word
5291:
5292:
           Function MinW( const B1, B2 : Word) : Word
          Function esbMaxI( const B1, B2 : Integer) : Integer
Function esbMinI( const B1, B2 : Integer) : Integer
5293:
5294:
          Function MaxL( const B1, B2 : LongInt) : LongInt
Function MinL( const B1, B2 : LongInt) : LongInt
5295:
5296:
5297:
           Procedure SwapB( var B1, B2 : Byte)
          Procedure SwapSI( var B1, B2 : ShortInt)
Procedure SwapW( var B1, B2 : Word)
5298:
5299:
           Procedure SwapI( var B1, B2 : SmallInt)
5300:
           Procedure SwapL( var B1, B2 : LongInt)
5301:
          Procedure SwapI32( var B1, B2 : Integer)
Procedure SwapC( var B1, B2 : LongWord)
Procedure SwapInt64( var X, Y : Int64)
5302:
5303:
5304:
          Function esbSign( const B : LongInt) : ShortInt
Function Max4Word( const X1, X2, X3, X4 : Word) : Word
5305:
5306:
5307:
          Function Min4Word( const X1, X2, X3, X4 : Word) : Word
          Function Max3Word( const X1, X2, X3 : Word) : Word
Function Min3Word( const X1, X2, X3 : Word) : Word
5308:
5309:
           Function MaxBArray( const B : array of Byte) : Byte
5310:
          Function MaxWArray( const B : array of Word) : Word
5311:
          Function MaxSIArray( const B : array of ShortInt) : ShortInt
Function MaxIArray( const B : array of Integer) : Integer
Function MaxLArray( const B : array of LongInt) : LongInt
5312:
5313:
```

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5315:
        Function MinBArray( const B : array of Byte) : Byte
        Function MinWArray( const B : array of Word) : Word
5316:
         Function MinSIArray( const B : array of ShortInt) : ShortInt
5318:
        Function MinIArray( const B : array of Integer) : Integer
        Function MinLArray( const B : array of LongInt) : LongInt
5319:
        Function SumBArray( const B : array of Byte) : Byte
Function SumBArray2( const B : array of Byte) : Word
5320:
5321:
        Function SumSIArray( const B : array of ShortInt) : ShortInt
5322:
        Function SumSIArray2( const B : array of ShortInt) : Integer
5323:
5324:
        Function SumWArray( const B : array of Word) : Word
Function SumWArray2( const B : array of Word) : LongInt
5325:
        Function SumIArray( const B : array of Integer) : Integer
5327:
        Function SumLArray( const B : array of LongInt) : LongInt
5328:
        Function SumLWArray( const B : array of LongWord) : LongWord
        Function ESBDigits( const X : LongWord) : Byte
5329:
5330:
        Function BitsHighest( const X : LongWord)
                                                               : Integer
        Function ESBBitsNeeded( const X : LongWord) : Integer
5331:
        Function esbGCD( const X, Y : LongWord) : LongWord
Function esbLCM( const X, Y : LongInt) : Int64
5332:
5333:
        //Function esbLCM( const X, Y : LongInt) : LongInt
5334:
         Function RelativePrime( const X,
                                                   Y : LongWord) : Boolean
        Function Get87ControlWord : TBitList
5336:
5337:
        Procedure Set87ControlWord( const CWord : TBitList)
        Procedure SwapExt( var X, Y : Extended)
Procedure SwapDbl( var X, Y : Double)
5338:
5339:
5340:
        Procedure SwapSing( var X, Y : Single)
5341:
        Function esbSgn( const X : Extended) : ShortInt
Function Distance( const X1, Y1, X2, Y2 : Extended) : Extended
Function ExtMod( const X, Y : Extended) : Extended
5342:
5343:
        Function ExtRem( const X, Y : Extended) : Extended
5344:
5345:
        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
        Procedure Extended2DMS( const X : Extended; var Degs, Mins, Secs : Extended)
5350:
        Function MaxExt( const X, Y : Extended) : Extended
5351:
        \textbf{Function} \ \texttt{MinExt}( \ \textbf{const} \ \texttt{X}, \ \texttt{Y} \ : \ \texttt{Extended}) \ : \ \texttt{Extended}
        Function MaxEArray( const B : array of Extended) : Extended Function MinEArray( const B : array of Extended) : Extended
5352:
5353:
        Function MaxSArray( const B : array of Single) : Single
5354:
5355:
        Function MinSArray( const B : array of Single) : Single
        Function MaxCArray( const B : array of Comp) : Comp
5356:
        Function MinCArray( const B : array of Comp) : Comp
5357:
5358:
        Function SumSArray( const B : array of Single) : Single
        Function SumEArray( const B : array of Extended) : Extended
Function SumSqEArray( const B : array of Extended) : Extended
5359:
5360:
        Function SumSqDiffEArray( const B : array of Extended; Diff : Extended) : Extended
5361:
        Function SumXYEArray( const X, Y : array of Extended) : Extended
5362:
5363:
        Function SumCArray(
                                  const B : array of Comp) : Comp
        Function FactorialX( A : LongWord) : Extended
Function PermutationX( N, R : LongWord) : Extended
5364:
5365:
        Function esbBinomialCoeff( N, R : LongWord) : Extended
5366:
        Function IsPositiveEArray( const X : array of Extended) : Boolean
        Function esbGeometricMean( const X : array of Extended) : Extended
5368:
        Function esbHarmonicMean( const X : array of Extended) : Extended Function ESBMean( const X : array of Extended) : Extended Function esbSampleVariance( const X : array of Extended) : Extended
5369:
5370:
5371:
        Function esbPopulationVariance( const X : array of Extended) : Extended
5372:
5373:
        Procedure esbSampleVarianceAndMean( const X : array of Extended; var Variance, Mean : Extended)
        Procedure esbPopulationVarianceAndMean( const X : array of Extended; var Variance, Mean : Extended)
Function GetMedian( const SortedX : array of Extended) : Extended
5374:
5375:
        Prunction GetMode( const SortedX : array of Extended; var Mode : Extended) : Boolean Procedure GetQuartiles( const SortedX : array of Extended; var Q1, Q3 : Extended)
5376:
5377:
5378:
        Function ESBMagnitude ( const X : Extended) : Integer
        Function ESBTan( Angle : Extended) : Extended
Function ESBCot( Angle : Extended) : Extended
5379:
         Function ESBCosec( const Angle : Extended) : Extended
5381:
5382:
        \textbf{Function} \  \, \texttt{ESBSec} \, ( \  \, \textbf{const} \  \, \texttt{Angle} \  \, \texttt{Extended}) \  \, \texttt{Extended}
5383:
        Function ESBArcTan( X, Y : Extended) : Extended
        Procedure ESBSinCos( Angle : Extended; var SinX, CosX : Extended)
5384:
        Function ESBArcCos( const X : Extended) : Extended
5385:
5386:
        Function ESBArcSin( const X : Extended) : Extended
5387:
        Function ESBArcSec( const X : Extended) : Extended
5388:
        Function ESBArcCosec( const X : Extended) : Extended
        Function ESBLog10( const X : Extended) : Extended Function ESBLog2( const X : Extended) : Extended
5389:
5390:
        Function ESBLogBase( const X, Base : Extended) : Extended Function Pow2( const X : Extended) : Extended
5391:
5392:
        Function IntPow( const Base : Extended; const Exponent : LongWord) : Extended
5393:
         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:
        Function LogXtoBaseY( const X, Y : Extended) : Extended
        Function esbISqrt( const I : LongWord) : Longword
5399:
        Function ILog2( const I : LongWord) : LongWord
Function IGreatestPowerOf2( const N : LongWord) : LongWord
5400:
5401:
5402:
        Function ESBArCosh( X : Extended) : Extended
        Function ESBArSinh( X : Extended) : Extended
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5404:
            Function ESBArTanh( X : Extended) : Extended
            Function ESBCosh( X : Extended) : Extended
5405:
            Function ESBSinh( X : Extended) : Extended
            Function ESBTanh( X : Extended) : Extended
5407:
            Function InverseGamma ( const X : Extended) : Extended
5408:
            Function esbGamma( const X : Extended) : Extended
5409:
            Function esbLnGamma( const X : Extended) : Extended Function esbBeta( const X, Y : Extended) : Extended
5410:
5411:
            Function IncompleteBeta( X : Extended; P, Q : Extended) : Extended
5412:
5413: end;
5414:
5416: Function Add_uint64_WithCarry( x, y : uint64; var Carry : Boolean) : uint64
5417: Function Add_uint32_WithCarry( x, y : uint32; var Carry : Boolean) : uint32
5418: Function Subtract_uint64_WithBorrow( x, y : uint64; var Borrow : Boolean) : uint64
5419: Function Subtract_uint32_WithBorrow( x, y : uint32; var Borrow : Boolean) : uint32
5420: Function BitCount_8( Value : byte) : integer
5421: Function BitCount_16( Value : uint16) : integer 5422: Function BitCount_32( Value : uint32) : integer
5423: Function BitCount_64( Value : uint64) : integer
5424: Function CountSetBits_64( Value : uint64) : integer TPrimalityTestNoticeProc',
          Procedure ( CountPrimalityTests : integer)
5425:
            Function gcd(a, b : THugeCardinal) : THugeCardinal
Function lcm(a, b : THugeCardinal) : THugeCardinal
5426:
5427:
5428:
            Function isCoPrime( a, b : THugeCardinal) : boolean
5429:
            Function isProbablyPrime(p: THugeCardinal;OnProgress: TProgress; var wasAborted: boolean): boolean
            Function hasSmallFactor( p : THugeCardinal) : boolean
5430:
          //Function GeneratePrime( NumBits : integer; OnProgress : TProgress; OnPrimalityTest: TPrimalityTestNoticeProc; PassCount: integer; Pool1:TMemoryStreamPool;var Prime: THugeCardinal; var
5431:
          NumbersTested: integer) : boolean
          Function Inverse( Prime, Modulus : THugeCardinal) : THugeCardinal
5432:
5433:
            Const('StandardExponent','LongInt').SetInt( 65537);
           //Procedure Compute_RSA_Fundamentals_2Factors(RequiredBitLengthOfN:integer;Fixed_e:uint64;var N,e,d,
5434:
           Totient:TProgress;OnPrimalityTest:TPrimalityTestNoticeProc;GeneratePrimePassCount:int;Pool1:TMemoryStreamPo
           Numbers
5435:
          Function Validate_RSA_Fundamentals( var N, e, d, Totient : THugeCardinal) : boolean')
5436:
5437: procedure SIRegister xrtl math Integer(CL: TPSPascalCompiler);
5438: begin
              AddTypeS('TXRTLInteger', 'array of Integer
AddClassN(FindClass('TOBJECT'),'EXRTLMathException
5439:
5440:
               (FindClass('TOBJECT'), 'EXRTLExtendInvalidArgument
5441:
5442:
               AddClassN(FindClass('TOBJECT'),'EXRTLDivisionByZero
               AddClassN(FindClass('TOBJECT'), 'EXRTLExpInvalidArgument
5443:
              AddClassN(FindClass('TOBJECT'),'EXRTLInvalidRadix AddClassN(FindClass('TOBJECT'),'EXRTLInvalidRadixDigit
5444:
5445:
               AddClassN(FindClass('TOBJECT'), 'EXRTLRootInvalidArgument
5446:
                BitsPerByte', 'LongInt').SetInt( 8);
5447:
              BitsPerDigit', 'LongInt').SetInt( 32);
SignBitMask', 'LongWord').SetUInt( $8000000);
5448:
5449:
5450:
            Function XRTLAdjustBits( const ABits : Integer) : Integer
             Function XRTLLength( const AInteger : TXRTLInteger) : Integer
5451:
             Function XRTLDataBits( const AInteger : TXRTLInteger) : Integer
5452:
5453:
            Procedure XRTLBitPosition( const BitIndex : Integer; var Index, Mask : Integer)
5454:
            Procedure XRTLBitSet( var AInteger : TXRTLInteger; const BitIndex : Integer)
Procedure XRTLBitReset( var AInteger : TXRTLInteger; const BitIndex : Integer)
5455:
             Function XRTLBitGet( const AInteger: TXRTLInteger; const BitIndex: Integer): Integer
5456:
            Function XRTLBitGetBool( const AInteger: TXRTLInteger; const BitIndex: Integer): Boolean
5457:
5458:
            \textbf{Function} \ \texttt{XRTLExtend} \\ (\textbf{const} \ \texttt{AInteger:TXRTLInteger;ADataBits:Integer:Sign:Int;} \\ \textbf{var} \ \texttt{AResult:TXRTLInteger):Int;} \\ \textbf{and} 
            Function XRTLZeroExtend(const AInteger:TXRTLInteger;ADataBits:Integer; var AResult:TXRTLInteger):Integer;Function XRTLSignExtend(const AInteger:TXRTLInteger; ADataBits:Integer;var AResult:TXRTLInteger):Integer;
5459:
5460:
5461:
             Function XRTLSignStrip(const AInteger: TXRTLInteger; var AResult: TXRTLInteger; const AMinDataBits: Int): Int;
5462:
            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)
5463:
5464:
5465:
             Function XRTLSign( const AInteger : TXRTLInteger) : Integer
5466:
            Procedure XRTLZero( var AInteger : TXRTLInteger)
Procedure XRTLOne( var AInteger : TXRTLInteger)
5467:
5468:
            Procedure XRTLMOne( var AInteger : TXRTLInteger)
5469:
            Procedure XRTLTwo( var AInteger : TXRTLInteger)
5470:
5471:
            \textbf{Function} \ \texttt{XRTLNeg( const AInteger : TXRTLInteger; var } \texttt{AResult : TXRTLInteger) : Integer}
5472:
            Function XRTLAbs( const AInteger: TXRTLInteger; var AResult: TXRTLInteger): Integer
            Procedure XRTLFullSum( const A, B, C : Integer; var Sum, Carry : Integer)
5473:
            Function XRTLAdd( const AInteger1, AInteger2 : TXRTLInteger; var AResult : TXRTLInteger) : Integer;
5474:
            Function XRTLAddl(const AInteger1:TXRTLInteger;const AInteger2:Int64;var AResult:TXRTLInteger):Integer;
5475:
            Function XRTLSub( const AInteger1, AInteger2 : TXRTLInteger; var AResult : TXRTLInteger) : Integer;
Function XRTLSub1( const AInteger1:TXRTLInteger; const AInteger2:Int64; var AResult:TXRTLInteger):Integer;
5476:
5477:
            Function XRTLCompare( const AInteger1, AInteger2 : TXRTLInteger) : Integer;
Function XRTLCompare1( const AInteger1 : TXRTLInteger; const AInteger2 : Int64) : Integer;
5478:
            Function XRTLUMul( const AInteger1, AInteger2 : TXRTLInteger; var AResult : TXRTLInteger) : Integer
5480:
5481:
            Function XRTLMulAdd(const AInteger1, AInteger2, AInteger3: TXRTLInteger; var AResult: TXRTLInteger): Integer
            Function XRTLMul( const AInteger1, AInteger2 : TXRTLInteger; var AResult : TXRTLInteger) : Integer Procedure XRTLDivMod( const AInteger1, AInteger2 : TXRTLInteger; var QResult, RResult : TXRTLInteger)
5482:
5483:
            Procedure XRTLSqr( const AInteger: TXRTLInteger; var AResult: TXRTLInteger)
5484:
5485:
            Procedure XRTLSqrt( const AInteger : TXRTLInteger; var AResult : TXRTLInteger)
            Procedure XRTLRoot( const AInteger1, AInteger2 : TXRTLInteger; var AResult : TXRTLInteger)
5486:
5487:
            Procedure XRTLRootApprox(const AInteger1, AInteger2:TXRTLInteger; var ALowApproxResult,
           AHighApproxResult:TXRTLInteger)
```

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5488: 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)
5490:
        Procedure XRTLSLBL(const AInteger: TXRTLInteger; const BitCount:Integer; var AResult: TXRTLInteger)
5491:
        Procedure XRTLSABL(const AInteger: TXRTLInteger; const BitCount:Integer; var AResult: TXRTLInteger)
5492:
        Procedure XRTLRCBL(const AInteger: TXRTLInteger; const BitCount:Integer; var AResult: TXRTLInteger)
5493:
        Procedure XRTLSLDL(const AInteger:TXRTLInteger;const DigitCount:Integer; var AResult:TXRTLInteger)
5494:
5495:
        Procedure XRTLSADL(const AInteger: TXRTLInteger; const DigitCount:Integer;var AResult: TXRTLInteger)
5496:
        Procedure XRTLRCDL(const AInteger: TXRTLInteger; const DigitCount: Integer; var AResult: TXRTLInteger)
5497:
        Procedure XRTLSLBR(const AInteger: TXRTLInteger; const BitCount:Integer; var AResult: TXRTLInteger)
        Procedure XRTLSABR(const AInteger: TXRTLInteger; const BitCount:Integer; var AResult: TXRTLInteger)
5498:
5499:
        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)
5500:
5501:
5502:
        Procedure XRTLRCDR(const AInteger: TXRTLInteger;const DigitCount:Integer;var AResult: TXRTLInteger)
        Function XRTLToHex( const AInteger: TXRTLInteger; Digits: Integer): string
5503:
5504:
        Function XRTLToBin( const AInteger : TXRTLInteger; Digits : Integer) : string
        Function XRTLToString( const AInteger: TXRTLInteger; Radix: Integer; Digits: Integer): string
5505:
       Procedure XRTLFromHex( const Value : string; var AResult : TXRTLInteger)
Procedure XRTLFromBin( const Value : string; var AResult : TXRTLInteger)
5506:
5507:
        Procedure XRTLFromString( const Value : string; var AResult : TXRTLInteger; Radix : Integer)
5508:
       Procedure XRTLAssign( const AInteger: TXXTLInteger);
Procedure XRTLAssign1( const Value: Integer; var AResult: TXXTLInteger);
Procedure XRTLAssign2( const Value: Integer; var AResult: TXXTLInteger);
5509:
5510:
5511:
5512:
        Procedure XRTLAppend( const ALow, AHigh: TXRTLInteger; var AResult: TXRTLInteger)
5513:
        Procedure XRTLSplit(const AInteger: TXRTLInteger; var ALow, AHigh: TXRTLInteger; LowDigits: Integer)
5514:
        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);
5515:
5516:
5517:
        Procedure XRTLMin1(const AInteger1: TXRTLInteger; const AInteger2:Integer; var AResult : TXRTLInteger);
5518:
        Procedure XRTLMax( const AInteger1, AInteger2 : TXRTLInteger; var AResult : TXRTLInteger);
       Procedure XRTLMax1(const AInteger1:TXRTLInteger; const AInteger2:Integer; var AResult:TXRTLInteger);
5519:
       Procedure XRTLGCD( const AInteger1, AInteger2 : TXRTLInteger; var AResult : TXRTLInteger)
Procedure XRTLSwap( var AInteger1, AInteger2 : TXRTLInteger)
5520:
5521:
       Procedure XRTLFactorial( const AInteger: TXRTLInteger; var AResult: TXRTLInteger)
Procedure XRTLFactorialMod( const AInteger1, AInteger2: TXRTLInteger; var AResult: TXRTLInteger)
5522:
5523:
5524:
      end;
5525:
      procedure SIRegister_JvXPCoreUtils(CL: TPSPascalCompiler);
5526:
5527: begin
       Function JvXPMethodsEqual (const Method1. Method2: TMethod): Boolean
5528:
5529:
       Procedure JvXPDrawLine( const ACanvas : TCanvas; const X1, Y1, X2, Y2 : Integer)
        Procedure JvXPCreateGradientRect( const AWidth, AHeight: Integer; const StartColor, EndColor: TColor;
       const Colors:TJvXPGradientColors;const Style:TJvXPGradientStyle;const Dithered:Boolean;var Bitmap:TBitmap);
5531:
      Procedure JvXPAdjustBoundRect(const BorderWidth:Byte; const ShowBoundLines:Boolean; const
      BoundLines: TJvXPBoundLines; var Rect : TRect)
      Procedure JvXPDrawBoundLines(const ACan:TCanvas;const BoundLines:TJvXPBoundLines;const
      AColor:TColor;const Rect:TRect);
5533:
       Procedure JvXPConvertToGray2( Bitmap : TBitmap)
       Procedure JvXPRenderText( const AParent : TControl; const ACanvas : TCanvas; ACaption : TCaption; const
5534:
      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);
5536:
      Procedure JvXPColorizeBitmap( Bitmap: TBitmap; const AColor: TColor)
       Procedure JvXPSetDrawFlags(const AAlignment: TAlignment;const AWordWrap: Boolean; var Flags: Integer)
5537:
        Procedure JvXPPlaceText( const AParent: TControl; const ACanvas: TCanvas; const AText: TCaption; const
5538:
      AFont : TFont; const AEnabled, AShowAccelChar: Boolean; const AAlignment: TAlignment; const
      AWordWrap:Boolean; var Rect:TRect)
5539:
      end;
5540:
5541:
5542:
      procedure SIRegister_uwinstr(CL: TPSPascalCompiler);
5543:
      begin
       Function StrDec( S : String) : String
5544:
        Function uIsNumeric( var S : String; var X : Float) : Boolean
5545:
       Function ReadNumFromEdit( Edit : TEdit) : Float
Procedure WriteNumToFile( var F : Text; X : Float)
5546:
5547:
5548: end;
5549:
      procedure SIRegister_utexplot(CL: TPSPascalCompiler);
5550:
5551:
      begin
5552:
       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)
5553:
5554:
        Procedure TeX_SetOxScale( Scale : TScale; OxMin, OxMax, OxStep : Float)
5555:
5556:
        Procedure TeX_SetOyScale( Scale : TScale; OyMin, OyMax, OyStep : Float)
        Procedure TeX_SetGraphTitle( Title : String)
5557:
        Procedure TeX_SetOxTitle( Title : String)
5558:
        Procedure TeX_SetOyTitle( Title : String
5560:
        Procedure TeX_PlotOxAxis
5561:
       Procedure TeX_PlotOyAxis
       Procedure TeX_PlotGrid( Grid : TGrid)
5562:
        Procedure TeX_WriteGraphTitle
5563:
5564:
        Function TeX_SetMaxCurv( NCurv : Byte) : Boolean
5565:
       Procedure TeX_SetPointParam( CurvIndex, Symbol, Size : Integer)
       Procedure TeX_SetLineParam( CurvIndex, Style : Integer; Width : Float; Smooth : Boolean)

Procedure TeX_SetCurvLegend( CurvIndex : Integer; Legend : String)
5566:
5567:
       Procedure TeX_SetCurvStep( CurvIndex, Step : Integer)
```

```
Procedure TeX_PlotCurve( X, Y : TVector; Lb, Ub, CurvIndex : Integer)
5569:
            Procedure TeX_PlotCurveWithErrorBars( X, Y, S : TVector; Ns, Lb, Ub, CurvIndex : Integer)
5570:
            Procedure TeX_PlotFunc( Func : TFunc; X1, X2 : Float; Npt : Integer; CurvIndex : Integer)
5572:
            Procedure TeX_WriteLegend( NCurv : Integer; ShowPoints, ShowLines : Boolean)
            Procedure TeX_ConRec( Nx, Ny, Nc : Integer; X, Y, Z : TVector; F : TMatrix)
5573:
5574:
            Function Xcm( X : Float) : Float
            Function Ycm( Y : Float) : Float
5575:
5576:
5577:
5578:
5579: procedure SIRegister_VarRecUtils(CL: TPSPascalCompiler);
5580:
          begin
5581:
              TConstArray',
                                       'array of TVarRec
            Function CopyVarRec( const Item : TVarRec) : TVarRec
5582:
            Function CreateConstArray( const Elements : array of const) : TConstArray
5583:
5584:
            Procedure FinalizeVarRec( var Item : TVarRec)
5585:
            Procedure FinalizeConstArray( var Arr : TConstArray)
5586: end;
5587:
5588: procedure SIRegister_StStrS(CL: TPSPascalCompiler);
          begin
            Function HexBS( B : Byte) : ShortString
5590:
            Function HexWS( W : Word) : ShortString
Function HexLS( L : LongInt) : ShortString
5591:
5592:
            Function HexPtrS( P : Pointer) : ShortString
5593:
            Function BinaryBS( B : Byte) :
5594:
                                                                     ShortString
5595:
            Function BinaryWS( W : Word) : ShortString
5596:
            Function BinaryLS( L : LongInt) : ShortString
            Function OctalBS( B : Byte) : ShortString
Function OctalWS( W : Word) : ShortString
5597:
5598:
5599:
            Function OctalLS( L : LongInt) : ShortString
            Function Str2Int16S( const S : ShortString; var I : SmallInt) : Boolean
Function Str2WordS( const S : ShortString; var I : Word) : Boolean
5600:
5601:
            Function Str2LongS( const S : ShortString; var I : LongInt) : Boolean
5602:
            Function Str2RealS( const S : ShortString; var R : Double) : Boolean
5603:
            Function Str2RealS( const S : ShortString; var R : Real) : Boolean
5604:
5605:
            Function Str2ExtS( const S : ShortString; var R : Extended) : Boolean
            Function Long2StrS( L : LongInt) : ShortString
5606:
5607:
            Function Real2StrS( R : Double; Width : Byte; Places : ShortInt) : ShortString
            Function Ext2StrS( R : Extended; Width : Byte; Places : ShortInt) : ShortString
5608:
5609:
            Function ValPrepS( const S : ShortString) : ShortString
            Function CharStrS( C : AnsiChar; Len : Cardinal) : ShortString
Function PadChS( const S : ShortString; C : AnsiChar; Len : Cardinal) : ShortString
5610:
5611:
            Function PadS( const S : ShortString; Len : Cardinal) : ShortString
5612:
            Function LeftPadChS( const S : ShortString; C : AnsiChar; Len : Cardinal) : ShortString
Function LeftPadS( const S : ShortString; Len : Cardinal) : ShortString
5613:
5614:
            Function TrimLeadS( const S : ShortString) : ShortString
5615:
            Function TrimTrailS( const S : ShortString) : ShortString
5616:
            Function TrimS( const S : ShortString) : ShortString
5617:
            Function TrimSpacesS( const S : ShortString) : ShortString
Function CenterChS( const S : ShortString; C : AnsiChar; Len : Cardinal) : ShortString
5618:
5619:
            Function CenterS( const S : ShortString; Len : Cardinal) : ShortString
5620:
            Function EntabS( const S : ShortString; TabSize : Byte) : ShortString
5621:
5622:
            Function DetabS( const S : ShortString; TabSize : Byte) : ShortString
5623:
            Function ScrambleS( const S, Key : ShortString) : ShortString
Function SubstituteS( const S, FromStr, ToStr : ShortString) : ShortString
5624:
5625:
            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
5626:
5627:
5628:
            Function WordPositionS( N : Cardinal; const S, WordDelims : ShortString; var Pos : Cardinal) : Boolean
5629:
            Function ExtractWordS( N : Cardinal; const S, WordDelims : ShortString) : ShortString
            Function AsciiCountS( const S, WordDelims : ShortString; Quote : AnsiChar) : Cardinal
5631:
5632:
            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
5633:
5634:
            Procedure WordWrapS(const InSt: ShortString; var OutSt,Overlap: ShortString;
          Margin:Cardinal;PadToMargin:Boolean)
          Function CompStringS( const S1, S2 : ShortString) : Integer
5635:
5636:
            Function CompUCStringS( const S1, S2 : ShortString) : Integer
            Function SoundexS( const S : ShortString) : ShortString
5637:
            Function MakeLetterSetS( const S : ShortString) : Longint
            Procedure BMMakeTableS( const MatchString : ShortString; var BT : BTable)
5639:
            \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
5640:
          Pos:Cardinal):Bool;
            Function BMSearchUCS(var Buffer, BufLength: Card; var BT: BTable; const MatchString: ShortString; var
          Pos:Cardinal):Bool;
5642: Function DefaultExtensionS( const Name, Ext : ShortString) : ShortString
            Function ForceExtensionS( const Name, Ext : ShortString) : ShortString
Function JustFilenameS( const PathName : ShortString) : ShortString
5643:
5644:
            Function JustNameS( const PathName : ShortString) : ShortString
5646:
            Function JustExtensionS( const Name : ShortString) : ShortString
           Function JustPathnameS( const PathName : ShortString) : ShortString
Function AddBackSlashS( const DirName : ShortString) : ShortString
5647:
5648:
            Function CleanPathNameS( const PathName : ShortString) : ShortString
5649:
            Function HasExtensionS( const Name : ShortString; var DotPos : Cardinal) : Boolean
           Function CommaizeS( L : LongInt) : ShortString
Function CommaizeChS( L : Longint; Ch : AnsiChar) : ShortString
5651:
5652:
            Function FloatFormS(const Mask:ShortString;R:TstFloat;const LtCurr,RtCurr:ShortString;Sep,
5653:
          DecPt:Char):ShortString;
```

```
5654: 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
5656:
5657:
5658:
           Function StrStInsertS( const S1, S2 : ShortString; Pos : Cardinal) : ShortString
5659:
           Function StrChDeleteS( const S : ShortString; Pos : Cardinal) : ShortString
5660:
           Function StrStDeleteS( const S : ShortString; Pos, Count : Cardinal) : ShortString
5661:
5662:
           Function ContainsOnlyS( const S, Chars : ShortString; var BadPos : Cardinal) : Boolean
Function ContainsOtherThanS( const S, Chars : ShortString; var BadPos : Cardinal) : Boolean
5663:
           Function CopyLeftS( const S : ShortString; Len : Cardinal) : ShortString
5665:
           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
Function CopyRightAbsS( const S : ShortString; NumChars : Cardinal) : ShortString
5666:
5667:
5668:
           Function CopyFromNthWordS(const S,WordDelims:string;const AWord:String;N:Card;var
         SubString: ShortString): Bool;
5669:
         Function DeleteFromNthWordS(const S,WordDelims:String;AWord:ShortString;N:Card;var
         SubStr: ShortString): Bool;
5670: 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;
5672:
           Function CopyWithinS( const S, Delimiter : ShortString; Strip : Boolean) : ShortString
           Function DeleteWithinS( const S, Delimiter : ShortString) : ShortString
5674:
           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
           Function IsChAlphaNumericS( C : Char; const Numbers : ShortString) : Boolean
5677:
           \textbf{Function} \  \, \texttt{IsStrAlphaS(} \  \, \textbf{const} \  \, \texttt{S} \  \, : \  \, \textbf{Shortstring)} \  \, : \  \, \texttt{Boolean}
5678:
5679:
           \textbf{Function} \  \, \texttt{IsStrNumericS}(\  \, \textbf{const} \  \, \texttt{S}, \  \, \texttt{Numbers} \  \, \textbf{:} \  \, \textbf{ShortString}) \  \, \textbf{:} \  \, \texttt{Boolean}
5680:
           Function IsStrAlphaNumericS( const S, Numbers : ShortString) : Boolean
           Function LastWordS( const S, WordDelims, AWord: ShortString; var Position: Cardinal): Boolean
5681:
           Function LastWordAbsS( const S, WordDelims : ShortString; var Position : Cardinal) : Boolean
5683:
           Function LastStringS( const S, AString : ShortString; var Position : Cardinal) : Boolean
5684:
           \textbf{Function} \  \, \texttt{LeftTrimCharsS( const S, Chars : ShortString)} \  \, : \  \, \textbf{ShortString} \\
           Function KeepCharsS( const S, Chars : ShortString) : ShortString
5685:
           Function RepeatStringS(const RepeatString:ShortString;var Repetitions: Cardinal; MaxLen:
5686:
          Cardinal):ShortString;
5687: Function ReplaceStringS(const S,OldString,NewString:ShortString;N:Cardinal;var
         Replacements:Cardinal):ShortString;
5688: Function ReplaceStringAllS(const S,OldString,NewString:ShortString;var Replacements:Cardinal):ShortString;
           Function ReplaceWordS(const S, WordDelims, OldWord, NewW: SString; N: Cardinal; var
         Replacements:Cardinal):ShortString
5690: Function ReplaceWordAllS(const S.WordDelims.OldWord.NewWord:ShortString; var
         Replacements:Cardinal):ShortString
5691: Function RightTrimCharsS( const S, Chars : ShortString) : ShortString
5692:
           Function StrWithinS(const S,SearchStr: ShortString;Start:Cardinal;var Position:Cardinal):boolean
5693:
           Function TrimCharsS( const S, Chars : ShortString) : ShortString
5694:
         Function WordPosS(const S, WordDelims, AWord: ShortString; N:Cardinal; var Position: Cardinal):Boolean
5695: end;
5696:
5697:
5699: Function SignL( L : LongInt) : Integer 5700: Function SignF( F : Extended) : Integer
5701: Function MinWord( A, B : Word) : Word
5702: Function MidWord( W1, W2, W3 : Word) : Word
5703: Function MaxWord( A, B : Word) : Word
5704: Function MinLong( A, B : LongInt) : LongInt
5705: Function MidLong( L1, L2, L3 : LongInt) : LongInt
5706: Function MaxLong( A, B : LongInt) : LongInt
5707: Function MinFloat(F1, F2 : Extended) : Extended
5708: Function Midfloat(F1, F2, F3 : Extended) : Extended
5709: Function MaxFloat(F1, F2 : Extended) : Extended
5710: Function MakeInteger16( H, L : Byte) : SmallInt
5711: Function MakeWordS( H, L : Byte) : Word
5712: Function SwapNibble(B: Byte): Byte
5713: Function SwapWord(L: LongInt): LongInt
5714: Procedure SetFlag( var Flags : Word; FlagMask : Word)
5715: Procedure ClearFlag( var Flags : Word; FlagMask : Word)
5716: Function FlagIsSet(Flags, FlagMask: Word): Boolean
5717: Procedure SetByteFlag( var Flags: Byte; FlagMask: Byte)
5718: Procedure ClearByteFlag( var Flags : Byte; FlagMask :
5719: Function ByteFlagIsSet( Flags, FlagMask : Byte) : Boolean
5720: Procedure SetLongFlag( var Flags : LongInt; FlagMask : LongInt)
5721: Procedure ClearLongFlag( var Flags : LongInt; FlagMask : LongInt)
5722: Function LongFlagIsSet(Flags, FlagMask: LongInt): Boolean
5723: Procedure ExchangeBytes( var I, J : Byte)
5724: Procedure ExchangeWords( var I, J : Word)
5725: Procedure ExchangeLongInts( var I, J : LongInt)
5726: Procedure ExchangeStructs( var I, J, Size : Cardinal)
5727: Procedure FillWord( var Dest, Count : Cardinal; Filler : Word)
5728: Procedure FillStruct( var Dest, Count : Cardinal; var Filler, FillerSize : Cardinal)
5731: Function AccruedInterestMaturity(Issue,Maturity:TStDate;Rate,Par:Extended;Basis: TStBasis): Extended
5732: Function AccruedInterestPeriodic(Issue,Settlement,Maturity:TStDate;Rate,
          Par:Extended;Frequency:TStFrequency; Basis : TStBasis) : Extended
```

```
5733: 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
5735: Function CumulativeInterest( Rate : Extended; NPeriods : Integer; PV : Extended; StartPeriod, EndPeriod :
       Integer: Frequency : TStFrequency; Timing : TStPaymentTime) : Extended
5736: Function CumulativePrincipal( Rate : Extended; NPeriods : Integer; PV : Extended; StartPeriod, EndPeriod :
Integer: Frequency: TStFrequency: Timing: TStPaymentTime): Extended 5737: Function DayCount( Day1, Day2: TStDate; Basis: TStBasis): LongInt
5738: Function DecliningBalance( Cost, Salvage : Extended; Life, Period, Month : Integer) : Extended
5739: Function DiscountRate(Settlement, Maturity:TStDate; Price, Redemption: Extended; Basis:TStBasis): Extended;
5740: Function DollarToDecimal(FracDollar: Extended; Fraction: Integer): Extended
5741: Function DollarToDecimalText( DecDollar : Extended) : string
5742: Function DollarToFraction( DecDollar : Extended; Fraction : Integer) : Extended
5743: Function DollarToFractionStr( FracDollar : Extended; Fraction : Integer) : string
5744: Function EffectiveInterestRate( NominalRate : Extended; Frequency : TStFrequency) : Extended
5745: Function FutureValueS(Rate:Extended;NPeriods:Int;Pmt,
       {\tt PV:Extended;Freq:TStFrequency;Timing:TStPaymentTime):Extended;}
5746: Function FutureValueSchedule(Principal: Extended; const Schedule: array of Double): Extended
5747: Function FutureValueSchedule16(Principal: Extended; const Schedule, NRates: Integer): Extended
5748: Function InterestRateS(NPeriods:Int;Pmt,PV,
       FV:Extended;Freq:TStFrequency;Timing:TStPaymentTime;Guess:Extended):Extend;
5749: Function InternalRateOfReturn( const Values : array of Double; Guess : Extended) : Extended
5750: Function InternalRateOfReturn16( const Values, NValues: Integer; Guess: Extended): Extended
5751: Function IsCardValid( const S : string) : Boolean
5752: Function ModifiedDuration(Settlement, Maturity:TStDate; Rate,
       Yield:Extended;Freq:TStFrequency;Basis:TStBasis):Extended;
5753: Function ModifiedIRR(const Values: array of Double; FinanceRate, ReinvestRate: Extended): Extended 5754: Function ModifiedIRR16(const Values, NValues: Integer; FinanceRate, ReinvestRate: Extended): Extended
5755: Function NetPresentValueS( Rate : Extended; const Values : array of Double) : Extended
5756: Function NetPresentValue16( Rate : Extended; const Values, NValues : Integer) : Extended
5757: Function NominalInterestRate( EffectRate: Extended; Frequency: TStFrequency): Extended 5758: Function NonperiodicIRR(const Values:array of Double; const Dates:array of TStDate; Guess: Extended): Extended;
5759: Function NonperiodicNPV(Rate:Extended;const Values: array of Double;const Dates:array of TStDate):Extended;
5760: Function Payment( Rate : Extended; NPeriods : Integer; PV, FV : Extended; Frequency : TStFrequency; Timing
       : TStPaymentTime): Extended
5761: \textbf{Function} \texttt{ Periods(Rate:Extended;Pmt,PV,FV:Extended;Frequency:TStFrequency;Timing:TStPaymentTime):Integer; \\
5762: Function PresentValueS( Rate: Extended; NPeriods: Integer; Pmt, FV: Extended; Frequency; TStFrequency;
       Timing: TStPaymentTime): Extended
5763: Function ReceivedAtMaturity(Settlement,Maturity:TStDate;Invest,Discount:Extended;Basis:TStBasis):Extended;
5764: Function RoundToDecimal( Value : Extended; Places : Integer; Bankers : Boolean) : Extended 5765: Function TBillEquivYield( Settlement, Maturity : TStDate; Discount : Extended) : Extended
5766: Function TBillPrice( Settlement, Maturity: TStDate; Discount: Extended): Extended 5767: Function TBillPrice( Settlement, Maturity: TStDate; Discount: Extended): Extended
5768: Function VariableDecliningBalance( Cost, Salvage: Extended; Life: Integer; StartPeriod, EndPeriod, Factor: Extended; NoSwitch: boolean): Extended
5769: Function YieldDiscounted(Settlement, Maturity:TStDate; Price, Redemption: Extended; Basis:TStBasis):Extended;
5770: Function YieldPeriodic(Settlement, Maturity: TStDate; Rate, Price,
       Redemption:Extended;Freq:TStFrequency;Basis:TStBasis): Extended
5771: Function YieldMaturity(Issue, Settlement, Maturity: TStDate; Rate, Price: Extended; Basis: TStBasis): Extended;
5772:
              5776: Function AveDev( const Data : array of Double) : Double
5777: Function AveDev16( const Data, NData : Integer) : Double
5778: Function Confidence( Alpha, StandardDev : Double; Size : LongInt) : Double
5779: Function Correlation( const Data1, Data2 : array of Double) : Double
5780: Function Correlation16( const Data1, Data2, NData : Integer) : Double
5781: Function Covariance( const Data1, Data2 : array of Double) : Double 5782: Function Covariance16( const Data1, Data2, NData : Integer) : Double
5783: Function DevSq( const Data : array of Double) : Double
5784: Function DevSq16( const Data, NData : Integer) : Double
5785: Procedure Frequency(const Data:array of Double;const Bins:array of Double;var Counts: array of LongInt);
5786: //Procedure Frequency16( const Data, NData : Integer; const Bins, NBins : Integer; var Counts)
5787: Function GeometricMeanS( const Data : array of Double) : Double
5788: Function GeometricMean16( const Data, NData : Integer) : Double
5789: Function HarmonicMeanS( const Data : array of Double) : Double
5790: Function HarmonicMean16( const Data, NData: Integer): Double
5791: Function Largest( const Data: array of Double; K: Integer): Double 5792: Function Largest16( const Data, NData: Integer; K: Integer): Double
5793: Function MedianS( const Data : array of Double) : Double
5794: Function Median16( const Data, NData : Integer) : Double
5795: Function Mode( const Data: array of Double): Double 5796: Function Model6( const Data, NData: Integer): Double
5797: Function Percentile( const Data : array of Double; K : Double) : Double
5798: Function Percentile16( const Data, NData : Integer; K : Double) : Double
5799: Function PercentRank( const Data : array of Double; X : Double) : Double
5800: Function PercentRank16( const Data, NData: Integer; X: Double): Double
5801: Function Permutations ( Number, NumberChosen : Integer) : Extended
5802: Function Combinations ( Number, NumberChosen : Integer) : Extended
5803: Function FactorialS( N : Integer) : Extended
5804: Function Rank( Number : Double; const Data : array of Double; Ascending : Boolean) : Integer
5805: Function Rankl6( Number : Double; const Data, NData : Integer; Ascending : Boolean) : Integer
5806: Function Smallest( const Data : array of Double; K : Integer) : Double
5807: Function Smallest16( const Data, NData: Integer; K: Integer): Double
5808: Function TrimMean( const Data: array of Double; Percent: Double): Double 5809: Function TrimMean16( const Data, NData: Integer; Percent: Double): Double
5810: AddTypeS('TStLinEst', 'record B0 : Double; B1 : double; seB0 : double; seB
```

```
5811:
           +'1 : Double; R2 : Double; sigma : Double; SSr: double; SSe: Double; F0 : Double; df : Integer; end
5812: Procedure LinEst(const KnownY:array of Double;const KnownX:array of Double;var
        LF:TStLinEst;ErrorStats:Bool;
5813: Procedure LogEst(const KnownY:array of Double;const KnownX:array of Double;var
        LF:TStLinEst;ErrorStats:Bool;
5814: Function Forecast(X: Double; const KnownY: array of Double; const KnownX: array of Double) : Double
5815: Function ForecastExponential(X:Double;const KnownY:array of Double;const KnownX:array of Double):Double;
5816: Function Intercept( const KnownY : array of Double; const KnownX : array of Double)
5817: Function RSquared( const KnownY : array of Double; const KnownX : array of Double) : Double
5818: Function Slope( const KnownY : array of Double; const KnownX : array of Double) : Double
5819: Function StandardErrorY( const KnownY: array of Double; const KnownX: array of Double): Double
5820: Function BetaDist( X, Alpha, Beta, A, B : Single) : Single
5821: Function BetaInv( Probability, Alpha, Beta, A, B : Single) : Single
5822: Function BinomDist( NumberS, Trials : Integer; ProbabilityS : Single; Cumulative : Boolean) : Single
5823: Function CritBinom( Trials : Integer; ProbabilityS, Alpha : Single) : Integer
5824: Function ChiDist( X : Single; DegreesFreedom : Integer) : Single 5825: Function ChiInv( Probability : Single; DegreesFreedom : Integer) : Single
5826: Function ExponDist( X, Lambda : Single; Cumulative : Boolean) : Single
5827: Function FDist( X : Single; DegreesFreedom1, DegreesFreedom2 : Integer) : Single
5828: Function FInv( Probability : Single; DegreesFreedom1, DegreesFreedom2 : Integer) : Single 5829: Function LogNormDist( X, Mean, StandardDev : Single) : Single) : Single
5830: Function LogInv( Probability, Mean, StandardDev : Single) : Single
5831: Function NormDist( X, Mean, StandardDev : Single; Cumulative : Boolean) : Single
5832: Function NormIntv( Probability, Mean, StandardDev : Single) : Single
5833: Function NormSDist( Z : Single) : Single
5834: Function NormSInv( Probability : Single) : Single
5835: Function NormSInv( Probability : Single) : Single
5836: Function Poisson( X : Integer; Mean : Single; Cumulative : Boolean) : Single
5836: Function TDist( X : Single; DegreesFreedom : Integer; TwoTails : Boolean) : Single
5837: Function TInv( Probability : Single; DegreesFreedom : Integer) : Single
5838: Function Erfc( X : Single) : Single
5839: Function GammaIn( X : Single) : Single
5840: Function LargestSort( const Data : array of Double; K : Integer) : Double
5841: Function SmallestSort( const Data : array of double; K : Integer) : Double
5842:
5843: 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
5844:
5845:
5846:
5847:
         Procedure ArraySort( var A, RecLen, NumRecs : Cardinal; Compare : TUntypedCompareFunc)
5848:
5849:
        procedure STRegister StAstro(CL: TPSPascalCompiler);
5850:
        Function AmountOfSunlight( LD : TStDate; Longitude, Latitude : Double) : TStTime
5851:
         Function FixedRiseSet( LD : TStDate; RA, DC, Longitude, Latitude : Double) : TStRiseSetRec
         Function SunPos( UT : TStDateTimeRec) : TStPosRec
5853:
         Function SunPosPrim( UT : TStDateTimeRec) : TStSunXYZRec
5854:
         Function SunRiseSet( LD : TStDate; Longitude, Latitude : Double) : TStRiseSetRec
5855:
         Function Twilight( LD : TStDate; Longitude, Latitude : Double; TwiType:TStTwilight):TStRiseSetRec Function LunarPhase( UT : TStDateTimeRec) : Double Function MoonPos( UT : TStDateTimeRec) : TStMoonPosRec
5857:
5858:
         Function MoonRiseSet( LD : TStDate; Longitude, Latitude : Double) : TStRiseSetRec
5859:
         Function FirstQuarter( D : TStDate) : TStLunarRecord
5860:
         Function FullMoon( D : TStDate) : TStLunarRecord
5861:
         Function LastQuarter( D : TStDate) : TStLunarRecord
5862:
         Function NewMoon( D : TStDate) : TStLunarRecord
Function NextFirstQuarter( D : TStDate) : TStDateTimeRec
Function NextFullMoon( D : TStDate) : TStDateTimeRec
5863:
5864:
5865:
         Function NextLastQuarter( D : TStDate) : TStDateTimeRec
5866:
5867:
         Function NextNewMoon( D : TStDate) : TStDateTimeRec
         Function PrevFirstQuarter(D: TStDate): TStDateTimeRec
Function PrevFullMoon(D: TStDate): TStDateTimeRec
5868:
5869:
5870:
         Function PrevLastQuarter( D : TStDate) : TStDateTimeRec
5871:
         \textbf{Function} \  \, \texttt{PrevNewMoon(D:TStDate):TStDateTimeRec}
         Function SiderealTime( UT : TStDateTimeRec) : Double
5872:
         Function Solstice(Y, Epoch: Integer; Summer: Boolean): TStDateTimeRec
Function Equinox(Y, Epoch: Integer; Vernal: Boolean): TStDateTimeRec
5873:
5875:
         Function SEaster( Y, Epoch : Integer) : TStDate
         Function DateTimeToAJD( D : TDateTime) : Double
5876:
5877:
         Function HoursMin( RA : Double) : ShortString
Function DegsMin( DC : Double) : ShortString
5878:
         Function AJDToDateTime( D : Double) : TDateTime
5879:
5880:
5881: Procedure SIRegister StDate(CL: TPSPascalCompiler);
5882:
         Function CurrentDate : TStDate
5883:
         Function StValidDate( Day, Month, Year, Epoch : Integer) : Boolean
         Function DMYtoStDate( Day, Month, Year, Epoch : Integer) : TStDate
5884:
5885:
         Procedure StDateToDMY( Julian : TStDate; var Day, Month, Year : Integer)
         Function StIncDate( Julian : TStDate; Days, Months, Years : Integer) : TStDate
5886:
         Function IncDateTrunc( Julian : TStDate; Months, Years : Integer) : TStDate
5887:
         Procedure StDateDiff( Date1, Date2 : TStDate; var Days, Months, Years : Integer)
Function BondDateDiff( Date1, Date2 : TStDate; DayBasis : TStBondDateType) : TStDate
Function WeekOfYear( Julian : TStDate) : Byte
5888:
5889:
5890:
         Function AstJulianDate( Julian : TStDate) : Double
Function AstJulianDatetoStDate( AstJulian : Double; Truncate : Boolean) : TStDate
5891:
5892:
         Function AstJulianDatePrim( Year, Month, Date : Integer; UT : TStTime) : Double
5893:
5894:
         Function StDayOfWeek( Julian : TStDate) : TStDayType
         Function DayOfWeekDMY( Day, Month, Year, Epoch : Integer) : TStDayType
Function StIsLeapYear( Year : Integer) : Boolean
5895:
5896:
5897: Function StDaysInMonth( Month : Integer; Year, Epoch : Integer) : Integer
```

```
5898:
       Function ResolveEpoch( Year, Epoch : Integer) : Integer
        Function ValidTime( Hours, Minutes, Seconds : Integer) : Boolean
5899:
        Procedure StTimeToHMS( T : TStTime; var Hours, Minutes, Seconds : Byte)
5901:
        Function HMStoStTime( Hours, Minutes, Seconds : Byte) : TStTime
5902:
        Function CurrentTime : TStTime
       Procedure TimeDiff( Time1, Time2 : TStTime; var Hours, Minutes, Seconds : Byte)
Function StIncTime( T : TStTime; Hours, Minutes, Seconds : Byte) : TStTime
5903:
5904:
        Function DecTime( T : TStTime; Hours, Minutes, Seconds : Byte) : TStTime
5905:
       Function RoundToNearestHour( T: TStTime; Truncate: Boolean): TStTime

Function RoundToNearestMinute( const T: TStTime; Truncate: Boolean): TStTime
5906:
5907:
       Procedure DateTimeDiff(const DT1:TStDateTimeRec;var DT2:TStDateTimeRec;var Days:LongInt;var Secs:LongInt
5908:
        Procedure IncDateTime(const DT1:TStDateTimeRec;var DT2:TStDateTimeRec;Days:Integer;Secs:LongInt)
       Function DateTimeToStDate( DT : TDateTime) : TStDateFunction DateTimeToStTime( DT : TDateTime) : TStTime
5910:
5911:
       Function StDateToDateTime( D : TStDate) : TDateTime
5912:
5913:
        Function StTimeToDateTime( T : TStTime) : TDateTime
        Function Convert2ByteDate( TwoByteDate : Word) : TStDate
5914:
5915 .
       Function Convert4ByteDate( FourByteDate : TStDate) : Word
5916:
5917: 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
5919:
5920:
       Function DateStringToDMY(const Picture, S:string; Epoch:Integer; var D, M, Y: Integer):Boolean
5921:
       Function StDateToDateString( const Picture : string; const Julian : TStDate; Pack : Boolean):string
5922:
5923:
        Function DayOfWeekToString( const WeekDay : TStDayType) : string
5924:
       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
5925:
5926:
       Function TimeStringToHMS( const Picture, St : string; var H, M, S : Integer) : Boolean
5927:
5928:
       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
5929:
5930:
       Function DateStringIsBlank( const Picture, S : string) : Boolean
Function InternationalDate( ForceCentury : Boolean) : string
5931:
5932:
5933:
       Function InternationalLongDate( ShortNames : Boolean; ExcludeDOW : Boolean) : string
5934:
       Function InternationalTime( ShowSeconds : Boolean) : string
5935:
       Procedure ResetInternationalInfo
5936:
5937:
      procedure SIRegister_StBase(CL: TPSPascalCompiler);
5938:
       Function DestroyNode( Container: TStContainer; Node: TStNode; OtherData: Pointer): Boolean
       Function AnsiUpperCaseShort32( const S : string) : string
5939:
       Function AnsiCompareTextShort32( const S1, S2 : string) : Integer
Function AnsiCompareStrShort32( const S1, S2 : string) : Integer
5940:
        Function AnsiCompareStrShort32( const S1, S2 : string)
5941:
5942:
        \textbf{Function} \ \ \texttt{HugeCompressRLE}( \ \ \textbf{const} \ \ \texttt{InBuffer}, \ \ \texttt{InLen} \ : \ \texttt{Longint}; \ \ \textbf{var} \ \ \texttt{OutBuffer}) \ : \ \texttt{Longint}
5943:
       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)
5944:
       Function Upcase( C : AnsiChar) : AnsiChar
Function LoCase( C : AnsiChar) : AnsiChar
5946:
5947:
5948:
       Function CompareLetterSets( Set1, Set2 : LongInt) : Cardinal
        Function CompStruct( const S1, S2, Size : Cardinal) : Integer
5949:
        Function Search(const Buffer,BufLength:Cardinal;const Match,MatLength:Cardinal;var Pos:Cardinal):Bool;
5950:
5951:
        \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}
5952:
       Function SearchUC(const Buffer, BufLength: Cardinal; const Match, MatLength: Cardinal; var Pos: Cardi): Boolean
5953:
       Function IsOrInheritsFrom( Root, Candidate : TClass) : boolean
        Procedure RaiseContainerError( Code : longint)
5954:
        Procedure RaiseContainerErrorFmt( Code : Longint; Data : array of const)
5955:
       Function ProductOverflow( A, B : LongInt) : Boolean
Function StNewStr( S : string) : PShortString
Procedure StDisposeStr( PS : PShortString)
5956:
5957:
5958:
        Procedure ValLongInt( S : ShortString; var LI : Longint; var ErrorCode : integer)
5959:
       Procedure ValSmallint( const S : ShortString; var SI : smallint; var ErrorCode : integer)
Procedure ValWord( const S : ShortString; var Wd : word; var ErrorCode : integer)
5960:
5961:
       Procedure RaiseStError( ExceptionClass : EStExceptionClass; Code : LongInt)
5962:
        Procedure RaiseStWin32Error( ExceptionClass : EStExceptionClass; Code : LongInt)
5963:
5964:
        Procedure RaiseStWin32ErrorEx( ExceptionClass: EStExceptionClass; Code: LongInt; Info: string)
5965:
5966: procedure SIRegister_usvd(CL: TPSPascalCompiler);
5967: begin
      Procedure SV_Decomp( A : TMatrix; Lb, Ub1, Ub2 : Integer; S : TVector; V : TMatrix)
5968:
5969:
       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)
5970:
5971:
5972: Procedure RKF45(F:TDiffEqs;Neqn:Int;Y,Yp:TVector;var T:Float;Tout,RelErr,AbsErr:Float;var Flag:Int;
5973: end;
5974:
5976: Function IntPowerS( Base : Extended; Exponent : Integer) : Extended
5977: Function PowerS( Base, Exponent : Extended) : Extended
5978: Function StInvCos( X : Double) : Double
5979: Function StInvSin(Y: Double): Double
5980: Function StInvTan2( X, Y : Double) : Double
5981: Function StTan( A : Double) : Double
5982: Procedure DumpException; //unit StExpEng;
5983: Function HexifyBlock( var Buffer, BufferSize : Integer) : string
5984:
```

```
5987: Function Adler320fStream( Stream: TStream; CurCrc: LongInt): LongInt
5988: Function Adler320fFile(FileName: AnsiString): LongInt
5989: Function Crc16Prim( var Data, DataSize, CurCrc : Cardinal)
5990: Function Crc16OfStream( Stream: TStream; CurCrc: Cardinal): Cardinal 5991: Function Crc16OfFile( FileName: AnsiString): Cardinal
5992: Function Crc32Prim( var Data, DataSize : Cardinal; CurCrc : LongInt) : LongInt 5993: Function Crc32OfStream( Stream : TStream; CurCrc : LongInt) : LongInt 5994: Function Crc32OfFile( FileName : AnsiString) : LongInt
5995: Function InternetSumPrim( var Data, DataSize, CurCrc : Cardinal) : Cardinal
5996: Function InternetSumOfStream( Stream : TStream; CurCrc : Cardinal) : Cardinal
5997: Function InternetSumOfFile( FileName : AnsiString) : Cardinal
5998: Function Kermitl6Prim( var Data, DataSize, CurCrc : Cardinal) : Cardinal
5999: Function Kermit160fStream( Stream: TStream; CurCrc: Cardinal): Cardinal 6000: Function Kermit160fFile( FileName: AnsiString): Cardinal
6001:
6003: Function AddBcd( const B1, B2 : TbcdS) : TbcdS
6004: Function SubBcd( const B1, B2 : TbcdS) : TbcdS
6005: Function MulBcd( const B1, B2 : TbcdS) : TbcdS
6006: Function DivBcd( const B1, B2 : TbcdS) : TbcdS
6007: Function ModBcd( const B1, B2 : TbcdS)
6008: Function NegBcd( const B : TbcdS) : TbcdS
6009: Function AbsBcd( const B : TbcdS) : TbcdS
6010: Function FracBcd( const B : TbcdS) : TbcdS
6011: Function IntBcd( const B : TbcdS) : TbcdS
6012: Function RoundDigitsBcd( const B : TbcdS; Digits : Cardinal) : TbcdS
6013: Function RoundPlacesBcd( const B : TbcdS; Places : Cardinal) : TbcdS
\begin{array}{lll} \mbox{6014: Function ValBcd( const S : string)} : \mbox{TbcdS} \\ \mbox{6015: Function LongBcd( L : LongInt)} : \mbox{TbcdS} \\ \mbox{6016: Function ExtBcd( E : Extended)} : \mbox{TbcdS} \\ \end{array}
6017: Function ExpBcd( const B : TbcdS) : TbcdS
6018: Function LnBcd( const B : TbcdS) : TbcdS
6019: Function IntPowBcd( const B: TbcdS; E: LongInt): TbcdS
6020: Function PowBcd( const B, E: TbcdS): TbcdS
6021: Function SqrtBcd( const B : TbcdS) : TbcdS
6022: Function CmpBcd( const B1, B2 : TbcdS) : Integer
6023: Function EqDigitsBcd( const B1, B2 : TbcdS; Digits : Cardinal) : Boolean 6024: Function EqPlacesBcd( const B1, B2 : TbcdS; Digits : Cardinal) : Boolean
6025: Function IsIntBcd( const B : TbcdS) : Boolean 6026: Function TruncBcd( const B : TbcdS) : LongInt
6027: Function BcdExt( const B : TbcdS) : Extended
6028: Function RoundBcd( const B : TbcdS) : LongInt
6029: Function StrBcd( const B : TbcdS; Width, Places : Cardinal) : string
6030: Function StrExpBcd( const B : TbcdS; Width : Cardinal) : string
6031: Function FormatBcd( const Format : string; const B : TbcdS) : string 6032: Function StrGeneralBcd( const B : TbcdS) : string
6033: Function FloatFormBcd(const Mask:string;B:TbcdS;const LtCurr,RtCurr:string;Sep,DecPt:AnsiChar):string
6034: Procedure ConvertBcd( const SrcB, SrcSize : Byte; var DestB, DestSize : Byte)
6038: Function StFieldTypeToStr(FieldType: TStSchemaFieldType): AnsiString
6039: Function StStrToFieldType( const S : AnsiString) : TStSchemaFieldType
6040: Function StDeEscape( const EscStr : AnsiString) : Char
6041: Function StDoEscape( Delim : Char) : AnsiString
6042: Function StTrimTrailingChars( const S : AnsiString; Trailer : Char) : AnsiString
6043: Function AnsiHashText( const S : string; Size : Integer) : Integer
6044: Function AnsiHashStr( const S : string; Size : Integer) : Integer
6045: Function AnsiELFHashText( const S : string; Size : Integer) : Integer 6046: Function AnsiELFHashStr( const S : string; Size : Integer) : Integer
           6049:
         with AddClassN(FindClass('TStComponent'),'TStNetConnection') do begin
6050:
            Constructor Create ( AOwner : TComponent)
            Function Connect : DWord
6051:
            Function Disconnect : DWord
            RegisterProperty('Password', 'String', iptrw);
Property('UserName', 'String', iptrw);
6053:
6054:
6055:
            Property('ConnectOptions', 'TStNetConnectOptionsSet', iptrw);
            Property('DisconnectOptions', 'TStNetDisconnectOptionsSet', iptrw);
6056:
            Property('DisconnectOptions', 'ISENEEDIsconne
Property('LocalDevice', 'String', iptrw);
Property('ServerName', 'String', iptrw);
Property('ShareName', 'String', iptrw);
Property('OnConnect', 'TNotifyEvent', iptrw);
6057:
6058:
6059:
6060:
            Property('OnConnectFail', 'TOnConnectFailEvent', iptrw);
Property('OnConnectCancel', 'TOnConnectCancelEvent', iptrw);
6061:
6062:
            Property('OnDisconnect', 'TNotifyEvent', iptrw);
Property('OnDisconnectFail', 'TOnDisconnectFailEvent', iptrw);
Property('OnDisconnectCancel', 'TOnDisconnectCancelEvent', iptrw);
6063:
6064:
6065:
6067: //******Thread Functions Context of Win API --- more objects in SyncObjs.pas
6068: / /153 unit uPSI_SyncObjs, unit uPSIParallelJobs;
6069: Procedure InitializeCriticalSection( var lpCriticalSection: TRTLCriticalSection) 6070: Procedure EnterCriticalSection( var lpCriticalSection: TRTLCriticalSection)
6071: Procedure LeaveCriticalSection( var lpCriticalSection : TRTLCriticalSection)
6072: Function InitializeCriticalSectionAndSpinCount(var
       {\tt lpCriticalSection:TRTLCriticalSection;\bar{dwSpinCount:DWORD):BOOL;}
6073: Function SetCriticalSectionSpinCount(var lpCriticalSection:TRTLCriticalSection;dwSpinCount:DWORD):DWORD;
6074: Function TryEnterCriticalSection( var lpCriticalSection: TRTLCriticalSection): BOOL
```

```
6075: Procedure DeleteCriticalSection( var lpCriticalSection: TRTLCriticalSection)
6076: Function GetThreadContext( hThread : THandle; var lpContext : TContext) : BOOL
6077: Function SetThreadContext( hThread : THandle; const lpContext : TContext) : BOOL
6078: Function SuspendThread( hThread: THandle): DWORD 6079: Function ResumeThread( hThread: THandle): DWORD
6080: Function CreateThread2(ThreadFunc: TThreadFunction2; thrid: DWord) : THandle
6081: Function GetCurrentThread : THandle
6082: Procedure ExitThread( dwExitCode : DWORD)
6083: Function TerminateThread( hThread : THandle; dwExitCode : DWORD) : BOOL
6084: Function GetExitCodeThread( hThread : THandle; var lpExitCode : DWORD) : BOOL
6085: Procedure EndThread(ExitCode: Integer);
6086: Function WaitForSingleObject( hHandle : THandle; dwMilliseconds : DWORD) : DWORD
6087: Function MakeProcInstance( Proc : FARPROC; Instance : THandle) : FARPROC
6088: Procedure FreeProcInstance( Proc : FARPROC)
6089: Procedure FreeLibraryAndExitThread( hLibModule : HMODULE; dwExitCode : DWORD)
6090: Function DisableThreadLibraryCalls( hLibModule : HMODULE) : BOOL
6091: Procedure ParallelJob( ASelf : TObject; ATarget : Pointer; AParam : Pointer; ASafeSection : boolean);
6092: Procedure ParallelJob1( ATarget : Pointer; AParam : Pointer; ASafeSection : boolean);
6093: Procedure ParallelJob2(AJobGroup:TJobSGroup;ASelf:TObject;ATarget:Ptr;AParam:Pointer;ASafeSection:bool;
6094: Procedure ParallelJob3( AJobGroup:TJobsGroup;ATarget:Pointer;AParam:Pointer;ASafeSection: boolean);
6095: Function CreateParallelJob(ASelf:TObject;ATarget:Pointer;AParam:Ptr;ASafeSection:bool:TParallelJob;
6096: Function CreateParallelJob1(ATarget:Pointer; AParam:Pointer; ASafeSection : boolean) : TParallelJob;
6097: Function CurrentParallelJobInfo : TParallelJobInfo 6098: Function ObtainParallelJobInfo : TParallelJobInfo
Function MimeEncodeString( const S : AnsiString) : AnsiString

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

6103: Procedure MimeEncodeStream( const InputStream : TStream; const OutputStream : TStream)

6104: Procedure MimeDecodeStream( const InputStream : TStream; const OutputStream : TStream)
        Function MimeEncodedSize( const I : Cardinal) : Cardinal
6105:
        Function MimeDecodedSize( const I : Cardinal) : Cardinal

Procedure MimeEncode( var InputBuffer : string; const InputByteCount : Cardinal; var OutputBuffer)
6106:
6107:
        Function MimeDecode(var InputBuffer:string;const InputBytesCount:Cardinal;var OutputBuffer):Cardinal;
6108:
        Function MimeDecodePartial(var InputBuffer:string;const InputBytesCount:Cardinal;var
       OutputBuffer: string; var ByteBuffer : Cardinal; var ByteBufferSpace : Cardinal) : Cardinal
6110:
       Function MimeDecodePartialEnd(var OutputBuf:string;const ByteBuf:Card;const ByteBufferSpace:Card):
       Cardinal;
6111:
6113: Procedure DirectPrint( const Printer, Data : string)
6114:
        Procedure SetPrinterPixelsPerInch
6115:
        Function GetPrinterResolution : TPoint
        Function CharFitsWithinDots( const Text : string; const Dots : Integer) : Integer
        Procedure PrintMemo( const Memo : TMemo; const Rect : TRect)
6117:
6118:
6119:
         6121:
        Function StrChr( lpStart : PChar; wMatch : WORD) : PChar
6122:
        Function StrChrI( lpStart : PChar; wMatch : WORD) : PChar
        Function StrCmpN( lpStr1, lpStr2 : PChar; nChar : Integer) : Integer
6123:
        Function StrCmpNI( lpStr1, lpStr2 : PChar; nChar : Integer) : Integer
6124:
        Function StrCSpn( lpStr_, lpSet : PChar) : Integer
6125:
        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
6126:
6127:
6128:
6129:
        Function StrFromTimeInterval(pszOut: PChar; cchMax:UINT;dwTimeMS:DWORD; digits: Integer): Integer
6130:
6131: Function StrIsIntlEqual( fCaseSens: BOOL; lpString1, lpString2: PChar; nChar: Integer): BOOL 6132: /Function StrNCat( psz1: PChar; psz2: PChar; cchMax: Integer): PChar 6133: Function StrPBrk( psz, pszSet: PChar): PChar
         Function StrRChr( lpStart, lpEnd : PChar; wMatch : WORD) : PChar
6135:
        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
6136:
6137:
         Function StrStrI( lpFirst, lpSrch : PChar) : PChar
6139:
6140:
        \textbf{Function} \ \texttt{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}
6141:
        Function StrTrim( psz : PChar; pszTrimChars : PChar) : BOOL
Function ChrCmpI( w1, w2 : WORD) : BOOL
6142:
6143:
6144:
        Function ChrCmpIA( w1, w2 : WORD) : BOOL
6145:
        Function ChrCmpIW( w1, w2 : WORD) : BOOL
        Function StrIntlEqN(s1,s2: PChar; nChar: Integer): BOOL
Function StrIntlEqNI(s1,s2: PChar; nChar: Integer): BOOL
6146:
6147:
        Function StrCatBuff( pszDest, pszSrc : PChar; cchDestBuffSize : Integer) : PChar
6148:
        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
6149:
6150:
6151:
        SZ_CONTENTTYPE_HTMLA', 'String').SetString( 'text/html SZ_CONTENTTYPE_HTMLW', 'String').SetString( 'text/html
6153:
        SZ_CONTENTTYPE_HTML', 'string').SetString( SZ_CONTENTTYPE_HTMLA);
SZ_CONTENTTYPE_CDFA', 'String').SetString( 'application/x-cdf
6154:
6155:
6156:
        SZ_CONTENTTYPE_CDFW', 'String').SetString( 'application/x-cdf
         SZ_CONTENTTYPE_CDF', 'string').SetString( SZ_CONTENTTYPE_CDFA);
        Function PathIsHTMLFile( pszPath : PChar) : BOOL
STIF_DEFAULT', 'LongWord').SetUInt( $00000000);
6158:
6159:
        STIF_SUPPORT_HEX','LongWord').SetUInt( $00000001);
Function StrNCmpI( lpStr1, lpStr2 : PChar; nChar : Integer) : Integer
6160:
```

```
Function StrNCpy( psz1, psz2 : PChar; cchMax : Integer) : PChar
Function StrCatN( psz1 : PChar; psz2 : PChar; cchMax : Integer) : PChar
6162:
6163:
         Function PathAddBackslash( pszPath : PChar) : PChar

Function PathAddExtension( pszPath : PChar; pszExt : PChar) : BOOL
6165:
6166:
         Function PathAppend( pszPath : PChar; pMore : PChar) : BOOL
         Function PathBuildRoot( szRoot : PChar; iDrive : Integer) : PChar
6167:
         Function PathCanonicalize( pszBuf : PChar; pszPath : PChar) : BOOL
6168:
         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
6170:
6171:
6172:
         Function PathFileExists( pszPath : PChar) : BOOL
         Function PathFindExtension( pszPath : PChar) : PChar
Function PathFindFileName( pszPath : PChar) : PChar
6174:
6175:
6176:
         Function PathFindNextComponent( pszPath : PChar) : PChar
6177:
         Function PathFindOnPath( pszPath : PChar; var ppszOtherDirs : PChar) : BOOL
         Function PathGetArgs( pszPath : PChar) : PChar
6178:
6179:
         Function PathFindSuffixArray(pszPath: PChar; const apszSuffix: PChar; iArraySize: Integer): PChar
         Function PathIsLFNFileSpec(| IpName : PChar) : BOOL
Function PathGetCharType(| ch : Char) : UINT
6180:
6181:
         GCT_INVALID', 'LongWord').SetUInt( $0000);
GCT_LFNCHAR', 'LongWord').SetUInt( $0001);
6183:
6184:
         GCT_SHORTCHAR','LongWord').SetUInt( $0002);
         GCT WILD', 'LongWord').SetUInt( $0004);
6185:
         GCT_SEPARATOR','LongWord').SetUInt( $0008);
6186:
6187:
         Function PathGetDriveNumber( pszPath : PChar) : Integer
6188:
         Function PathIsDirectory( pszPath : PChar) : BOOL
         Function PathIsDirectoryEmpty( pszPath : PChar) : BOOL
Function PathIsFileSpec( pszPath : PChar) : BOOL
6189:
6190:
6191:
         Function PathIsPrefix( pszPrefix, pszPath : PChar) : BOOL
6192:
         Function PathIsRelative( pszPath : PChar) : BOOL
6193:
         Function PathIsRoot( pszPath : PChar) : BOOL
         Function PathIsSameRoot( pszPath1, pszPath2 : PChar) : BOOL
6194:
         Function PathIsUNC( pszPath : PChar) : BOOL
Function PathIsNetworkPath( pszPath : PChar) : BOOL
6195:
6196:
6197:
         Function PathIsUNCServer( pszPath : PChar) : BOOL
6198:
         Function PathIsUNCServerShare( pszPath : PChar) : BOOL
         Function PathIsContentType( pszPath, pszContentType: PChar): BOOL
Function PathIsURL( pszPath: PChar): BOOL
6199:
6200:
         Function PathMakePretty(pszPath: PChar): BOOL
Function PathMatchSpec(pszFile,pszSpec: PChar): BOOL
6201:
6202:
         Function PathParseIconLocation(pszTionFile: PChar): Integer Procedure PathQuoteSpaces(lpsz: PChar)
6203:
6204:
         6206:
         Procedure PathRemoveArgs( pszPath : PChar)
         \textbf{Function} \hspace{0.1cm} \texttt{PathRemoveBackslash( pszPath : PChar) : PChar}
6207:
         Procedure PathRemoveBlanks( pszPath : PChar)
6208:
6209:
         Procedure PathRemoveExtension( pszPath : PChar)
6210:
         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)
6211:
6212:
6213:
         Function PathSkipRoot( pszPath : PChar) : PChar
6214:
6215:
         Procedure PathStripPath( pszPath : PChar)
         Function PathStripToRoot( pszPath : PChar) : BOOL
Procedure PathUnquoteSpaces( lpsz : PChar)
6216:
6217:
6218:
         Function PathMakeSystemFolder( pszPath : PChar) : BOOL
         Function PathUnmakeSystemFolder( pszPath : PChar) : BOOL
6219:
         Function PathIsSystemFolder( pszPath : PChar; dwAttrb : DWORD) : BOOL
Procedure PathUndecorate( pszPath : PChar)
Function PathUnExpandEnvStrings( pszPath : PChar; pszBuf : PChar; cchBuf : UINT) : BOOL
6220:
6221:
6222:
6223:
         URL_SCHEME_INVALID','LongInt').SetInt(
                                                                   1);
6224:
         URL_SCHEME_UNKNOWN','LongInt').SetInt( 0);
         URL_SCHEME_FTP', 'LongInt').SetInt( 1);
URL_SCHEME_HTTP', 'LongInt').SetInt( 2);
URL_SCHEME_GOPHER', 'LongInt').SetInt( 3);
URL_SCHEME_MAILTO', 'LongInt').SetInt( 4);
6225:
6226:
6228:
         URL_SCHEME_NEWS','LongInt').SetInt( 5);
URL_SCHEME_NNTP','LongInt').SetInt( 6);
6229:
6230:
         URL_SCHEME_TELNET', 'LongInt').SetInt( 7)
URL_SCHEME_WAIS', 'LongInt').SetInt( 8);
6231:
6232:
6233:
         URL_SCHEME_FILE','LongInt').SetInt(
         URL_SCHEME_MK','LongInt').SetInt( 10);
URL_SCHEME_HTTPS','LongInt').SetInt( 11);
URL_SCHEME_SHELL','LongInt').SetInt( 12);
6234:
6235:
6236:
6237:
         URL_SCHEME_SNEWS','LongInt').SetInt( 13);
6238:
         URL_SCHEME_LOCAL','LongInt').SetInt( 14);
         URL_SCHEME_JAVASCRIPT','LongInt').SetInt( 15);
URL_SCHEME_VBSCRIPT','LongInt').SetInt( 16);
6239:
6240:
         URL_SCHEME_ABOUT', 'LongInt').SetInt( 17
URL_SCHEME_RES', 'LongInt').SetInt( 18);
6242:
6243:
         URL_SCHEME_MAXVALUE', 'LongInt').SetInt( 19);
         URL_SCHEME', 'Integer
URL_PART_NONE', 'LongInt').SetInt( 0);
6244:
6245:
         URL_PART_SCHEME','LongInt').SetInt( 1);
6246:
         URL_PART_HOSTNAME','LongInt').SetInt( 2);
URL_PART_USERNAME','LongInt').SetInt( 3);
URL_PART_PASSWORD','LongInt').SetInt( 4);
6247:
6248:
6249:
         URL_PART_PORT','LongInt').SetInt( 5);
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6251:
          URL PART OUERY', 'LongInt').SetInt( 6);
          URL_PART', 'DWORD
URLIS_URL', 'LongInt').SetInt( 0);
6252:
6254:
           URLIS_OPAQUE', 'LongInt').SetInt( 1);
           URLIS_NOHISTORY','LongInt').SetInt( 2);
6255:
          URLIS_FILEURL','LongInt').SetInt( 3);
URLIS_APPLIABLE','LongInt').SetInt( 4);
URLIS_DIRECTORY','LongInt').SetInt( 5);
6256:
6257:
6258:
           URLIS_HASQUERY', 'LongInt').SetInt( 6);
6259:
           TUrlIs', 'DWORD
6260:
           URL_UNESCAPE','LongWord').SetUInt( $10000000);
6261:
           URL_ESCAPE_UNSAFE', 'LongWord').SetUInt( $20000000);
          URL_PLUGGABLE_PROTOCOL','LongWord').SetUInt( $40000000);
URL_WININET_COMPATIBILITY','LongWord').SetUInt( DWORD ( $80000000 ));
URL_DONT_ESCAPE_EXTRA_INFO','LongWord').SetUInt( $02000000);
6263:
6264:
6265:
6266:
           URL_ESCAPE_SPACES_ONLY','LongWord').SetUInt( $04000000);
           URL_DONT_SIMPLIFY', 'LongWord').SetUInt( $08000000);
          URL_NO_META', 'longword').SetUlnt( URL_DONT_SIMPLIFY);
URL_UNESCAPE_INPLACE', 'LongWord').SetUlnt( $00100000);
URL_CONVERT_IF_DOSPATH', 'LongWord').SetUlnt( $00200000);
URL_UNESCAPE_HIGH_ANSI_ONLY', 'LongWord').SetUlnt( $00400000);
URL_INTERNAL_PATH', 'LongWord').SetUlnt( $00800000);
6268:
6269:
6270:
6271:
6272:
          URL_FILE_USE_PATHURL','LongWord').SetUInt( $0001000);
URL_ESCAPE_ERCENT','LongWord').SetUInt( $0001000);
URL_ESCAPE_SEGMENT_ONLY','LongWord').SetUInt( $00002000);
URL_PARTFLAG_KEEPSCHEME','LongWord').SetUInt( $00000001);
6273:
6274:
6276:
6277:
           URL_APPLY_DEFAULT','LongWord').SetUInt( $00000001);
          URL_APPLY_GUESSSCHEME','LongWord').SetUInt( $0000002);
URL_APPLY_GUESSFILE','LongWord').SetUInt( $00000004);
URL_APPLY_FORCEAPPLY','LongWord').SetUInt( $00000008);
6278:
6279:
           Function UrlCompare( psz1, psz2 : PChar; fIgnoreSlash : BOOL) : Integer
6281:
           Function UrlCombine(pszBase,pszRelative:PChar;pszCombin:PChar;out pcchCombin:DWORD;dwFlags:DWORD):HRESULT;
6282:
          \textbf{Function} \  \, \texttt{UrlCanonicalize(pszUrl:PChar;pszCanonicalized:PChar;pschCanonic:DWORD;dwFlags:DWORD):HRESULT;} \\
6283:
6284:
           Function UrlIsOpaque( pszURL : PChar) : BOOL
           Function UrlIsNoHistory( pszURL : PChar) : BOOL
          Function UrlIsFileUrl( pszURL : PChar) : BOOL
Function UrlIs( pszUrl : PChar; UrlIs : TUrlIs) : BOOL
6286:
6287:
          Function UrlGetLocation(psz1: PChar): PChar
6288:
6289:
           Function UrlUnescape( pszUrl, pszUnescaped: PChar;pcchUnescaped:DWORD; dwFlags:
6290:
           Function UrlEscape(pszUrl: PChar; pszEscaped: PChar; pcchEscaped:DWORD; dwFlags: DWORD) : HRESULT
6291:
           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
6292:
6293:
          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:
          Function SHDeleteEmptyKey( hKey: HKEY; pszSubKey: PChar): DWORD
Function SHDeleteKey( hKey: HKEY; pszSubKey: PChar): DWORD
Function SHDeleteValue( hKey: HKEY; pszSubKey, pszValue: PChar): DWORD
6299:
6300:
6301:
         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
6302:
6304:
6305:
           Function SHRegGetPath(hKey:HKEY; pcszSubKey,pcszValue: PChar; pszPath: PChar; dwFlags: DWORD): DWORD
           Function SHRegSetPath( hKey:HKEY; pcszSubKey, pcszValue, pcszPath : PChar; dwFlags : DWORD): DWORD
6307:
          SHREGDEL_DEFAULT','LongWord').SetUInt( $0000000);
SHREGDEL_HKCU','LongWord').SetUInt( $00000001);
SHREGDEL_HKLM','LongWord').SetUInt( $00000010);
6308:
6309:
6310:
           SHREGDEL_BOTH','LongWord').SetUInt( $00000011)
6311:
6312:
           SHREGENUM_DEFAULT', 'LongWord').SetUInt( $00000000);
          SHREGENUM_HKCU','LongWord').SetUInt( $00000001);
SHREGENUM_HKLM','LongWord').SetUInt( $00000010);
6313:
6314:
           SHREGENUM_BOTH', 'LongWord').SetUInt( $00000011);
           SHREGSET_HKCU', 'LongWord').SetUInt( $00000001);
6316:
6317:
           SHREGSET_FORCE_HKCU','LongWord').SetUInt( $00000002);
6318:
           SHREGSET HKLM', 'LongWord').SetUInt( $00000004);
          SHREGSET_FORCE_HKLM', 'LongWord').SetUInt( $00000008);
TSHRegDelflags', 'DWORD
TSHRegEnumFlags', 'DWORD
6319:
6320:
6321:
          HUSKEY', 'THandle ASSOCF_INIT_NOREMAPCLSID', 'LongWord').SetUInt( $00000001);
6322:
6323:
          ASSOCF_INIT_BYEXENAME', 'LongWord').SetUlnt( $00000002);
ASSOCF_OPEN_BYEXENAME', 'LongWord').SetUlnt( $00000002);
6324:
6325:
6326:
          ASSOCF_INIT_DEFAULTTOSTAR','LongWord').SetUInt( $00000004);
ASSOCF_INIT_DEFAULTTOFOLDER','LongWord').SetUInt( $00000008);
6327:
           ASSOCF_NOUSERSETTINGS','LongWord').SetUInt( $00000010);
6328:
          ASSOCF_NOTRUNCATE','LongWord').SetUInt( $00000020);
ASSOCF_VERIFY','LongWord').SetUInt( $00000040);
6330:
6331:
           ASSOCF_REMAPRUNDLL', 'LongWord').SetUInt( $00000080);
           ASSOCF_NOFIXUPS','LongWord').SetUInt( $00000100);
6332:
           ASSOCF_IGNOREBASECLASS','LongWord').SetUInt( $00000200);
6333:
           ASSOCF', 'DWORD
6334:
          ASSOCSTR COMMAND', 'LongInt').SetInt(1);
6335:
          ASSOCSTR_EXECUTABLE','LongInt').SetInt( 2);
6336:
          ASSOCSTR_FRIENDLYDOCNAME', 'LongInt').SetInt( 3);
ASSOCSTR_FRIENDLYAPPNAME', 'LongInt').SetInt( 4);
6337:
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6339:
         ASSOCSTR NOOPEN', 'LongInt').SetInt(5);
         ASSOCSTR_SHELLNEWVALUE', 'LongInt').SetInt( 6);
6340:
         ASSOCSTR_DDECOMMAND', 'LongInt').SetInt( 7)
ASSOCSTR_DDEIFEXEC', 'LongInt').SetInt( 8);
6342:
6343:
         ASSOCSTR_DDEAPPLICATION', 'LongInt').SetInt( 9);
         ASSOCSTR_DDETOPIC','LongInt').SetInt( 10);
ASSOCSTR_INFOTIP','LongInt').SetInt( 11);
6344:
6345:
         ASSOCSTR_MAX', 'LongInt').SetInt( 12);
6346:
         ASSOCSTR', 'DWORD
6347:
6348:
         ASSOCKEY_SHELLEXECCLASS', 'LongInt').SetInt( 1);
         ASSOCKEY_APP','LongInt').SetInt(2);
ASSOCKEY_CLASS','LongInt').SetInt(3);
6349:
         ASSOCKEY_BASECLASS','LongInt').SetInt( 4);
ASSOCKEY_MAX','LongInt').SetInt( 5);
ASSOCKEY', 'DWORD
6351:
6352:
6353:
6354:
         ASSOCDATA_MSIDESCRIPTOR','LongInt').SetInt(1);
         ASSOCDATA_NOACTIVATEHANDLER','LongInt').SetInt(2);
ASSOCDATA_QUERYCLASSSTORE','LongInt').SetInt(3);
ASSOCDATA_HASPERUSERASSOC','LongInt').SetInt(4);
6355:
6356:
6357:
6358:
         ASSOCDATA_MAX', 'LongInt').SetInt( 5);
         ASSOCDATA', 'DWORD
         ASSOCENUM_NONE', 'LongInt').SetInt( 0);
6360:
         6361:
6362:
         SHACF_DEFAULT', 'LongWord').SetUlnt( $0000000);
SHACF_FILESYSTEM', 'LongWord').SetUlnt( $00000001);
6363:
6364:
6365:
         SHACF_URLHISTORY','LongWord').SetUInt( $00000002);
         SHACF_URLMRU','LongWord').SetUInt( $00000004);
SHACF_USETAB','LongWord').SetUInt( $00000008);
6366:
6367:
         SHACF_FILESYS_ONLY','LongWord').SetUInt( $00000010);
         SHACF_AUTOSUGGEST_FORCE_ON','LongWord').SetUInt( $1000000);
SHACF_AUTOSUGGEST_FORCE_OFF','LongWord').SetUInt( $2000000);
6369:
6370:
         SHACF_AUTOAPPEND_FORCE_OFF', LongWord').SetUInt( $20000000)/
SHACF_AUTOAPPEND_FORCE_OFF', LongWord').SetUInt( $4000000));
6371:
6372:
         Function SHAutoComplete( hwndEdit : HWND; dwFlags : DWORD) : HRESULT
6373:
6374:
         Procedure SHSetThreadRef( punk : IUnknown)
         Procedure SHGetThreadRef( out ppunk : IUnknown)
CTF_INSIST','LongWord').SetUInt( $00000001);
6375:
6376:
         CTF_THREAD_REF','LongWord').SetUInt( $0000002);
CTF_PROCESS_REF','LongWord').SetUInt( $00000004);
6377:
6378:
6379:
         CTF_COINIT','LongWord').SetUInt( $00000008);
         Function SHCreateShellPalette( hdc : HDC) : HPALETTE
6380:
         Procedure ColorRGBToHLS( clrRGB : TColorRef; out pwHue, pwLuminance, pwSaturation : WORD)
6381:
         Function ColorHLSToRGB( wHue, wLuminance, wSaturation : WORD) : TColorRef
6382:
         6383:
6384:
         Function DrawFocusRect(hDC: HDC; const lprc: TRect): BOOL
Function FillRect(hDC: HDC; const lprc: TRect; hbr: HBRUSH): Integer
6385:
6386:
         Function FrameRect( hDC : HDC; const lprc : TRect; hbr : HBRUSH) : Integer Function InvertRect( hDC : HDC; const lprc : TRect) : BOOL
6387:
6388:
         Function SetRect( var lprc: TRect; xLeft, yTop, xRight, yBottom: Integer): BOOL
Function SetRectEmpty( var lprc: TRect): BOOL
6389:
6390:
         Function CopyRect( var lprcDst : TRect; const lprcSrc : TRect) : BOOL
6391:
         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
6392:
6393:
6394:
6395:
         Function InitializeFlatSB( hWnd : HWND) : Bool
6396:
6397:
         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
6398:
6399:
6400:
6401:
         Function GET_DEVICE_LPARAM( lParam : Integer) : Word
6402:
         Function GET MOUSEORKEY LPARAM( 1Param : Integer) : Integer
         Function GET_FLAGS_LPARAM( lParam : Integer) : Word
Function GET_KEYSTATE_LPARAM( lParam : Integer) : Word
6403:
6405:
6406:
                  ******* 204 unit uPSI_ShellAPI;
6407: //
6408: Function DragQueryFile( Drop : HDROP; FileIndex : UINT; FileName : PChar; cb : UINT) : UINT
6409: Function DragQueryPoint( Drop : HDROP; var Point : TPoint) : BOOL
6410: Procedure DragFinish( Drop : HDROP)
6411: Procedure DragAcceptFiles( Wnd : HWND; Accept : BOOL)
6412: Function ShellExecute(hWnd:HWND;Operation,FileName,Parameters,Directory:PChar;ShowCmd:Integer):HINST
6413: Function FindExecutable(FileName, Directory: PChar; Result: PChar): HINST 6414: Function ShellAbout(Wnd: HWND; szApp, szOtherStuff: PChar; Icon: HICON): Integer
6415: Function DuplicateIcon( hInst : HINST; Icon : HICON) : HICON 6416: Function ExtractAssociatedIcon( hInst : HINST; lpIconPath : PChar; var lpiIcon : Word) : HICON
6417: Function ExtractIcon( hInst : HINST; lpszExeFileName : PChar; nIconIndex : UINT) : HICON
6418: Function SHAppBarMessage ( dwMessage : DWORD; var pData : TAppBarData) : UINT
6419: Function DoEnvironmentSubst( szString : PChar; cbString : UINT) : DWORD
6420: Function ExtractIconEx(lpszFile:PChar;nIconIndex:Int;var phiconLarge,phiconSmall:HICON;nIcons:UINT):UINT;
6421: Procedure SHFreeNameMappings ( hNameMappings : Thandle)
6422:
         DLLVER_PLATFORM_WINDOWS','LongWord').SetUInt( $00000001);
6423:
6424: DLLVER_PLATFORM_NT','LongWord').SetUInt( $00000002);
6425: DLLVER_MAJOR_MASK','LongWord').SetUInt( Int64 ( $FFFF0000000000));
6426: DLLVER_MINOR_MASK','LongWord').SetUInt( Int64 ( $0000FFFF0000000));
6427: DLLVER_BUILD_MASK','LongWord').SetUInt( Int64 ( $0000000FFFF0000));
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DLLVER_QFE_MASK','LongWord').SetUInt( Int64 ( $00000000000FFFF ));
Function MAKEDLLVERULL( Major, Minor, Build, Qfe : Word) : Int64
6428:
6429:
        Function SimpleXMLEncode( const S : string) : string
Procedure SimpleXMLDecode( var S : string; TrimBlanks : Boolean)
6431:
       Function XMLEncode( const S : string) : string
Function XMLDecode( const S : string) : string
6432:
6433:
        Function EntityEncode( const S : string) : string
6434:
        Function EntityDecode( const S : string) : string
6435:
6436:
      procedure RIRegister_CPort_Routines(S: TPSExec);
6437:
6438:
       Procedure EnumComPorts( Ports : TStrings)
Procedure ListComPorts( Ports : TStrings)
6439:
6440:
        Procedure ComPorts( Ports : TStrings) //Alias to Arduino
6441:
        Function GetComPorts: TStringlist;
        Function StrToBaudRate( Str : string) : TBaudRate
6442:
6443:
        Function StrToStopBits(Str : string) : TStopBits
        Function StrToDataBits( Str : string) : TDataBits
6444:
       Function StrToParity(Str: string): TParityBits
Function StrToFlowControl(Str: string): TFlowControl
Function BaudRateToStr(BaudRate: TBaudRate): string
6445:
6446:
6447:
        Function StopBitsToStr( StopBits : TStopBits) : string
6448:
6449:
        Function DataBitsToStr( DataBits : TDataBits) : string
       Function ParityToStr( Parity : TParityBits) : string
Function FlowControlToStr( FlowControl : TFlowControl) : string
6450:
6451:
6452:
       Function ComErrorsToStr( Errors : TComErrors) : String
6453:
6454:
        Function GetMessage( var lpMsg : TMsg; hWnd : HWND; wMsgFilterMin, wMsgFilterMax : UINT) : BOOL
       Function DispatchMessage( const lpMsg : TMsg) : Longint Function TranslateMessage( const lpMsg : TMsg) : BOOL
6455:
6456:
        Function SetMessageQueue( cMessagesMax
                                                      : Integer) : BOOL
6457:
6458:
        Function PeekMessage(var lpMsg:TMsg; hWnd:HWND;wMsgFilterMin,wMsgFilterMax,wRemoveMsg:UINT):BOOL
6459:
        \textbf{Function} \ \ \texttt{GetMessagePos} \ : \ \ \texttt{DWORD}
       Function GetMessageTime : Longint
6460:
       Function GetMessageExtraInfo: Longint
Function GetSpecialFolderPath( const FolderName : string; CanCreate : Boolean) : string
6461:
6462:
6463:
       Procedure JAddToRecentDocs( const Filename : string)
6464:
       Procedure ClearRecentDocs
       Function ExtractIconFromFile( FileName : string; Index : Integer) : HICON
Function CreateShellLink( const AppName, Desc : string; Dest : string) :;
6465:
6466:
                                                                                            : string
       Procedure GetShellLinkInfo( const LinkFile: WideString; var SLI: TShellLinkInfo)

Procedure SetShellLinkInfo( const LinkFile: WideString; const SLI: TShellLinkInfo)
6467:
6468:
       Function RecycleFile( FileToRecycle : string) : Boolean
Function JCopyFile( FromFile, ToDir : string) : Boolean
6469:
6470:
       Function ShellObjectTypeEnumToConst( ShellObjectType: TShellObjectType): UINT
Function ShellObjectTypeConstToEnum( ShellObjectType: UINT): TShellObjectType
6471:
6472:
       Function QueryServiceConfig2A( hService : SC_HANDLE; dwInfoLevel : DWORD; lpBuffer : LPBYTE; cbBufSize :
6473:
      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,
       lpResumeHandle:DWORD; pszGroupNam
       Function EnumServicesStatusEx( hSCManager : SC_HANDLE; InfoLevel : SC_ENUM_TYPE; dwServiceType : DWORD;
6478:
       dwServiceState : DWORD;lpServices :LPBYTE;cbBufSize:DWORD; var pcbBytesNeeded,lpServicesReturned,
       lpResumeHandle:DWORD; pszGroupName
       Function ConvertSidToStringSid( sid : PSID; var stringSid : LPWSTR) : BOOL
            ******* unit uPSI_JclPeImage;
6481:
6482:
       Function IsValidPeFile( const FileName : TFileName) : Boolean
6483:
      // Function PeGetNtHeaders( const FileName : TFileName; var NtHeaders : TImageNtHeaders) : Boolean
        Function PeCreateNameHintTable( const FileName : TFileName) : Boolean
6485:
6486:
       Function PeRebaseImage(const ImageName: TFileName; NewBase : DWORD; TimeStamp : DWORD; MaxNewSize :
      DWORD) : TJclRebaseImageInfo
6487:
       Function PeVerifyCheckSum( const FileName : TFileName) : Boolean
        Function PeClearCheckSum( const FileName : TFileName) : Boolean
        Function PeUpdateCheckSum( const FileName : TFileName) : Boolean
6489:
6490:
       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
6492: Function PelsExportFunctionForwarded(const FileName:TFileName:const
       FunctionName: string; Options: TJclSmartCompOptions): Bool
6493: Function PeDoesImportFunction( const FileName: TFileName; const FunctionName: string; const LibraryName
        string; Options : TJclSmartCompOptions) : Boolean
6494: Function PeDoesImportLibrary(const FileName:TFileName;const
      LibraryName: string; Recursive: Boolean): Boolean);
       Function PeImportedLibraries( const FileName : TFileName; const LibrariesList : TStrings; Recursive :
6495:
      Boolean; FullPathName : Boolean) : Boolean
       Function PeImportedFunctions(const FileName:TFileName;const FunctionsList:TStrings;const
LibraryName:string: IncludeLibNames: Boolean): Boolean
6497: Function PeExportedFunctions( const FileName: TFileName; const FunctionsList: TStrings): Boolean
       Function PeExportedNames ( const FileName : TFileName; const FunctionsList : TStrings) : Boolean
       Function PeExportedVariables( const FileName: TFileName; const FunctionsList: TStrings): Boolean
```

```
6500: 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,
6502:
         Descript:Bool:Bool;
6503:
          Function PeFindMissingImports( const FileName: TFileName; MissingImportsList: TStrings): Boolean;
          Function PeFindMissingImports1( RequiredImportsList, MissingImportsList : TStrings) : Boolean;
Function PeCreateRequiredImportList(const FileName: TFileName; RequiredImportsList: TStrings): Boolean;
6504:
6505:
6506:
           //Function PeMapImgNtHeaders( const BaseAddress : Pointer) : PImageNtHeaders
6507:
           // Function \ PeMapImgLibraryName(\ const\ BaseAddress\ :\ Pointer)\ :\ string
           //Function PeMapImgSections( const NtHeaders : PImageNtHeaders) : PImageSectionHeader 
//Function PeMapImgFindSection( const NtHeaders : PImageNtHeaders; const SectionName : string) :
6508:
6509:
         PImageSectionHeader
6510:
           //Function PeMapImgExportedVariables(const Module: HMODULE; const VariablesList:TStrings):Boolean
6511:
          //Function PeMapImgResolvePackageThunk( Address : Pointer) : Pointer
Function PeMapFindResource(const Module:HMODULE;const ResourceType:PChar;const ResourceName:string):
6512:
6513:
            SIRegister_TJclPeSectionStream(CL);
6514:
            SIRegister_TJclPeMapImgHookItem(CL);
6515:
            SIRegister_TJclPeMapImgHooks(CL);
           //Function PeDbgImgNtHeaders(ProcessHandle:THandle;BaseAddress:Pointer;var
         NtHeaders:TImageNtHeaders):Boolean
6517:
           // 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
6518:
            Type TJclBorUmSymbolKind','(skData,skFunction,skConstructor,skDestructor,skRTTI,skVTable)
TJclBorUmSymbolModifier', '( smQualified, smLinkProc )
6519:
6520:
            TJclBorUmSymbolModifiers', 'set of TJclBorUmSymbolModifier
6521:
            TJclBorUmDescription', 'record Kind: TJclBorUmSymbolKind; Modifiers: TJclBorUmSymbolModifiers; end
            TJclBorUmResult', '( urOk, urNotMangled, urMicrosoft, urError )
TJclPeUmResult', '( umNotMangled, umBorland, umMicrosoft )
6522:
6523:
          Function PeBorUnmangleName( const Name: string; var Unmangled: string; var Description:
         TJclBorUmDescription; var BasePos : Integer) : TJclBorUmResult;
6525:
          Function PeBorUnmangleName1(const Name:string;var Unmangled:string;var
         Descript: TJclBorUmDescription): TJclBorUmResult;
          Function PeBorUnmangleName2( const Name : string; var Unmangled : string) : TJclBorUmResult;
6526:
           Function PeBorUnmangleName3( const Name : string) : string;
          Function PeIsNameMangled( const Name : string) : TJclPeUmResult
Function PeUnmangleName( const Name : string; var Unmangled : string) : TJclPeUmResult
6528:
6529:
6530:
6531:
         6532:
6533: Function StCopyFile( const SrcPath, DestPath : AnsiString) : Cardinal
          Function CreateTempFile( const aFolder: AnsiString; const aPrefix: AnsiString): AnsiString
Function DeleteVolumeLabel( Drive: Char): Cardinal
6534:
6535:
6536:
           //Procedure EnumerateDirectories(const
         StartDir: AnsiString; FL: TStrings; SubDirs: Bool; IncludeItem: TIncludeItemFunc);
6537:
         //Procedure EnumerateFiles(const StartDir:AnsiString;FL:TStrings;SubDirs:Bool
         IncludeItem:TIncludeItemFunc);
6538: Function FileHandlesLeft( MaxHandles : Cardinal) : Cardinal
6539:
          Function FileMatchesMask( const FileName, FileMask : AnsiString) : Boolean
          Function FileTimeToStDateTime(FileTime: LongInt): TStDateTimeRec
Function FindNthSlash(const Path: AnsiString; n: Integer): Integer
6540:
6541:
          Function FlushOsBuffers( Handle : Integer) : Boolean
6542:
          Function GetCurrentUser : AnsiString
          Function GetDiskClass( Drive : Char) : DiskClass
6544:
6545:
          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;
6547:
         Function GetDiskSpace(Drive:Char; var UserSpaceAvail:Comp; var TotalSpaceAvail:Comp; var
         DiskSize:Comp):Boolean;
            { index 0 - FreeBytesAvailable, 1 - TotalNumberOfBytes, 2 - TotalNumberOfFreeBytes }
6549:
          Function getDiskSpace2(const path: String; index: integer): int64;
6550:
          Function GetFileCreateDate( const FileName : AnsiString) : TDateTime
6551:
          Function StGetFileLastAccess( const FileName : AnsiString) : TDateTime
          Function GetFileLastModify( const FileName : AnsiString) : TDateTime
6552:
          Function GetHomeFolder( aForceSlash : Boolean) : AnsiString
          Function GetLongPath( const APath : AnsiString) : AnsiString
6554:
6555:
          Function GetMachineName : AnsiString
6556:
          Function GetMediaID( Drive : Char; var MediaIDRec : MediaIDType) : Cardinal
          Function GetParentFolder( const APath : AnsiString; aForceSlash : Boolean) : AnsiString
6557:
          Function GetShortPath( const APath : AnsiString) : AnsiString
6558:
6559:
          Function GetSystemFolder( aForceSlash : Boolean) : AnsiString
          Function GetTempFolder(aForceSlash:boolean): AnsiString
Function StGetWindowsFolder(aForceSlash:boolean): AnsiString
Function GetWorkingFolder(aForceSlash:boolean): AnsiString
6560:
6561:
6562:
           Function GlobalDateTimeToLocal( const UTC : TStDateTimeRec; MinOffset : Integer) : TStDateTimeRec
6563:
6564:
          Function StIsDirectory( const DirName : AnsiString) : Boolean
          Function IsDirectoryEmpty( const S : AnsiString) : Integer Function IsDriveReady( Drive : Char) : Boolean
6565:
6566:
          Function IsFile( const FileName : AnsiString) : Boolean
Function IsFileArchive( const S : AnsiString) : Integer
6568:
          Function IsFileHidden( const S : AnsiString) : Integer
6569:
          Function IsFileReadOnly( const S : AnsiString) : Integer
6570:
          Function IsFileSystem( const S : AnsiString): Integer
Function LocalDateTimeToGlobal( const DT1 : TStDateTimeRec; MinOffset : Integer) : TStDateTimeRec
6571:
6572:
         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)
6573:
6574:
6575:
```

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6577:
        Function StDateTimeToFileTime( const FileTime : TStDateTimeRec) : LongInt
6578:
        Function StDateTimeToUnixTime( const DT1 : TStDateTimeRec) : Longint
        Function UnixTimeToStDateTime( UnixTime : Longint) : TStDateTimeRec
6580:
        Function ValidDrive( Drive : Char) : Boolean
6581:
        Function WriteVolumeLabel( const VolName : AnsiString; Drive : Char) : Cardinal
6582:
       6583:
6584: Function CreateAccount( const Server, Username, Fullname, Password, Description, Homedir, Script: string; const PasswordNeverExpires: Boolean): Boolean
6585:
       Function CreateLocalAccount( const Username, Fullname, Password, Description, Homedir, Script: string;
       const PasswordNeverExpires : Boolean) : Boolean
       Function DeleteAccount( const Servername, Username: string) : Boolean
6587:
        Function DeleteLocalAccount( Username : string) : Boolean
6588:
        Function CreateLocalGroup( const Server, Groupname, Description : string) : Boolean
        Function CreateGlobalGroup( const Server, Groupname, Description: string): Boolean Function DeleteLocalGroup( const Server, Groupname: string): Boolean
6589:
6590:
        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
6592:
6593:
6594:
        Function AddAccountToLocalGroup( const Accountname, Groupname : string) : Boolean
        Function LookupGroupName( const Server : string; const RID : TNetWellKnownRID) : string
6596:
6597:
        Procedure ParseAccountName( const QualifiedName : string; var Domain, UserName : string)
        Function IsLocalAccount( const AccountName : string) : Boolean
Function TimeStampInterval( StartStamp, EndStamp : TDateTime) : integer
6598:
6599:
        Function GetRandomString( NumChar : cardinal) : string
6600:
6601:
            6602:
6603: TypeS('TUnitType', '( utSrc, utHead, utRes, utPrj, utOther )
6604: Function cIsWinNT: boolean
       Procedure cFilesFromWildcard(Directory, Mask: string; var Files:TStringList; Subdirs, ShowDirs,
6605:
       Multitasking:Boolean;
6606: Function cExecuteFile( const FileName, Params, DefaultDir: string; ShowCmd: Integer): THandle
6607: Function cRunAndGetOutput(Cmd,WorkDir:string; ErrFunc:TErrFunc; LineOutputFunc:TLineOutputFunc;
       CheckAbortFunc: TCheckAbortFunc; ShowReturnValue: Boolean): string
6608: Function cGetShortName( FileName : string) : string
        Procedure cShowError( Msg : String)
Function cCommaStrToStr( s : string; formatstr : string) : string
6609:
6610:
        Function cIncludeQuoteIfSpaces(s:string): string
Function cIncludeQuoteIfNeeded(s:string): string
6611:
6612:
6613:
        Procedure cLoadFilefromResource( const FileName : string; ms : TMemoryStream)
        Function cValidateFile(const FileName:string; const WorkPath:string;const CheckDirs:boolean):string;
6614:
        Function cBuildFilter( var value : string; const FLTStyle : TFILTERSET) : boolean;
6615:
        Function cBuildFilter1( var value : string; const _filters : array of string) : boolean;
        Function cCodeInstoStr( s : string) : string
Function cStrtoCodeIns( s : string) : string
6617:
6618:
        Procedure cStrtoAttr( var Attr: TSynHighlighterAttributes; Value: string)
Function cAttrtoStr( const Attr: TSynHighlighterAttributes): string
6619:
6621:
        Procedure cStrtoPoint( var pt : TPoint; value : string)
        Function cPointtoStr( const pt : TPoint) : string
Function cListtoStr( const List : TStrings) : string
6622:
6623:
        Function ListtoStr( const List : TStrings) : string
6624:
        Procedure StrtoList( s : string; const List : TStrings; const delimiter : char)
6625:
        Procedure cStrtoList( s : string; const List : TStrings; const delimiter : char)
6626:
6627:
        Function cGetFileTyp( const FileName : string) : TUnitType Function cGetExTyp( const FileName : string) : TExUnitType
6628:
        Procedure cSetPath( Add : string; const UseOriginal : boolean)
6629:
        Function cExpandFileto( const FileName : string; const BasePath : string) : string
6630:
        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
6631:
6632:
6633:
6634:
        Function cGenMakePath( FileName : String) : String;
        Function cGenMakePath2(FileName: String): String
Function cGenMakePath1(FileName: String; EscapeSpaces, EncloseInQuotes: Boolean): String;
6635:
6636:
        Function cGetRealPath( BrokenFileName : String; Directory : String) : String
6637:
        Function cCalcMod( Count : Integer) : Integer
        Function cGetVersionString( FileName : string) : string
6639:
6640:
        \textbf{Function} \ \texttt{cCheckChangeDir}( \ \textbf{var} \ \texttt{Dir} \ \textbf{:} \ \textbf{string}) \ \textbf{:} \ \texttt{boolean}
6641:
        Function cGetAssociatedProgram(const Extension:string; var Filename,Description: string):boolean
        Function cIsNumeric( s : string) : boolean
Procedure StrtoAttr( var Attr : TSynHighlighterAttributes; Value : string)
6642:
6643:
6644:
        Function AttrtoStr( const Attr : TSynHighlighterAttributes) : string
6645:
        \textbf{Function} \ \ \texttt{GetFileTyp}( \ \ \textbf{const} \ \ \texttt{FileName} \ : \ \textbf{string}) \ : \ \ \texttt{TUnitType}
        Function Atoi(const aStr: string): integer
Function Itoa(const aint: integer): string
6646:
6647:
6648:
6649:
6650: procedure SIRegister_cHTTPUtils(CL: TPSPascalCompiler);
6651: begin
          FindClass('TOBJECT'),'EHTTP
6653:
         FindClass('TOBJECT'), 'EHTTPParser
         FindClass('TOBUECT', EMITTED SET'
//AnsiCharSet', 'set of AnsiChar
AnsiStringArray', 'array of AnsiString
THTTPProtocolEnum', '( hpNone, hpCustom, hpHTTP, hpHTTPS)
THTTPVersionEnum', '( hvNone, hvCustom, hvHTTP10, hvHTTP11)
6654:
6655:
6656:
6657:
6658:
         THTTPVersion', 'record Version : THTTPVersionEnum; Protocol : TH'
          +'TTPProtocolEnum; CustomProtocol : AnsiString; CustomMajVersion : Integer; '+'CustomMinVersion : Integer; end
6659:
6660:
         THTTPHeaderNameEnum', '( hntCustom, hntHost, hntContentType, hnt
```

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6662:
             +'ContentLength, hntContentTransferEncoding, hntContentLocation, hntContentL'
6663:
             +'anguage, hntContentEncoding, hntTransferEncoding, hntDate, hntServer, hntU'
6664:
             +'serAgent, hntLocation, hntConnection, hntExpires, hntCacheControl, hntSetC'
6665:
             +'ookie, hntCookie, hntAuthorization, hntVia, hntWarning, hntContentRange, h'
6666:
             +'ntXForwardedFor, hntPragma, hntXPoweredBy, hntWWWAuthenticate, hntLastModi'
            +'fied, hntETag, hntProxyAuthorization, hntReferer, hntAge, hntAcceptRanges,'
+' hntAcceptEncoding, hntAcceptLanguage, hntAcceptCharset, hntIfModifiedSinc'
6667:
6668:
             +'e, hntIfUnmodifiedSince, hntRetryAfter, hntUpgrade, hntStatus, hntProxyCon'
6669:
           +'nection, hntOrigin, hntKeepAlive )
THTTPHeaderName', 'record Value : THTTPHeaderNameEnum; Custom: AnsiString; end
THTTPCustomHeader', 'record FieldName : AnsiString; FieldValue :'
6670:
6671:
6672:
             +' AnsiString; end
6673:
6674:
            //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'
6675:
6676:
6677:
6678:
           THTTPContentTypeEnum', '( hctNone, hctCustomParts, hctCustomStri' +'ng, hctTextHtml, hctTextAscii, hctTextCss, hctTextPlain, hctTextXml, hctTe' +'xtCustom, hctImageJpeg, hctImagePng, hctImageGif, hctImageCustom, hctAppli'
6679:
6680:
6681:
6682:
               cationJSON, hctApplicationOctetStream, hctApplicationJavaScript, hctApplic'
             +'ationCustom, hctAudioCustom, hctVideoCustom)
6683:
           THTTPContentType', 'record Value : THTTPContentTypeEnum; CustomM'
    +'ajor : AnsiString; CustomMinor : AnsiString; Parameters : AnsiStringArray;'
6684:
6685:
                 CustomStr : AnsiString; end
6686:
6687:
           THTTPDateFieldEnum', '( hdNone, hdCustom, hdParts, hdDateTime )
6688:
           THTTPDateField', 'record Value : THTTPDateFieldEnum; DayOfWeek :'
             +' Integer; Day : integer; Month : integer; Year : Integer; Hour : integer; '+'Min : integer; Sec : Integer; TimeZoneGMT : Boolean; CustomTimeZone : Ansi'
6689:
6690:
             +'String; DateTime : TDateTime; Custom : AnsiString; end
6691:
6692:
           THTTPTransferEncodingEnum', '( hteNone, hteCustom, hteChunked )
           THTTPTransferEncoding', 'record Value : THTTPTransferEncodingEnu' +'m; Custom : AnsiString; end
THTTPConnectionFieldEnum', '( hcfNone, hcfCustom, hcfClose, hcfKeepAlive )
THTTPConnectionField', 'record Value : THTTPConnectionFieldEnum;'
6693:
6694:
6695:
6696:
6697:
             +' Custom : AnsiString; end
           THTTPAgeFieldEnum', '( hafNone, hafCustom, hafAge )
THTTPAgeField', 'record Value: THTTPAgeFieldEnum; Age : Int64;Custom:AnsiString; end
6698:
6699:
6700:
           THTTPCacheControlFieldEnum',
                                                     '( hccfNone, hccfDecoded, hccfCustom )
           THTTPCacheControlRequestSubField', '( hccsfNoCache, hccsfNoStore'
6701:
6702:
             +', hccsfMaxAge, hccsfMaxStale, hccsfMinFresh, hccsfNoTransform, hccsfOnlyIfCached )
           THTTPCacheControlResponseSubField', '( hccrfPublic, hccrfPrivate' +', hccrfNoCache, hccrfNoStore, hccrfNoTransform, hccrfMustRevalidate, hccrf' +'ProxyRevalidate, hccrfMaxAge, hccrfSMaxAge)
6703:
6704:
6705:
           THTTPCacheControlField', 'record Value : THTTPCacheControlFieldEnum; end THTTPContentEncodingEnum', '( hceNone, hceCustom, hceIdentity, h' +'ceCompress, hceDeflate, hceExi, hceGzip, hcePack200Gzip )
6706:
6707:
6708:
           THTTPContentEncoding', 'record Value: THTTPContentEncodingEnum; Custom: AnsiString; end;
6709:
           THTTPContentEncodingFieldEnum', '( hcefNone, hcefList )
THTTPContentEncodingField', 'record Value : THTTPContentEncoding'
6710:
6711:
             +'FieldEnum; List : array of THTTPContentEncoding; end
6712:
           THTTPRetryAfterFieldEnum', '( hrafNone, hrafCustom, harfDate, harfSeconds )
6713:
6714:
           THTTPRetryAfterField', 'record Value : THTTPRetryAfterFieldEnum;
           +'Custom: AnsiString; Date: TDateTime; Seconds: Int64; end
THTTPContentRangeFieldEnum', '(hcrfNone, hcrfCustom, hcrfByteRange)
THTTPContentRangeField', 'record Value: THTTPContentRangeFieldE'
6715:
6716:
6717:
             +'num; ByteFirst : Int64; ByteLast : Int64; ByteSize : Int64; Custom : AnsiString; end
6718:
           THTTPSetCookieFieldEnum', '( hscoNone, hscoDecoded, hscoCustom )
THTTPSetCookieCustomField', 'record Name : AnsiString; Value : AnsiString; end
THTTPSetCookieCustomFieldArray', 'array of THTTPSetCookieCustomField
THTTPSetCookieField', 'record Value : THTTPSetCookieFieldEnum; D'
6719:
6720:
6721:
6722:
6723:
             +'omain : AnsiString; Path : AnsiString; Expires : THTTPDateField; MaxAge : '
6724:
             +'Int64; HttpOnly : Boolean; Secure : Boolean; CustomFields : THTTPSetCookie'
6725:
             +'CustomFieldArray; Custom : AnsiString; end
6726:
            //PHTTPSetCookieField', '^THTTPSetCookieField // will not work
           THTTPSetCookieFieldArray', 'array of THTTPSetCookieField
THTTPCookieFieldEnum', '( hcoNone, hcoDecoded, hcoCustom )
THTTPCookieFieldEntry', 'record Name : AnsiString; Value : AnsiString; end
6727:
6728:
6729:
           //PHTTPCookieFieldEntry', '^THTTPCookieFieldEntry', will not work
THTTPCookieFieldEntryArray', 'array of THTTPCookieFieldEntry
6730:
                                                      'array of THTTPCookieFieldEntry
6731:
6732:
           THTTPCookieField', 'record Value : THTTPCookieFieldEnum; Entries'
6733:
             +' : THTTPCookieFieldEntryArray; Custom : AnsiString; end
           THTTPCommonHeaders', 'record TransferEncoding: THTTPTransferEnc' +'oding; ContentType: THTTPContentType; ContentLength: THTTPContentLength;
6734:
6735:
                 Connection: THTTPConnectionField; ProxyConnection: THTTPConnectionField'
6736:
6737:
             +'; Date : THTTPDateField; ContentEncoding : THTTPContentEncodingField; end
           THTTPCustomHeaders', 'array of THTTPCustomHeader //THTTPFixedHeaders', 'array[THTTPHeaderNameEnum] of AnsiString
6738:
6739:
           THTTPFixedHeaders', 'array[0.42] of AnsiString
THTTPMethodEnum', '(hmNone,hmCustom,hmGET,hmPUT,hmPOST,hmC'+'ONNECT,hmHEAD,hmDELETE,hmOPTIONS,hmTRACE)
6740:
6742:
           THTTPMethod', 'record Value : THTTPMethodEnum; Custom : AnsiString; end
6743:
           THTTPRequestStartLine', 'record Method: THTTPMethod; URI: AnsiString; Version: THTTPVersion; end
6744:
                                          'record CommonHeaders : THTTPCommonHeaders;
6745:
           THTTPRequestHeader',
6746:
                 FixedHeaders: THTTPFixedHeaders: CustomHeaders: THTTPCustomHeaders: Coo'
             +'kie: THTTPCookieField; IfModifiedSince:THTTPDateField; IfUnmodifiedSince:THTTPDateField; end
6747:
6748:
            //PHTTPRequestHeader', '^THTTPRequestHeader // will not work
6749:
           THTTPRequest', 'record StartLine: THTTPRequestStartLine; Header'
             +' : THTTPRequestHeader; HeaderComplete : Boolean; HasContent : Boolean; end
```

```
6751:
        THTTPResponseStartLineMessage', '( hslmNone, hslmCustom, hslmOK)
        THTTPResponseStartLine', 'record Version: THTTPVersion; Code:
6752:
6753:
            'Integer; Msg : THTTPResponseStartLineMessage; CustomMsg :
6754:
         THTTPResponseHeader', 'record CommonHeaders : THTTPCommonHeaders'
6755:
          +'; FixedHeaders: THTTPFixedHeaders: CustomHeaders: THTTPCustomHeaders: Co'
          +'okies : THTTPSetCookieFieldArray; Expires : THTTPDateField; LastModified :'
6756:
         + THTTPDateField; Age : THTTPAgeField; end
//PHTTPResponseHeader', '^THTTPResponseHeader // will not work
6757:
6758:
         THTTPResponse', 'record StartLine : THTTPResponseStartLine; Head'
6759:
6760:
          +'er : THTTPResponseHeader; HeaderComplete : Boolean; HasContent : Boolean; end
       Function HTTPMessageHasContent( const H : THTTPCommonHeaders) : Boolean
6761:
       Procedure InitHTTPRequest( var A : THTTPRequest)
       Procedure InitHTTPResponse( var A : THTTPResponse)
Procedure ClearHTTPVersion( var A : THTTPVersion)
6763:
6764:
       Procedure ClearHTTPContentLength( var A : THTTPContentLength)
6765:
6766:
       Procedure ClearHTTPContentType( var A : THTTPContentType)
       Procedure ClearHTTPDateField( var A : THTTPDateField)
6767:
       Procedure ClearHTTPTransferEncoding( var A : THTTPTransferEncoding)
Procedure ClearHTTPConnectionField( var A : THTTPConnectionField)
Procedure ClearHTTPAgeField( var A : THTTPAgeField)
6768:
6769:
6770:
       Procedure ClearHTTPContentEncoding( var A : THTTPContentEncoding)
6771:
6772:
       Procedure ClearHTTPContentEncodingField( var A : THTTPContentEncodingField)
       Procedure ClearHTTPContentRangeField( var A : THTTPContentRangeField)
Procedure ClearHTTPSetCookieField( var A : THTTPSetCookieField)
6773:
6774:
       Procedure ClearHTTPCommonHeaders( var A : THTTPCommonHeaders)
6775:
6776:
        //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)
6777:
6778:
6779:
6780:
6781:
       Procedure ClearHTTPRequestHeader( var A : THTTPRequestHeader)
6782:
       Procedure ClearHTTPRequest( var A : THTTPRequest)
       Procedure ClearHTTPResponseStartLine( var A : THTTPResponseStartLine)
Procedure ClearHTTPResponseHeader( var A : THTTPResponseHeader)
Procedure ClearHTTPResponse( var A : THTTPResponse)
6783:
6784:
6785:
        THTTPStringOption', '( hsoNone )
THTTPStringOptions', 'set of THTTPStringOption
6786:
6787:
        FindClass('TOBJECT'),'TAnsiStringBuilder
6788:
6789:
6790:
       Procedure BuildStrHTTPVersion(const A:THTTPVersion; const B:TAnsiStringBuilder;const
      P:THTTPStringOptions);
       Procedure BuildStrHTTPContentLengthValue(const A: THTTPContentLength; const B: TAnsiStringBuilder; const
6791:
      P : THTTPStringOptions)
      Procedure BuildStrHTTPContentLength( const A : THTTPContentLength; const B : TAnsiStringBuilder; const P
        THTTPStringOptions)
6793: Procedure BuildStrHTTPContentTypeValue( const A : THTTPContentType; const B : TAnsiStringBuilder; const P
        THTTPStringOptions)
      Procedure BuildStrHTTPContentType(const A:THTTPContentType;const B:TAnsiStringBuilder; const
      P:THTTPStringOptions)
6795:
      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 :
6798:
      TAnsiStringBuilder; const P : THTTPStringOptions)
      Procedure BuildStrHTTPTransferEncoding( const A : THTTPTransferEncoding; const B : TAnsiStringBuilder;
      const P : THTTPStringOptions)
6800:
       Procedure BuildStrHTTPContentRangeField( const A : THTTPContentRangeField; const B : TAnsiStringBuilder;
      const P : THTTPStringOptions)
      Procedure BuildStrHTTPConnectionFieldValue( const A : THTTPConnectionField; const B : TAnsiStringBuilder;
      const P : THTTPStringOptions)
6802: Procedure BuildStrHTTPConnectionField( const A : THTTPConnectionField; const B : TAnsiStringBuilder;
      const P : THTTPStringOptions)
      Procedure BuildStrHTTPAgeField(const A:THTTPAgeField;const B:TAnsiStringBuilder;const
      P:THTTPStringOptions);
6804:
      Procedure BuildStrHTTPContentEncoding( const A : THTTPContentEncoding; const B : TAnsiStringBuilder;
      const P : THTTPStringOptions)
       Procedure BuildStrHTTPContentEncodingField(const A:THTTPContentEncodingField;const
6805:
      B:TAnsiStringBuilder; const P:THTTPStringOptions)
6806: Procedure BuildStrHTTPProxyConnectionField(const A : THTTPConnectionField; const B : TAnsiStringBuilder;
      const P : THTTPStringOptions)
6807: Procedure BuildStrHTTPCommonHeaders ( const A : THTTPCommonHeaders; const B : TAnsiStringBuilder; const P
        THTTPStringOptions)
      Procedure BuildStrHTTPFixedHeaders(const A:THTTPFixedHeaders;const B:TAnsiStrBuilder;const
6808:
      P:THTTPStringOptions)
      Procedure BuildStrHTTPCustomHeaders( const A : THTTPCustomHeaders; const B : TAnsiStringBuilder; const P
6809:
        THTTPStringOptions)
      Procedure BuildStrHTTPSetCookieFieldValue( const A : THTTPSetCookieField; const B : TAnsiStringBuilder;
      const P : THTTPStringOptions)
6811: Procedure BuildStrHTTPCookieFieldValue( const A: THTTPCookieField; const B: TAnsiStringBuilder; const P
        THTTPStringOptions)
6812: Procedure BuildStrHTTPCookieField(const A:THTTPCookieField;const B:TAnsiStringBuilder;const
      P:THTTPStringOptions)
6813: Procedure BuildStrHTTPMethod( const A : THTTPMethod; const B : TAnsiStringBuilder; const P :
      THTTPStringOptions)
      Procedure BuildStrHTTPRequestStartLine( const A : THTTPRequestStartLine; const B : TAnsiStringBuilder;
      const P : THTTPStringOptions)
```

```
6815: Procedure BuildStrHTTPRequestHeader(const A:THTTPRequestHeader;const B:TAnsiStringBuilder;const
       P:THTTPStringOptions);
        Procedure BuildStrHTTPRequest( const A : THTTPRequest; const B : TAnsiStringBuilder; const P :
       THTTPStringOptions)
6817: Procedure BuildStrHTTPResponseCookieFieldArray( const A : THTTPSetCookieFieldArray; const B :
      TAnsiStringBuilder; const P : THTTPStringOptions)
6818: Procedure BuildStrHTTPResponseStartLine(const A:THTTPResponseStartLine;const B:TAnsiStrBldr;const P
6819: Procedure BuildStrHTTPResponseHeader(const A:THTTPRespHeader;const B:TAnsiStrBuilder;const
      P:THTTPStringOptions)
6820:
       Procedure BuildStrHTTPResponse(const A:THTTPResponse; const B:TAnsiStringBuilder; const
       P:THTTPStringOptions);
6821: Function HTTPContentTypeValueToStr( const A : THTTPContentType) : AnsiString
        Function HTTPSetCookieFieldValueToStr( const A : THTTPSetCookieField) : AnsiString Function HTTPCookieFieldValueToStr( const A : THTTPCookieField) : AnsiString
6822:
6823:
        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
6826 .
6827:
       Domain:AnsiString;const Secure:Bool; THTTPParserHeaderParseFunc', 'Function ( const HeaderName : THTT'
           +PHeaderNameEnum; const HeaderPtr : ____Pointer) : Boolean
6828:
         SIRegister_THTTPParser(CL);
6829:
6830:
         FindClass('TOBJECT'),'THTTPContentDecoder
         THTTPContentDecoderProc', 'Procedure ( const Sender : THTTPContentDecoder)
6831:
         THTTPContentDecoderContentType', '( crctFixedSize, crctChunked, crctUnsized )
THTTPContentDecoderChunkState', '( crcsChunkHeader, crcsContent,'
6832:
6833:
6834:
          +' crcsContentCRLF, crcsTrailer, crcsFinished )
         THTTPContentDecoderLogEvent', 'Procedure ( const Sender : THTTPContentDecoder; const LogMsg : String)
6835:
         SIRegister_THTTPContentDecoder(CL);
6836:
         THTTPContentReaderMechanism', '( hcrmEvent, hcrmString, hcrmStream, hcrmFile )
6837:
6838:
         FindClass('TOBJECT'), 'THTTPContentReader
         THTTPContentReaderProc', 'Procedure ( const Sender : THTTPContentReader)
6839:
         THTTPContentReader; const LogMsq:String; const Sender:THTTPContentReader; const LogMsq:String; const
6840:
      LogLevel: Int;
         SIRegister_THTTPContentReader(CL);
6841:
6842:
         THTTPContentWriterMechanism','(hctmEvent, hctmString, hctmStream, hctmFile )
6843:
         FindClass('TOBJECT'),'THTTPContentWriter
         THTTPContentWriterLogEvent', 'Procedure (const Sender : THTTPContentWriter; const LogMsg:AnsiString);
6844:
6845:
         SIRegister_THTTPContentWriter(CL);
6846:
        Procedure SelfTestcHTTPUtils
6847:
      end;
6848:
6849:
6850: procedure SIRegister_cTLSUtils(CL: TPSPascalCompiler);
6851: begin
        'TLSLibraryVersion', 'String').SetString( '1.00
6852:
        'TLSError_None', 'LongInt').SetInt( 0);
'TLSError_InvalidBuffer', 'LongInt').SetInt( 1);
6853:
        'TLSError_InvalidParameter', 'LongInt').SetInt( 2);
6855:
6856:
        'TLSError InvalidCertificate', 'LongInt').SetInt( 3);
6857:
        'TLSError InvalidState', 'LongInt').SetInt(4);
        'TLSError_DecodeError','LongInt').SetInt( 5);
'TLSError_BadProtocol','LongInt').SetInt( 6);
6858:
6859:
6860:
        Function TLSErrorMessage( const TLSError : Integer) : String
6861:
         SIRegister_ETLSError(CL);
         TTLSProtocolVersion', 'record major : Byte; minor : Byte; end PTLSProtocolVersion', '^TTLSProtocolVersion // will not work
6862:
6863:
        Procedure InitSSLProtocolVersion30( var A : TTLSProtocolVersion)
6864:
6865:
        Procedure InitTLSProtocolVersion10( var A : TTLSProtocolVersion)
        Procedure InitTLSProtocolVersion11( var A : TTLSProtocolVersion)
6866:
        Procedure InitTLSProtocolVersion12( var A : TTLSProtocolVersion)
6867:
        Function IsTLSProtocolVersion( const A, B : TTLSProtocolVersion) : Boolean
6868:
        Function IsSSL2( const A : TTLSProtocolVersion) : Boolean Function IsSSL3( const A : TTLSProtocolVersion) : Boolean
6869:
6870:
6871:
        Function IsTLS10( const A : TTLSProtocolVersion) : Boolean
        Function IsTLS11( const A : TTLSProtocolVersion) : Boolean
6872:
6873:
        Function IsTLS12( const A : TTLSProtocolVersion) : Boolean
        Function IsTLS100rLater( const A : TTLSProtocolVersion) : Boolean
Function IsTLS110rLater( const A : TTLSProtocolVersion) : Boolean
6874:
6875:
        Function IsTLS12OrLater( const A : TTLSProtocolVersion) : Boolean
6876:
        Function IsFutureTLSVersion( const A : TTLSProtocolVersion) : Boolean
6877:
6878:
        \textbf{Function} \  \, \texttt{IsKnownTLSVersion}( \  \, \textbf{const} \  \, \texttt{A} \  \, \texttt{:} \  \, \texttt{TTLSProtocolVersion}) \  \, \texttt{:} \  \, \texttt{Boolean}
6879:
        Function TLSProtocolVersionToStr( const A : TTLSProtocolVersion) : String
Function TLSProtocolVersionName( const A : TTLSProtocolVersion) : String
6880:
6881:
         PTLSRandom',
                          '^TTLSRandom // will not work
        Procedure InitTLSRandom( var Random : TTLSRandom)
6882:
6883:
        Function TLSRandomToStr( const Random : TTLSRandom) : AnsiString
'TLSSessionIDMaxLen','LongInt').SetInt( 32);
Procedure InitTLSSessionID( var SessionID : TTLSSessionID; const A : AnsiString)
6884:
6885:
        Function EncodeTLSSessionID(var Buffer:string;const Size:Int;const SessionID:TTLSSessionID):Int;
        Function DecodeTLSSessionID(const Buffer:string;const Size:Int;var SessionID:TTLSSessionID):Int;
6887:
         TTLSSignatureAndHashAlgorithm', 'record Hash : TTLSHashAlgorithm' +'; Signature : TTLSSignatureAlgorithm; end
6888:
6889:
        // PTLSSignatureAndHashAlgorithm', '^TTLSSignatureAndHashAlgorithm +'// will not work
6890:
         TTLSSignatureAndHashAlgorithmArray', 'array of TTLSSignatureAndHashAlgorithm
6891:
6892:
         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)
6893:
6894:
6895:
```

```
TTLSMacAlgorithmInfo', 'record Name : AnsiString; DigestSize : I' +'nteger; Supported : Boolean; end
6896:
6897:
        PTLSMacAlgorithmInfo', '^TTLSMacAlgorithmInfo // will not work
'TLS_MAC_MAXDIGESTSIZE', 'LongInt').SetInt( 64);
6898:
6899:
6900:
         TTLSPRFAlgorithm', '( tlspaSHA256 )
        Function tlsP_MD5( const Secret, Seed : AnsiString; const Size : Integer) : AnsiString Function tlsP_SHA1( const Secret, Seed : AnsiString; const Size : Integer) : AnsiString
6901:
6902:
        Function tlsP_SHA256( const Secret, Seed : AnsiString; const Size : Integer) : AnsiString
6903:
        Function tlsP_SHA512( const Secret, Seed : AnsiString; const Size : Integer) : AnsiString
6904:
        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
6905:
6906:
6908:
        Function TLSPRF(const ProtoVersion:TTLSProtocolVersion;const Secret,ALabel,Seed:AString;const
       Size:Int):AString;
6909:
       Function tls10KevBlock(const MasterSecret, ServerRandom, ClientRandom; AnsiString; const
       Size:Integer):AnsiString
       Function tls12SHA256KeyBlock(const MasterSecret, ServerRandom, ClientRandom: AnsiString; const
       Size:Int):AnsiString;
6911: Function tls12SHA512KevBlock(const MasterSecret.ServerRandom.ClientRandom: AnsiString/const
      Size:Int):AnsiString;
        Function TLSKeyBlock(const ProtocolVersion:TTLSProtocolVersion; const MasterSecret, ServerRandom,
       ClientRandom : AnsiString; const Size : Integer) : AnsiString
6913:
      Function tls10MasterSecret(const PreMasterSecret,ClientRandom, ServerRandom:AnsiString) :AnsiString;
6914:
        Function tls12SHA256MasterSecret(const PreMasterSecret.ClientRandom.ServerRandom:AnsiString):AnsiString;
        Function tls12SHA512MasterSecret(const PreMasterSecret,ClientRandom,ServerRandom:AnsiString): AnsiString;
6915:
        Function TLSMasterSecret( const ProtocolVersion: TTLSProtocolVersion; const PreMasterSecret, ClientRandom
6916:
       ServerRandom:AnsiString) : AnsiString
6917:
         TTLSKeys', 'record KeyBlock : AnsiString; ClientMACKey : AnsiStr'
          +'ing; ServerMACKey: AnsiString; ClientEncKey: AnsiString; ServerEncKey: +'AnsiString; ClientIV: AnsiString; ServerIV: AnsiString; end
6918:
        Procedure GenerateTLSKeys( const ProtocolVersion : TTLSProtocolVersion; const MACKeyBits, CipherKeyBits,
6920:
       IVBits : Integer: const MasterSecret, ServerRandom, ClientRandom : AnsiString: var TLSKeys : TTLSKeys)
      Procedure GenerateFinalTLSKeys(const ProtocolVersion:TTLSProtocolVersion;const IsExportable:Boolean;const
6921:
       ExpandedKeyBits:Integer;const ServerRandom,ClientRandom:AnsiString;var TLSKeys:TTLSKeys)
        'TLS_PLAINTEXT_FRAGMENT_MAXSIZE','LongInt').SetInt( 16384 - 1);
'TLS_COMPRESSED_FRAGMENT_MAXSIZE','LongInt').SetInt( 16384 + 1024);
6922:
6923:
6924:
        Procedure SelfTestcTLSUtils
6925:
      end;
6926:
6927:
6928: procedure SIRegister_Reversi(CL: TPSPascalCompiler);
6929: begin
         sPosData', 'record corner : boolean; square2x2 : boolean; edge:boolean; stable : integer; internal :
6930:
       integer; disks : integer; mx : integer; my : integer; end
        // pBoard', '^tBoard // will not work
        Function rCalculateData( cc : byte; cx, cy : integer) : sPosData
6932:
        Function rCheckMove(color: byte; cx, cy: integer): integer //Function rDoStep(data: pBoard): word
6933:
6935:
        Function winExecAndWait( const sAppPath : string; wVisible : word) : boolean
6936:
      end;
6937:
6938: procedure SIRegister_IWDBCommon(CL: TPSPascalCompiler);
6939:
      begin
6940: Function InEditMode( ADataset : TDataset) : Boolean
6941: Function CheckDataSource( ADataSource: TDataSource): Boolean;
6942: Function CheckDataSource(ADataSource: TDataSource; const AFieldName: string; var VField: TField): boolean;
      Function GetFieldText( AField : TField) : String
6944:
      end;
6945:
      procedure SIRegister SortGrid(CL: TPSPascalCompiler);
6946:
6947:
      begin
6948:
         TPrintMode', '( pmPrint, pmPreview, pmPageCount )
         TMyPrintRange', '( prAll, prSelected )
TSortStyle', '( ssAutomatic, ssNormal, ssNumeric, ssNumericExten'
6949:
6950:
         +'ded, ssDateTime, ssTime, ssCustom )
TSortDirection', '( sdAscending, sdDes
6951:
6952:
                                 sdAscending, sdDescending )
6953:
         TSetChecked', 'Procedure ( Sender : TObject; ACol, ARow : integer; State : Boolean)
6954:
         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)
6955:
6956:
6957:
6958:
         SIRegister_TSortOptions(CL);
6959:
         SIRegister_TPrintOptions(CL);
6960:
         TSortedListEntry'. 'record Str : String; RowNum : integer; SortOption : TSortOptions; end
6961:
         SIRegister_TSortedList(CL);
         TCellBevelStyle', '( cbNone, cbRaised, cbLowered )
6962:
6963:
         TCellBevel', 'record Style: TCellBevelStyle; UpperLeftColor: TColor; LowerRightColor: TColor; end
         TVertAlignment', '( taTopJustify, taBottomJustify, taMiddle )
TFormatOptions', 'record Brush : TBrush; Font : TFont; Alignment'
6964:
6965:
            'Horz : TAlignment; AlignmentVert : TVertAlignment; Bevel : TCellBevel; HideText : Boolean; end
6966:
6967:
         SIRegister_TFontSetting(CL);
6968:
         SIRegister TFontList(CL);
         AddTypeS(TFormatDrawCellEvent', 'Procedure ( Sender : TObject; Col, Row : '
6969:
6970:
          + integer;State:TGridDrawState; var FormatOptions:TFormatOptions;var CheckBox,Combobox,Ellipsis:Bool);
6971:
         TSetFilterEvent', 'Procedure ( ARows : TStrings; var Accept : Boolean)
6972:
         TSearchEvent', 'Procedure ( ARows : TStrings; var Accept : Boolean)
6973:
         TUpdateGridEvent', 'Procedure ( Sender : TObject; ARow : integer)
TSizeChangedEvent', 'Procedure ( Sender : TObject; OldColCount, OldRowCount : integer)
6974:
         TBeginSortEvent', 'Procedure ( Sender : TObject; var Col : integer)
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6976:
         TEndSortEvent', 'Procedure ( Sender : TObject; Col : integer)
         TGetSortStyleEvent', 'Procedure ( Sender : TObject; Col : intege +'r; var SortStyle : TSortStyle)
6977:
6978:
6979:
         TCellValidateEvent',
                                   'Procedure ( Sender : TObject; ACol, ARow : '
          +' integer; const OldValue : string; var NewValue : String; var Valid : Boolean)
6980:
         SIRegister TSortGrid(CL);
6981:
6982:
        Function ExtendedCompare( const Str1, Str2 : String) : Integer
        Function NormalCompare( const Str1, Str2: String): Integer Function DateTimeCompare( const Str1, Str2: String): Integer
6983:
6984:
        Function NumericCompare( const Str1, Str2: String): Integer Function TimeCompare( const Str1, Str2: String): Integer //Function Compare( Item1, Item2: Pointer): Integer
6985:
6986:
6988:
6989:
       6990:
        Procedure IBAlloc( var P, OldSize, NewSize : Integer)
        Procedure IBError( ErrMess : TIBClientError; const Args : array of const)
6992:
6993:
        Procedure IBDataBaseError
        Function StatusVector : PISC_STATUS
6994:
        Function StatusVectorArray: PStatusVector
Function CheckStatusVector( ErrorCodes: array of ISC_STATUS): Boolean
6995:
6996:
6997:
        Function StatusVectorAsText : string
        Procedure SetIBDataBaseErrorMessages( Value : TIBDataBaseErrorMessages)
Function GetIBDataBaseErrorMessages : TIBDataBaseErrorMessages
6998:
6999:
7001:
Function CharCount( c : char; const s : string) : integer
Function BoldNamesEqual( const name1, name2 : string) : Boolean
7003:
7004:
        Procedure BoldAppendToStrings(strings: TStrings; const aString: string; const ForceNewLine:Boolean)
7006:
        Function BoldSeparateStringList(strings:TStringList;const Separator,PreString,PostString:String):String
7007:
        \textbf{Function} \ \ \texttt{BoldSeparatedAppend} ( \ \textbf{const} \ \ \texttt{S1}, \ \ \texttt{S2} \ : \ \textbf{string}; \ \textbf{const} \ \ \texttt{Separator} \ : \ \textbf{string}) \ : \ \textbf{string} 
       Function BoldSeparatedAppend(const S1, S2: string; const separator · string; · string
Function BoldTrim(const S: string): string
Function BoldIsPrefix(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
7008:
7009:
7010:
7011:
7012:
7013:
7014:
        Function BoldCaseIndependentPos( const Substr, S: string) : Integer
7015:
        //Procedure EnumToStrings( aTypeInfo : pTypeInfo; Strings : TStrings)
7016:
        Function CapitalisedToSpaced( Capitalised : String) : String
        Function SpacedToCapitalised( Spaced: String): String
Function BooleanToString( BoolValue: Boolean): String
7017:
7018:
        Function StringToBoolean( StrValue : String) : Boolean
7020:
        \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
7021:
7022:
        Function GetComputerNameStr : string
Function TimeStampComp( const Time1, Time2 : TTimeStamp) : Integer
7024:
7025:
7026:
        Function BoldStrToDateFmt(const S:string;const DateFormat:string;const DateSeparatorChar:char):TDateTime
        Function BoldDateToStrFmt(const aDate:TDateTime;DateFormat:string;const DateSeparatorChar:char):String;
7027:
        Function BoldParseFormattedDateList(const value:String;const formats:TStrings;var Date:TDateTime):Boolean;
7028:
        Function BoldParseFormattedDate(const value:String;const formats:array of string; var
7029:
       Date: TDateTime): Boolean;
      Procedure EnsureTrailing( var Str : String; ch : char)
        Function BoldDirectoryExists( const Name : string) : Boolean
        Function BoldForceDirectories( Dir : string) : Boolean
7032:
        Function BoldRootRegistryKey : string
Function GetModuleFileNameAsString( IncludePath : Boolean) : string
Function BoldVariantToStrings( V : OleVariant; Strings : TStrings) : Integer
7033:
7034:
7035:
7036:
        Function LogicalAnd( A, B : Integer) : Boolean
7037:
        record TByHandleFileInformation dwFileAttributes : DWORD; '
7038:
          +'ftCreationTime : TFileTime; ftLastAccessTime : TFileTime; ftLastWriteTime
           +': TFileTime; dwVolumeSerialNumber : DWORD; nFileSizeHigh : DWORD; nFileSiz'
7039:
           +'eLow : DWORD; nNumberOfLinks : DWORD; nFileIndexHigh : DWORD; nFileIndexLow : DWORD; end
7040:
        Function GetFileInformationByHandle(hFile:THandle; var lpFileInformation:TByHandleFileInformation):BOOL;
7041:
7042:
        \textbf{Function} \  \, \texttt{IsFirstInstance} \  \, : \  \, \texttt{Boolean}
        Procedure ActivateFirst( AString : PChar)
7043:
7044:
        Procedure ActivateFirstCommandLine
        function MakeAckPkt(const BlockNumber: Word): string;
7045:
7046:
        procedure SendError(UDPBase:TldUDPBase;APeerIP:string;const APort:Int;const ErrNumber:Word;ErrStr:string;
7047:
        procedure SendError(UDPClient: TIdUDPClient; const ErrNumber: Word; ErrorString: string); overload;
        procedure SendError(UDPBase: TIdUDPBase; APeerIP: string; const APort: Integer; E: Exception); overload;
7048:
7049:
        procedure SendError(UDPClient: TIdUDPClient; E: Exception); overload;
7050:
        function IdStrToWord(const Value: String): Word;
        function IdWordToStr(const Value: Word): WordStr;
7051:
        Function HasInstructionSet( const InstructionSet : TCPUInstructionSet) : Boolean
7052:
        Function CPUFeatures : TCPUFeatures
7053:
7055:
       procedure SIRegister_xrtl_util_CPUUtils(CL: TPSPascalCompiler);
7056: begin
         AddTypeS('TXRTLBitIndex', 'Integer
7057:
        Function XRTLSwapBits( Data : Cardinal; BitlIndex, Bit2Index : TXRTLBitIndex) : Cardinal
7058:
        Function XRTLBitTest( Data : Cardinal; BitIndex : TXRTLBitIndex) : Boolean
7059:
        Function XRTLBitSet( Data : Cardinal; BitIndex : TXRTLBitIndex) : Cardinal
7060:
7061:
        Function XRTLBitReset( Data : Cardinal; BitIndex : TXRTLBitIndex) : Cardinal
        Function XRTLBitComplement( Data : Cardinal; BitIndex : TXRTLBitIndex) : Cardinal
7062:
        Function XRTLSwapHiLo16( X : Word) : Word
```

```
7064:
         Function XRTLSwapHiLo32( X : Cardinal) : Cardinal
         Function XRTLSwapHiLo64( X : Int64) : Int64
7065:
         Function XRTLROL32( A, S : Cardinal) : Cardinal
7067:
         Function XRTLROR32( A, S : Cardinal) : Cardinal
         Function XRTLROL16( A : Word; S : Cardinal) : Word Function XRTLROR16( A : Word; S : Cardinal) : Word
7068:
7069:
7070:
         Function XRTLROL8( A : Byte; S : Cardinal) : Byte
         Function XRTLROR8( A : Byte; S : Cardinal) : Byte
7071:
7072:
         //Procedure XRTLXorBlock( I1, I2, O1 : PByteArray; Len : integer)
7073:
         //Procedure XRTLIncBlock( P : PByteArray; Len : integer)
Procedure XRTLUMul64( const A, B : Integer; var MulL, MulH : Integer)
7074:
         Function XRTLPopulation( A : Cardinal) : Cardinal
7076: end;
7077:
7078: Function XRTLURLDecode( const ASrc : WideString) : WideString 7079: Function XRTLURLEncode( const ASrc : WideString) : WideString
7080: Function XRTLURINormalize( const AURI : WideString) : WideString
7081: Procedure XRTLURIParse(const AURI:WideString; var VProtocol, VHost, VPath, VDocument, VPort, VBookmark, VUserName,
        VPassword : WideString)
7082: Function XRTLExtractLongPathName(APath: string): string;
7083:
7084: procedure SIRegister_cFundamentUtils(CL: TPSPascalCompiler);
7085: begin
          AddTypeS('Int8', 'ShortInt
7086:
          AddTypeS('Int16', 'SmallInt AddTypeS('Int32', 'LongInt
7087:
7088:
7089:
           AddTypeS('UInt8',
                                   'Byte
          AddTypeS('UInt16', 'Word AddTypeS('UInt32', 'Long'
7090:
7091:
                                     'LongWord
           AddTypeS('UInt64',
7092:
                                     'Int64
          AddTypeS('Word8', 'UInt8
AddTypeS('Word16', 'UInt16
AddTypeS('Word32', 'UInt32
7093:
7094:
7095:
          AddTypeS('Word64', 'UInt64'
AddTypeS('LargeInt', 'Int64'
AddTypeS('NativeInt', 'Integer
AddTypeS('NativeUInt', 'Cardinal
7096:
7097:
7098:
7099:
          Const('BitsPerByte','LongInt').SetInt( 8);
Const('BitsPerWord','LongInt').SetInt( 16);
7100:
7101:
           Const('BitsPerLongWord', 'LongInt').SetInt( 32);
7102:
7103:
         //Const('BitsPerCardinal','LongInt').SetInt( BytesPerCardinal * 8);
         //Const( BitsPerNativeWord', 'LongInt').SetInt( BytesPerNativeWord * 8);
Function MinI( const A, B : Integer) : Integer
7104:
7105:
         Function MaxI( const A, B : Integer) : Integer
7106:
7107:
         Function MinC( const A, B : Cardinal) : Cardinal
         Function MaxC( const A, B : Cardinal) : Cardinal
7108:
         Function SumClipI( const A, I : Integer) : Integer
Function SumClipC( const A : Cardinal; const I : Integer) : Cardinal
7109:
7110:
         Function InByteRange( const A : Int64) : Boolean
Function InWordRange( const A : Int64) : Boolean
7111:
7112:
7113:
         Function InLongWordRange( const A : Int64) : Boolean
         Function InShortIntRange( const A : Int64) : Boolean
7114:
         Function InSmallIntRange( const A : Int64) : Boolean
7115:
7116:
         Function InLongIntRange( const A : Int64) : Boolean
          AddTypeS('Bool8', 'ByteBool
AddTypeS('Bool16', 'WordBool
AddTypeS('Bool32', 'LongBool
7117:
7118:
7119:
           AddTypeS('TCompareResult', '( crLess, crEqual, crGreater, crUndefined )
7120:
         AddTypeS('TCompareResultSet', 'set of TCompareResult
Function ReverseCompareResult( const C : TCompareResult) : TCompareResult
7121:
7122:
7123:
         Const('MinSingle','Single').setExtended( 1.5E-45);
7124:
         Const('MaxSingle','Single').setExtended( 3.4E+38);
7125:
         Const('MinDouble','Double').setExtended( 5.0E-324);
7126:
         Const('MaxDouble', 'Double').setExtended( 1.7E+308);
         Const ( MaxExtended', 'Extended').setExtended(3.4E-4932);
Const ('MaxExtended', 'Extended').setExtended(1.1E+4932);
7127:
         Const('MinCurrency','Currency').SetExtended( - 922337203685477.5807);
Const('MaxCurrency','Currency').SetExtended( 922337203685477.5807);
7129:
7130:
         Function MinF( const A, B : Float) : Float
Function MaxF( const A, B : Float) : Float
7131:
7132:
7133:
         Function ClipF( const Value : Float; const Low, High : Float) : Float
7134:
         Function InSingleRange( const A : Float) : Boolean
7135:
         Function InDoubleRange( const A : Float) : Boolean
         Function InCurrencyRange( const A : Float) : Boolean;
7136:
         Function InCurrencyRangel( const A : Int64) : Boolean;
7137:
7138:
         \textbf{Function} \  \, \texttt{FloatExponentBase2(} \  \, \textbf{const} \  \, \texttt{A} \  \, \texttt{:} \  \, \texttt{Extended}; \  \, \textbf{var} \  \, \texttt{Exponent} \  \, \texttt{:} \  \, \texttt{Integer)} \  \, \texttt{:} \  \, \texttt{Boolean}
7139:
         Function FloatExponentBase10( const A : Extended; var Exponent : Integer) : Boolean
         Function FloatIsInfinity( const A : Extended) : Boolean
7140:
         Function FloatIsNaN( const A : Extended) : Boolean
7141:
         Const('SingleCompareDelta','Extended').setExtended( 1.0E-34);
Const('DoubleCompareDelta','Extended').setExtended( 1.0E-280);
7143:
         Const('ExtendedCompareDelta','Extended').setExtended( 1.0E-4400);
Const('DefaultCompareDelta','Extended').SetExtended( 1.0E-34);
7144:
7145:
         Function FloatZero( const A : Float; const CompareDelta : Float) : Boolean
7146:
         Function FloatOne( const A : Float; const CompareDelta : Float) : Boolean
7147:
         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);
7148:
7149:
7150:
```

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Const('ExtendedCompareEpsilon','Extended').setExtended( 1.0E-17);
Const('DefaultCompareEpsilon','Extended').setExtended( 1.0E-10);
7152:
7153:
         Function ApproxEqual( const A, B : Extended; const CompareEpsilon : Double) : Boolean
7155:
         Function ApproxCompare( const A, B : Extended; const CompareEpsilon : Double): TCompareResult
7156:
         Function cClearBit( const Value, BitIndex : LongWord) : LongWord
         Function cSetBit( const Value, BitIndex : LongWord) : LongWord
7157:
         Function cIsBitSet( const Value, BitIndex : LongWord) : Boolean
7158:
         Function cToggleBit( const Value, BitIndex : LongWord) : LongWord
7160:
         Function clsHighBitSet( const Value : LongWord) : Boolean
         Function SetBitScanForward( const Value : LongWord) : Integer;
Function SetBitScanForward1( const Value, BitIndex : LongWord) : Integer;
7161:
7162:
         Function SetBitScanReverse( const Value : LongWord) : Integer;
7163:
7164:
         Function SetBitScanReversel( const Value, BitIndex : LongWord) : Integer;
         Function ClearBitScanForward( const Value : LongWord) : Integer;
7165:
         Function ClearBitScanForward1( const Value, BitIndex : LongWord) : Integer;
7166:
7167:
         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;
7169:
7170:
         Function cSwapEndian( const Value : LongWord) : LongWord
7171:
         Function cTwosComplement( const Value : LongWord) : LongWord
7173:
         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
7174:
7175:
         Function RotateRightBits32( const Value : LongWord; const Bits : Byte) : LongWord
7176:
7177:
         Function cBitCount( const Value : LongWord) : LongWord
7178:
         Function cIsPowerOfTwo( const Value : LongWord) : Boolean
         Function LowBitMask( const HighBitIndex : LongWord) : LongWord
Function HighBitMask( const LowBitIndex : LongWord) : LongWord
7179:
7180:
         Function RangeBitMask( const LowBitIndex, HighBitIndex : LongWord) : LongWord
7181:
7182:
         Function SetBitRange( const Value: LongWord; const LowBitIndex, HighBitIndex: LongWord) : LongWord
         Function ClearBitRange(const Value: LongWord; const LowBitIndex; HighBitIndex: LongWord) : LongWord
7183:
         Function ToggleBitRange(const Value:LongWord; const LowBitIndex, HighBitIndex: LongWord) : LongWord
7184:
7185:
         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
7187:
7188:
7189:
          AddTypeS('ByteSet', 'set of Byte AddTypeS('AnsiChar', 'Char
7190:
7191:
7192:
           // Function AsCharSet( const C : array of AnsiChar) : CharSet
         Function AsByteSet( const C : array of Byte) : ByteSet
Procedure ComplementChar( var C : CharSet; const Ch : Char)
7193:
7194:
7195:
         Procedure ClearCharSet( var C : CharSet)
7196:
         Procedure FillCharSet( var C : CharSet)
7197:
         Procedure ComplementCharSet( var C : CharSet)
         Procedure AssignCharSet( var DestSet : CharSet; const SourceSet : CharSet)

Procedure Union( var DestSet : CharSet; const SourceSet : CharSet)
7198:
7199:
7200:
         Procedure Difference( var DestSet : CharSet; const SourceSet : CharSet)
7201:
         Procedure Intersection( var DestSet : CharSet; const SourceSet : CharSet)
         Procedure XORCharSet( var DestSet : CharSet; const SourceSet : CharSet)
7202:
         Function IsSubSet( const A, B : CharSet) : Boolean
7203:
         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
7204:
7205:
7206:
7207:
7208:
         Procedure ConvertCaseInsensitive( var C : CharSet)
         Function CaseInsensitiveCharSet( const C : CharSet) : CharSet
7209:
         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
7210:
7211:
7212:
7213:
         Function IntRangeHasElement( const Low, High, Element : Integer) : Boolean
7214:
         \textbf{Function} \  \, \texttt{IntRangeIncludeElement} ( \  \, \textbf{var} \  \, \texttt{Low}, \  \, \texttt{High} \  \, : \  \, \texttt{Integer}; \  \, \textbf{const} \  \, \texttt{Element} \  \, : \  \, \texttt{Integer}) \  \, : \  \, \texttt{Boolean}
7215:
         \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
7216:
         Function CardRangeOverlap( const Low1, High1, Low2, High2 : Cardinal) : Boolean
7218:
7219:
         \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;
7220:
7221:
          AddTypeS('UnicodeChar', 'WideChar
7222:
7223:
         Function Compare( const I1, I2 : Boolean) : TCompareResult;
         Function Compare1( const I1, I2 : Integer) : TCompareResult;
Function Compare2( const I1, I2 : Int64) : TCompareResult;
7224:
7225:
         Function Compare3( const I1, I2 : Extended) : TCompareResult;
7226:
         Function CompareA( const I1, I2 : AnsiString) : TCompareResult
7227:
7228:
         Function CompareW( const I1, I2 : WideString) : TCompareResult
         Function cSgn( const A : LongInt) : Integer;
Function cSgn1( const A : Int64) : Integer;
7229:
7230:
         Function cSgn2( const A : Extended) : Integer;
7232:
         AddTypeS('TConvertResult', '( convertOK, convertFormatError, convertOverflow )
         Function AnsiCharToInt( const A : AnsiChar) : Integer
Function WideCharToInt( const A : WideChar) : Integer
7233:
7234:
         Function CharToInt( const A : Char) : Integer
7235:
         Function IntToAnsiChar( const A : Integer) : AnsiChar
Function IntToWideChar( const A : Integer) : WideChar
7236:
7237:
         Function IntToChar( const A : Integer) : Char
7238:
         Function IsHexMansiChar( const Ch : AnsiChar) : Boolean
Function IsHexWideChar( const Ch : WideChar) : Boolean
7239:
```

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7241:
         Function IsHexChar( const Ch : Char) : Boolean
7242:
         Function HexAnsiCharToInt( const A : AnsiChar) : Integer
         Function HexWideCharToInt( const A : WideChar) : Integer
7244 .
         Function HexCharToInt( const A : Char) : Integer
         Function IntToUpperHexAnsiChar( const A : Integer) : AnsiChar
7245:
         Function IntToUpperHexWideChar( const A : Integer) : WideChar
7246:
         Function IntToUpperHexChar( const A : Integer) : Char
7247:
         Function IntToLowerHexAnsiChar( const A : Integer) : AnsiChar
Function IntToLowerHexWideChar( const A : Integer) : WideChar
7248:
7249:
7250:
         Function IntToLowerHexChar( const A : Integer) : Char
         Function IntToStringA( const A : Int64) : AnsiString
Function IntToStringW( const A : Int64) : WideString
7251:
7253:
         Function IntToString( const A : Int64) : String
         Function UIntToStringA( const A : NativeUInt) : AnsiString
Function UIntToStringW( const A : NativeUInt) : WideString
7254:
7255:
7256:
         Function UIntToString( const A : NativeUInt) : String
         Function LongWordToStrA( const A : LongWord; const Digits : Integer) : AnsiString
7257:
7258 .
         Function LongWordToStrW( const A : LongWord; const Digits : Integer) : WideString
         Function LongWordToStrU( const A : LongWord; const Digits : Integer) : WideString
7259:
         Function LongWordToStr( const A : LongWord; const Digits : Integer) : String
7260:
         Function LongWordToHexA(const A:LongWord;const Digits:Integer;const UpperCase:Boolean):AnsiString;
7261:
         Function LongWordToHexW(const A:LongWord;const Digits:Integer;const UpperCase:Boolean):WideString;
7262:
         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
7263:
7264:
7265:
7266:
         Function LongWordToOct( const A : LongWord; const Digits : Integer) : String
7267:
         Function LongWordToBinA( const A : LongWord; const Digits : Integer) : AnsiString Function LongWordToBinW( const A : LongWord; const Digits : Integer) : WideString
7268:
         Function LongWordToBin( const A : LongWord; const Digits : Integer) : String
7269:
         Function TryStringToInt64A( const S : AnsiString; out A : Int64) : Boolean
7270:
7271:
         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
7272:
7273:
7274:
         Function StringToInt64Def( const S : String; const Default : Int64) : Int64
7275:
         Function StringToInt64A( const S : AnsiString) : Int64
Function StringToInt64W( const S : WideString) : Int64
7276:
7277:
7278:
         Function StringToInt64( const S : String) : Int64
         Function TryStringToIntA( const S : AnsiString; out A : Integer) : Boolean
Function TryStringToIntW( const S : WideString; out A : Integer) : Boolean
7279:
7280:
7281:
         \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
7282:
7283:
         Function StringToIntDef( const S : String; const Default : Integer) : Integer
7284:
         Function StringToIntA( const S : AnsiString) : Integer
Function StringToIntW( const S : WideString) : Integer
7285:
7286:
         Function StringToInt( const S : String) : Integer
Function TryStringToLongWordA( const S : AnsiString; out A : LongWord) : Boolean
7287:
7288:
7289:
         Function TryStringToLongWordW( const S : WideString; out A : LongWord) : Boolean
         Function TryStringToLongWord( const S : String; out A : LongWord) : Boolean
Function StringToLongWordA( const S : AnsiString) : LongWord
7290:
7291:
         Function StringToLongWordW( const S : WideString) : LongWord
7292:
         Function StringToLongWord( const S : String) : LongWord
7293:
         Function HexToUIntA( const S : AnsiString) : NativeUInt
Function HexToUIntW( const S : WideString) : NativeUInt
Function HexToUInt( const S : String) : NativeUInt
7294:
7295:
7296:
         Function TryHexToLongWordA( const S : AnsiString; out A : LongWord) : Boolean
Function TryHexToLongWordW( const S : WideString; out A : LongWord) : Boolean
7297:
7298:
7299:
         \textbf{Function} \  \, \texttt{TryHexToLongWord}( \  \, \textbf{const} \  \, \texttt{S} \  \, \textbf{:} \  \, \textbf{String}; \  \, \textbf{out} \  \, \texttt{A} \  \, \textbf{:} \  \, \texttt{LongWord}) \  \, \textbf{:} \  \, \texttt{Boolean}
         Function HexToLongWordA( const S : AnsiString) : LongWord
Function HexToLongWordW( const S : WideString) : LongWord
7300:
7301:
7302:
         Function HexToLongWord( const S : String) : LongWord
         Function TryOctToLongWordA( const S : AnsiString; out A : LongWord) : Boolean Function TryOctToLongWordW( const S : WideString; out A : LongWord) : Boolean
7303:
7304:
         Function TryOctToLongWord( const S : String; out A : LongWord) : Boolean
7305:
         Function OctToLongWordA( const S : AnsiString) : LongWord
         Function OctToLongWordW( const S : WideString) : LongWord
7307:
7308:
         \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
7309:
7310:
         Function TryBinToLongWord( const S : String; out A : LongWord) : Boolean
7311:
7312:
         \textbf{Function} \  \, \texttt{BinToLongWordA}(\  \, \textbf{const} \  \, \texttt{S} \  \, \texttt{EnsiString}) \  \, \texttt{:} \  \, \texttt{LongWord}
7313:
         Function BinToLongWordW( const S : WideString) : LongWord
         Function BinToLongWord( const S : String) : LongWord
7314:
         Function FloatToStringA( const A : Extended) : AnsiString
7315:
         Function FloatToStringW( const A : Extended) : WideString
7316:
7317:
         Function FloatToString( const A : Extended) : String
         Function TryStringToFloatA( const A : AnsiString; out B : Extended) : Boolean Function TryStringToFloatW( const A : WideString; out B : Extended) : Boolean
7318:
7319:
         Function TryStringToFloat( const A : String; out B : Extended) : Boolean
         Function StringToFloatA( const A : AnsiString) : Extended Function StringToFloatW( const A : WideString) : Extended
7321:
7322:
7323:
         Function StringToFloat( const A : String) : Extended
         Function StringToFloatDefA( const A : AnsiString; const Default : Extended) : Extended
         Function StringToFloatDefW( const A : WideString; const Default : Extended) : Extended
7325:
7326:
         \textbf{Function} \  \, \texttt{StringToFloatDef( const A : String; const Default : Extended)} \  \, \texttt{Extended}
         Function EncodeBase64(const S,Alphabet:AnsiString; const Pad:Boolean; const PadMultiple:Integer; const
7327:
        PadChar: AnsiChar) : AnsiString
7328: Function DecodeBase64( const S, Alphabet : AnsiString; const PadSet : CharSet) : AnsiString
```

```
7329:
            unit uPSI cFundamentUtils;
            Const('b64_MIMEBase64','Str').String('ABCDEFGHIJKLMNOPQRSTUVWXYZabcdefghijklmnopqrstuvwxyz0123456789+/
7330:
            7332:
            Const('CCHARSET','String').SetString(b64_XXEncode);
Const('CHEXSET','String').SetString('0123456789ABCDEF
7333:
7334:
            Const('HEXDIGITS','String').SetString('0123456789ABCDEF
7335:
            Const('HEADIGITS','SETING').SetString('0123456789ABCDEF';
StHexDigits : array[0..$F] of Char = '0123456789ABCDEF';
Const('DIGISET','String').SetString('0123456789
Const('LETTERSET','String').SetString('ABCDEFGHIJKLMNOPQRSTUVWXYZ'
Const('DIGISET2','TCharset').SetSet('0123456789'
7336:
7337:
7338:
7339:
            Const('LETTERSET2','TCharset').SetSet('ABCDEFGHIJKLMNOPQRSTUVWXYZ'
7341:
            Const('HEXSET2','TCharset').SetSET('0123456789ABCDEF');
            Const('NUMBERSET','TCharset').SetSet('0123456789');
Const('NUMBERS','String').SetString('0123456789');
Const('LETTERS','String').SetString('ABCDEFGHIJKLMNOPQRSTUVWXYZ');
7342:
7343:
7344:
            Function CharSetToStr( const C : CharSet) : AnsiString
Function StrToCharSet( const S : AnsiString) : CharSet
7345:
7346 .
            Function MIMEBase64Decode( const S : AnsiString) : AnsiString
Function MIMEBase64Encode( const S : AnsiString) : AnsiString
7347:
7348:
            Function UUDecode( const S : AnsiString) : AnsiString
Function XXDecode( const S : AnsiString) : AnsiString
7349:
7350:
7351:
            Function BytesToHex( const P : array of Byte; const UpperCase : Boolean) : AnsiString
            Function InterfaceToStrA( const I : IInterface) : AnsiString
Function InterfaceToStrW( const I : IInterface) : WideString
7352:
7353:
7354:
            Function InterfaceToStr( const I : IInterface) : String
7355:
            Function ObjectClassName( const O : TObject) : String
            Function ClassClassName( const C : TClass) : String
Function ObjectToStr( const O : TObject) : String
7356:
7357:
            Function ObjectToString( const 0 : TObject) : String
            Function CharSetToStr( const C : CharSet) : AnsiString
7359:
            Function StrToCharSet( const S : AnsiString) : CharSet
7360:
           Function HashStrA(const S : AnsiString; const Index : Integer; const Count: Integer; const
7361:
          AsciiCaseSensitive : Boolean; const Slots : LongWord) : LongWord
7362: Function HashStrW(const S:WideString;const Index:Integer;const Count:Integer;const
          AsciiCaseSensitive:Boolean; const Slots:LongWord) : LongWord
7363: Function HashStr(const S : String; const Index : Integer; const Count : Integer; const AsciiCaseSensitive : Boolean; const Slots : LongWord) : LongWord
7364: Function HashInteger( const I : Integer; const Slots : LongWord) : LongWord 7365: Function HashLongWord( const I : LongWord; const Slots : LongWord) : LongWord
7366:
            Const('Bytes1KB','LongInt').SetInt( 1024);
             STRegister TInterface(CL);
7367:
            Procedure SelfTestCFundamentUtils
7368:
7369:
7370: Function CreateSchedule : IJclSchedule
7371: Function NullStamp : TTimeStamp
7372: Function CompareTimeStamps( const Stamp1, Stamp2 : TTimeStamp) : Int64
7373: Function EqualTimeStamps (const Stamp1, Stamp2: TrimeStamp): Boolean 7374: Function IsNullTimeStamp (const Stamp: TrimeStamp): Boolean
7375:
7376: procedure SIRegister_uwinplot(CL: TPSPascalCompiler);
7377: begin
7378: AddTypeS('TFunc', 'function(X : Float) : Float;
7370: Audrypes( 'Hunte', 'Hunte') : Float; 'Float; 'Fl
7383: Procedure GetOxScale( var Scale : TScale; var OxMin, OxMax, OxStep : Float)
7384: Procedure GetOyScale( var Scale: TScale; var OyMin, OyMax, OyStep: Float) 7385: Procedure SetGraphTitle( Title: String)
7386: Procedure SetOxTitle( Title : String
7387: Procedure SetOyTitle( Title : String
7388: Function GetGraphTitle : String
7389: Function GetOxTitle : String
7390: Function GetOyTitle : String
7391: Procedure PlotOxAxis( Canvas : TCanvas)
7392: Procedure PlotOyAxis( Canvas : TCanvas)
7393: Procedure PlotGrid( Canvas : TCanvas; Grid : TGrid)
7394: Procedure WriteGraphTitle( Canvas : TCanvas)
7395: Function SetMaxCurv( NCurv : Byte) : Boolean
7396: Procedure SetPointParam( CurvIndex, Symbol, Size : Integer; Color : TColor)
7397: Procedure SetLineParam( CurvIndex : Integer; Style : TPenStyle; Width : Integer; Color : TColor)
7398: Procedure SetCurvLegend( CurvIndex : Integer; Legend : String)
7399: Procedure SetCurvStep( CurvIndex, Step : Integer)
7400: Function GetMaxCurv : Byte
7401: Procedure GetPointParam( CurvIndex : Integer; var Symbol, Size : Integer; var Color : TColor)
7402: Procedure GetLineParam(CurvIndex:Integer; var Style:TPenStyle; var Width:Integer; var Color:TColor);
7403: Function GetCurvLegend( CurvIndex : Integer) : String
7404: Function GetCurvStep( CurvIndex : Integer) : Integer
7405: Procedure PlotPoint (Canvas: TCanvas; X, Y: Float; CurvIndex: Integer)
7406: Procedure PlotCurve (Canvas: TCanvas; X, Y: TVector; Lb, Ub, CurvIndex: Integer)
7407: Procedure PlotCurveWithErrorBars(Canvas: TCanvas; X,Y,S: TVector; Ns,Lb,Ub,CurvIndex:Integer)
7408: Procedure PlotFunc(Canvas: TCanvas; Func: TFunc; Xmin,Xmax: Float; Npt,CurvIndex: Integer)
7409: Procedure WriteLegend( Canvas: TCanvas; NCurv: Integer; ShowPoints, ShowLines: Boolean)
7410: Procedure ConRec( Canvas : TCanvas; Nx, Ny, Nc : Integer; X, Y, Z : TVector; F : TMatrix)
7411: Function Xpixel( X : Float) : Integer
7412: Function Ypixel( Y : Float) : Integer
7413: Function Xuser( X : Integer) : Float
7414: Function Yuser( Y : Integer) : Float
```

```
7415: end;
7416:
7417: Procedure FFT( NumSamples : Integer; InArray, OutArray : TCompVector)
7418: Procedure IFFT( NumSamples : Integer; InArray, OutArray : TCompVector)
7419: Procedure FFT_Integer( NumSamples : Integer; RealIn, ImagIn : TIntVector; OutArray : TCompVector)
7420: Procedure FFT Integer Cleanup
7421: Procedure CalcFrequency(NumSamples,FrequencyIndex: Integer;InArray: TCompVector;var FT : Complex)
7422: //unit uPSI JclStreams;
7423: Function StreamSeek( Stream: TStream; const Offset: Int64; const Origin: TSeekOrigin): Int64
7424: Function StreamCopy( Source : TStream; Dest : TStream; BufferSize : Integer) : Int64
7425: Function CompareStreams( A, B : TStream; BufferSize : Integer) : Boolean
7426: Function JCompareFiles( const FileA, FileB: TFileName; BufferSize: Integer): Boolean
7427:
7428: procedure SIRegister FmxUtils(CL: TPSPascalCompiler);
7429: begin
7430: FindClass('TOBJECT'), 'EInvalidDest
      FindClass('TOBJECT'),'EFCantMove
7431:
7432:
      Procedure fmxCopyFile( const FileName, DestName : string)
7433:
      Procedure fmxMoveFile( const FileName, DestName : string)
      Function fmxGetFileSize( const FileName : string) : LongInt
7434:
       Function fmxFileDateTime( const FileName : string) :
                                                              TDateTime
      Function fmxHasAttr( const FileName : string; Attr : Word) : Boolean
7436:
7437: Function fmxExecuteFile( const FileName, Params, DefaultDir: string; ShowCmd: Integer):THandle;
7438: end;
7439:
7440:
     procedure SIRegister_FindFileIter(CL: TPSPascalCompiler);
7441: begin
7442:
     STRegister TFindFileTterator(CL);
7443:
      Function CreateFindFile(const Path:string; IncludeAttr:Integer;out iffi:IFindFileIterator):Bool;
     end;
7445:
7446: procedure SIRegister PCharUtils(CL: TPSPascalCompiler);
7447: begin
7448: Function SkipWhite(cp: PChar): PChar
       Function ReadStringDoubleQuotedMaybe( cp : PChar; var AStr : string) : PChar
7449:
      Function ReadStringSingleQuotedMaybe( cp : PChar; var AStr : string) : PChar
7450:
7451: Function ReadIdent( cp : PChar; var ident : string) : PChar
7452:
     end;
7453:
7454: procedure SIRegister_JclStrHashMap(CL: TPSPascalCompiler);
7455: begin
       SIRegister TStringHashMapTraits(CL);
7456:
7457:
       Function CaseSensitiveTraits : TStringHashMapTraits
       Function CaseInsensitiveTraits : TStringHashMapTraits
7458:
7459:
        THashNode', 'record Str : string; Ptr : Pointer; Left : PHashNod'
7460:
         +'e; Right : PHashNode; end
        //PHashArray', '^THashArray // will not work
7461:
        SIRegister_TStringHashMap(CL);
7462:
7463:
      THashValue',
                    'Cardinal
      Function StrHash( const s : string) : THashValue
7464:
7465:
      Function TextHash( const s : string) : THashValue
       Function DataHash( var AValue, ASize : Cardinal) : THashValue
7466:
       Function Iterate_FreeObjects( AUserData : Pointer; const AStr : string; var AData : Pointer) : Boolean
7467:
7468:
      Function Iterate_Dispose( AUserData : Pointer; const AStr : string; var AData : Pointer) : Boolean
7469:
      Function Iterate_FreeMem( AUserData : Pointer; const AStr : string; var AData : Pointer) : Boolean
       SIRegister_TCaseSensitiveTraits(CL);
7470:
7471:
        SIRegister_TCaseInsensitiveTraits(CL);
7472:
7473:
7475: Function uExpo( X : Float) : Float
7476:
      Function uExp2( X : Float) : Float
7477:
      Function uExp10( X : Float) : Float
7478:
      Function uLog( X : Float) : Float
      Function uLog2( X : Float) : Float
7479:
      Function uLog10( X : Float) : Float
       Function uLogA( X, A : Float) : Float
7481:
7482:
      \textbf{Function} \ \ \texttt{uIntPower(X : Float; N : Integer): Float}
7483:
      Function uPower( X, Y : Float) : Float
      Function SgnGamma( X : Float) : Integer
Function Stirling( X : Float) : Float
7484:
7485:
7486:
      Function StirLog( X : Float) : Float
      Function Gamma( X : Float) : Float
7487:
7488:
      Function InGamma( X : Float) : Float
      Function DiGamma( X : Float) : Float
7489:
7490:
      Function TriGamma( X : Float) : Float
7491:
      Function IGamma( X : Float) : Float
7492: Function JGamma(X: Float): Float
      Function InvGamma( X : Float) : Float
7493:
7494: Function Erf( X : Float) : Float
7495: Function Erfc( X : Float) : Float
7496: Function Correl(X, Y : TVector; Lb, Ub : Integer) : Float;
7497: { Correlation coefficient between samples X and Y } 7498: function DBeta(A, B, X : Float) : Float;
7499: { Density of Beta distribution with parameters A and B }
7500: Function LambertW( X : Float; UBranch, Offset : Boolean) : Float 7501: Function Beta(X, Y : Float) : Float
7502: Function Binomial( N, K : Integer) : Float
7503: Function PBinom( N : Integer; P : Float; K : Integer) : Float
```

```
7504: Procedure Cholesky( A, L : TMatrix; Lb, Ub : Integer)
7505: Procedure LU_Decomp( A : TMatrix; Lb, Ub : Integer)
7506: Procedure LU_Solve( A : TMatrix; B : TVector; Lb, Ub : Integer; X : TVector)
7507: Function DNorm( X : Float) : Float
7508:
7509: function DGamma(A, B, X : Float) : Float;
7510: { Density of Gamma distribution with parameters A and B }
7511: function DKhi2(Nu : Integer; X : Float) : Float;
7512: { Density of Khi-2 distribution with Nu d.o.f.
7513: function DStudent(Nu : Integer; X : Float) : Float;
7514: { Density of Student distribution with Nu d.o.f. }
7515: function DSnedecor(Nul, Nu2: Integer; X: Float): Float;
7516: { Density of Fisher-Snedecor distribution with Nu1 and Nu2 d.o.f. }
7517: function IBeta(A, B, X : Float) : Float;
7518: { Incomplete Beta function}
7519: function Correl(X, Y : TVector; Lb, Ub : Integer) : Float;
7520:
7521: procedure SIRegister_unlfit(CL: TPSPascalCompiler);
7522: begin
7523:
          Procedure SetOptAlgo( Algo : TOptAlgo)
          procedure SetOptAlgo(Algo : TOptAlgo);
7525:
7526:
             Sets the optimization algorithm according to Algo, which must be
7527:
             NL_MARQ, NL_SIMP, NL_BFGS, NL_SA, NL_GA. Default is NL_MARQ
7528:
7529:
           Function GetOptAlgo : TOptAlgo
7530:
           Procedure SetMaxParam( N : Byte)
7531:
           Function GetMaxParam : Bvte
7532:
           Procedure SetParamBounds( I : Byte; ParamMin, ParamMax : Float)
           Procedure GetParamBounds( I : Byte; var ParamMin, ParamMax : Float)
7534:
           \textbf{Function} \ \ \texttt{NullParam}(\ \ \texttt{B} \ : \ \ \texttt{TVector}; \ \ \texttt{Lb} \,, \ \ \texttt{Ub} \ : \ \ \texttt{Integer}) \ : \ \ \texttt{Boolean}
7535: 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;
7536:
MaxIter:Integer;Tol: Float; B: TVector; FirstPar, LastPar: Integer; V: TMatrix)
7537: Procedure SetMCFile(FileName: String)
7538: \quad \textbf{Procedure} \quad \texttt{SimFit}(\texttt{RegFunc:TRegFunc:X,Y}:\texttt{TVector:Lb,Ub:Integer:B:TVector:FirstPar,LastPar:Integer:V:TMatrix:RegFunc:TMatrix:RegFunc:TMatrix:RegFunc:TMatrix:RegFunc:TMatrix:RegFunc:TMatrix:RegFunc:TMatrix:RegFunc:TMatrix:RegFunc:TMatrix:RegFunc:TMatrix:RegFunc:TMatrix:RegFunc:TMatrix:RegFunc:TMatrix:RegFunc:TMatrix:RegFunc:TMatrix:RegFunc:TMatrix:RegFunc:TMatrix:RegFunc:TMatrix:RegFunc:TMatrix:RegFunc:TMatrix:RegFunc:TMatrix:RegFunc:TMatrix:RegFunc:TMatrix:RegFunc:TMatrix:RegFunc:TMatrix:RegFunc:TMatrix:RegFunc:TMatrix:RegFunc:TMatrix:RegFunc:TMatrix:RegFunc:TMatrix:RegFunc:TMatrix:RegFunc:TMatrix:RegFunc:TMatrix:RegFunc:TMatrix:RegFunc:TMatrix:RegFunc:TMatrix:RegFunc:TMatrix:RegFunc:TMatrix:RegFunc:TMatrix:RegFunc:TMatrix:RegFunc:TMatrix:RegFunc:TMatrix:RegFunc:TMatrix:RegFunc:TMatrix:RegFunc:TMatrix:RegFunc:TMatrix:RegFunc:TMatrix:RegFunc:TMatrix:RegFunc:TMatrix:RegFunc:TMatrix:RegFunc:TMatrix:RegFunc:TMatrix:RegFunc:TMatrix:RegFunc:TMatrix:RegFunc:TMatrix:RegFunc:TMatrix:RegFunc:TMatrix:RegFunc:TMatrix:RegFunc:TMatrix:RegFunc:TMatrix:RegFunc:TMatrix:RegFunc:TMatrix:RegFunc:TMatrix:RegFunc:TMatrix:RegFunc:TMatrix:RegFunc:TMatrix:RegFunc:TMatrix:RegFunc:TMatrix:RegFunc:TMatrix:RegFunc:TMatrix:RegFunc:TMatrix:RegFunc:TMatrix:RegFunc:TMatrix:RegFunc:TMatrix:RegFunc:TMatrix:RegFunc:TMatrix:RegFunc:TMatrix:RegFunc:TMatrix:RegFunc:TMatrix:RegFunc:TMatrix:RegFunc:TMatrix:RegFunc:TMatrix:RegFunc:TMatrix:RegFunc:TMatrix:RegFunc:TMatrix:RegFunc:TMatrix:RegFunc:TMatrix:RegFunc:TMatrix:RegFunc:TMatrix:RegFunc:TMatrix:RegFunc:TMatrix:RegFunc:TMatrix:RegFunc:TMatrix:RegFunc:TMatrix:RegFunc:TMatrix:RegFunc:TMatrix:RegFunc:TMatrix:RegFunc:TMatrix:RegFunc:TMatrix:RegFunc:TMatrix:RegFunc:TMatrix:RegFunc:TMatrix:RegFunc:TMatrix:RegFunc:TMatrix:RegFunc:TMatrix:RegFunc:TMatrix:RegFunc:TMatrix:RegFunc:TMatrix:RegFunc:TMatrix:RegFunc:TMatrix:RegFunc:TMatrix:RegFunc:TMatrix:RegFunc:TMatrix:RegFunc:TMatrix:RegFunc:TMatrix:RegFunc:TMatrix:RegFunc:TMatrix:RegFunc:TMatrix:RegFunc:TMatrix:RegFunc:TMatrix:RegFunc:TMatri
           Procedure WSimFit(RegFunc:TRegFunc; X,Y,S:TVector;Lb,Ub:Integer;B:TVector;FirstPar,
7539:
          LastPar:Integer;V:TMatrix);
7540: end;
7541:
7542:
7543: procedure SIRegister_usimplex(CL: TPSPascalCompiler);
7544: begin
7545:
           Procedure SaveSimplex( FileName : string)
           Procedure Simplex(Func:TFuncNVar; X:TVector;Lb,Ub:Integer; MaxIter:Integer;Tol:Float; var F_min:Float);
7546:
7547: end;
7548: (*--
7549:
          procedure SIRegister_uregtest(CL: TPSPascalCompiler);
7550: begin
          Procedure RegTest(Y,Ycalc: TVector;LbY,UbY:Integer;V:TMatrix;LbV,UbV:Integer;var Test:TRegTest)
7551:
           Procedure WRegTest(Y,Ycalc,S:TVector;LbY,UbY:Integer;V:TMatrix;LbV,UbV:Integer;var Test:TRegTest);
7552:
7553:
7554:
7555:
          procedure SIRegister_ustrings(CL: TPSPascalCompiler);
7556: begin
7557:
           Function LTrim( S : String) : String
           Function RTrim( S : String) : String
7558:
7559:
           Function uTrim( S : String) : String
           Function StrChar( N : Byte; C : Char) : string
Function RFill( S : String; L : Byte) : String
7560:
7561:
7562:
           Function LFill( S : String; L : Byte)
                                                                           : String
7563:
           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)
7564:
7565:
           Procedure SetFormat( NumLength, MaxDec : Integer; FloatPoint, NSZero : Boolean)
7567:
7568: Function FloatStr( X : Float) : String
7569: Function IntStr( N : LongInt) : String
7570: Function uCompStr( Z : Complex) : String
7571: end;
7572:
7573: procedure SIRegister_uhyper(CL: TPSPascalCompiler);
7574: begin
7575:
          Function uSinh( X : Float) : Float
7576:
           Function uCosh( X : Float) : Float
7577:
           Function uTanh( X : Float) : Float
           Function uArcSinh( X : Float) : Float
7578:
           Function uArcCosh( X : Float) : Float
7579:
           Function ArcTanh( X : Float) : Float
7580:
7581: Procedure SinhCosh( X : Float; var SinhX, CoshX : Float)
7582: end;
7583:
7584: procedure SIRegister_urandom(CL: TPSPascalCompiler);
7585: begin
7586: type RNG_Type =
7587:
             (RNG_MWC,
                                     { Multiply-With-Carry }
                                      { Mersenne Twister }
{ Universal Virtual Array Generator }
7588:
               RNG_MT,
7589:
               RNG UVAG);
```

```
7590:
       Procedure SetRNG( RNG : RNG_Type)
       Procedure InitGen( Seed : RNG_IntType)
7591:
       Procedure SRand( Seed : RNG_IntType)
7593:
       Function IRanGen : RNG_IntType
7594:
       Function IRanGen31 : RNG IntType
       Function RanGen1 : Float
7595:
       Function RanGen2 : Float
7596:
       Function RanGen3 : Float
7597:
7598: Function RanGen53: Float
7599: end;
7600:
7601: // Optimization by Simulated Annealing
7602: procedure SIRegister_usimann(CL: TPSPascalCompiler);
7603: begin
7604: Procedure InitSAParams( NT, NS, NCycles : Integer; RT : Float)
7605: Procedure SA_CreateLogFile( FileName : String)
       Procedure SimAnn(Func: TFuncNVar; X, Xmin, Xmax: TVector; Lb, Ub: Integer; var F_min: Float);
7607: end;
7608:
7609: procedure SIRegister_uranuvag(CL: TPSPascalCompiler);
7610: begin
7611: Procedure InitUVAGbyString( KeyPhrase : string)
7612: Procedure InitUVAG( Seed: RNG_IntType)
7613: Function IRanUVAG: RNG_IntType
7614: end;
7615:
7616: procedure SIRegister_ugenalg(CL: TPSPascalCompiler);
7617: begin
7618: Procedure InitGAParams( NP, NG : Integer; SR, MR, HR : Float)
       Procedure GA_CreateLogFile( LogFileName : String)
7620: Procedure GenAlg(Func: TFuncNVar; X, Xmin, Xmax : TVector; Lb, Ub : Integer; var F_min : Float);
7621: end;
7622:
7623: TVector', 'array of Float
      procedure SIRegister_uqsort(CL: TPSPascalCompiler);
7625: begin
7626: Procedure QSort( X : TVector; Lb, Ub : Integer)
7627: Procedure DQSort( X : TVector; Lb, Ub : Integer)
7628: end
7629:
7630: procedure SIRegister_uinterv(CL: TPSPascalCompiler);
7631: begin
7632: 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)
7633:
7634: end;
7635:
7636: procedure SIRegister D2XXUnit(CL: TPSPascalCompiler);
7637: begin
7638:
       FT_Result', 'Integer //TDWordptr', '^DWord // will not work
7639:
         TFT_Program_Data', 'record Signature1 : DWord; Signature2 : DWor'
d; Version : DWord; VendorID : Word; ProductID : Word; Manufacturer : PCha
7640:
7641:
          r; ManufacturerID : PChar; Description : PChar; SerialNumber : PChar; MaxP
7642:
7643:
          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;
7644:
7645:
          ; IsoInB : Byte; IsoOutA : Byte; IsoOutB : Byte; PullDownEnable5 : Byte; S'
7646:
          erNumEnable5 : Byte; USBVersionEnable5 : Byte; USBVersion5 : Word; AlsHigh'
7647:
          Current : Byte; BIsHighCurrent : Byte; IFAIsFifo : Byte; IFAIsFifoTar : Byte; IFAIsFastSer : Byte; AIsVCP : Byte; IFBIsFifo : Byte; IFBIsFifoTar : Byte; IFBIsFastSer : Byte; BIsVCP : Byte; UseExtOsc : Byte; HighDriveIOs : '
7648:
7649:
7650:
7651:
          Byte; EndpointSize : Byte; PullDownEnableR : Byte; SerNumEnableR : Byte; I'
7652:
          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'
7653:
7654:
          yte; end
7655:
7656: end;
7657:
7658:
7660: procedure SIRegister_TJvPaintFX(CL: TPSPascalCompiler);
7661: begin
7662:
         //with RegClassS(CL,'TComponent', 'TJvPaintFX') do
         with AddClassN(FindClass('TComponent'),'TJvPaintFX') do begin
7663:
           Procedure Solarize( const Src : TBitmap; var Dst : TBitmap; Amount : Integer)
7664:
            Procedure Posterize( const Src : TBitmap; var Dst : TBitmap; Amount : Integer)
7665:
           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)
7666:
7667:
7668:
           Procedure ExcludeColor( const Dst : TBitmap; AColor : TColor)
7669:
7670:
           Procedure Turn( Src, Dst : TBitmap)
           Procedure TurnRight( Src, Dst : TBitmap)
Procedure HeightMap( const Dst : TBitmap; Amount : Integer)
7671:
7672:
7673:
           Procedure TexturizeTile( const Dst : TBitmap; Amount : Integer)
            Procedure TexturizeOverlap( const Dst : TBitmap; Amount : Integer)
7674:
           Procedure RippleRandom( const Dst : TBitmap; Amount : Integer)
Procedure RippleTooth( const Dst : TBitmap; Amount : Integer)
7675:
7676:
7677:
           Procedure RippleTriangle( const Dst : TBitmap; Amount : Integer)
           Procedure Triangles( const Dst : TBitmap; Amount : Integer)
```

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7679:
           Procedure DrawMandelJulia(const Dst: TBitmap; x0,y0,x1,y1:Single; Niter:Integer; Mandel:Boolean)
7680:
           Procedure FilterXBlue( const Dst : TBitmap; Min, Max : Integer)
            Procedure FilterXGreen( const Dst : TBitmap; Min, Max : Integer)
7682:
            Procedure FilterXRed( const Dst : TBitmap; Min, Max : Integer)
           Procedure FilterBlue( const Dst : TBitmap; Min, Max : Integer)
7683:
           Procedure FilterGreen( const Dst : TBitmap; Min, Max : Integer)
7684:
           Procedure FilterRed( const Dst : TBitmap; Min, Max : Integer)
7685:
            Procedure Emboss( var Bmp : TBitmap)
7686:
           Procedure Plasma( Src1, Src2, Dst : TBitmap; Scale, Turbulence : Single)
7687:
           Procedure Shake( Src, Dst : TBitmap; Factor : Single)
7688:
           Procedure ShakeDown( Src, Dst : TBitmap; Factor : Single)
Procedure KeepBlue( const Dst : TBitmap; Factor : Single)
7689:
7691:
           Procedure KeepGreen( const Dst : TBitmap; Factor : Single)
           Procedure KeepRed( const Dst : TBitmap; Factor : Single)
Procedure Mandelbrot( const Dst : TBitmap; Factor : Integer)
7692:
7693:
7694:
           Procedure MaskMandelbrot( const Dst : TBitmap; Factor : Integer)
           Procedure FoldRight( Src1, Src2, Dst : TBitmap; Amount : Single)
7695:
           Procedure QuartoOpaque( Src, Dst : TBitmap)
Procedure SemiOpaque( Src, Dst : TBitmap)
7696:
7697:
7698:
           Procedure ShadowDownLeft( const Dst : TBitmap)
            Procedure ShadowDownRight( const Dst : TBitmap)
7699:
           Procedure ShadowUpLeft( const Dst : TBitmap)
7700:
7701:
           Procedure ShadowUpRight( const Dst : TBitmap)
7702:
           Procedure Darkness (const Dst : TBitmap; Amount : Integer)
           Procedure Trace( const Dst : TBitmap; Intensity : Integer)
7703:
7704:
           Procedure FlipRight( const Dst : TBitmap)
7705:
           Procedure FlipDown( const Dst : TBitmap)
           Procedure SpotLight( const Dst : TBitmap; Amount : Integer; Spot : TRect)
Procedure SplitLight( const Dst : TBitmap; Amount : Integer)
7706:
7707:
           Procedure MakeSeamlessClip( var Dst : TBitmap; Seam : Integer)
7708:
           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)
7709:
7710:
7711:
7712:
           Procedure SmoothResize( var Src, Dst : TBitmap)
           Procedure Twist( var Bmp, Dst : TBitmap; Amount : Integer)
7713:
7714:
           Procedure SplitBlur( const Dst : TBitmap; Amount : Integer)
           Procedure GaussianBlur( const Dst : TBitmap; Amount : Integer)
Procedure Smooth( const Dst : TBitmap; Weight : Integer)
7715:
7716:
7717:
           Procedure GrayScale( const Dst : TBitmap)
           Procedure AddColorNoise( const Dst : TBitmap; Amount : Integer)

Procedure AddMonoNoise( const Dst : TBitmap; Amount : Integer)
7718:
7719:
           Procedure Contrast (const Dst : TBitmap; Amount : Integer)
Procedure Lightness (const Dst : TBitmap; Amount : Integer)
7720:
7721:
            Procedure Saturation( const Dst : TBitmap; Amount : Integer)
7722:
7723:
           Procedure Spray( const Dst : TBitmap; Amount : Integer)
7724:
           Procedure AntiAlias( const Dst : TBitmap)
           Procedure AntiAliasRect( const Dst : TBitmap; XOrigin, YOrigin, XFinal, YFinal : Integer)
7725:
           Procedure SmoothPoint( const Dst : TBitmap; XK, YK : Integer)
7726:
7727:
           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)
7728:
7729:
7730:
           Procedure Marble3( const Src : TBitmap; var Dst : TBitmap; Scale : Single; Turbulence: Integer)
7731:
           Procedure Marble4( const Src : TBitmap; var Dst : TBitmap; Scale : Single; Turbulence: Integer)
7732:
           Procedure Marble5( const Src : TBitmap; var Dst : TBitmap; Scale : Single; Turbulence: Integer)
7733:
           Procedure Marble6( const Src : TBitmap; var Dst : TBitmap; Scale : Single; Turbulence: Integer)
7734:
           Procedure Marble7( const Src : TBitmap; var Dst : TBitmap; Scale : Single; Turbulence:
                                                                                                                    Integer)
           Procedure Marble8( const Src : TBitmap; var Dst : TBitmap; Scale : Single; Turbulence: Integer)
7735:
7736:
           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)
7737:
7738:
           Procedure Stretch( Src, Dst : TBitmap; Filter : TFilterProc; AWidth : Single)
7739:
7740:
            Procedure Grow( Src1, Src2, Dst : TBitmap; Amount : Single; X, Y : Integer
7741:
           Procedure Invert( Src : TBitmap)
           Procedure MirrorRight( Src : TBitmap)
Procedure MirrorDown( Src : TBitmap)
7742:
7743:
7744:
         end;
7745:
7746:
7747:
7748: procedure SIRegister JvPaintFX(CL: TPSPascalCompiler);
7749:
7750:
         AddTypeS('TLightBrush', '( lbBrightness, lbContrast, lbSaturation, lbFishe'
7751:
          +'ye, lbrotate, lbtwist, lbrimple, mbHor, mbTop, mbBottom, mbDiamond, mbWast'
+'e, mbRound, mbRound2, mbSplitRound, mbSplitWaste )
7752:
         SIRegister_TJvPaintFX(CL);
7753:
7754:
       Function SplineFilter( Value : Single) : Single
7755:
       Function BellFilter( Value : Single) : Single
       Function TriangleFilter( Value : Single) : Single
7756:
       Function BoxFilter( Value : Single) : Single
7757:
       Function HermiteFilter( Value : Single) : Single
Function Lanczos3Filter( Value : Single) : Single
7759:
       Function MitchellFilter( Value : Single) : Single
7760:
7761: end;
7762:
7763:
7764: (*----
7765: procedure SIRegister_Chart(CL: TPSPascalCompiler);
7766: begin
      'TeeMsg_DefaultFunctionName','String').SetString( 'TeeFunction
```

```
7768:
           TeeMsq DefaultSeriesName', 'String'). SetString( 'Series
           TeeMsg_DefaultToolName', 'String').SetString(
ChartComponentPalette', 'String').SetString(
                                                                                           ChartTool
7769:
           TeeMaxLegendColumns',LongInt').SetInt(2);
TeeDefaultLegendSymbolWidth','LongInt').SetInt(20);
7771 •
7772:
7773:
           TeeTitleFootDistance,LongInt).SetInt(5);
7774:
             SIRegister_TCustomChartWall(CL);
              SIRegister_TChartWall(CL);
7775:
              SIRegister_TChartLegendGradient(CL);
7776:
             TLegendStyle', '( lsAuto, lsSeries, lsValues, lsLastValues, lsSeriesGroups )
TLegendAlignment', '( laLeft, laRight, laTop, laBottom )
FindClass('TOBJECT'),'LegendException
7777:
7778:
7779:
7780:
              TOnGetLegendText', 'Procedure ( Sender : TCustomAxisPanel; Legen'
             rollectLegendrext, Froedure (Sender : ItastomaxisFaher, Legendrext : String)
+'dStyle : TLegendStyle; Index : Integer; var LegendText : String)
FindClass('TOBJECT'),'TCustomChartLegend
7781:
7782:
7783:
              TLegendSymbolSize',
                                                 '( lcsPercent, lcsPixels
              TLegendSymbolPosition', '( spLeft, spRight )
7784:
             TSymbolDrawEvent', 'Procedure(Sender:TObject;Series:TChartSeries;ValueIndex:Integer;R:TRect);
TSymbolCalcHeight', 'Function : Integer
7785
7786:
7787:
              SIRegister_TLegendSymbol(CL);
7788:
              SIRegister_TTeeCustomShapePosition(CL);
7789:
              TCheckBoxesStyle', '( cbsCheck, cbsRadio )
7790:
              SIRegister_TLegendTitle(CL);
7791:
              SIRegister TLegendItem(CL);
7792:
              SIRegister_TLegendItems(CL);
             TLegendCalcSize', 'Procedure ( Sender : TCustomChartLegend; var ASize : Integer) FindClass('TOBJECT'), 'TCustomChart
7793:
7794:
7795:
              SIRegister TCustomChartLegend(CL);
7796:
              SIRegister_TChartLegend(CL);
              SIRegister_TChartTitle(CL);
7797:
7798:
              SIRegister_TChartFootTitle(CL);
             TChartClick', 'Procedure ( Sender : TCustomChart; Button : TMous'
+'eButton; Shift : TShiftState; X, Y : Integer)
7799:
7800:
              TChartClickAxis', 'Procedure ( Sender : TCustomChart; Axis : TCh
7801:
                ChartClickSeries', 'Procedure ( Sender : TCustomChart; Series : '

ChartClickSeries', 'Procedure ( Sender : TCustomChart; Series : '
7802:
7803:
             TChartClickSeries',
7804:
               + TChartSeries; \ ValueIndex : Integer; \ Button: \ TMouseButton; \ Shift: TShiftState; X,Y:Integer) \\
7805:
              TChartClickTitle', 'Procedure ( Sender : TCustomChart; ATitle :
7806:
               +'TChartTitle; Button : TMouseButton; Shift : TShiftState; X,
                                                                                                                           Y : Integer)
             TaxisSavedScales', 'record Auto: Boolean; AutoMin: Boolean; AutoMin: Boolean; AutoMin: Boolean; Min: Double; Max: Double; end
7807:
7808:
7809:
7810:
7811:
              TAllAxisSavedScales', 'array of TAxisSavedScales
              SIRegister_TChartBackWall(CL);
7812:
7813:
              SIRegister TChartRightWall(CL);
              SIRegister_TChartBottomWall(CL);
7814:
              SIRegister_TChartLeftWall(CL);
              SIRegister_TChartWalls(CL);
7816:
7817:
              TChartAllowScrollEvent', 'Procedure(Sender:TChartAxis;var AMin,AMax:Double;var AllowScroll:Boolean);
7818:
              SIRegister TCustomChart(CL);
              SIRegister_TChart(CL);
7819:
              SIRegister_TTeeSeriesTypes(CL);
7820:
7821:
              SIRegister_TTeeToolTypes(CL);
7822:
             SIRegister_TTeeDragObject(CL);
7823:
             SIRegister TColorPalettes(CL);
7824:
           Procedure RegisterTeeSeries(ASeriesClass:TChartSeriesClass;ADescription,
          AGalleryPage:PString;ANumGallerySeries:Integer;
7825: Procedure RegisterTeeSeries1( ASeriesClass: TChartSeriesClass; ADescription: PString); 7826: Procedure RegisterTeeFunction(AFunctClass:TTeeFunctionClass; ADescription,
          AGalleryPage:PString;ANumGallerySeries: Int;
          Procedure RegisterTeeBasicFunction( AFunctionClass: TTeeFunctionClass: ADescription: PString)
7828: \begin{tabular}{ll} Procedure & Register Tee Series Function (ASeries Class: TChart Series Class: AFunction Class: TTee Function Class: TTee Functio
          ADescription, AGalleryPage : PString; ANumGallerySeries : Integer; ASubIndex : Integer)
7829:
           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;
7831:
7832:
7833:
         AFunctionClass: TTeeFunctionClass): TChartSeries
Function CloneChartSeries( ASeries: TChartSeries): TChartSeries;
7834:
7835:
           Function CloneChartSeries1( ASeries : TChartSeries; AChart : TCustomAxisPanel) : TChartSeries;
           Function CloneChartSeries2(ASeries:TChartSeries;AOwner:TComponent;AChart:TCustomAxisPanel):TChartSeries;;
Function CloneChartTool(ATool: TTeeCustomTool; AOwner: TComponent): TTeeCustomTool
7836:
7837:
           Function ChangeSeriesType( var ASeries : TChartSeries; NewType : TChartSeriesClass) : TChartSeries Procedure ChangeAllSeriesType( AChart : TCustomChart; AClass : TChartSeriesClass)
7838:
7839:
7840:
           \textbf{Function} \ \ \texttt{GetNewSeriesName} \ ( \ \ \texttt{AOwner} \ : \ \ \texttt{TComponentName} \ ) \ : \ \ \texttt{TComponentName}
           Procedure RegisterTeeTools( const ATools : array of TTeeCustomToolClass)

Procedure UnregisterTeeTools( const ATools : array of TTeeCustomToolClass)
7841:
7842:
            Function GetGallerySeriesName( ASeries : TChartSeries) : String
7844:
           Procedure PaintSeriesLegend(ASeries:TChartSeries; ACanvas:TCanvas; const R:TRect; ReferenceChart:
          TCustomChart);
7845:
             SIRegister TChartTheme(CL);
             //TChartThemeClass', 'class of TChartTheme
7846:
              //TCanvasClass', 'class of TCanvas3D
7847:
           Function SeriesNameOrIndex( ASeries : TCustomChartSeries) : String
Function SeriesTitleOrName( ASeries : TCustomChartSeries) : String
7848:
7849:
           Procedure FillSeriesItems( AItems: TStrings; AList: TCustomSeriesList; UseTitles: Boolean)
7850:
           Procedure ShowMessageUser( const S : String)
```

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7852:
                Function HasNoMandatoryValues( ASeries : TChartSeries) : Boolean
7853:
                Function HasLabels ( ASeries : TChartSeries) : Boolean
                 Function HasColors ( ASeries : TChartSeries)
                                                                                                                                  Boolean
7855 .
                Function SeriesGuessContents( ASeries : TChartSeries) : TeeFormatFlag
                Procedure TeeDrawBitmapEditor( Canvas: TCanvas; Element: TCustomChartElement; Left, Top: Integer)
7856:
7857: end;
7858:
7859:
7860: procedure SIRegister_TeeProcs(CL: TPSPascalCompiler);
7861: begin
                //'TeeFormBorderStyle','').SetString( bsNone);
7862:
                   SIRegister_TMetafile(CL);
7864:
                   'TeeDefVerticalMargin','LongInt').SetInt( 4);
                 'TeeDefHorizMargin','LongInt').SetInt( 3);
'crTeeHand','LongInt').SetInt( TCursor ( 2020 ));
7865:
7866:
7867:
                  'TeeMsg_TeeHand','String').SetString('crTeeHand
                 'TeeNormalPrintDetail', 'LongInt').SetInt( 0);
7868:
                 'TeeHighPrintDetail','LongInt').SetInt( - 100);
'TeeDefault_PrintMargin','LongInt').SetInt( 15);
'MaxDefaultColors','LongInt').SetInt( 19);
7869:
7870:
7871:
                   TDateTimeStep', '(dtOneMicroSecond, dtOneMillisecond, dtOneSeco'
7872:
7873:
7874:
                     +'nd, dtFiveSeconds, dtTenSeconds, dtFifteenSeconds, dtThirtySeconds, dtOneM'
                      + ind, dtfiveSeconds, dtfenSeconds, dtfitteenSeconds, dtfitteenSec
7875:
7877:
                      +'eDays, dtOneWeek, dtHalfMonth, dtOneMonth, dtTwoMonths, dtThreeMonths, dtF'
7878:
                      +'ourMonths, dtSixMonths, dtOneYear, dtNone )
                   SIRegister_TCustomPanelNoCaption(CL);
FindClass('TOBJECT'),'TCustomTeePanel
SIRegister_TZoomPanning(CL);
7879:
7880:
7882:
                   SIRegister_TTeeEvent(CL);
7883:
                    //SIRegister_TTeeEventListeners(CL);
7884:
                   TTeeMouseEventKind', '( meDown, meUp, meMove )
                   SIRegister_TTeeMouseEvent(CL);
7885:
                   SIRegister_TCustomTeePanel(CL);
7887:
                   //TChartGradient', 'TTeeGradient
7888:
                    //TChartGradientClass', 'class of TChartGradient
7889:
                   TPanningMode', '( pmNone, pmHorizontal, pmVertical, pmBoth )
7890:
                   SIRegister_TTeeZoomPen(CL);
7891:
                   SIRegister_TTeeZoomBrush(CL);
                   7892:
7893:
7894:
7895:
7896:
7897:
                   //TChartBrushClass', 'class of TChartBrush
SIRegister_TTeeCustomShapeBrushPen(CL);
7898:
                   TChartObjectShapeStyle', '( fosRectangle, fosRoundRectangle, fosEllipse )
TTextFormat', '( ttfNormal, ttfHtml )
SIRegister_TTeeCustomShape(CL);
7900:
7901:
7902:
7903:
                   SIRegister_TTeeShape(CL);
                   SIRegister_TTeeExportData(CL);
7904:
7905:
                Function TeeStr( const Num : Integer) : String
7906:
                Function DateTimeDefaultFormat( const AStep : Double) : String
Function TEEDaysInMonth( Year, Month : Word) : Word
7907:
                 Function FindDateTimeStep( const StepValue : Double) : TDateTimeStep
7908:
                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;
7909:
7910:
7911:
7912:
7913:
                 Function PointInLine3( const P : TPoint; const px, py, qx, qy, TolerancePixels:Integer):Boolean;
7914:
                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;
7915:
7916:
7918:
                Function PointInEllipse( const P : TPoint; const Rect : TRect) : Boolean;
Function PointInEllipsel( const P: TPoint; Left, Top, Right, Bottom : Integer) : Boolean;
7919:
7920:
                Function DelphiToLocalFormat( const Format : String) : String
Function LocalToDelphiFormat( const Format : String) : String
7921:
7922:
7923:
                Procedure TEEEnableControls(Enable: Boolean; const ControlArray : array of TControl)
7924:
                \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
7925:
              AnIncrement:Double; tmpWhichDateTime:TDateTimeStep)
7926:
                   TTeeSortCompare', 'Function ( a, b : Integer) : Integer
7927:
                   TTeeSortSwap', 'Procedure ( a, b : Integer)
                Procedure TeeSort(StartIndex,EndIndex:Integer;CompareFunc:TTeeSortCompare;SwapFunc:TTeeSortSwap);
7928:
                Function TeeGetUniqueName( AOwner : TComponent; const AStartName : String) : string
7929:
                 Function TeeExtractField( St : String; Index : Integer) : String;
                Function TeeExtractField1(St: String; Index: Integer; const Separator: String): String;
7931:
                Function TeeNumFields( St: String): Integer;
Function TeeNumFields1( const St, Separator: String): Integer;
Procedure TeeGetBitmapEditor( AObject: TObject; var Bitmap: TBitmap)
7932:
7933:
7934:
                Procedure TeeLoadBitmap( Bitmap: TBitmap; const Name1, Name2: String)
7935:
7936:
                 // TColorArray', 'array of TColor
                Function GetDefaultColor( const Index : Integer) : TColor
7937:
7938:
                Procedure SetDefaultColorPalette;
                Procedure SetDefaultColorPalette1( const Palette : array of TColor);
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7940:
        'TeeCheckBoxSize', 'LongInt').SetInt( 11);
7941:
        Procedure TeeDrawCheckBox(x,y:Integer;Canvas:TCanvas;Checked:Boolean;ABackColor:TColor;CheckBox:Boolean);
        Function TEEStrToFloatDef( const S : string; const Default : Extended) : Extended
7943 .
        \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
7944:
        Procedure TeeTranslateControl( AControl: TControl);
Procedure TeeTranslateControl1( AControl: TControl; const ExcludeChilds: array of TControl);
7945:
7946:
        Function ReplaceChar( const AString: String; const Search: Char; const Replace: Char)
7947:
        //Procedure RectToFourPoints (const ARect: TRect; const Angle: Double; var P: TFourPoints)
Function TeeAntiAlias (Panel: TCustomTeePanel; ChartRect: Boolean): TBitmap
7948:
7949:
        //Procedure DrawBevel(Canvas:TTeeCanvas;Bevel:TPanelBevel;var R:TRect;Width:Integer;Round:Integer);
7950:
        //Function ScreenRatio( ACanvas : TCanvas3D) : Double
7951:
7952:
        Function TeeReadBoolOption( const AKey : String; DefaultValue : Boolean) : Boolean
        Procedure TeeSaveBoolOption( const AKey : String; Value : Boolean)
Function TeeReadIntegerOption( const AKey : String; DefaultValue : Integer) : Integer
7953:
7954:
7955:
        Procedure TeeSaveIntegerOption( const AKey : String; Value : Integer)
        Function TeeReadStringOption( const AKey, DefaultValue : String) : String
7956:
7957 .
        Procedure TeeSaveStringOption( const AKey, Value : String)
7958:
        Function TeeDefaultXMLEncoding : String
7959:
        Procedure ConvertTextToXML( Stream : TStream; XMLHeader : Boolean)
          TeeWindowHandle', 'Integer
        Procedure TeeGotoURL( Handle : TeeWindowHandle; const URL : String)
7961:
        Procedure HtmlTextOut( ACanvas : TCanvas; x, y : Integer; Text : String)
Function HtmlTextExtent( ACanvas : TCanvas; const Text : String) : TSize
7962:
7963:
       end;
7965:
7966:
7967: using mXBDEUtils
7968:
7969: Procedure SetAlias( aAlias, aDirectory : String)
        Procedure CheckRegistryEntry(Reg:TRegistry:const Path, Value:String:const Default,
7970:
       Desired: Variant; Size: Byte);
7971: Function GetFileVersionNumber( const FileName : String) : TVersionNo
        Procedure SetBDE( aPath, aNode, aValue : String)
        function RestartDialog(Wnd: HWnd; Reason: PChar; Flags: Integer): Integer; stdcall;
7973:
7974:
        \textbf{Function} \ \ \texttt{GetSystemDirectory}( \ \ \texttt{lpBuffer} \ : \ \textbf{string}; \ \ \texttt{uSize} \ : \ \ \texttt{UINT}) \ : \ \ \texttt{UINT}
7975:
        Function GetSystemDirectoryW( lpBuffer : pchar; uSize : UINT) : UINT
        Function GetTempPath( nBufferLength : DWORD; lpBuffer : string) : DWORD
7976:
        Function GetWindowsDirectoryW( nBufferLength : DWORD; lpBuffer : string)
7978:
        Function GetTempFileName(lpPathName,lpPrefixString:string;uUnique:UINT;lpTempFileName:string):UINT;
7979:
7980:
7981: procedure SIRegister_cDateTime(CL: TPSPascalCompiler);
       begin
7983: AddClassN(FindClass('TOBJECT'), 'EDateTime
7984: Function DatePart( const D : TDateTime) : Integer
7985: Function TimePart( const D : TDateTime) : Double
7986: Function Century( const D : TDateTime) : Word
7987: Function Year( const D : TDateTime) : Word
7988: Function Month( const D : TDateTime) : Word
7989: Function Day( const D : TDateTime) : Word
7990: Function Hour( const D : TDateTime) : Word
7991: Function Minute( const D : TDateTime) : Word
7992: Function Second( const D : TDateTime) : Word
7993: Function Millisecond( const D : TDateTime) : Word
7994: ('OneDay','Extended').setExtended( 1.0);
7995: ('OneHour','Extended').SetExtended( OneDay / 24);
7996: ('OneMinute', 'Extended').SetExtended(OneHour / 60);
7997:
       ('OneSecond','Extended').SetExtended(OneMinute / 60);
7998: ('OneMillisecond','Extended').SetExtended( OneSecond / 1000);
7999: ('OneWeek','Extended').SetExtended( OneDay * 7);
:0008
        'HoursPerDay', 'Extended').SetExtended( 24);
8001: ('MinutesPerHour', 'Extended').SetExtended( 60);
8002: ('SecondsPerMinute','Extended').SetExtended( 60);
8003: Procedure SetYear( var D : TDateTime; const Year : Word)
8004: Procedure SetMonth( var D : TDateTime; const Month : Word)
8005: Procedure SetDay( var D : TDateTime; const Day : Word)
8006: Procedure SetHour( var D : TDateTime; const Hour : Word)
8007: Procedure SetMinute( var D : TDateTime; const Minute : Word) 8008: Procedure SetSecond( var D : TDateTime; const Second : Word)
8009: Procedure SetMillisecond( var D : TDateTime; const Milliseconds : Word)
8010: Function IsEqual( const D1, D2: TDateTime): Boolean;
8011: Function IsEqual1( const D1: TDateTime; const Ye, Mo, Da: Word):Boolean;
8012: Function IsEqual2( const D1: TDateTime; const Ho, Mi, Se, ms: Word):Boolean;
8013: Function IsAM( const D : TDateTime) : Boolean 8014: Function IsPM( const D : TDateTime) : Boolean
8015: Function IsMidnight( const D : TDateTime) : Boolean
8016: Function IsNoon( const D : TDateTime) : Boolean
8017: Function IsSunday( const D : TDateTime) : Boolean
8018: Function IsMonday( const D : TDateTime) : Boolean
8019: Function IsTuesday( const D : TDateTime) : Boolean
8020: Function IsWedneday( const D : TDateTime) : Boolean 8021: Function IsThursday( const D : TDateTime) : Boolean
8022: Function IsFriday( const D : TDateTime) : Boolean
8023: Function IsSaturday( const D : TDateTime) : Boolean
8024: Function IsWeekend( const D : TDateTime) : Boolean
8025: Function Noon( const D : TDateTime) : TDateTime
8026: Function Midnight (const D : TDateTime) : TDateTime
8027: Function FirstDayOfMonth( const D : TDateTime) : TDateTime
```

```
8028: Function LastDayOfMonth( const D : TDateTime) : TDateTime
8029: Function NextWorkday( const D : TDateTime) : TDateTime
8030: Function PreviousWorkday( const D : TDateTime) : TDateTime
8031: Function FirstDayOfYear( const D : TDateTime) : TDateTime
8032: Function LastDayOfYear( const D : TDateTime) : TDateTime
8033: Function EasterSunday( const Year : Word) : TDateTime 8034: Function GoodFriday( const Year : Word) : TDateTime
8035: Function AddMilliseconds( const D : TDateTime; const N : Int64) : TDateTime
8036: Function AddSeconds( const D : TDateTime; const N : Int64) : TDateTime 8037: Function AddMinutes( const D : TDateTime; const N : Integer) : TDateTime
8038: Function AddHours( const D : TDateTime; const N : Integer) : TDateTime
8039: Function AddDays( const D : TDateTime; const N : Integer) : TDateTime
8040: Function AddWeeks( const D : TDateTime; const N : Integer) : TDateTime
8041: Function AddMonths( const D : TDateTime; const N : Integer) : TDateTime
8042: Function AddYears( const D : TDateTime; const N : Integer) : TDateTime
8043: Function DayOfYear( const Ye, Mo, Da : Word) : Integer
8044: Function DayOfYear( const D : TDateTime) : Integer
8045: Function DaysInMonth( const Ye, Mo : Word) : Integer 8046: Function DaysInMonth( const D : TDateTime) : Integer
8047: Function DaysInYear( const Ye : Word) : Integer
8048: Function DaysInYearDate( const D : TDateTime) : Integer
8049: Function WeekNumber( const D : TDateTime) : Integer
8050: Function ISOFirstWeekOfYear( const Ye : Word) : TDateTime
8051: Procedure ISOWeekNumber( const D : TDateTime; var WeekNumber, WeekYear : Word)
8052: Function DiffMilliseconds( const D1, D2 : TDateTime) : Int64
8053: Function DiffSeconds( const D1, D2 : TDateTime) : Integer
8054: Function DiffMinutes( const D1, D2 : TDateTime) : Integer 8055: Function DiffHours( const D1, D2 : TDateTime) : Integer 8056: Function DiffDays( const D1, D2 : TDateTime) : Integer 8057: Function DiffWeeks( const D1, D2 : TDateTime) : Integer
8058: Function DiffMonths( const D1, D2 : TDateTime) : Integer
8059: Function DiffYears( const D1, D2 : TDateTime) : Integer
8060: Function GMTBias : Integer
8061: Function GMTTimeToLocalTime( const D : TDateTime) : TDateTime
8062: Function LocalTimeToGMTTime( const D : TDateTime) : TDateTime
8063: Function NowAsGMTTime : TDateTime
8064: Function DateTimeToISO8601String( const D : TDateTime) : AnsiString
8065: Function ISO8601StringToTime( const D : AnsiString) : TDateTime
8066: Function ISO8601StringAsDateTime( const D : AnsiString) : TDateTime
8067: Function DateTimeToANSI( const D : TDateTime) : Integer
8068: Function ANSIToDateTime( const Julian : Integer) : TDateTime
8069: Function DateTimeToISOInteger( const D : TDateTime) : Integer
8070: Function DateTimeToISOString( const D : TDateTime) : AnsiString
8071: Function ISOIntegerToDateTime( const ISOInteger : Integer) : TDateTime
8072: Function TwoDigitRadix2000YearToYear( const Y : Integer) : Integer
8073: Function DateTimeAsElapsedTime(const D:TDateTime; const IncludeMilliseconds:Boolean):AnsiString
8074: Function UnixTimeToDateTime( const UnixTime : LongWord) : TDateTime
8075: Function DateTimeToUnixTime( const D : TDateTime) : LongWord
8076: Function EnglishShortDayOfWeekStrA( const DayOfWeek : Integer)
8077: Function EnglishShortDayOfWeekStrU( const DayOfWeek : Integer) : UnicodeString
8078: Function EnglishLongDayOfWeekStrA( const DayOfWeek : Integer) : AnsiString
8079: Function EnglishLongDayOfWeekStrU( const DayOfWeek : Integer)
                                                                              : UnicodeString
8080: Function EnglishShortMonthStrA( const Month : Integer) : AnsiString
8081: Function EnglishShortMonthStrU( const Month : Integer) : UnicodeString
8082: Function EnglishLongMonthStrA( const Month : Integer) : AnsiString 8083: Function EnglishLongMonthStrU( const Month : Integer) : UnicodeString
8084: Function EnglishShortDayOfWeekA( const S : AnsiString) : Integer
8085: Function EnglishShortDayOfWeekU( const S : UnicodeString) : Integer
8086: Function EnglishLongDayOfWeekA( const S : AnsiString) : Integer 8087: Function EnglishLongDayOfWeekU( const S : UnicodeString) : Integer
8088: Function EnglishShortMonthA( const S : AnsiString) : Integer
8089: Function EnglishShortMonthU( const S : UnicodeString) : Integer
8090: Function EnglishLongMonthA( const S : AnsiString) : Integer
8091: Function EnglishLongMonthU( const S : UnicodeString) : Integer
8092: Function RFC850DayOfWeekA( const S : AnsiString) : Integer 8093: Function RFC850DayOfWeekU( const S : UnicodeString) : Integer
8094: Function RFC1123DayOfWeekA( const S : AnsiString) : Integer 8095: Function RFC1123DayOfWeekU( const S : UnicodeString) : Integer
8096: Function RFCMonthA( const S : AnsiString) : Word 8097: Function RFCMonthU( const S : UnicodeString) : Word
8098: Function GMTTimeToRFC1123TimeA( const D : TDateTime; const IncludeSeconds:Boolean) : AnsiString
8099: Function GMTTimeToRFC1123TimeU( const D : TDateTime; const IncludeSeconds:Boolean) : UnicodeString
8100: Function GMTDateTimeToRFC1123DateTimeA(const D: TDateTime; const IncludeDayOfWeek:Bool):AnsiString;
8101: Function GMTDateTimeToRFC1123DateTimeU(const D:TDateTime;const IncludeDayOfWeek:Bool):UnicodeString;
8102: Function DateTimeToRFCDateTimeA( const D : TDateTime) : AnsiString
8103: Function DateTimeToRFCDateTimeU( const D : TDateTime) : UnicodeString
8104: Function NowAsRFCDateTimeA : AnsiString 8105: Function NowAsRFCDateTimeU : UnicodeString
8106: Function RFCDateTimeToGMTDateTime( const S : AnsiString) : TDateTime
8107: Function RFCDateTimeToDateTime( const S : AnsiString) : TDateTime
8108: Function RFCTimeZoneToGMTBias( const Zone : AnsiString) : Integer
8109: Function TimePeriodStr( const D : TDateTime) : AnsiString
8110: Procedure SelfTest
8111: end;
8113: Function PathHasDriveLetterA( const Path : AnsiString) : Boolean
8114: Function PathHasDriveLetter( const Path : String) : Boolean 8115: Function PathIsDriveLetterA( const Path : AnsiString) : Boolean
8116: Function PathIsDriveLetter( const Path : String) : Boolean
```

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8117: Function PathIsDriveRootA( const Path : AnsiString) : Boolean
8118: Function PathIsDriveRoot( const Path : String) : Boolean
8119: Function PathIsRootA( const Path : AnsiString)
8120: Function PathIsRoot( const Path : String) : Boolean
8121: Function PathIsUNCPathA( const Path : AnsiString) : Boolean
8122: Function PathIsUNCPath( const Path : String) : Boolean
8123: Function PathIsAbsoluteA( const Path : AnsiString) : Boolean
8124: Function PathIsAbsolute( const Path : String) : Boolean
8125: Function PathIsDirectoryA( const Path : AnsiString) : Boolean
8126: Function PathIsDirectory( const Path : String) : Boolean
8127: Function PathInclSuffixA( const Path : AnsiString; const PathSep : Char) : AnsiString
8128: Function PathInclSuffix( const Path : String; const PathSep : Char) : String
8129: Function PathExclSuffixA( const Path : AnsiString; const PathSep : Char) : AnsiString
8130: Function PathExclSuffix( const Path: String; const PathSep: Char): String 8131: Procedure PathEnsureSuffixA( var Path: AnsiString; const PathSep: Char)
8132: Procedure PathEnsureSuffix( var Path : String; const PathSep : Char)
8133: Procedure PathEnsureNoSuffixA( var Path : AnsiString; const PathSep : Char)
8134: Procedure PathEnsureNoSuffix( var Path : String; const PathSep : Char)
8135: //Function PathCanonicalA( const Path : AnsiString; const PathSep : Char) : AnsiString
8136: Function PathCanonical( const Path : String; const PathSep : Char) : String
8137: Function PathExpandA(const Path:AnsiString;const BasePath:AnsiString;const PathSep:Char):AnsiString
8138: Function PathExpand( const Path : String; const BasePath : String; const PathSep : Char) : String
8139: Function PathLeftElementA( const Path : AnsiString; const PathSep : Char) : AnsiString
8140: Function PathLeftElement( const Path : String; const PathSep : Char) : String
8141: Procedure PathSplitLeftElementA(const Path:AString; var LeftElement,RightPath:AString; const PathSep:Char);
8142: Procedure PathSplitLeftElement(const Path:String; var LeftElement,RightPath: String;const PathSep:Char);
8143: Procedure DecodeFilePathA(const FilePath:AnsiString; var Path,FileName:AnsiString; const PathSep:Char;
8144: Procedure DecodeFilePath( const FilePath: String; var Path, FileName: String; const PathSep: Char) 8145: Function FileNameValidA( const FileName: AnsiString): AnsiString 8146: Function FileNameValid( const FileName: String): String
8147: Function FilePathA(const FileName,Path:AnsiString;const BasePath:AnsiStr;const PathSep:Char):AnsiString;
8148: Function FilePath(const FileName, Path: String;const BasePath: String;const PathSep : Char) : String
8149: Function DirectoryExpandA(const Path:AnsiString;const BasePath:AnsiString;const PathSep:Char):AnsiString
8150: Function DirectoryExpand(const Path: String; const BasePath: String; const PathSep : Char) : String
8151: Function UnixPathToWinPath( const Path : AnsiString) : AnsiString 8152: Function WinPathToUnixPath( const Path : AnsiString) : AnsiString
8153: Procedure CCopyFile( const FileName, DestName : String) 8154: Procedure CMoveFile( const FileName, DestName : String)
8155: Function CDeleteFiles( const FileMask : String) : Boolean
8156: Function FileSeekEx(const FHandle:TFileHandle;const FileOffset:Int64; const FilePos:TFileSeekPos):Int64;
8157: Procedure FileCloseEx( const FileHandle : TFileHandle)
8158: Function FileExistsA( const FileName : AnsiString) : Boolean
8159: Function CFileExists( const FileName : String) : Boolean
        Function CFileGetSize( const FileName : String) : Int64
8161: Function FileGetDateTime( const FileName : String) : TDateTime 8162: Function FileGetDateTime2( const FileName : String) : TDateTime
8163: Function FileIsReadOnly( const FileName : String) : Boolean
8164: Procedure FileDeleteEx( const FileName : String)
8165: Procedure FileRenameEx( const OldFileName, NewFileName :
                                                                              String)
8166: Function ReadFileStrA( const FileName:AnsiString; const FileSharing: TFileSharing; const FileCreationMode : TFileCreationMode; const FileOpenWait : PFileOpenWait) : AnsiString
8167: Function DirectoryEntryExists( const Name : String) : Boolean
8168: Function DirectoryEntrySize( const Name : String) : Int64
8169: Function CDirectoryExists( const DirectoryName : String) : Boolean
8170: Function DirectoryGetDateTime( const DirectoryName : String) : TDateTime
8171: Procedure CDirectoryCreate( const DirectoryName : String)
8172: Function GetFirstFileNameMatching( const FileMask : String) : String
8173: Function DirEntryGetAttr( const FileName : AnsiString) : Integer
8174: Function DirEntryIsDirectory( const FileName : AnsiString) : Boolean 8175: Function FileHasAttr( const FileName : String; const Attr : Word) : Boolean 8176: AddTypeS('TLogicalDriveType', '( DriveRemovable, DriveFixed, DriveRemote,
          +'DriveCDRom, DriveRamDisk, DriveTypeUnknown )
8178: Function DriveIsValid( const Drive: Char): Boolean
8179: Function DriveGetType( const Path: AnsiString): TLogicalDriveType
8180: Function DriveFreeSpace( const Path: AnsiString): Int64
8182: procedure SIRegister cTimers(CL: TPSPascalCompiler);
8183: begin
8184: AddClassN(FindClass('TOBJECT'),'ETimers
        Const('TickFrequency','LongInt').SetInt( 1000);Function GetTick : LongWord
8185:
8186: Function TickDelta( const D1, D2 : LongWord) : Integer
8187: Function TickDeltaW( const D1, D2 : LongWord) : LongWord
        AddTypeS('THPTimer',
8188:
                                   'Int64
8189: Procedure StartTimer( var Timer : THPTimer)
8190: Procedure StopTimer( var Timer : THPTimer)
8191: Procedure ResumeTimer( var StoppedTimer: THPTimer)
8192: Procedure InitStoppedTimer( var Timer: THPTimer)
8193: Procedure InitElapsedTimer( var Timer: THPTimer; const Milliseconds: Integer)
8194: Function MillisecondsElapsed( const Timer: THPTimer; const TimerRunning : Boolean) : Integer
8195: Function MicrosecondsElapsed( const Timer: THPTimer; const TimerRunning : Boolean) : Int64
8196: Procedure WaitMicroseconds ( const MicroSeconds : Integer)
8197: Function GetHighPrecisionFrequency : Int64
8198: Function GetHighPrecisionTimerOverhead : Int64
8199: Procedure AdjustTimerForOverhead( var StoppedTimer: THPTimer; const Overhead: Int64)
8200: Procedure SelfTestCTimer
8201: end;
8202:
8203: procedure SIRegister_cRandom(CL: TPSPascalCompiler);
```

```
8205:
                Function RandomSeed : LongWord
                Procedure AddEntropy( const Value : LongWord)
8206:
                 Function RandomUniform : LongWord;
8208:
                 Function RandomUniform1( const N : Integer) : Integer;
8209:
                Function RandomBoolean : Boolean
8210:
                Function RandomBvte : Bvte
                Function RandomByteNonZero : Byte
8211:
8212:
                 Function RandomWord : Word
                 Function RandomInt64 : Int64;
8213:
8214:
                Function RandomInt641( const N : Int64) : Int64;
8215:
                 Function RandomHex( const Digits : Integer) : String
                 Function RandomFloat : Extended
8216:
8217:
                 Function RandomAlphaStr( const Length : Integer) : AnsiString
                Function RandomPseudoWord( const Length : Integer) : AnsiString
8218:
                Function RandomPassword(const MinL, MaxLength: Int; const CaseSens, UseSymbols, UseNumbers: Bool): AnsiString;
8219:
                Function mwcRandomLongWord : LongWord
Function urnRandomLongWord : LongWord
8220:
8221:
                Function moaRandomFloat : Extended Function mwcRandomFloat : Extended
8222.
8223:
                Function RandomNormalF : Extended
8224:
8225:
                Procedure SelfTestCRandom
8226: end;
8227:
8228: procedure SIRegister SynEditMiscProcs(CL: TPSPascalCompiler);
8229:
              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):
8230:
8231:
8232:
              AnsiString
              Function synMax(x, y: integer): integer
                Function synMin(x, y : integer) : integer
Function synMin(x, mi, ma : integer) : integer
8234:
8235:
8236:
                Procedure synSwapInt( var 1, r : integer)
                Function symMaxPoint( const Pl, P2 : TPoint) : TPoint
Function symMinPoint( const Pl, P2 : TPoint) : TPoint
8237:
8238:
8239:
                 //Function synGetIntArray( Count : Cardinal; InitialValue : integer) : PIntArray
                Procedure synInternalFillRect( dc : HDC; const rcPaint : TRect)

Function synGetBestConvertTabsProc( TabWidth : integer) : TConvertTabsProc
8240:
8241:
                Function synConvertTabs( const Line : AnsiString; TabWidth : integer) : AnsiString
Function synGetBestConvertTabsProcEx( TabWidth : integer) : TConvertTabsProcEx
8242:
8243:
8244:
                \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{
                Function synGetExpandedLength( const aStr : string; aTabWidth : integer) : integer
Function synCharIndex2CaretPos( Index, TabWidth : integer; const Line : string) : integer
8245:
8246:
                 Function synCaretPos2CharIndex(Position, TabWidth:int; const Line: string; var InsideTabChar:boolean):int;
8248:
                 \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
8249:
                Function synStrRScanForCharInSet(const Line:string;Start:integer;AChars:TSynIdentChars):integer;
                   TStringType', '( stNone, stHalfNumAlpha, stHalfSymbol, stHalfKat' +'akana,stWideNumAlpha,stWideSymbol,stWideKatakana,stHiragana,stIdeograph,stControl,stKashida )
8250:
8251:
8252:
                  ('C3_NONSPACING','LongInt').SetInt( 1);
8253:
                  'C3_DIACRITIC','LongInt').SetInt( 2);
'C3_VOWELMARK','LongInt').SetInt( 4);
8254:
                  ('C3_SYMBOL', 'LongInt').SetInt( 8);
8255:
                    'C3_KATAKANA', 'LongWord').SetUInt( $0010);
'C3_KATAKANA', 'LongWord').SetUInt( $0020);
'C3_HALFWIDTH', 'LongWord').SetUInt( $0040);
'C3_FULLWIDTH', 'LongWord').SetUInt( $0080);
8256:
8257:
8258:
8259:
                     'C3_IDEOGRAPH','LongWord').SetUInt(
8260:
                    'C3_KASHIDA','LongWord').SetUInt( $0200);
8261:
                   ('C3_LEXICAL','LongWord').SetUInt( $0400);
('C3_ALPHA','LongWord').SetUInt( $8000);
8262:
8263:
                  ('C3_NOTAPPLICABLE', 'LongInt').SetInt( 0);
8264:
8265:
                 Function synStrScanForMultiByteChar( const Line : string; Start : Integer) : Integer
8266:
                Function synStrRScanForMultiByteChar( const Line : string; Start : Integer) : Integer
                Function synIsStringType( Value : Word) : TStringType
Function synGetEOL( Line : PChar) : PChar
8267:
8268:
                Function synEncodeString( s : string) : string
Function synDecodeString( s : string) : string
8269:
8270:
8271:
                Procedure synFreeAndNil( var Obj: TObject)
8272:
                Procedure synAssert( Expr : Boolean)
                Function synLastDelimiter( const Delimiters, S : string) : Integer
8273:
                    TReplaceFlag', '( rfReplaceAll, rfIgnoreCase )
8274:
8275:
                   TReplaceFlags', 'set of TReplaceFlag )
8276:
                \begin{tabular}{ll} Function & synStringReplace(const S, OldPattern, NewPattern : string; Flags: TReplaceFlags) : string & Function & synGetRValue( RGBValue : TColor) : byte \\ \end{tabular}
8277:
                 Function synGetGValue( RGBValue : TColor) : byte
8278:
8279:
                 Function synGetBValue( RGBValue : TColor)
                                                                                                                            : byte
                Function synRGB( r, g, b : Byte) : Cardinal
8280:
                       THighlighterAttriProc', 'Function ( Highlighter : TSynCustomHigh'
/ +'lighter; Attri:TSynHighlighterAttributes;UniqueAttriName:string;Params array of Pointer):Boolean;
8281: //
8282:
8283:
                  //Function synEnumHighlighterAttris( Highlighter : TSynCustomHighlighter; SkipDuplicates : Boolean;
HighlighterAttriProc: THighlighterAttriProc; Params: array of Pointer): Boolean 8284: Function synCalcFCS( const ABuf, ABufSize: Cardinal): Word
                Procedure synSynDrawGradient(const ACanvas:TCanvas;const AStartColor,
8285:
              AEndColor:TColor;ASteps:integer;const ARect : TRect; const AHorizontal : boolean)
8286: end;
8287:
                Function GET_APPCOMMAND_LPARAM( lParam : LPARAM) : WORD
8288:
8289:
                 Function GET_DEVICE_LPARAM( lParam : LPARAM) : WORD
                 Function GET_KEYSTATE_LPARAM( lParam : LPARAM) : WORD
```

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8291:
8292: procedure SIRegister_synautil(CL: TPSPascalCompiler);
8293: begin
        Function STimeZoneBias : integer
8294 .
8295:
        Function TimeZone : string
        Function Rfc822DateTime( t : TDateTime) : string
8296:
        Function CDateTime( t : TDateTime) : string
8297:
        Function SimpleDateTime( t : TDateTime) : string
Function AnsiCDateTime( t : TDateTime) : string
8298:
8299:
        Function GetMonthNumber( Value : String) : integer
Function GetTimeFromStr( Value : string) : TDateTime
8300:
8301:
        Function GetDateMDYFromStr( Value : string) : TDateTime
8303:
        Function DecodeRfcDateTime( Value : string) : TDateTime
        Function GetUTTime : TDateTime
8304:
        Function SetUTTime( Newdt : TDateTime) : Boolean
8305:
8306:
        Function SGetTick : LongWord
        Function STickDelta( TickOld, TickNew : LongWord) : LongWord
8307:
        Function CodeInt( Value : Word) : Ansistring
Function DecodeInt( const Value : Ansistring; Index : Integer) : Word
Function CodeLongInt( Value : LongInt) : Ansistring
8308:
8309:
8310:
        Function DecodeLongInt( const Value : Ansistring; Index : Integer) : LongInt
        Function DumpStr( const Buffer : Ansistring) : string
8312:
8313:
        Function DumpExStr( const Buffer : Ansistring) : string
        Procedure Dump( const Buffer : AnsiString; DumpFile : string)
Procedure DumpEx( const Buffer : AnsiString; DumpFile : string)
8314:
8315:
8316:
        Function TrimSPLeft( const S : string) : string
8317:
        Function TrimSPRight( const S : string) : string
        Function TrimSP( const S : string) : string
Function SeparateLeft( const Value, Delimiter : string) : string
8318:
8319:
        Function SeparateRight( const Value, Delimiter : string) : string
8320:
        Function SGetParameter( const Value, Parameter : string) : string
8321:
8322:
        Procedure ParseParametersEx( Value, Delimiter : string; const Parameters : TStrings)
8323:
        Procedure ParseParameters ( Value : string; const Parameters : TStrings)
8324:
        Function IndexByBegin( Value : string; const List : TStrings) : integer
        Function GetEmailAddr( const Value : string) : string
8325:
8326:
        Function GetEmailDesc( Value : string) : string
        Function CStrToHex( const Value : Ansistring) : string
Function CIntToBin( Value : Integer; Digits : Byte) : string
8327:
8328:
8329:
        Function CBinToInt( const Value : string) : Integer
        Function ParseURL( URL : string; var Prot, User, Pass, Host, Port, Path, Para:string):string
8330:
8331:
        Function CReplaceString( Value, Search, Replace : AnsiString) : AnsiString
        Function CRPosEx( const Sub, Value : string; From : integer) : Integer
Function CRPos( const Sub, Value : String) : Integer
8332:
8333:
        Function FetchBin( var Value : string; const Delimiter : string) : string
8334:
        Function CFetch( var Value : string; const Delimiter : string) : string
Function FetchEx( var Value : string; const Delimiter, Quotation : string) : string
8335:
8336:
        Function IsBinaryString( const Value : AnsiString) : Boolean
8337:
        Function PosCRLF( const Value : AnsiString; var Terminator : AnsiString) : integer
8338:
8339:
        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
8340:
8341:
8342:
        Function CCountOfChar( const Value : string; aChr : char) : integer
8343:
8344:
        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)
8345:
8346:
8347:
        Function SwapBytes( Value : integer) : integer
8348:
        Function ReadStrFromStream( const Stream : TStream; len : integer) : AnsiString
Procedure WriteStrToStream( const Stream : TStream; Value : AnsiString)
8349:
8350:
        Function GetTempFile( const Dir, prefix : AnsiString) : AnsiString
8351:
8352:
        Function CPadString( const Value : AnsiString; len : integer; Pad : AnsiChar): AnsiString
8353:
        Function CXorString( Indata1, Indata2 : AnsiString) : AnsiString
        Function NormalizeHeader( Value : TStrings; var Index : Integer) : string
8354:
8355: end;
       procedure SIRegister_StCRC(CL: TPSPascalCompiler);
8357:
8358: begin
       ('CrcBufSize','LongInt').SetInt( 2048);
8359:
        Function Adler32Prim( var Data, DataSize : Cardinal; CurCrc : LongInt) : LongInt
8360:
        Function Adler32OfStream( Stream : TStream; CurCrc : LongInt) : LongInt
8361:
8362:
        Function Adler320fFile(FileName : AnsiString) : LongInt
        Function Crc16Prim( var Data, DataSize, CurCrc : Cardinal) : Cardinal
8363:
        Function Crc16OfStream( Stream: TStream; CurCrc: Cardinal): Cardinal Function Crc16OfFile( FileName: AnsiString): Cardinal
8364:
8365:
        Function Crc32Prim( var Data, DataSize : Cardinal; CurCrc : LongInt) : LongInt
8366:
        Function Crc32OfStream( Stream : TStream; CurCrc : LongInt) : LongInt
Function Crc32OfFile( FileName : AnsiString) : LongInt
Function InternetSumPrim( var Data, DataSize, CurCrc : Cardinal) : Cardinal
8367:
8368:
8369:
        Function InternetSumOfStream( Stream: TStream; CurCrc: Cardinal): Cardinal Function InternetSumOfFile( FileName: AnsiString): Cardinal
8371:
        Function Kermit16Prim( var Data, DataSize, CurCrc : Cardinal) : Cardinal
8372:
        Function Kermit160fStream( Stream: TStream; CurCrc: Cardinal) : Cardinal Function Kermit160fFile( FileName : AnsiString) : Cardinal
8373:
8374:
8375: end;
8376:
      procedure SIRegister_ComObj(cl: TPSPascalCompiler);
8377:
8378: begin
8379: function CreateOleObject(const ClassName: String): IDispatch;
```

```
8380:
       function GetActiveOleObject(const ClassName: String): IDispatch;
       function ProgIDToClassID(const ProgID: string): TGUID;
8381:
8382:
       function ClassIDToProgID(const ClassID: TGUID): string
8383:
       function CreateClassID: string;
8384:
       function CreateGUIDString: string;
       function CreateGUIDID: string;
8385:
       procedure OleError(ErrorCode: longint)
8386:
       procedure OleCheck(Result: HResult);
8387:
8388:
      end;
8389:
       Function xCreateOleObject( const ClassName : string) : Variant //or IDispatch
8390:
8391:
       Function xGetActiveOleObject( const ClassName : string) : Variant
8392:
        //Function DllGetClassObject( const CLSID : TCLSID; const IID : TIID; var Obj) : HResult
8393:
       Function DllCanUnloadNow : HResult
       Function DllRegisterServer : HResult
8394:
8395:
       Function DllUnregisterServer : HResult
8396:
       Function VarFromInterface( Unknown : IUnknown) : Variant
       Function VarToInterface( const V : Variant) : IDispatch
Function VarToAutoObject( const V : Variant) : TAutoObject
8397 .
8398:
8399:
       //Procedure
      DispInvoke(Dispatch:IDispatch;CallDesc:PCallDesc;DispIDs:PDispIDList;Params:Pointer;Res:PVariant);
8400:
       //Procedure DispInvokeError( Status : HResult; const ExcepInfo : TExcepInfo)
8401:
       Procedure OleError( ErrorCode : HResult)
       Procedure OleCheck( Result : HResult)
8402:
       Function StringToClassID( const S: string) : TCLSID
Function ClassIDToString( const ClassID : TCLSID) : string
8403:
8404:
8405:
       Function xProgIDToClassID( const ProgID : string) : TCLSID
       Function xClassIDToProgID( const ClassID : TCLSID) : string
8406:
       Function xWideCompareStr( const S1, S2 : WideString) : Integer
Function xWideSameStr( const S1, S2 : WideString) : Boolean
8407:
8409:
       Function xGUIDToString( const ClassID : TGUID) : string
       Function xStringToGUID( const S : string) : TGUID
Function xGetModuleName( Module : HMODULE) : string
8410:
8411:
       Function xAcquireExceptionObject : TObject
8412:
       Function xIfThen( AValue : Boolean; const ATrue : Integer; const AFalse : Integer) : Integer
       Function xUtf8Encode( const WS : WideString) : UTF8String Function xUtf8Decode( const S : UTF8String) : WideString
8414:
8415:
       Function xExcludeTrailingPathDelimiter( const S : string) : string
8416:
       Function xIncludeTrailingPathDelimiter( const S : string) : string
8417:
       Function XRTLHandleCOMException : HResult
8418:
8419:
       Procedure XRTLCheckArgument( Flag : Boolean)
8420:
       //Procedure XRTLCheckOutArgument( out Arg)
       Procedure XRTLInterfaceConnect(const Source: IUnknown; const IID:TIID; const Sink: IUnknown; var
8421:
      Connection:Longint)
8422:
      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} \} \\
8423:
      RegisterCookie:Int):HResult
8424: Function XRTLUnRegisterActiveObject( var RegisterCookie : Integer) : HResult
8425:
       //Function XRTLGetActiveObject( ClassID : TCLSID; RIID : TIID; out Obj) : HResult
8426:
       Procedure XRTLEnumActiveObjects( Strings : TStrings)
8427: function XRTLDefaultCategoryManager: IUnknown;
8428: function
                  XRTLIsCategoryEmpty(CatID: TGUID: const CategoryManager: IUnknown = nil): Boolean;
      // ICatRegister helper functions
8430: function XRTLCreateComponentCategory(CatID: TGUID; CatDescription: WideString;
                                                   LocaleID: TLCID = LOCALE_USER_DEFAULT;
8431:
                                                   const CategoryManager: IUnknown = nil): HResult;
8432:
8433: function XRTLRemoveComponentCategory(CatID: TGUID; CatDescription: WideString;
                                                   LocaleID: TLCID = LOCALE_USER_DEFAULT;
8434:
8435: const CategoryManager: IUnknown = nil): HResult; 8436: function XRTLRegisterCLSIDInCategory(ClassID: TGUID; CatID: TGUID; TGUID;
                                                   const CategoryManager: IUnknown = nil): HResult;
8437:
                 XRTLUnRegisterCLSIDInCategory(ClassID: TGUID; CatID: TGUID;
8438: function
8439:
                                                     const CategoryManager: IUnknown = nil): HResult;
8440: // ICatInformation helper functions
                  XRTLGetCategoryDescription(CatID: TGUID; var CatDescription: WideString;
8441: function
                                                  LocaleID: TLCID = LOCALE_USER_DEFAULT;
8442:
8443:
                                                  const CategoryManager: IUnknown = nil): HResult;
8444: function
                 XRTLGetCategoryList(Strings: TStrings; LocaleID: TLCID = LOCALE_USER_DEFAULT;
                                          const CategoryManager: IUnknown = nil): HResult;
8445:
8446: function XRTLGetCategoryCLSIDList(CatID: TGUID; Strings: TStrings; 8447: const CategoryManager: IUnknown = nil): HResult;
8448: function XRTLGetCategoryProgIDList(CatID: TGUID; Strings: TStrings;
8449:
                                                const CategoryManager: IUnknown = nil): HResult;
8450: function XRTLFetch(var AInput: WideString; const ADelim: WideString = '
8451:
                           const ADelete: Boolean = True): WideString;
8452: function XRTLRPos(const ASub, AIn: WideString; AStart: Integer = -1): Integer; 8453: Function XRTLGetVariantAsString( const Value : Variant) : string 8454: Function XRTLDateTimeToTimeZoneTime( DT : TDateTime; TimeZone : TXRTLTimeZone) : TDateTime
8455: Function XRTLGetTimeZones : TXRTLTimeZones
8456: Function XFileTimeToDateTime( FileTime : TFileTime) : TDateTime
8457: Function DateTimeToFileTime( DateTime : TDateTime) : TFileTime
8458: Function GMTNow : TDateTime
8459: Function GMTToLocalTime( GMT : TDateTime) : TDateTime
8460: Function LocalTimeToGMT( LocalTime : TDateTime) : TDateTime
8461: Procedure XRTLNotImplemented
8462: Procedure XRTLRaiseError( E : Exception)
8463: Procedure XRTLInvalidOperation( ClassName:string; OperationName:string; Description: string)
8464:
8465:
```

```
8466: procedure SIRegister xrtl util Value(CL: TPSPascalCompiler);
8467: begin
          SIRegister_IXRTLValue(CL);
8469:
         SIRegister_TXRTLValue(CL);
          //AddTypeS('PXRTLValueArray', '^TXRTLValueArray // will not work AddTypeS('TXRTLValueArray', 'array of IXRTLValue
8470:
8471: AddTypeS('TXRTLValueArray', 'array of IXRTLValue 8472: Function XRTLValue( const AValue: Cardinal): IXRTLValue;
8473: Function XRTLSetValue( const IValue : IXRTLValue; const AValue : Cardinal) : Cardinal;
8474: Function XRTLGetAsCardinal( const IValue : IXRTLValue) : Cardinal
8475: Function XRTLGetAsCardinalDef( const IValue : IXRTLValue; const DefValue : Cardinal) : Cardinal 8476: Function XRTLValue( const AValue : Integer) : IXRTLValue;
8477: Function XRTLSetValue1 (const IValue : IXRTLValue; const AValue : Integer) : Integer;
8478: Function XRTLGetAsInteger( const IValue : IXRTLValue) : Integer
8479: Function XRTLGetAsIntegerDef( const IValue : IXRTLValue; const DefValue : Integer) : Integer 8480: Function XRTLValue2( const AValue : Int64) : IXRTLValue;
8481: Function XRTLSetValue2( const IValue : IXRTLValue; const AValue : Int64) : Int64;
8482: Function XRTLGetAsInt64( const IValue : IXRTLValue) : Int64
8483: Function XRTLGetAsInt64Def( const IValue : IXRTLValue; const DefValue : Int64) : Int64
8484: Function XRTLValue3( const AValue : Single) : IXRTLValue;
8485: Function XRTLSetValue3( const IValue : IXRTLValue; const AValue : Single) : Single;
8486: Function XRTLGetAsSingle( const IValue : IXRTLValue) : Single
8487: Function XRTLGetAsSingleDef( const IValue : IXRTLValue; const DefValue : Single) : Single
8488: Function XRTLValue4( const AValue : Double) : IXRTLValue;
8489: Function XRTLSetValue4( const IValue : IXRTLValue; const AValue : Double) : Double; 8490: Function XRTLGetAsDouble( const IValue : IXRTLValue) : Double
8491: Function XRTLGetAsDoubleDef( const IValue : IXRTLValue; const DefValue : Double) : Double
8492: Function XRTLValue5( const AValue : Extended) : IXRTLValue;
8493: Function XRTLSetValue5( const IValue : IXRTLValue; const AValue : Extended) : Extended;
8494: Function XRTLGetAsExtended( const IValue : IXRTLValue) : Extended
8495: Function XRTLGetAsExtendedDef( const IValue : IXRTLValue; const DefValue : Extended) : Extended
8496: Function XRTLValue6( const AValue : IInterface) : IXRTLValue;
8497: Function XRTLSetValue6( const IValue : IXRTLValue; const AValue : IInterface) : IInterface;
8498: Function XRTLGetAsInterface( const IValue : IXRTLValue) : IInterface;
8499: //Function XRTLGetAsInterface1( const IValue : IXRTLValue; out Obj) : IInterface;
8500: Function XRTLGetAsInterfaceDef( const IValue : IXRTLValue; const DefValue : IInterface)
8501: Function XRTLValue7( const AValue : WideString) : IXRTLValue;
8502: Function XRTLSetValue? (const IValue : IXRTLValue; const AValue : WideString) : WideString; 8503: Function XRTLGetAsWideString (const IValue : IXRTLValue) : WideString
8504: Function XRTLGetAsWideStringDef( const IValue : IXRTLValue; const DefValue : WideString) : WideString
8505: Function XRTLValue8( const AValue : TObject; const AOwnValue : Boolean) : IXRTLValue;
8506: Function XRTLSetValue8( const IValue : TXRTLValue; const AValue : TObject) : TObject;
8507: Function XRTLGetAsObject( const IValue : IXRTLValue; const ADetachOwnership : Boolean) : TObject;
8508: Function XRTLGetAsobjectDef(const IValue:IXRTLValue; const DefValue:TObject; const
       ADetachOwnership:Boolean):TObject;
8509: //Function XRTLValue9( const AValue : __Pointer) : IXRTLValue;
8510: //Function XRTLSetValue9( const IValue : IXRTLValue; const AValue : __Pointer) : __Pointer;
8511: //Function XRTLGetAsPointer( const IValue : IXRTLValue) : __Pointer
8512: //Function XRTLGetAsPointerDef( const IValue : IXRTLValue; const DefValue : __Pointer
8513: Function XRTLValueV( const AValue : Variant) : IXRTLValue;
8514: Function XRTLSetValueV( const IValue : IXRTLValue; const AValue : Variant) : Variant; 8515: Function XRTLGetAsVariant( const IValue : IXRTLValue) : Variant
8516: Function XRTLGetAsVariantDef( const IValue : IXRTLValue; const DefValue : Variant) : Variant
8517: Function XRTLValue10( const AValue : Currency) : IXRTLValue;
8518: Function XRTLSetValue10( const IValue : IXRTLValue; const AValue : Currency) : Currency;
8519: Function XRTLGetAsCurrency( const IValue : IXRTLValue) : Currency
8520: Function XRTLGetAsCurrencyDef( const IValue : IXRTLValue; const DefValue : Currency) : Currency
8521: Function XRTLValue11( const AValue : Comp) : IXRTLValue;
8522: Function XRTLSetValue1( const IValue: IXRTLValue; const AValue: Comp): Comp;
8523: Function XRTLGetAsComp( const IValue: IXRTLValue): Comp
8524: Function XRTLGetAsCompDef( const IValue: IXRTLValue; const DefValue: Comp): Comp
8525: Function XRTLValue12( const AValue : TClass) : IXRTLValue;
8526: Function XRTLSetValue12( const IValue : IXRTLValue; const AValue : TClass) : TClass; 8527: Function XRTLGetAsClass( const IValue : IXRTLValue) : TClass
8528: Function XRTLGetAsClassDef( const IValue : IXRTLValue; const DefValue : TClass) : TClass 8529: Function XRTLValue13( const AValue : TGUID) : IXRTLValue;
8530: Function XRTLSetValue13( const IValue : IXRTLValue; const AValue : TGUID) : TGUID;
8531: Function XRTLGetAsGUID( const IValue : IXRTLValue) : TGUID
8532: Function XRTLGetAsGUIDDef( const IValue : IXRTLValue; const DefValue : TGUID) : TGUID
8533: Function XRTLValue14( const AValue : Boolean) : IXRTLValue;
8534: Function XRTLSetValue14 (const IValue : IXRTLValue; const AValue : Boolean) : Boolean; 8535: Function XRTLGetAsBoolean(const IValue : IXRTLValue) : Boolean
8536: Function XRTLGetAsBooleanDef( const IValue: IXRTLValue: const DefValue: Boolean) : Boolean
8537: end:
8538:
8540:
        Function Color32( WinColor : TColor) : TColor32;
Function Color321( R, G, B : Byte; A : Byte) : TColor32;
8541:
8542:
        Function Color322( Index : Byte; var Palette : TPalette32) : TColor32;
8543:
        Function Gray32( Intensity : Byte; Alpha : Byte) : TColor32
Function WinColor( Color32 : TColor32) : TColor
8545:
        Function ArrayOfColor32( Colors: array of TColor32): TArrayOfColor32

Procedure Color32ToRGB( Color32: TColor32; var R, G, B: Byte)
8546:
8547:
        Procedure Color32ToRGBA( Color32 : TColor32; var R, G, B, A : Byte)
8548:
        Function Color32Components(R, G, B, A : Boolean) : TColor32Components
Function RedComponent(Color32 : TColor32) : Integer
8550:
        Function GreenComponent( Color32 : TColor32) : Integer
Function BlueComponent( Color32 : TColor32) : Integer
8551:
8552:
        Function AlphaComponent(Color32: TColor32): Integer
```

```
Function Intensity( Color32 : TColor32) : Integer
8554:
         Function SetAlpha( Color32 : TColor32; NewAlpha : Integer) : TColor32
8555:
         Procedure RGBtoHSL( RGB : TColor32; out H, S, L : Single);
8557 .
8558:
         Function HSLtoRGB1( H, S, L : Integer) : TColor32;
         Procedure RGBtoHSL1( RGB : TColor32; out H, S, L : Byte);
Function WinPalette( const P : TPalette32) : HPALETTE
8559:
8560:
         Function FloatPoint( X, Y : Single) : TFloatPoint;
8561:
         Function FloatPoint1 (const P : TPoint) : TFloatPoint;
Function FloatPoint2 (const FXP : TFixedPoint) : TFloatPoint;
8562:
8563:
         Function FixedPoint( X, Y : Integer) : TFixedPoint;
Function FixedPoint1( X, Y : Single) : TFixedPoint;
8564:
         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;
8566:
8567:
8568:
8569:
         Function MakeRect1( const FR : TFloatRect; Rounding : TRectRounding) : TRect;
8570:
         Function MakeRect2( const FXR : TRect; Rounding : TRectRounding) : TRect;
Function GFixedRect( const L, T, R, B : TFixed) : TRect;
Function FixedRect1( const ARect : TRect) : TRect;
8571 •
8572:
8573:
         Function FixedRect2( const FR : TFloatRect) : TRect;
8574:
8575:
         Function GFloatRect( const L, T, R, B : TFloat) : TFloatRect;
         Function FloatRect1( const ARect : Trect) : TFloatRect;
Function FloatRect2( const FXR : Trect) : TFloatRect;
8576:
8577:
         Function GIntersectRect( out Dst : TRect; const R1, R2 : TRect) : Boolean;
8579:
         Function IntersectRect1( out Dst : TFloatRect; const FR1, FR2 : TFloatRect) : Boolean;
8580:
         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;
8581:
8582:
         Function EqualRect1( const R1, R2 : TFloatRect) : Boolean;
8583:
8584:
         Procedure GInflateRect( var R : TRect; Dx, Dy : Integer);
         Procedure InflateRect1( var FR : TFloatRect; Dx, Dy : TFloat);
8585:
         Procedure GOffsetRect( var R : TRect; Dx, Dy : Integer);
Procedure OffsetRect1( var FR : TFloatRect; Dx, Dy : TFloat);
8586:
8587:
         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;
8589:
8590:
8591:
         Function PtInRect2( const R : TRect; const P : TFloatPoint) : Boolean;
Function PtInRect3( const R : TFloatRect; const P : TFloatPoint) : Boolean;
8592:
8593:
8594:
         Function EqualRectSize( const R1, R2 : TRect) : Boolean;
         Function EqualRectSize1( const R1, R2 : TFloatRect) : Boolean;
Function MessageBeep( uType : UINT) : BOOL
8595:
8596:
         Function ShowCursor( bShow : BOOL) : Integer
8597:
         Function SetCursorPos( X, Y : Integer) : BOOL
Function SetCursor( hCursor : HICON) : HCURSOR
Function GetCursorPos( var lpPoint : TPoint) : BOOL
//Function ClipCursor( lpRect : PRect) : BOOL
8598:
8599:
8600:
         Function GetClipCursor( var lpRect : TRect) : BOOL
8602:
         Function GetCursor: HCURSOR

Function CreateCaret( hWnd: HWND; hBitmap: HBITMAP; nWidth, nHeight: Integer): BOOL
8603:
8604:
         Function GetCaretBlinkTime : UINT
8605:
         Function SetCaretBlinkTime( uMSeconds : UINT) : BOOL
8606:
8607:
         Function DestroyCaret : BOOL
         Function HideCaret( hWnd : HWND) : BOOL
Function ShowCaret( hWnd : HWND) : BOOL
8608:
8609:
8610:
         Function SetCaretPos( X, Y : Integer) : BOOL
         Function GetCaretPos( var lpPoint : TPoint) : BOOL
8611:
         Function ClientToScreen( hWnd : HWND; var lpPoint : TPoint) : BOOL
Function ScreenToClient( hWnd : HWND; var lpPoint : TPoint) : BOOL
8612:
8613:
         Function MapWindowPoints(hWndFrom,hWndTo:HWND; var lpPoints, cPoints: UINT) : Integer
8614:
8615:
         Function WindowFromPoint( Point : TPoint) : HWND
8616:
         Function ChildWindowFromPoint( hWndParent : HWND; Point : TPoint) : HWND
8617:
8618:
8619: procedure SIRegister_GR32_Math(CL: TPSPascalCompiler);
8620:
        begin
8621:
        Function FixedFloor( A : TFixed) : Integer
8622:
         \textbf{Function} \  \, \texttt{FixedCeil(A:TFixed):Integer}
         Function FixedMul( A, B : TFixed) : TFixed
8623:
         Function FixedDiv( A, B : TFixed) : TFixed
8624:
8625:
         Function OneOver( Value : TFixed) : TFixed
         Function FixedRound( A : TFixed) : Integer
8626:
         Function FixedSgr( Value : TFixed) : TFixed
8627:
8628:
         Function FixedSqrtLP( Value : TFixed) : TFixed
         Function FixedSqrtHP( Value : TFixed) : TFixed
8629:
         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);
8630:
8631:
8632:
         Function GRHypot( const X, Y : TFloat) : TFloat;
Function Hypotl( const X, Y : Integer) : Integer;
8634:
         Function FastSqrt( const Value : TFloat) : TFloat
8635:
         Function FastSqrtBab1( const Value : TFloat) : TFloat
Function FastSqrtBab2( const Value : TFloat) : TFloat
8636:
8637:
         Function FastInvSqrt( const Value : Single) : Single;
8638:
         Function MulDiv( Multiplicand, Multiplier, Divisor : Integer) : Integer
Function GRIsPowerOf2( Value : Integer) : Boolean
Function PrevPowerOf2( Value : Integer) : Integer
8639:
8640:
8642: Function NextPowerOf2( Value : Integer) : Integer
```

```
8643:
           Function Average( A, B : Integer) : Integer
Function GRSign( Value : Integer) : Integer
8644:
           Function FloatMod(x, y : Double) : Double
8646:
8647:
         procedure SIRegister GR32 LowLevel(CL: TPSPascalCompiler);
8648:
8649:
         begin
           Function Clamp( const Value : Integer) : Integer;
8650:
8651:
           Procedure GRFillWord( var X, Count : Cardinal; Value : Longword)
8652:
           Function StackAlloc( Size : Integer) : Pointer
           Procedure StackFree( P : Pointer)
8653:
           Procedure Swap( var A, B : Pointer);
8655:
           Procedure Swap1( var A, B : Integer);
           Procedure Swap2( var A, B : TFixed);
8656:
8657:
           Procedure Swap3( var A, B : TColor32);
8658:
           Procedure TestSwap( var A, B : Integer);
           Procedure TestSwap1( var A, B : TFixed);
8659:
           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;
8660:
8661:
8662:
            Function Constrain1( const Value, Lo, Hi : Single) : Single;
           Function SwapConstrain( const Value:Integer; Constrain1,Constrain2:Integer) : Integer
8664:
           Function GRMin( const A, B, C : Integer) : Integer;
Function GRMax( const A, B, C : Integer) : Integer;
8665:
8666:
           Function Clamp( Value, Max : Integer) : Integer;
8667:
           Function Clamp1( Value, Min, Max : Integer) : Integer;
8668:
8669:
           Function Wrap( Value, Max : Integer) : Integer;
8670:
           Function Wrap1( Value, Min, Max : Integer) : Integer;
8671:
           Function Wrap3( Value, Max : Single) : Single;
           Function WrapPow2( Value, Max : Integer) : Integer;
8672:
8673:
           Function WrapPow21( Value, Min, Max : Integer) : Integer;
           Function Mirror( Value, Max : Integer) : Integer;
Function Mirror1( Value, Min, Max : Integer) : Integer;
8674:
8675:
           Function MirrorPow2( Value, Max : Integer) : Integer;
Function MirrorPow21( Value, Min, Max : Integer) : Integer;
8676:
8677:
8678:
           Function GetOptimalWrap( Max : Integer) : TWrapProc;
           Function GetOptimalWrap1( Min, Max : Integer) : TWrapProcEx;
Function GetOptimalMirror( Max : Integer) : TWrapProc;
8679:
8680:
8681:
           Function GetOptimalMirror1( Min, Max : Integer) : TWrapProcEx;
           Function GetWrapProc( WrapMode : TWrapMode) : TWrapProc;
Function GetWrapProc1( WrapMode : TWrapMode; Max : Integer) : TWrapProc;
8682:
8683:
           Function GetWrapProcEx( WrapMode : TWrapMode) : TWrapProcEx;
8684:
           Function GetWrapProcEx1( WrapMode : TWrapMode; Min, Max : Integer):TWrapProcEx;
8685:
           Function Div255( Value : Cardinal) : Cardinal
8686:
8687:
           Function SAR_4( Value : Integer) : Integer
8688:
           Function SAR 8( Value : Integer) : Integer
           Function SAR_9( Value : Integer) :
8689:
                                                                       Integer
           Function SAR_11( Value : Integer)
                                                                      : Integer
8691:
           Function SAR_12( Value : Integer)
8692:
           Function SAR 13( Value : Integer) : Integer
8693:
           Function SAR 14( Value : Integer) : Integer
8694:
           Function SAR_15( Value : Integer) : Integer
           Function SAR_16( Value : Integer) : Integer
8695:
8696:
           Function ColorSwap( WinColor : TColor) : TColor32
8697: end;
8698:
8699:
         procedure SIRegister_GR32_Filters(CL: TPSPascalCompiler);
8700: begin
         AddTypeS('TLogicalOperator', '( loXOR, loAND, loOR )

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

Procedure CopyComponents1(Dst:TCustomBmap32;DstX,
8701:
8702:
8703:
         DstY:Int;Src:TCustomBmap32;SrcRect:TRect;Components:TColor32Comp;
8704 .
           Procedure AlphaToGrayscale( Dst, Src : TCustomBitmap32)
8705:
           Procedure ColorToGrayscale( Dst, Src : TCustomBitmap32; PreserveAlpha : Boolean)
8706:
           Procedure IntensityToAlpha( Dst, Src : TCustomBitmap32)
           Procedure Invert( Dst, Src : TCustomBitmap32; Components : TColor32Components)
8707:
8708:
           Procedure InvertRGB( Dst, Src : TCustomBitmap32)
           Procedure ApplyLUT( Dst, Src : TCustomBitmap32; const LUT : TLUT8; PreserveAlpha : Boolean)
Procedure ChromaKey( ABitmap : TCustomBitmap32; TrColor : TColor32)
8709:
8710:
           Procedure Chromatey( Abrumap : Icustomapia, Icolor : Icolors2;
Function CreateBitmask( Components : TColor32Components) : TColor32
Procedure ApplyBitmask(Dst: TCustomBitmap32; DstX,DstY:Integer; Src:TCustomBitmap32; SrcRect : TRect;
8711:
8712:
          Bitmask : TColor32; LogicalOperator : TLogicalOperator);
8713:
          Procedure
          {\tt ApplyBitmask!} ({\tt ABitmap:TCustomBitmap32:ARect:TRect:Bitmask:TColor32:LogicalOperator:TLogicalOperator}) \ if the {\tt ABitmap:TCustomBitmap32:ARect:TRect:Bitmask:TColor32:LogicalOperator:TLogicalOperator}) \ if the {\tt ABitmap:TCustomBitmap32:ARect:TRect:Bitmask:TColor32:LogicalOperator:TLogicalOperator}) \ if the {\tt ABitmap:TCustomBitmap32:ARect:TRect:Bitmask:TColor32:LogicalOperator}) \ if the {\tt ABitmap:TCustomBitmap32:ARect:TRect:TRect:Bitmask:TColor32:LogicalOperator}) \ if the {\tt ABitmap:TCustomBitmap32:ARect:TRect:TRect:TRect:TRect:TRect:TRect:TRect:TRect:TRect:TRect:TRect:TRect:TRect:TRect:TRect:TRect:TRect:TRect:TRect:TRect:TRect:TRect:TRect:TRect:TRect:TRect:TRect:TRect:TRect:TRect:TRect:TRect:TRect:TRect:TRect:TRect:TRect:TRect:TRect:TRect:TRect:TRect:TRect:TRect:TRect:TRect:TRect:TRect:TRect:TRect:TRect:TRect:TRect:TRect:TRect:TRect:TRect:TRect:TRect:TRect:TRect:TRect:TRect:TRect:TRect:Trect:TRect:TRect:Trect:Trect:Trect:Trect:Trect:Trect:Trect:Trect:Trect:Trect:Trect:Trect:Trect:Trect:Trect:Trect:Trect:Trect:Trect:Trect:Trect:Trect:Trect:Trect:Trect:Trect:Trect:Trect:Trect:Trect:Trect:Trect:Trect:Trect:Trect:Trect:Trect:Trect:Trect:Trect:Trect:Trect:Trect:Trect:Trect:Trect:Trect:Trect:Trect:Trect:Trect:Trect:Trect:Trect:Trect:Trect:Trect:Trect:Trect:Trect:Trect:Trect:Trect:Trect:Trect:Trect:Trect:Trect:Trect:Trect:Trect:Trect:Trect:Trect:Trect:Trect:Trect:Trect:Trect:Trect:Trect:Trect:Trect:Trect:Trect:Trect:Trect:Trect:Trect:Trect:Trect:Trect:Trect:Trect:Trect:Trect:Trect:Trect:Trect:Trect:Trect:Trect:Trect:Trect:Trect:Trect:Trect:Trect:Trect:Trect:Trect:Trect:Trect:Trect:Trect:Trect:Trect:Trect:Trect:Trect:Trect:Trect:Trect:Trect:Trect:Trect:Trect:Trect:Trect:Trect:Trect:Trect:Trect:Trect:Trect:Trect:Trect:Trect:Trect:Trect:Trect:Trect:Trect:Trect:Trect:Trect:Trect:Trect:Trect:Trect:Trect:Trect:Trect:Trect:Trect:Trect:Trect:Trect:Trect:Trect:Trect:Trect:Trect:Trect:Trect:Trect:Trect:Trect:Trect:Trect:Trect:Trect:Trect:Trect:Trect:Trect:Trect:Trect:Trect:Trect:Trect:Trect:Trect:Trect:Trect:Tr
8714:
           Procedure CheckParams( Dst, Src : TCustomBitmap32; ResizeDst : Boolean)
8715: end;
8716:
8717:
8718: procedure SIRegister_JclNTFS(CL: TPSPascalCompiler);
8720:
             AddClassN(FindClass('TOBJECT'),'EJclNtfsError
           AddTypeS('TFileCompressionState', '(fcNoCompression, fcDefaultCompression, fcLZNT1Compression)
Function NtfsGetCompression(const FileName: string; var State: Short): Boolean;
Function NtfsGetCompression1(const FileName: string): TFileCompressionState;
8721:
8722:
8723:
           Function NtfsSetCompression( const FileName : string; const State : Short) : Boolean
8724:
8725:
           Procedure NtfsSetFileCompression( const FileName : string; const State : TFileCompressionState)
           Procedure NtfsSetDirectoryTreeCompression(const Directory: string; const State: TFileCompressionState)
Procedure NtfsSetDefaultFileCompression(const Directory: string; const State:TFileCompressionState)
8726:
           Procedure NtfsSetPathCompression(const Path:string;const State:TFileCompressionState;Recursive:Boolean;
```

```
8729:
          //AddTypeS('TNtfsAllocRanges', 'record Entries : Integer; Data : PFileAlloca' //+'tedRangeBuffer; MoreData : Boolean; end
8730:
         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
8732:
8733:
8734:
         //Function NtfsOueryAllocRanges(const FileName:string;Offset,Count:Int64;var
        Ranges:TNtfsAllocRanges):Boolean;
8735:
         //Function NtfsGetAllocRangeEntry( const Ranges : TNtfsAllocRanges
        Index:Integer):TFileAllocatedRangeBuffer
       Function NtfsSparseStreamsSupported( const Volume : string) : Boolean
Function NtfsGetSparse( const FileName : string) : Boolean
Function NtfsDeleteReparsePoint( const FileName : string; ReparseTag : DWORD) : Boolean
8736:
8737:
8739:
         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
8740:
8741:
         Function NtfsReparsePointsSupported( const Volume : string) : Boolean
         Function NtfsFileHasReparsePoint( const Path : string) : Boolean
8743:
2744 .
         \textbf{Function} \  \, \texttt{NtfsIsFolderMountPoint} ( \  \, \textbf{const} \  \, \texttt{Path} \  \, : \  \, \textbf{string}) \  \, : \  \, \texttt{Boolean}
         Function NtfsMountDeviceAsDrive( const Device : string; Drive : Char) : Boolean
8745:
         Function NtfsMountVolume ( const Volume : Char; const MountPoint : string) : Boolean
8746:
         AddTypeS('TOpLock', '( olExclusive, olReadOnly, olBatch, olFilter )

Function NtfsOpLockAckClosePending( Handle: THandle; Overlapped: TOverlapped): Boolean
8747:
8748:
8749:
         \textbf{Function} \  \, \texttt{NtfsOpLockBreakAckNo2( Handle : THandle; Overlapped : Toverlapped) : Boolean} \\
         Function NtfsOpLockBreakAcknowledge( Handle : THandle; Overlapped : TOverlapped) : Boolean
8750:
         Function NtfsOpLockBreakNotify( Handle: THandle; Overlapped: TOverlapped): Boolean
8751:
8752:
         Function NtfsRequestOpLock( Handle : THandle; Kind : TOpLock; Overlapped : TOverlapped) : Boolean
8753:
         \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
8754:
8755:
          AddTypeS('TStreamId', '( siInvalid, siStandard, siExtendedAttribute, siSec'
8756:
            +'urity, siAlternate, siHardLink, siProperty, siObjectIdentifier, siReparsePoints, siSparseFile )
8757:
          AddTypeS('TStreamIds', 'set of TStreamId
8758:
          AddTypeS('TInternalFindStreamData', 'record FileHandle: THandle; Context '
8759:
          +': __Pointer; StreamIds: TStreamIds; end
AddTypeS('TFindStreamData', 'record internal: TInternalFindStreamData; At'
8760:
8761:
8762:
           +'tributes : DWORD; StreamID : TStreamId; Name : WideString; Size : Int64; end
8763:
         Function NtfsFindFirstStream(const FileName:string;StreamIds:TStreamIds;var Data:TFindStreamData):Boolean;
         Function NtfsFindNextStream( var Data : TFindStreamData) : Boolean
Function NtfsFindStreamClose( var Data : TFindStreamData) : Boolean
8764:
8765:
8766:
         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
8767:
8768:
8769:
        List:TStrings):Bool;
         \textbf{Function} \  \, \texttt{NtfsDeleteHardLinks} ( \  \, \textbf{const} \  \, \texttt{FileName} \  \, : \  \, \textbf{string}) \  \, : \  \, \texttt{Boolean}
         Function JclAppInstances: TJclAppInstances;
Function JclAppInstances1( const UniqueAppIdGuidStr : string) : TJclAppInstances;
8771:
8772:
         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)
8774:
8775:
8776:
8777:
8778:
8779:
8780:
       procedure SIRegister_JclGraphics(CL: TPSPascalCompiler);
8781:
       begin
          FindClass('TOBJECT'),'EJclGraphicsError
8782:
          TDynDynIntegerArrayArray', 'array of TDynIntegerArray
TDynPointArray', 'array of TPoint
8783:
8784:
          TDynDynPointArrayArray', 'array of TDynDointArray
TPointF', 'record X : Single; Y : Single; end
8785:
8786:
          TDynPointArrayF', 'array of TPointF
8787:
          TDrawMode2', '( dmOpaque, dmBlend )
8788:
          TStretchFilter2', '( sfNearest, sfLinear, sfSpline )
TConversionKind', '( ckRed, ckGreen, ckBlue, ckAlpha, ckUniformRGB, ckWeightedRGB )
TResamplingFilter', '( rfBox, rfTriangle, rfHermite, rfBell, rfSpline, rfLanczos3, rfMitchell )
8789:
8790:
8791:
8792:
          TMatrix3d', 'record array[0..2,0..2] of extended end
8793:
          TDynDynPointArrayArrayF', 'array of TDynPointArrayF
          TScanLine', 'array of Integer
TScanLines', 'array of TScanLi
8794:
                            'array of TScanLine
8795:
8796:
          TColorChannel', '( ccRed, ccGreen, ccBlue, ccAlpha )
8797:
          TGradientDirection', '( gdVertical, gdHorizontal )
          TPolyFillMode', '( fmAlternate, fmWinding )
TJclRegionCombineOperator', '( coAnd, coDiff, coOr, coXor )
8798:
8799:
          TJclRegionKind', '( rkNull, rkSimple, rkComplex, rkError )
8800:
8801:
8802:
          SIRegister_TJclDesktopCanvas(CL);
          FindClass('TOBJECT'),'TJclRegion
SIRegister_TJclRegionInfo(CL);
8803:
8804:
          SIRegister_TJclRegion(CL);
8805:
8806:
          SIRegister_TJclThreadPersistent(CL);
8807:
          SIRegister_TJclCustomMap(CL);
          SIRegister_TJclBitmap32(CL);
8808:
8809:
          SIRegister_TJclByteMap(CL);
8810:
          SIRegister_TJclTransformation(CL);
8811:
          SIRegister TJclLinearTransformation(CL);
8812:
         Procedure Stretch (NewWidth.
       NewHeight:Card;Filter:TResamplingFilter;Radius:Single;Source:TGraphic;Target:TBitmap);
8813: 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
8814:
8815:
        Procedure BitmapToJPeg( const FileName : string)
8817:
        Procedure JPegToBitmap( const FileName : string)
        Function ExtractIconCount( const FileName : string) : Integer
Function BitmapToIconJ( Bitmap : HBITMAP; cx, cy : Integer) : HICON
Function IconToBitmapJ( Icon : HICON) : HBITMAP
8818:
8819:
8820:
8821:
       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 :
8824:
8825:
       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);
8827 .
8828:
        Procedure PolyLineTS( Bitmap : TJclBitmap32; const Points : TDynPointArray; Color : TColor32)
8829:
        Procedure PolyLineAS( Bitmap : TJclBitmap32; const Points : TDynPointArray; Color : TColor32
        Procedure PolyLineFS( Bitmap : TJclBitmap32; const Points : TDynPointArrayF; Color : TColor32)
8831:
        Procedure PolygonTS( Bitmap : TJclBitmap32; const Points : TDynPointArray; Color : TColor32)
Procedure PolygonAS( Bitmap : TJclBitmap32; const Points : TDynPointArray; Color : TColor32)
8832:
8833:
        Procedure PolygonFS( Bitmap : TJclBitmap32; const Points : TDynPointArrayF; Color : TColor32)
8834:
8835:
        Procedure PolyPolygonTS(Bitmap:TJclBitmap32;const Points:TDynDynPointArrayArray;Color:TColor32);
8836:
        Procedure PolyPolygonAS(Bitmap:TJclBitmap32;const Points:TDynDynPointArrayArray;Color:TColor32);
8837:
        Procedure PolyPolygonFS(Bitmap:TJclBitmap32;const Points:TDynDynPointArrayArrayF;Color:TColor32);
        Procedure AlphaToGrayscale(Dst, Src : TJclBitmap32)
Procedure IntensityToAlpha(Dst, Src : TJclBitmap32)
8838:
8839:
8840:
        Procedure Invert( Dst, Src : TJclBitmap32)
        Procedure InvertRGB( Dst, Src : TJclBitmap32)
8841:
        Procedure ColorToGrayscale( Dst, Src : TJclBitmap32)
8842:
        Procedure ApplyLUT( Dst, Src : TJclBitmap32; const LUT : TLUT8)
8843:
        Procedure SetGamma ( Gamma : Single)
8844:
8845:
       end;
8846:
8847:
8848: procedure SIRegister_JclSynch(CL: TPSPascalCompiler);
8849:
8850:
        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;
8851:
                                                                                                     ___Pointer) : Pointer;
8852:
        Function LockedDec( var Target : Integer) : Integer
8854:
        \textbf{Function} \  \, \texttt{LockedExchange( var Target : Integer; Value : Integer) : Integer}
        Function LockedExchangeAdd( var Target : Integer; Value : Integer) : Integer
Function LockedExchangeDec( var Target : Integer) : Integer
8855:
8856:
        Function LockedExchangeInc( var Target : Integer) : Integer
8858:
        Function LockedExchangeSub( var Target : Integer; Value : Integer) : Integer
8859:
        Function LockedInc( var Target : Integer) : Integer
Function LockedSub( var Target : Integer; Value : Integer) : Integer
8860:
          TJclWaitResult', '( wrAbandoned, wrError, wrIoCompletion, wrSignaled, wrTimeout )
8861:
          SIRegister_TJclDispatcherObject(CL);
8862:
        Function WaitForMultipleObjects(const Objects:array of
8863:
       TJclDispatcherObject; WaitAll: Bool; TimeOut: Cardinal): Cardinal;
       Function WaitAlertableForMultipleObjects(const Objects : array of TJclDispatcherObject; WaitAll:Bool;
8864:
       TimeOut : Cardinal):Cardinal
8865:
          SIRegister_TJclCriticalSection(CL);
8866:
          SIRegister_TJclCriticalSectionEx(CL);
          SIRegister_TJclEvent(CL);
8867:
8868:
          SIRegister_TJclWaitableTimer(CL);
8869:
          SIRegister_TJclSemaphore(CL);
8870:
          SIRegister_TJclMutex(CL);
          TOptexSharedInfo', ''TOptexSharedInfo // will not work
TOptexSharedInfo', 'record SpinCount:Int; LockCount: Int; ThreadId:Longword; RecursionCount:Int; end
8871:
8872:
8873:
          SIRegister_TJclOptex(CL);
          TMrewPreferred', '( mpReaders, mpWriters, mpEqual )
TMrewThreadInfo', 'record ThreadId : Longword; RecursionCount: Integer; Reader : Boolean; end
8874:
8875:
          TMrewThreadInfoArray', 'array of TMrewThreadInfo
8876:
          SIRegister_TJclMultiReadExclusiveWrite(CL);
8877:
         TMetSectSharedInfo', 'TMetSectSharedInfo // will not work
TMetSectSharedInfo', 'record Initialized : LongBool; SpinLock : '
8878:
8879:
          +'Longint; ThreadsWaiting: Longint; AvailableCount: Longint; MaximumCount: Longint; end PMeteredSection', '^TMeteredSection // will not work
8880:
8881:
                                'record Event : THandle; FileMap : THandle; SharedInfo : PMetSectSharedInfo; end
8882:
          TMeteredSection',
          SIRegister_TJclMeteredSection(CL);
8883:
          TEventInfo', 'record EventType : Longint; Signaled : LongBool; end
TMutexInfo', 'record SignalState : Longint; Owned : Boolean; Abandoned : Boolean; end
8884:
8885:
          TSemaphoreCounts', 'record CurrentCount: Longint; MaximumCount: Longint; end
8886:
        TTimerInfo', 'record Remaining: TLargeInteque; Signaled: LongBool; end

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

```
8897:
         FindClass('TOBJECT'), 'EJclWaitableTimerError
         FindClass('TOBJECT'), 'EJclSemaphoreError
FindClass('TOBJECT'), 'EJclMutexError
8898:
8900:
         FindClass('TOBJECT'),'EJclMeteredSectionError
8901: end;
8902:
8903:
       8904:
8905: Procedure SetCurrentPrinterAsDefault
8906: Function CurrentPrinterName : string
8907: Function mCurrentPrinterPaperSize : string
8908: Procedure UseDefaultPrinter
8909:
8910: procedure SIRegisterTSTREAM(Cl: TPSPascalCompiler);
8911: begin
8912:
         with FindClass('TOBJECT'), 'TStream') do begin
8913:
            IsAbstract := True;
9914 .
           //RegisterMethod('Function Read( var Buffer, Count : Longint) : Longint
          /// RegisterMethod('Function Write( const Buffer, Count : Longint) : Longint function Read(Buffer:String;Count:LongInt):LongInt
8915:
8916:
            function Write(Buffer:String;Count:LongInt):LongInt
8917:
8918:
            function ReadString(Buffer:String;Count:LongInt):LongInt
                                                                                     //FileStream
8919:
            \textbf{function} \ \texttt{WriteString}(\texttt{Buffer:} \textbf{String}; \texttt{Count:} \texttt{LongInt}) : \texttt{LongInt}
8920:
            function ReadInt(Buffer:integer;Count:LongInt):LongInt
            function WriteInt(Buffer:integer;Count:LongInt):LongInt
8921:
8922:
            procedure ReadAB(Buffer: TByteArray;Count:LongInt)
8923:
            procedure WriteAB(Buffer: TByteArray;Count:LongInt)
procedure ReadABD(Buffer: TByteDynArray;Count:LongInt)
8924:
8925:
            procedure WriteABD(Buffer: TByteDynArray;Count:LongInt)
            procedure ReadAC(Buffer: TCharArray;Count:LongInt)
8926:
            procedure WriteAC(Buffer: TCharArray;Count:LongInt)
procedure ReadACD(Buffer: TCharDynArray;Count:LongInt)
8927:
8928:
            procedure WriteACD(Buffer: TCharDynArray;Count:LongInt)
8929:
8930:
8931:
            function Seek(Offset:LongInt;Origin:Word):LongInt
8932:
            procedure ReadBuffer(Buffer:String;Count:LongInt)
8933:
            procedure WriteBuffer(Buffer:String;Count:LongInt)
8934:
            procedure ReadBufferInt(Buffer:Integer;Count:LongInt)');
8935:
            procedure WriteBufferInt(Buffer:Integer;Count:LongInt)');
8936:
            procedure ReadBufferFloat(Buffer:Double;Count:LongInt)');
8937:
            Procedure WriteBufferFloat(Buffer:Double;Count:LongInt)');
8938:
8939:
            procedure ReadBufferAB(Buffer: TByteArray;Count:LongInt)
           procedure WriteBufferAB(Buffer: TByteArray;Count:LongInt)
procedure ReadBufferABD(Buffer: TByteDynArray;Count:LongInt)
procedure WriteBufferABD(Buffer: TByteDynArray;Count:LongInt)
8940:
8941:
8942:
           procedure ReadBufferAW(Buffer: TWordArray;Count:LongInt)
procedure WriteBufferAW(Buffer: TWordArray;Count:LongInt)
8943:
            procedure ReadBufferAWD(Buffer: TWordDynArray;Count:LongInt)
procedure WriteBufferAWD(Buffer: TWordDynArray;Count:LongInt)
8945:
8946:
8947:
            procedure ReadBufferAW(Buffer: TWordArray;Count:LongInt)
8948:
            procedure WriteBufferAW(Buffer: TWordArray;Count:LongInt)
            procedure ReadBufferAC(Buffer: TCharArray;Count:LongInt)
8949:
           procedure WriteBufferAC(Buffer: TCharArray;Count:LongInt)
procedure ReadBufferACD(Buffer: TCharDynArray;Count:LongInt)
procedure WriteBufferACD(Buffer: TCharDynArray;Count:LongInt)
8950:
8951:
8952:
8953:
8954:
            procedure ReadBufferP(Buffer: PChar;Count:LongInt)
           procedure WriteBufferP(Buffer: PChar;Count:LongInt)
procedure ReadBufferO(Buffer: TObject;Count:LongInt)');
procedure WriteBufferO(Buffer: TObject;Count:LongInt)');
8955:
8956:
8957:
8958:
            //READBUFFERAC
8959:
            function InstanceSize: Longint
            Procedure FixupResourceHeader( FixupInfo : Integer)
8960:
8961:
            Procedure ReadResHeader
8962:
8963:
8964:
            function CopyFrom(Source:TStream;Count:Int64):LongInt
8965:
8966:
            function CopyFrom(Source:TStream;Count:Integer):LongInt
8967:
8968:
            RegisterProperty('Position', 'LongInt', iptrw);
8969:
            RegisterProperty('Size', 'LongInt', iptrw);
8970:
         end;
8971: end;
8972:
8973:
8974: {
8975:
         Unit DMATH - Interface for DMATH.DLL
                                                   8976:
8977: // see more docs/dmath_manual.pdf
8978:
8979: Function InitEval : Integer
8980: Procedure SetVariable( VarName : Char; Value : Float)
8981: Procedure SetFunction( FuncName : String; Wrapper : TWrapper)
8982: Function Eval( ExpressionString : String) : Float
8983:
8984: unit dmath; //types are in built, others are external in DLL
8985: interface
```

```
8986: {$IFDEF DELPHI}
8987: uses
8988:
         StdCtrls, Graphics;
8989.
        <del>$ENDIF}</del>
8990: {
8991:
        Types and constants
8992:
8993: {$i types.inc}
8994: {
        Error handling
8995:
8996:
8997: procedure SetErrCode(ErrCode: Integer); external 'dmath';
8998:
       { Sets the error code }
8999: function DefaultVal(ErrCode: Integer; DefVal: Float): Float; external 'dmath';
9000: { Sets error code and default function value } 9001: function MathErr : Integer; external 'dmath';
      { Returns the error code }
9002:
9003: {
9004:
        Dynamic arrays
9005:
9006: procedure SetAutoInit(AutoInit : Boolean); external 'dmath';
9007: { Sets the auto-initialization of arrays }
9008: procedure DimVector(var V : TVector; Ub : Integer); external 'dmath';
9009: { Creates floating point vector V[0..Ub] }
9010: procedure DimIntVector(var V : TintVector; Ub : Integer); external 'dmath';
9011:
      { Creates integer vector V[0..Ub] }
9012: procedure DimCompVector(var V : TCompVector; Ub : Integer); external 'dmath';
9013: { Creates complex vector V[0..Ub] }
9014: procedure DimBoolVector(var V : TBoolVector; Ub : Integer); external 'dmath';
9015: { Creates boolean vector V[0..Ub] }
9016: procedure DimStrVector(var V : TStrVector; Ub : Integer); external 'dmath';
9017: { Creates string vector V[0..Ub] }
9018: procedure DimMatrix(var A : TMatrix; Ub1, Ub2 : Integer); external 'dmath';
9019: { Creates floating point matrix A[0..Ub1, 0..Ub2] }
9020: procedure DimIntMatrix(var A : TIntMatrix; Ub1, Ub2 : Integer); external 'dmath';
9021:
       { Creates integer matrix A[0..Ub1, 0..Ub2] }
9022: procedure DimCompMatrix(var A : TCompMatrix; Ubl, Ub2 : Integer); external 'dmath';
9023: { Creates complex matrix A[0..Ub1, 0..Ub2] }
9024: procedure DimBoolMatrix(var A: TBoolMatrix; Ub1, Ub2: Integer); external 'dmath';
9025: { Creates boolean matrix A[0..Ub1, 0..Ub2] }
9026: procedure DimStrMatrix(var A : TStrMatrix; Ub1, Ub2 : Integer); external 'dmath';
9029:
        Minimum, maximum, sign and exchange
9030:
9031: function FMin(X, Y : Float) : Float; external 'dmath';
9032: { Minimum of 2 reals }
9033: function FMax(X, Y : Float) : Float; external 'dmath';
9034: { Maximum of 2 reals }
9035: function IMin(X, Y : Integer) : Integer; external 'dmath';
9036: { Minimum of 2 integers }
9037: function IMax(X, Y : Integer) : Integer; external 'dmath';
9038: { Maximum of 2 integers }
9039: function Sgn(X : Float) : Integer; external 'dmath';
9040: { Sign (returns 1 if X = 0) }
9041: function Sgn0(X : Float) : Integer; external 'dmath';
9042: { Sign (returns 0 if X = 0) }
9043: function DSgn(A, B : Float) : Float; external 'dmath';
9044: { Sgn(B) * |A| }
9045: [SgM(B) | A| / September | Swap | Var X, Y : Float); external 'dmath'; 9046: { Exchange 2 reals }
9047: procedure ISwap(var X, Y : Integer); external 'dmath';
9050:
         Rounding functions
9051:
9052: function RoundN(X : Float; N : Integer) : Float; external 'dmath';
9053: { Rounds X to N decimal places }
9054: function Ceil(X : Float) : Integer; external 'dmath';
       { Ceiling function }
9055:
9056: function Floor(X : Float) : Integer; external 'dmath';
9057: { Floor function }
9058: {
9059:
        Logarithms, exponentials and power
9060:
9061: function Expo(X : Float) : Float; external 'dmath';
       { Exponential
9062:
9063: function Exp2(X : Float) : Float; external 'dmath';
9064: { 2^X }
9065: function Exp10(X : Float) : Float; external 'dmath';
9066: { 10^X }
9067: function Log(X : Float) : Float; external 'dmath';
9068: { Natural log }
9069: function Log2(X : Float) : Float; external 'dmath';
9070: { Log, base 2
9071: function Log10(X : Float) : Float; external 'dmath';
9072: { Decimal log } 9073: function LogA(X, A : Float) : Float; external 'dmath';
9074: { Log, base A }
```

```
9075: function IntPower(X: Float; N: Integer): Float; external 'dmath';
9076: { X^N }
9077: function Power(X, Y : Float) : Float; external 'dmath';
9078: \{ X^Y, X \ge 0 \}
        9079: {
9080:
        Trigonometric functions
9081:
9082: function Pythag(X, Y : Float) : Float; external 'dmath';
9083: { Sqrt(X^2 + Y^2)
9084: function FixAngle(Theta : Float) : Float; external 'dmath';
9085:
9085: { Set Theta in -Pi..Pi }
9086: function Tan(X : Float) : Float; external 'dmath';
9087: { Tangent }
9088: function ArcSin(X : Float) : Float; external 'dmath';
9089: { Arc sinus }
9090: function ArcCos(X : Float) : Float; external 'dmath';
9091: { Arc cosinus }
9092: function ArcTan2(Y, X : Float) : Float; external 'dmath';
9093: { Angle (Ox, OM) with M(X,Y) }
9094: { -----
9095:
        Hyperbolic functions
9096:
9097: function Sinh(X : Float) : Float; external 'dmath';
9098: { Hyperbolic sine }
9099: function Cosh(X : Float) : Float; external 'dmath';
9100: { Hyperbolic cosine }
9101: function Tanh(X : Float) : Float; external 'dmath';
9102: { Hyperbolic tangent }
9103: function ArcSinh(X : Float) : Float; external 'dmath';
9104: { Inverse hyperbolic sine }
9105: function ArcCosh(X : Float) : Float; external 'dmath';
9106: { Inverse hyperbolic cosine }
9107: function ArcTanh(X : Float) : Float; external 'dmath';
9108: { Inverse hyperbolic tangent }
9109: procedure SinhCosh(X : Float; var SinhX, CoshX : Float); external 'dmath';
9110:
      { Sinh & Cosh }
9111: {
9112:
        Gamma function and related functions
9113:
9114: function Fact(N : Integer) : Float; external 'dmath';
9115: { Factorial }
9116: function SqnGamma(X : Float) : Integer; external 'dmath';
9117: { Sign of Gamma function }
9118: function Gamma(X : Float) : Float; external 'dmath';
      { Gamma function }
9119:
9120: function LnGamma(X : Float) : Float; external 'dmath';
9121: { Logarithm of Gamma function }
9122: function Stirling(X : Float) : Float; external 'dmath';
9123: { Stirling's formula for the Gamma function }
9124: function StirLog(X : Float) : Float; external 'dmath';
9125: { Approximate Ln(Gamma) by Stirling's formula, for X >= 13 }
9126: function DiGamma(X : Float ) : Float; external 'dmath';
9127: { Digamma function }
9128: function TriGamma(X : Float ) : Float; external 'dmath';
9129: { Trigamma function }
9130: function IGamma(A, X : Float) : Float; external 'dmath';
9131: { Incomplete Gamma function}
9132: function JGamma(A, X : Float) : Float; external 'dmath';
9133: { Complement of incomplete Gamma function }
9134: function InvGamma(A, P : Float) : Float; external 'dmath'; 9135: { Inverse of incomplete Gamma function }
9136: function Erf(X : Float) : Float; external 'dmath';
9137: { Error function }
9138: function Erfc(X : Float) : Float; external 'dmath';
      { Complement of error function }
9139:
9140: { ----
9141:
        Beta function and related functions
9142:
9143: function Beta(X, Y : Float) : Float; external 'dmath';
9144: { Beta function }
9145: function IBeta(A, B, X : Float) : Float; external 'dmath';
9146: { Incomplete Beta function }
9147: function InvBeta(A, B, Y : Float) : Float; external 'dmath';
9148: { Inverse of incomplete Beta function }
9149: {
9150:
        Lambert's function
9151:
9152: function LambertW(X: Float; UBranch, Offset: Boolean): Float; external 'dmath';
9153:
9154:
        Binomial distribution
9155:
9156: function Binomial(N, K : Integer) : Float; external 'dmath';
9157: { Binomial coefficient C(N,K) } 9158: function PBinom(N : Integer; P : Float; K : Integer) : Float; external 'dmath';
9159: { Probability of binomial distribution }
9160: function FBinom(N : Integer; P : Float; K : Integer) : Float; external 'dmath';
9161: { Cumulative probability for binomial distrib. }
9162: {
9163:
        Poisson distribution
```

```
9164:
9165: function PPoisson(Mu : Float; K : Integer) : Float; external 'dmath';
9166: { Probability of Poisson distribution }
      function FPoisson(Mu : Float; K : Integer) : Float; external 'dmath';
9167:
9168: { Cumulative probability for Poisson distrib. }
9169:
9170:
        Exponential distribution
9171:
9172: function DExpo(A, X : Float) : Float; external 'dmath';
9173:
      { Density of exponential distribution with parameter A }
9174: function FExpo(A, X : Float) : Float; external 'dmath';
      { Cumulative probability function for exponential dist. with parameter A }
9175:
9176: {
9177:
        Standard normal distribution
9178:
9179: function DNorm(X : Float) : Float; external 'dmath';
      { Density of standard normal distribution }
9181: function FNorm(X : Float) : Float; external 'dmath';
9182: { Cumulative probability for standard normal distrib. }
9183: function PNorm(X : Float) : Float; external 'dmath';
      { Prob(|U| > X) for standard normal distrib.
9185: function InvNorm(P : Float) : Float; external 'dmath';
9186: { Inverse of standard normal distribution }
9187:
9188:
        Student's distribution
9189:
9190: function DStudent(Nu : Integer; X : Float) : Float; external 'dmath';
9191: { Density of Student distribution with Nu d.o.f. } 9192: function FStudent(Nu : Integer; X : Float) : Float; external 'dmath';
      { Cumulative probability for Student distrib. with Nu d.o.f. }
9194: function PStudent(Nu : Integer; X : Float) : Float; external 'dmath';
9195: { Prob(|t| > X) for Student distrib. with Nu d.o.f. } 9196: function InvStudent(Nu : Integer; P : Float) : Float; external 'dmath';
9197: { Inverse of Student's t-distribution function }
9198:
9199:
        Khi-2 distribution
9200:
9201: function DKhi2(Nu : Integer; X : Float) : Float; external 'dmath';
9202: { Density of Khi-2 distribution with Nu d.o.f. }
9203: function FKhi2(Nu : Integer; X : Float) : Float; external 'dmath';
9204: { Cumulative prob. for Khi-2 distrib. with Nu d.o.f. }
9205: function PKhi2(Nu : Integer; X : Float) : Float; external 'dmath';
      { Prob(Khi2 > X) for Khi-2 distrib. with Nu d.o.f. }
9206:
      function InvKhi2(Nu : Integer; P : Float) : Float; external 'dmath';
      { Inverse of Khi-2 distribution function }
9208:
9209: {
9210:
        Fisher-Snedecor distribution
9211:
9212: function DSnedecor(Nu1, Nu2 : Integer; X : Float) : Float; external 'dmath';
9213: { Density of Fisher-Snedecor distribution with Nu1 and Nu2 d.o.f. } 9214: function FSnedecor(Nu1, Nu2 : Integer; X : Float) : Float; external 'dmath';
      { Cumulative prob. for Fisher-Snedecor distrib. with Nu1 and Nu2 d.o.f.
9215:
9216: function PSnedecor(Nul, Nu2 : Integer; X : Float) : Float; external 'dmath';
9217: { Prob(F > X) for Fisher-Snedecor distrib. with Nu1 and Nu2 d.o.f. }
9218: function InvSnedecor(Nul, Nu2: Integer; P: Float): Float; external 'dmath'; 9219: { Inverse of Snedecor's F-distribution function }
9220:
9221:
        Beta distribution
9222:
9223: function DBeta(A. B. X : Float) : Float; external 'dmath';
      { Density of Beta distribution with parameters A and B } function FBeta(A, B, X : Float) : Float; external 'dmath';
9226 .
      { Cumulative probability for Beta distrib. with param. A and B } \,
9227:
9228:
        Gamma distribution
9230: function DGamma(A, B, X : Float) : Float; external 'dmath';
9231:
      \{ Density of Gamma distribution with parameters A and B \}
9232: function FGamma(A, B, X : Float) : Float; external 'dmath';
        Cumulative probability for Gamma distrib. with param. A and B }
9233:
9234:
9235:
        Expression evaluation
9236:
9237: function InitEval : Integer; external 'dmath';
9238:
      { Initializes built-in functions and returns their number }
      function Eval(ExpressionString : String) : Float; external 'dmath';
9239:
9240: { Evaluates an expression at run-time }
9241: procedure SetVariable(VarName : Char; Value : Float); external 'dmath';
9242: { Assigns a value to a variable }
9243: procedure SetFunction(FuncName : String; Wrapper : TWrapper); external 'dmath';
9246:
        Matrices and linear equations
                               -----
9247:
9248: procedure GaussJordan(A
                                            : TMatrix;
                         Lb, Ub1, Ub2 : Integer;
9249:
                              var Det : Float); external 'dmath';
9250:
9251: { Transforms a matrix according to the Gauss-Jordan method }
9252: procedure LinEq(A
                                : TMatrix;
```

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9253:
                              : TVector;
                      В
                      Lb, Ub : Integer;
9254:
                      var Det : Float); external 'dmath';
9256: { Solves a linear system according to the Gauss-Jordan method }
9257: procedure Cholesky(A, L : TMatrix; Lb, Ub : Integer); external 'dmath';
9258: { Cholesky factorization of a positive definite symmetric matrix }
9259: procedure LU_Decomp(A : TMatrix; Lb, Ub : Integer); external 'dmath';
9260: { LU decomposition }
                             : TMatrix;
9261: procedure LU_Solve(A
                    В _--
9262:
                                : TVector;
                         Lb, Ub : Integer;
9263:
                        X : TVector); external 'dmath';
9265: { Solution of linear system from LU decomposition }
                          (A : TMatrix;
Lb, Ub1, Ub2 : Integer;
9266: procedure QR_Decomp(A
9267:
9268:
                          R
                                        : TMatrix); external 'dmath';
9269: { QR decomposition }
9270: procedure QR_Solve(Q, R
                                : TMatrix;
9271:
                                       : TVector;
                         В
9272:
                         Lb, Ub1, Ub2 : Integer;
                                       : TVector); external 'dmath';
9273:
                          Х
9274: { Solution of linear system from QR decomposition }
9275: procedure SV_Decomp(A
                                        : TMatrix;
                          Lb, Ub1, Ub2 : Integer;
9276:
9277:
                           S
                                          TVector;
9278:
                           V
                                        : TMatrix); external 'dmath';
9279: { Singular value decomposition }
9280: procedure SV_SetZero(S : TVector; 9281: Lb, Ub : Integer;
                            Tol : Float); external 'dmath';
9283: { Set lowest singular values to zero
9284: procedure SV_Solve(U
                                       : TMatrix;
                                       : TVector;
9285:
                         S
9286:
                                       : TMatrix;
9288:
                          Lb, Ub1, Ub2 : Integer;
9289:
                         Х
                                      : TVector); external 'dmath';
9290: { Solution of linear system from SVD }
9291: procedure SV_Approx(U
                                      : TMatrix;
9292:
                                        : TVector;
                           S
9293:
                           V
                                        : TMatrix;
                          Lb, Ub1, Ub2 : Integer;
9294:
9295:
                                       : TMatrix); external 'dmath';
                          A
9296: { Matrix approximation from SVD }
9297: procedure EigenVals(A : TMatrix; 9298: Lb, Ub : Integer;
                          Lambda : TCompVector); external 'dmath';
9299:
9300: { Eigenvalues of a general square matrix }
9301: procedure EigenVect(A : TMatrix;
                                 : TMatrix;
9303:
                          Lambda : TCompVector;
                           V
                                  : TMatrix); external 'dmath';
9304:
9305: { Eigenvalues and eigenvectors of a general square matrix }
                         (A : TMatrix;
Lb, Ub : Integer;
9306: procedure EigenSym(A
9307:
                         Lambda : TVector;
9308:
9309:
                                : TMatrix); external 'dmath';
9310: { Eigenvalues and eigenvectors of a symmetric matrix (SVD method) }
                       (A : TMatrix;
Lb, Ub, MaxIter : Integer;
9311: procedure Jacobi(A
9312:
                                : Float;
9313:
                        Tol
9314:
                        Lambda
                                        : TVector;
9315:
                       7.7
                                        : TMatrix); external 'dmath';
9316: { Eigenvalues and eigenvectors of a symmetric matrix (Jacobi method) }
9317: {
       ` -----
       Optimization
9319:
9320: procedure MinBrack(Func
                                                  : TFunc;
                        var A, B, C, Fa, Fb, Fc : Float); external 'dmath';
9321: Var A, B, C, L.
9322: { Brackets a minimum of a function }
9324:
                          A, B
                                           : Float;
9325:
                            MaxIter
                                           : Integer;
9326:
                                           : Float;
                           Tol
                           var Xmin, Ymin : Float); external 'dmath';
9327:
9328: { Minimization of a function of one variable (golden search) }
                       (Func : TFuncNVar; X, DeltaX : TVector;
9329: procedure LinMin(Func
9330:
                       Lb, Ub : Integer;
var R : Float;
9331:
9332:
9333:
                       MaxIter
                                 : Integer;
9334:
                       Tol
                                  : Float;
                       var F_min : Float); external 'dmath';
9335:
9336: { Minimization of a function of several variables along a line }
                                 : TFuncNVar;
9337: procedure Newton (Func
                       HessGrad : THessGrad;
9338:
9339:
                                  : TVector;
                               : Integer;
                        Lb, Ub
9340:
9341:
                       MaxIter : Integer;
```

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9342:
                           Tol
                                      : Float;
9343:
                           var F_min : Float;
                                  : TVector;
: TMatrix;
9344:
                           G
9345 .
                           H inv
                           var Det : Float); external 'dmath';
9346:
9347: { Minimization of a function of several variables (Newton's method) } 9348: procedure SaveNewton(FileName: string); external 'dmath';
      { Save Newton iterations in a file }
                              (Func : TFuncNVar;
HessGrad : THessGrad;
9350: procedure Marquardt(Func
9351:
9352:
                              Х
                                          : TVector;
                              Lb, Ub
                                          : Integer;
9353:
9354:
                              MaxIter
                                          : Integer
9355:
                              Tol
                                          : Float;
                              var F_min : Float;
9356:
                                        : TVector;
9357:
                              G
                              H_inv
                                          : TMatrix;
9358:
9359 .
                              var Det
                                         : Float); external 'dmath';
9360: { Minimization of a function of several variables (Marquardt's method) } 9361: procedure SaveMarquardt(FileName : string); external 'dmath';
       { Save Marquardt iterations in a file }
                        (Func : TFuncNVar;
Gradient : TGradient;
9363: procedure BFGS(Func
9364:
9365:
                                    : TVector;
                        X
                        Lb, Ub
9366:
                                    : Integer;
                        MaxIter
9367:
                                    : Integer;
9368:
                        Tol
                                   : Float;
9369:
                        var F_min : Float;
                                : TVector;
: TMatrix); external 'dmath';
9370:
                        G
                        H_inv
9371:
9372: { Minimization of a function of several variables (BFGS method) }
9373: procedure SaveBFGS(FileName : string); external 'dmath';
9374: { Save BFGS iterations in a file }
                                     : TFuncNVar;
: TVector;
9375: procedure Simplex(Func
                           X
Lb, Ub
9376:
9377:
                                       : Integer;
                            MaxIter : Integer;
9378:
                                       : Float;
9379:
                            Tol
9380:
                            var F_min : Float); external 'dmath';
9381: { Minimization of a function of several variables (Simplex) } 9382: procedure SaveSimplex(FileName: string); external 'dmath';
9383: { Save Simplex iterations in a file } 9384: { ------
9385:
        Nonlinear equations
9386:
9387: procedure RootBrack(Func
                                                 : TFunc;
                              var X, Y, FX, FY : Float); external 'dmath';
9388:
9389: { Brackets a root of function Func between X and Y }
9390: procedure Bisect(Func : TFunc;
9391: var X, Y : Float;
                          var A, 1 : Float:
MaxIter : Integer;
Tol : Float;
var F : Float); external 'dmath';
9392:
9393:
9394:
9395: { Bisection method }
9396: procedure Secant(Func
                                     : TFunc;
                           var X, Y : Float;
9397:
                           MaxIter : Integer;
Tol : Float;
var F : Float); external 'dmath';
9398:
9399:
9400:
9401: { Secant method }
9402: procedure NewtEq(Func, Deriv : TFunc;
9403:
                           var X
9404:
                           MaxIter
                                         : Integer;
9405:
                           Tol
                                         : Float;
                           var F
                                         : Float); external 'dmath';
9406:
9407: { Newton-Raphson method for a single nonlinear equation }
9408: procedure NewtEqs(Equations: TEquations;
                            Jacobian : TJacobian;
9409:
9410:
                            X, F
                                        : TVector;
                            Lb, Ub
                                        : Integer;
9411:
                            MaxIter
9412:
                                        : Integer;
9413:
                            Tol
                                        : Float); external 'dmath';
9414: { Newton-Raphson method for a system of nonlinear equations }
9415: procedure Broyden(Equations : TEquations;
                                      : TVector;
9416:
                            X, F
                            Lb, Ub
9417:
                                        : Integer;
9418:
                            MaxIter
                                      : Integer;
                                       : Float); external 'dmath';
9419:
                            Tol
9420: { Broyden's method for a system of nonlinear equations }
9422:
         Polynomials and rational fractions
9423: -----9424: function Poly(X : Float;
9425:
                      Coef : TVector;
9426:
                       Deg : Integer) : Float; external 'dmath';
9427: { Evaluates a polynomial }
9428: function RFrac(X : Float;
9429: Coef : TVector;
                        Deg1, Deg2 : Integer) : Float; external 'dmath';
```

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9431: { Evaluates a rational fraction }
9432: function RootPol1(A, B : Float;
                         var X : Float) : Integer; external 'dmath';
9433:
9434: { Solves the linear equation A + B * X = 0 }
9435: function RootPol2(Coef : TVector;
                         Z : TCompVector) : Integer; external 'dmath';
9436:
9437: { Solves a quadratic equation }
9438: function RootPol3(Coef : TVector;
9439: Z : TCompVector) : Integer; external 'dmath';
9440:
      { Solves a cubic equation }
9440: { SOIVES a CMDIC equation ; 9441: function RootPol4(Coef: TVector; 9442: Z : TCompVector) : Integer; external 'dmath';
9443: { Solves a quartic equation }
9444: function RootPol(Coef : TVector; 9445: Deg : Integer;
9446:
                        Z
                              : TCompVector) : Integer; external 'dmath';
9447: { Solves a polynomial equation }
9448: function SetRealRoots(Deg : Integer; 9449: Z : TCompVector;
                          Z
                              Tol: Float): Integer; external 'dmath';
9450:
9451: { Set the imaginary part of a root to zero }
9452: procedure SortRoots(Deg : Integer;
                          Z : TCompVector); external 'dmath';
9453:
9454: { Sorts the roots of a polynomial }
9455: {
9456:
       Numerical integration and differential equations
9457:
9458: function TrapInt(X, Y : TVector; N : Integer) : Float; external 'dmath';
9459: { Integration by trapezoidal rule } 9460: function GausLeg(Func : TFunc; A, B : Float) : Float; external 'dmath';
9461: { Integral from A to B }
9462: function GausLeg0(Func : TFunc; B : Float) : Float; external 'dmath';
9463: { Integral from 0 to B }
9464: function Convol(Func1, Func2 : TFunc; T : Float) : Float; external 'dmath';
9465: { Convolution product at time T }
9466: procedure ConvTrap(Func1,Func2:TFunc; T,Y:TVector; N:Integer);external 'dmath';
9467: { Convolution by trapezoidal rule } 9468: procedure RKF45(F
                                               : TDiffEqs;
9469:
                       Neqn
                                                 Integer
9470:
                                               : TVector;
                        Y, Yp
9471:
                        var T
                                               : Float;
                        Tout, RelErr, AbsErr : Float;
9472:
                        var Flag
                                               : Integer); external 'dmath';
9473:
9474: { Integration of a system of differential equations }
9475: {
9476:
        Fast Fourier Transform
9477:
                               9478: procedure FFT(NumSamples
                                       : Integer;
                     InArray, OutArray : TCompVector); external 'dmath';
9479:
9480: { Fast Fourier Transform }
                                         : Integer;
9481: procedure IFFT(NumSamples
9482: InArray, OutArray : TCompVector); external 'dmath';
9483: { Inverse Fast Fourier Transform }
9484: procedure FFT_Integer(NumSamples
                                              : Integer;
9485:
                             RealIn, ImagIn : TIntVector;
                              OutArray : TCompVector); external 'dmath';
9486:
9487: { Fast Fourier Transform for integer data }
9488: procedure FFT_Integer_Cleanup; external 'dmath';
9489: { Clear memory after a call to FFT_Integer }
9490: procedure CalcFrequency(NumSamples,
9491:
                                FrequencyIndex : Integer;
                                          : TCompVector;
: Complex); external 'dmath';
9492:
                                InArray
9493:
                                var FFT
9494: { Direct computation of Fourier transform }
9495: { -----
9496:
      Random numbers
9497:
9498: procedure SetRNG(RNG : RNG_Type); external 'dmath';
9499: { Select generator }
9500: procedure InitGen(Seed : RNG_IntType); external 'dmath';
9501: { Initialize generator }
9502: function IRanGen : RNG_IntType; external 'dmath';
9503: { 32-bit random integer in [-2^31 .. 2^31 - 1] } 9504: function IRanGen31 : RNG_IntType; external 'dmath';
9505: { 31-bit random integer in [0 .. 2^31 - 1] }
9506: function RanGen1 : Float; external 'dmath'
9507: { 32-bit random real in [0,1] }
9508: function RanGen2 : Float; external 'dmath';
9509: { 32-bit random real in [0,1) }
9510: function RanGen3 : Float; external 'dmath';
9511: { 32-bit random real in (0,1) }
9512: function RanGen53: Float; external 'dmath';
9513: { 53-bit random real in [0,1) }
9514: procedure InitMWC(Seed : RNG_IntType); external 'dmath';
9515: { Initializes the 'Multiply with carry' random number generator } 9516: function IRanMWC: RNG_IntType; external 'dmath';
9517: { Returns a 32 bit random number in [-2^31; 2^31-1] } 9518: procedure InitMT(Seed : RNG_IntType); external 'dmath'
9519: { Initializes Mersenne Twister generator with a seed }
```

```
9520: procedure InitMTbvArray(InitKev
                                           : array of RNG_LongType;
                                KeyLength : Word); external 'dmath';
9521:
9522: { Initialize MT generator with an array InitKey[0..(KeyLength - 1)] }
9523: function IRanMT : RNG_IntType; external 'dmath';
9524: { Random integer from MT generator }
9525: procedure InitUVAGbyString(KeyPhrase : string); external 'dmath';
9526: { Initializes the UVAG generator with a string }
9527: procedure InitUVAG(Seed : RNG_IntType); external 'dmath';
9528: { Initializes the UVAG generator with an integer } 9529: function IRanUVAG : RNG_IntType; external 'dmath';
9530: { Random integer from UVAG generator }
9531: function RanGaussStd : Float; external 'dmath';
9532: { Random number from standard normal distribution }
9533: function RanGauss(Mu, Sigma : Float) : Float; external 'dmath';
9534: { Random number from normal distrib. with mean Mu and S. D. Sigma }
9535: procedure RanMult(M
                                 : TVector; L
                                                      : TMatrix;
                        Lb, Ub : Integer;
9537 .
                          X
                                  : TVector); external 'dmath';
9538: { Random vector from multinormal distribution (correlated) }
9539: procedure RanMultIndep(M, S : TVector;
                               Lb, Ub : Integer;
                                       : TVector); external 'dmath';
9541:
                                X
9542: { Random vector from multinormal distribution (uncorrelated)
9543: procedure InitMHParams(NCycles, MaxSim, SavedSim : Integer); external 'dmath';
9544: { Initializes Metropolis-Hastings parameters }
9545: procedure GetMHParams(var NCycles, MaxSim, SavedSim:Integer); external 'dmath';
9546: { Returns Metropolis-Hastings parameters }
9547: procedure Hastings(Func
                                         TFuncNVar;
9548:
                                       : Float;
                            Т
9549:
                                       : TVector
9550:
                                       : TMatrix;
                            7.7
9551:
                            Lb. Ub
                                       : Integer;
                                       : TMatrix;
9552:
                            Xmat
                            X min
                                       : TVector;
9553:
                           var F_min : Float); external 'dmath';
9555: { Simulation of a probability density function by Metropolis-Hastings }
9556: procedure InitSAParams(NT, NS, NCycles: Integer; RT: Float); external 'dmath'; 9557: { Initializes Simulated Annealing parameters }
9558: procedure SA_CreateLogFile(FileName : String); external 'dmath';
      { Initializes log file }
9559:
                                        : TFuncNVar;
9560: procedure SimAnn(Func
                         X, Xmin, Xmax : TVector;
Lb, Ub : Integer;
9561:
                                     : Integer;
: Float); external 'dmath';
9562:
                         var F_min
9564: { Minimization of a function of several var. by simulated annealing } 9565: procedure InitGAParams(NP, NG: Integer; SR, MR, HR: Float); external 'dmath';
9566: { Initializes Genetic Algorithm parameters }
9567: procedure GA_CreateLogFile(FileName : String); external 'dmath';
9568: { Initializes log file }
9569: procedure GenAlg(Func
                                         : TFuncNVar;
9570:
                         X, Xmin, Xmax : TVector;
                                      : Integer;
: Float); external 'dmath';
9571:
                         Lb, Ub
                          var F_min
9572:
      { Minimization of a function of several var. by genetic algorithm }
9573:
9574: {
9575:
9577: function Mean(X: TVector; Lb, Ub: Integer): Float; external 'dmath';
9578: { Mean of sample X }
9579: function Min(X: TVector; Lb, Ub: Integer): Float; external 'dmath';
9580: { Minimum of sample X }
9581: function Max(X: TVector; Lb, Ub: Integer): Float; external 'dmath';
9582: { Maximum of sample X }
9583: function Median(X: TVector; Lb, Ub: Integer; Sorted: Boolean): Float; external 'dmath';
9584: { Median of sample X }
9585: function StDev(X: TVector; Lb, Ub: Integer; M: Float): Float; external 'dmath';
      { Standard deviation estimated from sample X }
9587: function StDevP(X : TVector; Lb, Ub : Integer; M : Float) : Float; external 'dmath';
9588: { Standard deviation of population }
9589: function Correl(X, Y : TVector; Lb, Ub : Integer) : Float; external 'dmath'; 9590: { Correlation coefficient }
9591: function Skewness(X : TVector; Lb, Ub : Integer; M,Sigma: Float): Float; external 'dmath';
9592: { Skewness of sample X }
9593: function Kurtosis(X: TVector; Lb, Ub: Integer; M,Sigma: Float): Float; external 'dmath';
9594: { Kurtosis of sample X }
9595: procedure QSort(X : TVector; Lb, Ub : Integer); external 'dmath';
9596: { Quick sort (ascending order) }
9597: procedure DQSort(X : TVector; Lb, Ub : Integer); external 'dmath';
9598: { Quick sort (descending order) }
9599: procedure Interval(X1, X2
9600:
                           MinDiv, MaxDiv
                                                : Integer;
                           var Min, Max, Step : Float); external 'dmath';
9601:
9602: { Determines an interval for a set of values } 9603: procedure AutoScale(X : TVector; Lb, Ub : Integer; Scale : TScale;
                            var XMin, XMax, XStep : Float); external 'dmath';
9604:
9605: { Finds an appropriate scale for plotting the data in X[Lb..Ub] }
9606: procedure StudIndep(N1, N2 : Integer; 9607: M1, M2, S1, S2 : Float;
                             var T
                                             : Float
```

```
9609:
                             var DoF
                                              : Integer); external 'dmath';
9610: { Student t-test for independent samples }
9611: procedure StudPaired(X, Y
                                      : TVector;
                               T.b. IIb
9612:
                                        : Integer;
9613:
                              var T
                                        : Float;
                              var DoF : Integer); external 'dmath';
9614: 
9615: { Student t-test for paired samples } 
POWO1/Ng : Integer;
9617:
                          N
                                             : TIntVector;
9618:
                          M. S
                                              : TVector;
                          var V_f, V_r, F : Float;
var DoF_f, DoF_r : Integer); external 'dmath';
9619:
9621: { One-way analysis of variance , 9622: procedure AnOVa2(NA, NB, Nobs : Integer; 9623: M, S : TMatrix; 0624: V, F : TVector;
9621: { One-way analysis of variance }
                          DoF
                                       : TIntVector); external 'dmath';
9626: { Two-way analysis of variance } 9627: procedure Snedecor(N1, N2 9628: S1, S2
                                             : Integer;
                                             : Float;
                            var F
9630:
                            var DoF1, DoF2 : Integer); external 'dmath';
9631: { Snedecor's F-test (comparison of two variances) }
9631: { Shedecor S r-test (comparation)
9632: procedure Bartlett(Ns : Integer;
9633: N : TIntVector;
9634:
                            S
                                      : TVector;
9635:
                            var Khi2 : Float;
var DoF : Integer); external 'dmath';
9636:
9637: { Bartlett's test (comparison of several variances) }
9638: procedure Mann_Whitney(N1, N2 : Integer; 9639: X1, X2 : TVector;
9640:
                                 var U, Eps : Float); external 'dmath';
9641: { Mann-Whitney test}
9641: Main-Williams Cost,
9642: procedure Wilcoxon(X, Y
9643: Lb, Ub
                                         : TVector;
                            Lb, Ub : Integer;

var Ndiff : Integer;
9644:
                            var T, Eps : Float); external 'dmath';
9645:
9646: { Wilcoxon test }
9647: procedure Kruskal_Wallis(Ns
                                            : Integer;
9648:
                                            : TIntVector;
                                   Ν
9649:
                                   x
                                            : TMatrix;
9650:
                                   var H
                                            : Float;
                                   var DoF : Integer); external 'dmath';
9651:
9652: { Kruskal-Wallis test }
9653: procedure Khi2_Conform(N_cls
                                           : Integer;
                                 N_estim : Integer;
9654:
                                 Obs
Calc
9655:
                                           : TIntVector;
                                           : TVector;
9657:
                                 var Khi2 : Float;
9658:
                                 var DoF : Integer); external 'dmath';
9659: { Khi-2 test for conformity }
9660: procedure Khi2_Indep(N_lin
                                         : Integer;
                                        : Integer
                               N_col
9662:
                              Obs
                                         : TIntMatrix;
                               var Khi2 : Float;
9663:
                              var DoF : Integer); external 'dmath';
9664:
9665: { Khi-2 test for independence }
9666: procedure Woolf_Conform(N_cls
                                           : Integer;
9667:
                                  N_estim : Integer;
                                           : TIntVector;
9668:
                                  Obs
                                  Calc
                                           : TVector;
9669:
9670:
                                  var G
var DoF : Integer); external 'dmath';
                                        : Integer;
                                N_col
9675:
                                Obs
                                         : TIntMatrix;
                                var G
9676:
                                        : Float;
                               var DoF : Integer); external 'dmath';
9677:
9678: { Woolf's test for independence }
9679: procedure DimStatClassVector(var C : TStatClassVector;
9680:
                                       Ub : Integer); external 'dmath';
9681: { Allocates an array of statistical classes: C[0..Ub] }
9682: procedure Distrib(X : TVector; 9683: Lb, Ub : Integer;
                           A, B, H : Float;
9684:
9685:
                           C
                                   : TStatClassVector); external 'dmath';
       { Distributes an array X[Lb..Ub] into statistical classes }
9686:
9687: { ------
9688:
        Linear / polynomial regression
9689:
9690: procedure LinFit(X, Y
                                 : TVector;
9691:
                          Lb, Ub : Integer;
                                : TVector;
9692:
                          В
                                  : TMatrix); external 'dmath';
9693:
9694: { Linear regression : Y = B(0) + B(1) * X }
9695: procedure WLinFit(X, Y, S : TVector;
9696: Lb, Ub : Integer;
9697: B : TVector;
```

```
9698:
                          V
                                   : TMatrix); external 'dmath';
9699: { Weighted linear regression : Y = B(0) + B(1) * X }
9699: { weighted illear regressions: TVector; 9700: procedure SVDLinFit(X, Y : TVector; Lb, Ub : Integer;
                                   : TVector;
9702:
                             SVDTol : Float;
9703:
                                    : TVector;
                            В
9704:
                                     : TMatrix); external 'dmath';
                             V
9705: { Unweighted linear regression by singular value decomposition }
9706: procedure WSVDLinFit(X, Y, S : TVector;
                             Lb, Ub : Integer;
9707:
9708:
                              SVDTol : Float;
9709:
                             В
                                       : TVector;
9710:
                             V
                                      : TMatrix); external 'dmath';
9711: { Weighted linear regression by singular value decomposition } 9712: procedure MulFit(X : TMatrix;
9713:
                                          TVector;
9714:
                         Lb, Ub, Nvar:
                                          Integer;
                                      : Boolean;
9715
                         ConsTerm
9716:
                                       : TVector;
                         В
9717:
                         V
                                        : TMatrix); external 'dmath';
9718: { Multiple linear regression by Gauss-Jordan method }
9719: procedure WMulFit(X : TMatrix; 9720: Y, S : TVector;
9721:
                          Lb, Ub, Nvar : Integer;
9722:
                          ConsTerm
                                           Boolean;
9723:
                          В
                                        : TVector;
9724:
                          7.7
                                         : TMatrix); external 'dmath';
9725: { Weighted multiple linear regression by Gauss-Jordan method }
                                      : TMatrix;
9726: procedure SVDFit(X
9727:
                                          TVector;
9728:
                         Lb, Ub, Nvar : Integer;
                                     : Boolean;
9729:
                         ConsTerm
9730:
                                       : Float;
                         SVDTol
9731:
                                        : TVector;
                         В
                                        : TMatrix); external 'dmath';
9732:
9733: { Multiple linear regression by singular value decomposition }
9734: procedure WSVDFit(X 9735: Y, S
                                         : TMatrix;
9735:
                                           TVector;
9736:
                          Lb, Ub, Nvar :
                                           Integer;
9737:
                           ConsTerm
                                           Boolean;
9738:
                          SVDTol
                                         : Float;
9739:
                                         : TVector;
                          В
9740:
                                         : TMatrix); external 'dmath';
9741: { Weighted multiple linear regression by singular value decomposition }
9742: procedure PolFit(X, Y : TVector; 9743: Lb, Ub, Deg : Integer;
                                    : TVector;
9744:
                         В
                                      : TMatrix); external 'dmath';
9745:
9746: { Polynomial regression by Gauss-Jordan method }
9747: procedure WPolFit(X, Y, S : TVector; 9748: Lb, Ub, Deg : Integer;
                                9749:
                          В
9750:
9751: { Weighted polynomial regression by Gauss-Jordan method }
SVDTol : Float;
B : TVector;
9754:
9755:
9756:
                            7.7
                                          : TMatrix); external 'dmath';
9757: { Unweighted polynomial regression by singular value decomposition } 9758: procedure WSVDPolFit(X, Y, S : TVector;
9759:
                              Lb, Ub, Deg : Integer;
                                        : Float;
9760:
                              SVDTol
9761:
                              В
                                           : TVector;
9762:
                                           : TMatrix); external 'dmath';
      { Weighted polynomial regression by singular value decomposition }
9764: procedure RegTest(Y, Ycalc : TVector; 9765: LbY, UbY : Integer;
9766:
                          7.7
                                    : TMatrix;
                          LbV, UbV : Integer;
9767:
                          var Test : TRegTest); external 'dmath';
9768:
9769: { Test of unweighted regression }
9770: procedure WRegTest(Y, Ycalc, S: TVector;
                           LbY, UbY
9771:
                                        : Integer;
                                         : TMatrix;
9772:
9773:
                           LbV, UbV
                                         : Integer;
9774:
                           var Test
                                         : TRegTest); external 'dmath';
9775:
       { Test of weighted regression }
9776: {
9777:
        Nonlinear regression
9778:
9779: procedure SetOptAlgo(Algo : TOptAlgo); external 'dmath';
9780: \bar{\{} Sets the optimization algorithm for nonlinear regression \} 9781: function GetOptAlgo: TOptAlgo; external 'dmath';
9782: { Returns the optimization algorithm }
9783: procedure SetMaxParam(N : Byte); external 'dmath';
9784: { Sets the maximum number of regression parameters for nonlinear regression } 9785: function GetMaxParam : Byte; external 'dmath';
9786: { Returns the maximum number of regression parameters for nonlinear regression }
```

```
9787: procedure SetParamBounds(I : Byte; ParamMin, ParamMax : Float); external 'dmath';
9788: { Sets the bounds on the I-th regression parameter }
9789: procedure GetParamBounds(I : Byte; var ParamMin,ParamMax:Float); external 'dmath';
9790.
      { Returns the bounds on the I-th regression parameter }
9791: procedure NLFit(RegFunc : TRegFunc;
9792:
                       DerivProc : TDerivProc;
9793:
                                   TVector;
                       X, Y
9794:
                       Lb, Ub
                                 : Integer
9795:
                       MaxIter
                                 : Integer;
9796:
                       Tol
                                  : Float;
9797:
                                  : TVector;
                       В
                       FirstPar,
9798:
                       LastPar : Integer;
V : TMatrix); external 'dmath';
9799:
9800:
9801: { Unweighted nonlinear regression }
9802: procedure WNLFit(RegFunc
                                    TRegFunc;
                        DerivProc :
                                    TDerivProc;
9803:
                        X, Y, S :
Lb, Ub :
9804:
                                    TVector;
                                  : Integer;
9805:
9806:
                        MaxIter
                                  : Integer;
9807:
                        Tol
                                   : Float;
9808:
                        В
                                  : TVector;
9809:
                        FirstPar,
                                  : Integer;
                        LastPar
9810:
9811:
                                   : TMatrix); external 'dmath';
9812:
      { Weighted nonlinear regression }
9813: procedure SetMCFile(FileName : String); external 'dmath';
9814: { Set file for saving MCMC simulations }
9815: procedure SimFit(RegFunc
                                     TRegFunc;
                        Х, Ү
                                    TVector;
9817:
                        Lb, Ub
                                  : Integer;
9818:
                        B
                                  : TVector;
                        FirstPar,
9819:
                        LastPar : Integer;
9820:
                        V
                                   : TMatrix); external 'dmath';
9821:
9822: { Simulation of unweighted nonlinear regression by MCMC }
9823: procedure WSimFit(RegFunc
                                  : TRegFunc;
                         X, Y, S
                                     TVector;
9824:
9825:
                         Lb, Ub
                                      Integer;
9826:
                         В
                                    : TVector;
                         FirstPar,
9827:
                         LastPar : Integer;
9828:
                                    : TMatrix); external 'dmath';
9829:
      { Simulation of weighted nonlinear regression by MCMC }
9830:
9831:
9832:
        Nonlinear regression models
9833:
                                        ______}
9834: procedure FracFit(X, Y
                                    : TVector;
9835:
                         Lb, Ub
                                       Integer;
9836:
                         Deg1, Deg2 : Integer;
9837:
                         ConsTerm :
                                       Boolean;
9838:
                         MaxIter
                                       Integer;
9839:
                                       Float;
9840:
                         В
                                     : TVector;
9841:
                         V
                                     : TMatrix); external 'dmath';
9842:
      { Unweighted fit of rational fraction }
                                      : TVector;
: Integer;
9843: procedure WFracFit(X, Y, S
9844:
                          Lb, Ub
                          Deg1, Deg2 : Integer;
ConsTerm : Boolean;
9845:
9846:
                                      : Integer;
9847:
                          MaxIter
9848:
                          Tol
                                      : Float;
9849:
                          В
                                      : TVector;
9850:
                          V
                                      : TMatrix); external 'dmath';
9851: { Weighted fit of rational fraction }
9853: function FracFit_Func(X : Float; B : TVector) : Float; external 'dmath';
9854: { Returns the value of the rational fraction at point X }
9855: procedure ExpFit(X, Y
                                     : TVector;
                        Lb, Ub, Nexp:
9856:
                                        Integer;
                                    : Boolean;
: Integer;
9857:
                        ConsTerm
9858:
                        MaxIter
9859:
                        Tol
                                      : Float;
9860:
                                      : TVector;
                        В
9861:
                                      : TMatrix); external 'dmath';
9862:
      { Unweighted fit of sum of exponentials }
9863: procedure WExpFit(X, Y, S : TVector; 9864: Lb, Ub, Nexp : Integer;
                         ConsTerm
9865:
                                         Boolean;
9866:
                         MaxIter
                                         Integer;
9867:
                         Tol
                                       : Float;
9868:
                         В
                                       : TVector;
9869:
                         V
                                       : TMatrix); external 'dmath';
      { Weighted fit of sum of exponentials } function ExpFit_Func(X : Float; B : TVector) : Float; external 'dmath';
9871:
9872: { Returns the value of the regression function at point X }
9873: procedure IncExpFit(X, Y 9874: Lb, Ub
                                   : TVector;
: Integer;
9875:
                           ConsTerm : Boolean
```

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9876:
                            MaxIter : Integer;
9877:
                                       : Float;
                            Tol
9878:
                                       : TVector;
9879 .
                            ٦,7
                                       : TMatrix); external 'dmath';
9880: { Unweighted fit of model of increasing exponential }
9881: procedure WIncExpFit(X, Y, S : TVector; 9882: Lb, Ub : Integer;
                              ConsTerm :
9883:
                                          Boolean;
9884:
                             MaxIter : Integer;
9885:
                             Tol
                                       : Float;
                                        : TVector;
9886:
                             В
                                       : TMatrix); external 'dmath';
9888: { Weighted fit of increasing exponential }
9889: function IncExpFit_Func(X : Float; B : TVector) : Float; external 'dmath';
9890: { Returns the value of the regression function at point X }
9891: procedure ExpLinFit(X, Y
                                    : TVector;
                            Lb, Ub : Integer;
9893.
                            MaxIter : Integer;
                                     : Float;
9894:
                            Tol
9895:
                            В
                                     : TVector;
9896:
                                     : TMatrix); external 'dmath';
9897: { Unweighted fit of the "exponential + linear" model }
9898: procedure WExpLinFit(X, Y, S: TVector; 9899: Lb, Ub : Integer;
                              MaxIter :
                                        Integer;
9901:
                              Tol
                                       : Float;
9902:
                             В
                                       : TVector;
                                      : TMatrix); external 'dmath';
9903:
                             V
9904: { Weighted fit of the "exponential + linear" model }
9906: function ExpLinFit_Func(X : Float; B : TVector) : Float; external 'dmath';
9907: { Returns the value of the regression function at point X }
9908: procedure MichFit(X, Y : TVector; 9909: Lb, Ub : Integer;
                          MaxIter : Integer
9910:
9911:
                          Tol
                                   : Float;
9912:
                          В
                                   : TVector;
9913:
                          V
                                   : TMatrix); external 'dmath';
9914: { Unweighted fit of Michaelis equation }
9915: procedure WMichFit(X, Y, S : TVector; 9916: Lb, Ub : Integer;
                           MaxIter : Integer;
9917:
9918:
                                      Float;
                           Tol
9919:
                           В
                                      TVector;
9920:
                           7.7
                                    : TMatrix); external 'dmath';
9921: { Weighted fit of Michaelis equation } 9922: function MichFit_Func(X : Float; B : TVector) : Float; external 'dmath';
9923: { Returns the value of the Michaelis equation at point X }
9924: procedure MintFit(X, Y : TVector; 9925: Lb, Ub : Integer;
9926:
                          MintVar : TMintVar;
                          Fit_S0 : Boolean;
9927:
                          MaxIter : Integer;
9928:
9929:
                          Tol
                                  : Float;
9930:
                          В
                                   : TVector;
                                   : TMatrix); external 'dmath';
9931:
                          V
9932: { Unweighted fit of the integrated Michaelis equation }
9933: procedure WMintFit(X, Y, S : TVector;
                           Lb, Ub : Integer;
MintVar : TMintVar
9934:
9935:
                                      TMint.Var;
9936:
                           Fit_S0 :
                                      Boolean;
9937:
                           MaxIter : Integer;
9938:
                           Tol
                                    : Float;
9939:
                           В
                                      TVector;
                           V
                                    : TMatrix); external 'dmath';
9940:
        Weighted fit of the integrated Michaelis equation }
9942: function MintFit_Func(X : Float; B : TVector) : Float; external 'dmath';
9943: { Returns the value of the integrated Michaelis equation at point X \}
9944: procedure HillFit(X, Y : TVector;
9945: Lb, Ub : Integer;
9946:
                          MaxIter : Integer;
9947:
                          Tol
                                  : Float;
9948:
                          В
                                   : TVector;
9949:
                          V
                                   : TMatrix); external 'dmath';
9950: { Unweighted fit of Hill equation }
9951: procedure WHillFit(X, Y, S : TVector;
                           Lb, Ub : Integer;
9952:
9953:
                           MaxIter : Integer;
                                      Float;
9954:
                           Tol
                                      TVector;
9956:
                           V
                                    : TMatrix); external 'dmath';
9957: { Weighted fit of Hill equation }
9958: function HillFit_Func(X : Float; B : TVector) : Float; external 'dmath';
9959: { Returns the value of the Hill equation at point X }
9960: procedure LogiFit(X, Y 9961: Lb, Ub
                                   : TVector;
                                    : Integer;
9962:
                          ConsTerm : Boolean;
                          General : Boolean;
MaxIter : Integer;
9963:
9964:
```

```
9965:
                           Tol
                                    : Float;
 9966:
                                   : TVector;
                           В
 9967:
                                     : TMatrix); external 'dmath';
 9968: { Unweighted fit of logistic function }
9969: procedure WLogiFit(X, Y, S : TVector;
9970: Lb, Ub : Integer;
 9971:
                            ConsTerm : Boolean;
                            General : Boolean;
MaxIter : Integer;
 9972:
 9973:
 9974:
                            Tol
                                      : Float;
 9975:
                                      : TVector;
                            В
                                      : TMatrix); external 'dmath';
 9976:
 9977: { Weighted fit of logistic function }
9978: function LogiFit_Func(X : Float; B : TVector) : Float; external 'dmath';
 9979: { Returns the value of the logistic function at point X }
 9980: procedure PKFit(X, Y : TVector; 9981: Lb, Ub : Integer;
 9982.
                         MaxIter : Integer;
                               : Float;
 9983:
                         Tol
 9984:
                         В
                                 : TVector;
                                 : TMatrix); external 'dmath';
 9985:
 9986: { Unweighted fit of the acid-base titration curve }
 9987: procedure WPKFit(X, Y, S : TVector;
9988: Lb, Ub : Integer;
 9989:
                          MaxIter : Integer;
                                  : Float;
 9990:
                          Tol
 9991:
                          В
                                   : TVector;
                                   : TMatrix); external 'dmath';
 9992:
                          V
 9993:
       { Weighted fit of the acid-base titration curve }
 9994: function PKFit_Func(X : Float; B : TVector) : Float; external 'dmath';
 9995: { Returns the value of the acid-base titration function at point X }
                          (X, Y : TVector;
Lb, Ub : Integer;
 9996: procedure PowFit(X, Y
 9997:
 9998:
                          MaxIter : Integer;
                                   : Float;
 9999:
                          Tol
                          В
10000:
                                  : TVector;
10001:
                          V
                                  : TMatrix); external 'dmath';
10001: { Unweighted fit of power function }
10003: procedure WPowFit(X, Y, S : TVector; 10004: Lb, Ub : Integer;
10005:
                           MaxIter : Integer;
10006:
                                   : Float;
                           Tol
                                    : TVector;
10007:
                           В
10008:
                           V
                                    : TMatrix); external 'dmath';
10009: { Weighted fit of power function }
10010:
10011: function PowFit_Func(X : Float; B : TVector) : Float; external 'dmath';
10012: { Returns the value of the power function at point X }
10013: procedure GammaFit(X, Y : TVector; 10014: Lb, Ub : Integer;
10015:
                            MaxIter : Integer;
10016:
                                  : Float;
                            Tol
                                     : TVector;
10017:
10018:
                            V
                                     : TMatrix); external 'dmath';
10019: { Unweighted fit of gamma distribution function } 10020: procedure WGammaFit(X, Y, S : TVector; 10021: Lb, Ub : Integer;
10022:
                             MaxIter : Integer;
10023:
                             Tol
                                    : Float;
                                      : TVector;
10024:
                             B
V
                                      : TMatrix); external 'dmath';
10025:
10026: { Weighted fit of gamma distribution function } 10027: function GammaFit_Func(X : Float; B : TVector) : Float; external 'dmath';
10028: { Returns the value of the gamma distribution function at point X }
10029: {
                                      _____
        Principal component analysis
10031:
10032: procedure VecMean(X
                                         : TMatrix;
                         Lb, Ub, Nvar : Integer;
10033:
                                          : TVector); external 'dmath';
10034:
                           M
10035: { Computes the mean vector M from matrix X }
10036: procedure VecSD(X
                                       : TMatrix;
                       Lb, Ub, Nvar : Integer;
10037:
                                   : TVector); external 'dmath';
10038:
                        M.S
10039: { Computes the vector of standard deviations S from matrix X }
10040: procedure MatVarCov(X
                                           : TMatrix;
10041:
                             Lb, Ub, Nvar : Integer;
                                          : TVector;
: TMatrix); external 'dmath';
10042:
                             Μ
                             V
10043:
10044: { Computes the variance-covariance matrix V from matrix X }
10045: procedure MatCorrel(V : TMatrix;
                          Nvar : Integer;
10046:
10047:
                             R : TMatrix); external 'dmath';
10048: { Computes the correlation matrix R from the var-cov matrix V }
            edure PCA(R : TMatrix;
Nvar : Integer;
10049: procedure PCA(R
10050:
                      Lambda : TVector;
10051:
                      C, Rc : TMatrix); external 'dmath';
10052:
10053: { Performs a principal component analysis of the correlation matrix R }
```

```
10054: procedure ScaleVar(X
                                              : TMatrix;
10055:
                              Lb, Ub, Nvar : Integer;
                              M, S : TVector;
7. : TMatrix); external 'dmath';
10057:
10058: { Scales a set of variables by subtracting means and dividing by SD's }
10059: procedure PrinFac(Z
                                            : TMatrix;
10060: Lb, Ub, Nvar : Integer;
                              C, F
10061:
                                             : TMatrix); external 'dmath';
10062: { Computes principal factors }
10063: { -----
10064:
          Strings
10066: function LTrim(S : String) : String; external 'dmath';
10067: { Removes leading blanks }
10068: function RTrim(S : String) : String; external 'dmath';
10069: { Removes trailing blanks }
10070: function Trim(S: String): String; external 'dmath';
10071: { Removes leading and trailing blanks }
10072: function StrChar(N: Byte; C: Char): String; external 'dmath'; 10073: { Returns a string made of character C repeated N times } 10074: function RFill(S: String; L: Byte): String; external 'dmath';
10075: { Completes string S with trailing blanks for a total length L }
10076: function LFill(S : String; L : Byte) : String; external 'dmath'
10077: { Completes string S with leading blanks for a total length L }
10078: function CFill(S : String; L : Byte) : String; external 'dmath';
10079: { Centers string S on a total length L }
10080: function Replace(S : String; C1, C2 : Char) : String; external 'dmath';
10081: { Replaces in string S all the occurences of C1 by C2 }
10082: function Extract(S: String; var Index: Byte; Delim: Char): String; external 'dmath';
10083: { Extracts a field from a string }
10084: procedure Parse(S : String; Delim:Char; Field:TStrVector; var N:Byte); external 'dmath';
10085: { Parses a string into its constitutive fields }
10086: procedure SetFormat(NumLength, MaxDec:Integer; FloatPoint, NSZero:Bool); external 'dmath';
10087: { Sets the numeric format
10088: function FloatStr(X : Float) : String; external 'dmath';
10089: { Converts a real to a string according to the numeric format }
10090: function IntStr(N : LongInt) : String; external 'dmath';
10091: { Converts an integer to a string }
10092: function CompStr(Z : Complex) : String; external 'dmath';
10093: { Converts a complex number to a string }
10094: {$IFDEF DELPHI}
10095: function StrDec(S: String): String; external 'dmath';
10096: { Set decimal separator to the symbol defined in SysUtils }
10097: function IsNumeric(var S : String; var X : Float) : Boolean; external 'dmath';
10098: { Test if a string represents a number and returns it in X }
10099: function ReadNumFromEdit(Edit : TEdit) : Float; external 'dmath';
10100: { Reads a floating point number from an Edit control }
10101: procedure WriteNumToFile(var F : Text; X : Float); external 'dmath';
        { Writes a floating point number in a text file }
10102:
10103: {$ENDIF}
10104: {
10105:
          BGI / Delphi graphics
10106:
10107: function InitGraphics
10108: {$IFDEF DELPHI}
10109: (Width, Height: Integer): Boolean;
10110: {$ELSE}
10111: (Pilot, Mode: Integer; BGIPath: String): Boolean; { SENDIF } external 'dmath';
10112: { Enters graphic mode }
10113: procedure SetWindow({$iFDEF DELPHI}Canvas : TCanvas;{$ENDIF}
10114:
                              X1, X2, Y1, Y2: Integer; GraphBorder:Boolean); external 'dmath';
10115: { Sets the graphic window }
10116: procedure SetOxScale(Scale
                                                          : TScale;
10117:
                                 OxMin, OxMax, OxStep : Float); external 'dmath';
10118: { Sets the scale on the Ox axis }
10119: procedure SetOyScale(Scale
                                                          : TScale;
                                 OyMin, OyMax, OyStep : Float); external 'dmath';
10120:
10121: { Sets the scale on the Oy axis }
10122: procedure GetOxScale(var Scale : TScale; 10123: var OxMin, OxMax, OxStep : Float); external 'dmath';
10124: { Returns the scale on the Ox axis }
10125: procedure GetOyScale(var Scale
                                                               : TScale;
10126:
                                 var OyMin, OyMax, OyStep : Float); external 'dmath';
10127: { Returns the scale on the Oy axis }
10128: procedure SetGraphTitle(Title: String); external 'dmath'; { Sets the title for the graph }
10139: procedure SetOxTitle(Title: String); external 'dmath'; { Sets the title for the Ox axis } 10130: procedure SetOyTitle(Title: String); external 'dmath'; { Sets the title for the Oy axis }
10131: function GetGraphTitle: String; external 'dmath'; { Returns the title for the graph } 10132: function GetGraphTitle: String; external 'dmath'; { Returns the title for the Ox axis } 10133: function GetOyTitle: String; external 'dmath'; { Returns the title for the Oy axis }
10134: {$IFNDEF DELPHI}
10135: procedure SetTitleFont(FontIndex, Width, Height: Integer); external 'dmath';
10136: { Sets the font for the main graph title }
10137: procedure SetOxFont(FontIndex, Width, Height : Integer); external 'dmath';
10138: { Sets the font for the Ox axis (title and labels) }
10139: procedure SetOyFont(FontIndex, Width, Height : Integer); external 'dmath';
10140: { Sets the font for the Oy axis (title and labels) }
10141: procedure SetLgdFont(FontIndex, Width, Height: Integer); external 'dmath';
10142: { Sets the font for the legends }
```

```
10143: procedure SetClipping(Clip : Boolean); external 'dmath';
10144: { Determines whether drawings are clipped at the current viewport
               boundaries, according to the value of the Boolean parameter Clip
10146: { $ENDIF }
10147: procedure PlotOxAxis ($IFDEF DELPHI) (Canvas : TCanvas) ($ENDIF); external 'dmath';
10148: { Plots the horizontal axis }
10149: procedure PlotOyAxis{$IFDEF DELPHI}(Canvas : TCanvas){$ENDIF}; external 'dmath';
10150: { Plots the vertical axis
10151: procedure PlotGrid([{SIFDEF DELPHI}|Canvas:TCanvas;[{SENDIF}] Grid:TGrid); external 'dmath';
10152: { Plots a grid on the graph }
10153: procedure WriteGraphTitle{{SIFDEF DELPHI}}(Canvas : TCanvas){{$ENDIF}}; external 'dmath';
10154: { Writes the title of the graph }
10155: procedure SetMaxCurv(NCurv : Byte); external 'dmath';
10156: \overline{\{} Sets the maximum number of curves and re-initializes their parameters \}
10157: procedure SetPointParam
10158: {SIFDEF DELPHI}
10159: (CurvIndex, Symbol, Size : Integer; Color : TColor);
10160: {\subseteq \text{ELSE}}
10161: (CurvIndex, Symbol, Size, Color: Integer); {\subseteq \text{ENDIF}} external 'dmath';
10162: { Sets the point parameters for curve # CurvIndex }
10163: procedure SetLineParam
10164: {$IFDEF DELPHI}
10165: (CurvIndex: Integer; Style: TPenStyle; Width: Integer; Color: TColor);
10166: { $ELSE }
10167: (CurvIndex, Style, Width, Color: Integer); ($ENDIF) external 'dmath';
10168: { Sets the line parameters for curve # CurvIndex }
10169: procedure SetCurvLegend(CurvIndex : Integer; Legend : String); external 'dmath';
10170: { Sets the legend for curve # CurvIndex }
10171: procedure SetCurvStep(CurvIndex, Step : Integer); external 'dmath';
10172: { Sets the step for curve # CurvIndex }
10173: function GetMaxCurv : Byte; external 'dmath'; { Returns the maximum number of curves }
10174: procedure GetPointParam
10175: { $IFDEF DELPHI }
10176: (CurvIndex : Integer; var Symbol, Size : Integer; var Color : TColor);
10178: (CurvIndex: Integer; var Symbol, Size, Color: Integer); { SENDIF } external 'dmath';
10179: { Returns the point parameters for curve # CurvIndex }
10180: procedure GetLineParam
10181: {$IFDEF DELPHI}
10182: (CurvIndex : Integer; var Style : TPenStyle; var Width : Integer; var Color : TColor);
10183: {SELSE}
10184: (CurvIndex : Integer; var Style, Width, Color : Integer); {SENDIF} external 'dmath';
10185: { Returns the line parameters for curve # CurvIndex }
10186: function GetCurvLegend(CurvIndex : Integer) : String; external 'dmath';
10187: { Returns the legend for curve # CurvIndex }
10188: function GetCurvStep(CurvIndex : Integer) : Integer; external 'dmath';
10189: { Returns the step for curve # CurvIndex } 10190: { SIFDEF DELPHI }
10191: procedure PlotPoint(Canvas : TCanvas;
10192: X, Y : Float; CurvIndex : Integer); external 'dmath';
10193: {$ELSE}
10194: procedure PlotPoint(Xp, Yp, CurvIndex : Integer); external 'dmath';
10195: {$ENDIF}
10196: { Plots a point on the screen }
10197: procedure PlotCurve([$IFDEF DELPHI]Canvas: TCanvas; [$ENDIF]
                                           X, Y : TVector;
Lb, Ub, CurvIndex : Integer); external 'dmath';
10198:
10199:
10200: { Plots a curve }
10201: procedure PlotCurveWithErrorBars({\$IFDEF DELPHI}\)Canvas : TCanvas;{\$ENDIF\}
10202: X, Y, S : TVector;
                                                                   Ns, Lb, Ub, CurvIndex : Integer); external 'dmath';
10203:
10204: { Plots a curve with error bars }
10205: procedure PlotFunc({\$iFDEF DELPHI}\Canvas : TCanvas;{\$ENDIF}
                                           Func : TFunc;
Xmin, Xmax : Float;
10206:
10207:
                                           \{\frac{\{\$IFDEF DELPHI\}{\$Integer; \{\$ENDIF\}}}{\$CurvIndex : Integer; \{\$extraction \text{external 'dmath';}}
10208:
10209:
10210: { Plots a function }
10211: procedure WriteLegend(($IFDEF DELPHI) Canvas: TCanvas; {$ENDIF}
                                           NCurv
                                                                                     : Integer;
10212:
                                                 ShowPoints, ShowLines : Boolean); external 'dmath';
10213:
10214: { Writes the legends for the plotted curves }
10218:
                                                                           : TMatrix); external 'dmath';
                                        F
10219: { Contour plot }
10219: { Contour plot }
10220: function Xpixel(X : Float):Integer; external 'dmath'; {Converts user abscissa X to screen coordinate 10221: function Ypixel(Y : Float):Integer; external 'dmath'; {Converts user ordinate Y to screen coordinate 10222: function Xuser(X : Integer):Float; external 'dmath'; {Converts screen coordinate X to user abscissa 10223: function Yuser(Y : Integer):Float; external 'dmath'; {Converts screen coordinate Y to user ordinate Y to user ordin
10224: {$IFNDEF DELPHI}
10225: procedure LeaveGraphics; external 'dmath';
10226: { Quits graphic mode }
10227:
10228: {
              LaTeX graphics
10229:
10230:
10231: function TeX_InitGraphics(FileName : String; PgWidth, PgHeight : Integer;
```

```
10232:
                                                             : Boolean) : Boolean; external 'dmath';
                                        Header
10233: { Initializes the LaTeX file }
10234: procedure TeX_SetWindow(X1, X2, Y1, Y2 : Integer; GraphBorder : Boolean); external 'dmath';
10235: { Sets the graphic window }
10236: procedure TeX_LeaveGraphics(Footer : Boolean); external 'dmath'; { Close the LaTeX file }
10237: procedure TeX SetOxScale(Scale: TScale; OxMin, OxMax, OxStep: Float); external 'dmath';
10238: { Sets the scale on the Ox axis }
10239: procedure TeX_SetOyScale(Scale: TScale; OyMin, OyMax, OyStep: Float); external 'dmath';
10240: { Sets the scale on the Oy axis }
10241: procedure TeX_SetGraphTitle(Title : String); external 'dmath'; { Sets the title for the graph }
10242: procedure TeX_SetOxTitle(Title: String); external 'dmath'; { Sets the title for the Ox axis 10243: procedure TeX_SetOyTitle(Title: String); external 'dmath'; { Sets the title for the Ox axis
10244: procedure TeX_PlotOxAxis; external 'dmath'; { Plots the horizontal axis } 10245: procedure TeX_PlotOyAxis; external 'dmath'; { Plots the vertical axis }
10246: procedure TeX_PlotGrid(Grid: TGrid); external 'dmath'; { Plots a grid on the graph } 10247: procedure TeX_WriteGraphTitle; external 'dmath'; Writes the title of the graph }
10248: procedure TeX_SetMaxCurv(NCurv : Byte); external 'dmath';
        { Sets the maximum number of curves and re-initializes their parameters }
10249:
10250: procedure TeX_SetPointParam(CurvIndex, Symbol, Size: Integer); external 'dmath'; 10251: { Sets the point parameters for curve # CurvIndex } 10252: procedure TeX_SetLineParam(CurvIndex, Style: Integer;
                                        Width : Float; Smooth : Boolean); external 'dmath';
10253:
10254: { Sets the line parameters for curve # CurvIndex }
10255: procedure TeX_SetCurvLegend(CurvIndex : Integer; Legend : String); external 'dmath';
10256: { Sets the legend for curve # CurvIndex }
10257: procedure TeX_SetCurvStep(CurvIndex, Step : Integer); external 'dmath';
10258: { Sets the step for curve # CurvIndex }
10259: procedure TeX_PlotCurve(X, Y : TVector; Lb, Ub, CurvIndex : Integer); external 'dmath';
10260: { Plots a curve }
10261: procedure TeX_PlotCurveWithErrorBars(X, Y, S : TVector;
                                                     Ns, Lb, Ub, CurvIndex : Integer); external 'dmath';
10262:
10263: { Plots a curve with error bars }
10264: procedure TeX_PlotFunc(Func : TFunc; X1, X2 : Float;
10265:
                                   Npt : Integer; CurvIndex : Integer); external 'dmath';
10267: procedure TeX_WriteLegend(NCurv : Integer; ShowPoints, ShowLines : Boolean); external 'dmath';
10268: { Writes the legends for the plotted curves }
10269: procedure TeX_ConRec(Nx, Ny, Nc : Integer; X, Y, Z : TVector; F : TMatrix); external 'dmath';
10270: { Contour plot }
10271: function Xcm(X : Float) : Float; external 'dmath'; { Converts user coordinate X to cm }
10272: function Ycm(Y : Float) : Float; external 'dmath'; { Converts user coordinate Y to cm }
10273:
10275: Function RawUTF8ToPDFString( const Value : RawUTF8) : PDFString
{\tt 10276:} \quad \textbf{Function} \; \; \texttt{\_DateTimeToPdfDate} ( \; \; \texttt{ADate} \; : \; \; \texttt{TDateTime}) \; : \; \; \texttt{TPdfDate}
10277:
         Function PdfDateToDateTime( const AText : TPdfDate) : TDateTime
         Function PdfRect( Left, Top, Right, Bottom : Single) : TPdfRect;
10278:
         Function PdfRect1( const Box : TPdfBox) : TPdfRect;
10280:
         Function PdfBox( Left, Top, Width, Height : Single) : TPdfBox
10281:
         // {\tt Function} \ \_{\tt GetCharCount}(\ {\tt Text} \ : \ {\tt PAnsiChar}) \ : \ {\tt integer}
10282:
         //Procedure L2R( W : PWideChar; L : integer)
Function PdfCoord( MM : single) : integer
10283:
         Function CurrentPrinterPaperSize : TPDFPaperSize
10284:
10285:
         Function CurrentPrinterRes: TPoint

Procedure GDICommentBookmark( MetaHandle : HDC; const aBookmarkName : RawUTF8)

Procedure GDICommentOutline( MetaHandle : HDC; const aTitle : RawUTF8; aLevel : Integer)
10286:
10287:
         Procedure GDICommentLink( MetaHandle: HDC; const aBookmarkName: RawUTF8; const aRect : TRect)
10288:
         Const('Usp10','String').SetString('usp10.dll
10289:
         10290:
10291:
10292:
10293: //****
10294:
10295: procedure SIRegister PMrand(CL: TPSPascalCompiler); //ParkMiller
10296: begin
10297: Procedure PMrandomize( I : word)
         Function PMrandom : longint
10298:
10299:
         Function Rrand : extended
10300:
         Function Irand( N : word) : word
Function Brand( P : extended) : boolean
10301:
10302: Function Nrand : extended
10303: end;
10304:
10305: procedure SIRegister Spring Cryptography Utils(CL: TPSPascalCompiler);
10306: begin
          Function Endian(x: LongWord): LongWord
10307:
10308:
          \textbf{Function} \ \texttt{Endian64} ( \ \texttt{x} \ : \ \texttt{Int64}) \ : \ \texttt{Int64}
          Function spRol( x : LongWord; y : Byte) : LongWord
Function spRor( x : LongWord; y : Byte) : LongWord
10309:
10310:
          Function Ror64(x: Int64; y: Byte): Int64
10311:
10312: end;
10313:
10314: procedure SIRegister MapReader(CL: TPSPascalCompiler);
10315: begin
10316: Procedure ClearModules
10317:
         Procedure ReadMapFile( Fname : string)
10318: Function AddressInfo( Address : dword) : string
10319: end;
```

```
10321: procedure SIRegister LibTar(CL: TPSPascalCompiler);
10322: begin
           TTarPermission', '( tpReadByOwner, tpWriteByOwner, tpExecuteByOw
10324 .
             +'ner, tpReadByGroup, tpWriteByGroup, tpExecuteByGroup, tpReadByOther, tpWri'
10325:
             +'teByOther, tpExecuteByOther )
10326:
           TTarPermissions', 'set of TTarPermission
10327:
           TFileType', '( ftNormal, ftLink, ftSymbolicLink, ftCharacter, ft'
10328:
             +'Block, ftDirectory, ftFifo, ftContiguous, ftDumpDir, ftMultiVolume, ftVolumeHeader;
           TTarMode', '( tmSetUid, tmSetGid, tmSaveText )
TTarModes', 'set of TTarMode
TTarDirRec', 'record Name : STRING; Size : INT64; DateTime : TDa'
10329:
10330:
10331:
            +'teTime; Permissions : TTarPermissions; FileType : TFileType; LinkName : ST'
10333:
             +'RING; UID : INTEGER; GID : INTEGER; UserName : STRING; GroupName : STRING;'
            +' ChecksumOK : BOOLEAN; Mode : TTarModes; Magic : STRING; MajorDevNo : INTE'
10334:
             +'GER; MinorDevNo : INTEGER; FilePos : INT64; end
10335:
10336:
           SIRegister_TTarArchive(CL);
10337:
           SIRegister TTarWriter(CL);
          Function PermissionString( Permissions : TTarPermissions) : STRING
Function ConvertFilename( Filename : STRING) : STRING
10338:
10339:
10340:
          Function FileTimeGMT( FileName : STRING) : TDateTime;
          Function FileTimeGMT1( SearchRec : TSearchRec) : TDateTime;
10341:
10342:
          Procedure ClearDirRec( var DirRec : TTarDirRec)
10343: end;
10344:
10345:
10346:
         //********unit uPSI_TlHelp32;
10347:
        procedure SIRegister_TlHelp32(CL: TPSPascalCompiler);
10348: begin
          Const('MAX_MODULE_NAME32','LongInt').SetInt( 255);
10349:
          Function CreateToolhelp32Snapshot( dwFlags, th32ProcessID : DWORD) : THandle
10350:
          Const('TH32CS_SNAPHEAPLIST','LongWord').SetUInt( $0000001);
Const('TH32CS_SNAPPROCESS','LongWord').SetUInt( $00000002);
Const('TH32CS_SNAPTHREAD','LongWord').SetUInt( $00000004);
10351:
10352:
10353:
          Const('TH32CS_SNAPMODULE','LongWord').SetUInt( $00000008);
10354:
          Const('TH32CS_INHERIT','LongWord').SetUInt( $80000000);
10356:
           tagHEAPLIST32','record dwSize:DWORD;th32ProcessID:DWORD;th32HeapID:DWORD;dwFlags:DWORD;end';
           AddTypeS('HEAPLIST32', 'tagHEAPLIST32' AddTypeS('TheapList32', 'tagHEAPLIST32')
10357:
10358:
          Const('HF32_DEFAULT','LongInt').SetInt( 1);
Const('HF32_SHARED','LongInt').SetInt( 2);
10359:
10360:
          Function Heap32ListFirst( hSnapshot : THandle; var lphl : THeapList32) : BOOL Function Heap32ListNext( hSnapshot : THandle; var lphl : THeapList32) : BOOL AddTypeS('tagHEAPENTRY32', 'record dwSize : DWORD; hHandle : THandle; dwAd'
10361:
10362:
10363:
            +'dress : DWORD; dwBlockSize : DWORD; dwFlags : DWORD; dwLockCount : DWORD; '
10364:
10365:
             +'dwResvd : DWORD; th32ProcessID : DWORD; th32HeapID : DWORD; end
           AddTypeS('HEAPENTRY32', 'tagHEAPENTRY32' AddTypeS('THeapEntry32', 'tagHEAPENTRY32')
10366:
10367:
          Const('LF32_FIXED','LongWord').SetUInt( $00000001);
10368:
          Const('LF32_FRED', 'LongWord').SetUInt( $00000001),
Const('LF32_FREE', 'LongWord').SetUInt( $00000002);
Const('LF32_MOVEABLE', 'LongWord').SetUInt( $00000004);
Function Heap32First( var lphe : THeapEntry32; th32ProcessID, th32HeapID : DWORD) : BOOL
Function Heap32Next( var lphe : THeapEntry32) : BOOL
10369:
10370:
10371:
10372:
10373:
          DWORD; var lpNumberOfBytesRead : DWORD) : BOOL
10374:
           AddTypeS('tagTHREADENTRY32', 'record dwSize : DWORD; cntUsage : DWORD; th3'
            +'2ThreadID : DWORD; th32OwnerProcessID : DWORD; tpBasePri : Longint; tpDelt' +'aPri : Longint; dwFlags : DWORD; end
10375:
10376:
           AddTypeS('THREADENTRY32', 'tagTHREADENTRY32' AddTypeS('TThreadEntry32', 'tagTHREADENTRY32')
10377:
10378:
         Function Thread32First( hSnapshot : THandle; var lpte : TThreadEntry32) : BOOL
Function Thread32Next( hSnapshot : THandle; var lpte : TThreadEntry32) : BOOL
10379:
10380:
10381:
        end;
10382:
          Const('EW_RESTARTWINDOWS','LongWord').SetUInt( $0042);
          Const('EW_REBOOTSYSTEM','LongWord').SetUInt( $0043);
Const('EW_EXITANDEXECAPP','LongWord').SetUInt( $0044);
Const('ENDSESSION_LOGOFF','LongWord').SetUInt( DWORD ( $80000000 ));
10383:
10384:
10385:
          Const('EWX_LOGOFF','LongInt').SetInt( 0);
10386:
10387:
          Const('EWX_SHUTDOWN','LongInt').SetInt( 1);
          Const('EWX_REBOOT','LongInt').SetInt(2);
Const('EWX_FORCE','LongInt').SetInt(4);
10388:
10389:
          Const('EWX_POWEROFF','LongInt').SetInt( 8);
Const('EWX_FORCEIFHUNG','LongWord').SetUInt( $10);
10390:
10391:
10392:
          Function GET_APPCOMMAND_LPARAM( const lParam : LongInt) : Shortint
10393:
          Function GET_DEVICE_LPARAM( const lParam : LongInt) : Word
          Function GET_MOUSEORKEY_LPARAM( const lParam : LongInt) : Word
10394:
10395:
          Function GET_FLAGS_LPARAM( const lParam : LongInt) : Word
10396:
          Function GET_KEYSTATE_LPARAM( const lParam : LongInt) : Word
         Function GetWindowWord( hWnd : HWND; nIndex : Integer) : Word
Function SetWindowWord( hWnd : HWND; nIndex : Integer; wNewWord : Word) : Word
10397:
10398:
          Function GetWindowLong( hWnd : HWND; nIndex : Integer) : Longint
10399:
          Function SetWindowLong( hWnd : HWND; nIndex : Integer; dwNewLong : Longint) : Longint
10400:
10401:
          Function GetClassWord( hWnd : HWND; nIndex : Integer) : Word
10402:
          Function SetClassWord( hWnd : HWND; nIndex : Integer; wNewWord : Word) : Word
          Function GetClassLong( hWnd : HWND; nIndex : Integer) : DWORD
10403:
          Function SetClassLong( hWnd : HWND; nIndex : Integer; dwNewLong : Longint) : DWORD
10404:
         Function GetDesktopWindow: HWND
Function GetParent( hWnd: HWND): HWND
Function SetParent( hWndChild, hWndNewParent: HWND): HWND
10405:
10406:
10407:
10408: Function GetTopWindow( hWnd : HWND) : HWND
10409: Function GetNextWindow( hWnd : HWND; uCmd : UINT) : HWND
```

```
10410:
         Function GetWindow( hWnd : HWND; uCmd : UINT) : HWND
10411:
         //Delphi DFM
         Function LoadDFMFile2Strings(const AFile:string; AStrings:TStrings; var WasText:boolean):integer
10413:
         Function SaveStrings2DFMFile( AStrings : TStrings; const AFile : string) : integer
         procedure GetHighlighters(AOwner: TComponent; AHighlighters: TStringList; AppendToList: boolean);
10414:
         function GetHighlightersFilter(AHighlighters: TStringList): string;
10415:
10416:
         function GetHighlighterFromFileExt(AHighlighters: TStringList;Extension: string):TSynCustomHighlighter;
         Function ShowOwnedPopups( hWnd : HWND; fShow : BOOL) : BOOL
10417:
10418:
         Function OpenIcon( hWnd : HWND) : BOOL
         Function CloseWindow( hWnd : HWND) : BOOL
Function MoveWindow( hWnd : HWND; X, Y, nWidth, nHeight : Integer; bRepaint : BOOL) : BOOL
10419:
10420:
         Function SetWindowPos(hWnd: HWND;hWndInsertAfter: HWND; X,Y,cx,cy: Integer; uFlags: UINT) : BOOL
10422:
         Function IsWindowVisible( hWnd : HWND) : BOOL
         Function IsIconic( hWnd : HWND) : BOOL
Function AnyPopup : BOOL
10423:
10424:
10425:
         Function BringWindowToTop( hWnd : HWND) : BOOL
         Function IsZoomed( hWnd : HWND) : BOOL
10426:
10427:
         Function IsWindow( hWnd : HWND) : BOOL
10428:
         Function IsMenu( hMenu : HMENU) : BOOL
         Function IsChild( hWndParent, hWnd : HWND) : BOOL
10429:
         Function DestroyWindow( hWnd : HWND) : BOOL
10430:
10431:
         Function ShowWindow( hWnd : HWND; nCmdShow : Integer) : BOOL
         Function AnimateWindow( hWnd : HWND; dwTime : DWORD; dwFlags : DWORD) : BOOL Function ShowWindowAsync( hWnd : HWND; nCmdShow : Integer) : BOOL
10432:
10433:
10434:
         Function FlashWindow( hWnd : HWND; bInvert : BOOL) : BOOL
10435:
         Function IsWindowUnicode( hWnd : HWND) : BOOL
10436:
         Function EnableWindow( hWnd : HWND; bEnable : BOOL) : BOOL
10437:
         Function IsWindowEnabled( hWnd : HWND) : BOOL
10438:
10439: procedure SIRegister IDECmdLine(CL: TPSPascalCompiler);
10440: begin
10441:
         const('ShowSetupDialogOptLong','String').SetString('--setup
         const('ShowSetupDialogOptLong','String').SetString('--setup
PrimaryConfPathOptLong','String').SetString('--primary-config-path=
PrimaryConfPathOptShort','String').SetString('--pcp=
SecondaryConfPathOptLong','String').SetString('--secondary-config-path=
SecondaryConfPathOptShort','String').SetString('--scp=
10442:
10443:
10444:
10445:
         NoSplashScreenOptLong', 'String').SetString( '--no-splash-screen NoSplashScreenOptShort', 'String').SetString( '--nsc
10446:
10447:
10448:
         StartedByStartLazarusOpt', 'String').SetString( '--started-by-startlazarus
10449:
         SkipLastProjectOpt', 'String').SetString('--skip-last-project
10450:
         DebugLogOpt','String').SetString( '--debug-log=
         DebugLogOptEnable','String').SetString('--debug-enable=
10451:
10452:
         LanguageOpt', 'String').SetString( '--language=
         LazarusDirOpt','String').SetString('--lazarusdir=
10453:
10454:
         Procedure ParseCommandLine(aCmdLineParams:TStrings;out IDEPid:Int;out ShowSplashScreen:boolean);
         Function GetCommandLineParameters( aCmdLineParams : TStrings; isStartLazarus:Boolean) : string
Function ExtractPrimaryConfigPath( aCmdLineParams : TStrings) : string
10455:
10456:
         Function IsHelpRequested : Boolean
10458:
         Function IsVersionRequested : boolean
         Function GetLanguageSpecified : string
10459:
10460:
         Function ParamIsOption( ParamIndex : integer; const Option : string) : boolean
10461:
         Function ParamIsOptionPlusValue(ParamIndex:integer; const Option: string; out AValue: string):bool;
10462:
         Procedure ParseNoGuiCmdLineParams
10463:
         Function ExtractCmdLineFilenames : TStrings
10464:
        end;
10465:
10466:
        procedure SIRegister_LazFileUtils(CL: TPSPascalCompiler);
10467:
10468: begin
         Function CompareFilenames (const Filename1, Filename2 : string) : integer
10469:
         Function CompareFilenamesIgnoreCase( const Filename1, Filename2 : string) : integer
10470:
10471:
         Function CompareFileExt( const Filename, Ext : string; CaseSensitive : boolean) : integer;
         Function CompareFileExt1( const Filename, Ext: string): integer;
Function CompareFilenameStarts( const Filename1, Filename2: string): integer
10472:
10473:
10474:
         Function CompareFilenames(Filename1:PChar;Len1:integer; Filename2:PChar;Len2:integer):integer
         Function CompareFilenamesP( Filename1, Filename2 : PChar; IgnoreCase : boolean) : integer
         Function DirPathExists( DirectoryName : string) : boolean
10476:
10477:
         \textbf{Function} \  \, \texttt{DirectoryIsWritable(} \  \, \textbf{const} \  \, \texttt{DirectoryName} \  \, : \  \, \textbf{string)} \  \, : \  \, \texttt{boolean}
10478:
         Function ExtractFileNameOnly( const AFilename : string) : string
Function FilenameIsAbsolute( const TheFilename : string) : boolean
10479:
         Function FilenameIsWinAbsolute( const TheFilename : string) : boolean
10480:
10481:
         Function FilenameIsUnixAbsolute( const TheFilename : string) : boolean
10482:
         Function ForceDirectory( DirectoryName : string) : boolean
Procedure CheckIfFileIsExecutable( const AFilename : string)
10483:
10484:
         Procedure CheckIfFileIsSymlink( const AFilename : string)
10485:
         Function FileIsText( const AFilename : string) : boolean
10486:
         Function FileIsText2( const AFilename : string; out FileReadable : boolean) : boolean
         Function FilenameIsTrimmed(const TheFilename: string): boolean

Function FilenameIsTrimmed2(StartPos: PChar; NameLen: integer): boolean
10487:
10488:
         Function TrimFilename( const AFilename : string) : string
10490:
         Function ResolveDots( const AFilename : string) : string
10491:
         Procedure ForcePathDelims( var FileName : string)
         Function GetForcedPathDelims( const FileName : string) : String
10492:
         Function CleanAndExpandFilename( const Filename: string) : string
10493:
         Function CleanAndExpandDirectory( const Filename : string) : string
10494:
         Function TrimAndExpandFilename( const Filename: string; const BaseDir: string): string
Function TrimAndExpandDirectory( const Filename: string; const BaseDir: string): string
Function TryCreateRelativePath(const Dest,Source:String; UsePointDirectory:bool;
10495:
10496:
10497:
        AlwaysRequireSharedBaseFolder : Boolean; out RelPath : String) : Boolean
```

```
10498: 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
10500:
10501:
         Function CreateAbsoluteSearchPath( const SearchPath, BaseDirectory: string): string
Function CreateRelativeSearchPath( const SearchPath, BaseDirectory: string): string
10502:
10503:
         Function MinimizeSearchPath( const SearchPath: string): string
10504:
         Function FindPathInSearchPath(APath:PChar;APathLen:int;SearchPath:PChar;SearchPathLen:int):PChar;
10505:
10506:
         (*Function FileExistsUTF8( const Filename : string) : boolean
10507:
         Function FileAgeUTF8( const FileName : string) : Longint Function DirectoryExistsUTF8( const Directory : string) : Boolean
10509:
         Function ExpandFileNameUTF8( const FileName : string; BaseDir : string) : string
10510:
         Function\ \textit{FindFirstUTF8} (const\ \textit{Path:string;}\ \textit{Attr:}\ \textit{Longint;}\ out\ \textit{Rslt}\ :\ \textit{TSearchRec})\ :\ \textit{Longint}
10511:
         Function FindNextUTF8( var Rslt : TSearchRec) : Longint
         Function FindCloseUTF8( var F : TSearchrec)
Function FileSetDateUTF8( const FileName : String; Age : Longint) : Longint
10513:
10514 :
         Function FileGetAttrUTF8( const FileName : String) : Longint
10515:
         Function FileSetAttrUTF8( const Filename : String; Attr : longint) : Longint
         Function DeleteFileUTF8( const FileName : String) : Boolean
10516:
         Function RenameFileUTF8( const OldName, NewName : String) : Boolean
Function FileSearchUTF8( const Name, DirList : String; ImplicitCurrentDir : Boolean) : String
10518:
10519:
         Function FileIsReadOnlyUTF8( const FileName : String) : Boolean
10520:
        Function GetCurrentDirUTF8 : String
Function SetCurrentDirUTF8( const NewDir : String) : Boolean
10521:
10522:
         Function CreateDirUTF8( const NewDir : String) : Boolean
10523:
         Function RemoveDirUTF8( const Dir : String) : Boolean
10524:
         Function ForceDirectoriesUTF8( const Dir : string) : Boolean
        Function FileOpenUTF8( const FileName : string; Mode : Integer) : THandle Function FileCreateUTF8( const FileName : string) : THandle;
10525:
         Function FileCreateUTF81( const FileName : string; Rights : Cardinal) : THandle;
10527:
10528:
         Function FileCreateUtf82( const FileName : String; ShareMode : Integer; Rights : Cardinal) : THandle;
10529:
         Function FileSizeUtf8( const Filename : string) : int64
10530:
         Function GetFileDescription( const AFilename : string) : string
         Function GetAppConfigDirUTF8( Global : Boolean; Create : boolean) : string
10532:
         Function GetAppConfigFileUTF8( Global : Boolean; SubDir : boolean; CreateDir : boolean) : string
         Function GetTempFileNameUTF8( const Dir, Prefix : String) : String*)
Function IsUNCPath( const Path : String) : Boolean
10533:
10534:
10535:
         Function ExtractUNCVolume( const Path : String) : String
         Function ExtractFileRoot(FileName: String): String
Function GetDarwinSystemFilename(Filename: string): string
10536:
10537:
         Procedure SplitCmdLineParams( const Params: string; ParamList: TStrings; ReadBackslash: boolean)
10538:
10539:
         Function StrToCmdLineParam( const Param : string) : string
         Function MergeCmdLineParams( ParamList : TStrings) : string
10540:
10541:
         Procedure InvalidateFileStateCache( const Filename : string)
10542:
         Function FindAllFiles(const SearchPath:String;SearchMask:String;SearchSubDirs:Boolean):TStringList);
         Function FindAllDirectories( const SearchPath : string; SearchSubDirs : Boolean) : TStringList
10543:
         Function ReadFileToString( const Filename : string) : string
10545:
         type
10546:
          TCopyFileFlag = ( cffOverwriteFile,
          cffCreateDestDirectory, cffPreserveTime );
TCopyFileFlags = set of TCopyFileFlag;*)
10547:
10548:
          TCopyFileFlag', '(cffOverwriteFile, cffCreateDestDirectory, cffPreserveTime)
10549:
10550:
          TCopyFileFlags', 'set of TCopyFileFlag
10551:
          Function CopyDirTree( const SourceDir, TargetDir : string; Flags : TCopyFileFlags) : Boolean
10552: end;
10553:
        procedure SIRegister_lazMasks(CL: TPSPascalCompiler);
10554:
10555: begin
          TMaskCharType', '( mcChar, mcCharSet, mcAnyChar, mcAnyText )
10556:
10557:
          SIRegister_TMask(CL);
10558:
          SIRegister_TParseStringList(CL);
10559:
          SIRegister_TMaskList(CL);
         Function MatchesMask( const FileName, Mask: String; const CaseSensitive: Boolean): Boolean
Function MatchesWindowsMask( const FileName, Mask: String; const CaseSensitive: Boolean): Bool;
10560:
10561:
         Function MatchesMaskList(const FileName,Mask:String;Separator:Char;const CaseSensitive:Boolean):Bool;
10563:
         Function MatchesWindowsMaskList(const FileName, Mask: String; Separat: Char; const CaseSensitive: Bool): Bool;
10564: end;
10565:
10566: procedure SIRegister_JvShellHook(CL: TPSPascalCompiler);
10567:
        begin
10568:
          //PShellHookInfo', '^TShellHookInfo // will not work
          TShellHookInfo', 'record hwnd : THandle; rc : TRect; end SHELLHOOKINFO', 'TShellHookInfo
10569:
10570:
          LPSHELLHOOKINFO', 'PShellHookInfo
TJvShellHookEvent', 'Procedure (
10571:
10572:
                                 'Procedure ( Sender : TObject; var Msg : TMessage)
10573:
          SIRegister_TJvShellHook(CL);
10574:
         Function InitJvShellHooks : Boolean
10575:
         Procedure UnInitJvShellHooks
10576:
        end
10577:
10578: procedure SIRegister JvExControls(CL: TPSPascalCompiler);
10579: begin
10580:
          TDlgCode', '( dcWantAllKeys, dcWantArrows, dcWantChars, dcButton'
                dcHasSetSel, dcWantTab, dcNative )
10581:
10582:
          TDlgCodes', 'set of TDlgCode
10583:
         'dcWantMessage','').SetString( dcWantAllKeys);
SIRegister_IJvExControl(CL);
10584:
          SIRegister_IJvDenySubClassing(CL);
```

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10586:
          SIRegister TStructPtrMessage(CL);
10587:
         Procedure SetDotNetFrameColors( FocusedColor, UnfocusedColor: TColor)
         Procedure DrawDotNetControl( Control: TWinControl; AColor: TColor; InControl: Boolean);
Procedure DrawDotNetControl1( DC: HDC; R: TRect; AColor: TColor; UseFocusedColor: Boolean);
10589:
          Procedure HandleDotNetHighlighting(Control:TWinControl;const Msg:TMessage;MouseOver:Boolean;Color:TColor);
10590:
         Function CreateWMMessage( Msg : Integer; WParam : Integer; LParam : Longint) : TMessage;
Function CreateWMMessagel( Msg : Integer; WParam : Integer; LParam : TControl) : TMessage;
10591:
10592:
         Function SmallPointToLong( const Pt : TSmallPoint) : Longint
Function ShiftStateToKeyData( Shift : TShiftState) : Longint
Function GetFocusedControl( AControl : TControl) : TWinControl
10593:
10594:
10595:
         Function DlgCodes( Value : Longint) : TDlgCodes
Function DlgCodesToDlgc( Value : TDlgCodes) : Longint
10596:
10597:
         Procedure GetHintColor( var HintInfo: THintInfo; AControl: TControl; HintColor: TColor)
Function DispatchIsDesignMsg( Control: TControl; var Msg: TMessage): Boolean
10598:
10599:
           SIRegister_TJvExControl(CL);
10600:
10601:
           SIRegister_TJvExWinControl(CL);
           SIRegister_TJvExCustomControl(CL);
10602:
10603:
           SIRegister_TJvExGraphicControl(CL);
           SIRegister_TJvExHintWindow(CL);
10604:
10605:
           SIRegister_TJvExPubGraphicControl(CL);
10606:
10607:
10608:
10609: procedure SIRegister EncdDecd(CL: TPSPascalCompiler);
10610: begin
10611:
         Procedure EncodeStream( Input, Output : TStream)
10612:
          Procedure DecodeStream( Input, Output : TStream)
         Function EncodeString1( const Input : string) : string
Function DecodeString1( const Input : string) : string
10613:
10614:
10615:
        end;
10616:
10617:
10618: procedure SIRegister_SockAppReg(CL: TPSPascalCompiler);
10619: begin
           SIRegister_TWebAppRegInfo(CL);
10621:
           SIRegister_TWebAppRegList(CL);
10622:
         Procedure GetRegisteredWebApps( AList : TWebAppRegList)
         Procedure RegisterWebApp( const AFileName, AProgID: string)
Procedure UnregisterWebApp( const AProgID: string)
10623:
10624:
10625:
         Function FindRegisteredWebApp( const AProgID : string) : string
10626:
         Function CreateRegistry( InitializeNewFile : Boolean) : TCustomIniFile
          'sUDPPort','String').SetString( 'UDPPort
10627:
10628: end;
10629:
10630:
        procedure SIRegister_PJEnvVars(CL: TPSPascalCompiler);
10631: begin
         // TStringDynArray', 'array of string
Function GetEnvVarValue( const VarName : string) : string
10632:
10634:
         Function SetEnvVarValue( const VarName, VarValue : string) : Integer
10635:
         Function DeleteEnvVar( const VarName : string) : Integer
         Function CreateEnvBlock(const NewEnv:TStrings;const IncludeCurrent:Bool;const Buffer:string;const
10636:
        BufSize:Int):Int;
10637:
        Function ExpandEnvVars( const Str : string) : string
10638:
         Function GetAllEnvVars( const Vars : TStrings) : Integer
         Procedure GetAllEnvVarNames( const Names : TStrings);
Function GetAllEnvVarNames1 : TStringDynArray;
10639:
10640:
10641:
          Function EnvBlockSize : Integer
           TPJEnvVarsEnum', 'Procedure ( const VarName : string; Data : TObject)
10642:
10643:
           SIRegister_TPJEnvVarsEnumerator(CL);
           SIRegister_TPJEnvVars(CL);
FindClass('TOBJECT'),'EPJEnvVars
10644:
10645:
10646:
           FindClass('TOBJECT'),'EPJEnvVars
10647:
          //Procedure Register
10648: end;
10649:
10650:
10651:
        procedure SIRegister PJConsoleApp(CL: TPSPascalCompiler);
10652: begin
10653:
         'cOneSecInMS','LongInt').SetInt( 1000);
         //'cDefTimeSlice','LongInt').SetInt( 50);
//'cDefMaxExecTime','').SetString( cOneMinInMS);
10654:
10655:
          'cAppErrorMask', 'LongInt').SetInt( 1 shl 29);
10656:
10657:
         \textbf{Function} \  \, \texttt{IsApplicationError}(\  \, \textbf{const} \  \, \texttt{ErrCode} \  \, : \  \, \texttt{LongWord}) \  \, : \  \, \texttt{Boolean}
           TPJConsoleAppPriority', '(cpDefault, cpHigh, cpNormal, cpIdle, cpRealTime)
TPJConsoleColors', 'record Foreground: TPJConsoleColor; Background: TPJConsoleColor; end;
10658:
10659:
          Function MakeConsoleColors( const AForeground, ABackground : TPJConsoleColor):TPJConsoleColors;
10660:
10661:
         Function MakeConsoleColors1( const AForeground, ABackground : TColor) : TPJConsoleColors;
Function MakeConsoleColors2( const AForeground, ABackground : TAlphaColor) : TPJConsoleColors;
Function MakeSize( const ACX, ACY : LongInt) : TSize
10662:
10663:
10664:
           SIRegister_TPJCustomConsoleApp(CL);
10665:
           SIRegister_TPJConsoleApp(CL)
10666: end;
10667:
10668: procedure SIRegister_ip_misc(CL: TPSPascalCompiler);
10669:
        INVALID_IP_ADDRESS','LongWord').SetUInt( $ffffffff);
10670:
10671:
           t encoding', '( uuencode, base64, mime )
10672: Function internet_date( date : TDateTime) : string
10673: Function lookup_hostname( const hostname : string) : longint
```

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10674:
         Function my_hostname : string
10675:
         Function my ip address : longint
          Function ip2string( ip_address : longint) : string
10677:
          Function resolve_hostname( ip : longint) : string
         Function address_from( const s : string; count : integer) : string
Function encode_base64( data : TStream) : TStringList
10678:
10679:
10680:
         Function decode_base64( source : TStringList) : TMemoryStream
10681:
          Function posn( const s, t : string; count : integer) : integer
10682:
         Function poscn( c : char; const s : string; n : integer) : integer
10683:
         Function filename_of( const s : string) : string
         //Function trim( const s : string) : string
//Procedure setlength( var s : string; l : byte,
10684:
10686:
         Function TimeZoneBias : longint
         Function eight2seven_quoteprint( const s : string) : string
10687:
10688:
         Function eight2seven_german( const s : string) : string
Function seven2eight_quoteprint( const s : string) : string end;
10689:
           type in_addr', 'record s_bytes : array[1..4] of byte; end;
10690:
10691:
         Function socketerror : cint
         Function fpsocket( domain : cint; xtype : cint; protocol : cint) : cint
10692:
         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
10693:
10694:
         //Function fpbind( s : cint; addrx : psockaddr; addrlen : tsocklen) : cint Function fplisten( s : cint; backlog : cint) : cint
10695:
10696:
         //Function fpaccept( s : cint; addrx : psockaddr; addrlen : plongint) : cint
//Function fpaccept( s : cint; addrx : psockaddr; namelen : tsocklen) : cint
10697:
10698:
10699:
          //Function fpgetsockname( s : cint; name : psockaddr; namelen : psocklen) : cint
         Function NetAddrToStr(Entry: in_addr): String
Function HostAddrToStr(Entry: in_addr): String
Function StrToHostAddr(IP: String): in_addr
Function StrToNetAddr(IP: String): in_addr
10700:
10701:
10702:
10703:
10704:
         SOL_SOCKET','LongWord').SetUInt( $ffff);
          cint8', 'shortint
cuint8', 'byte
cchar', 'cint8
cschar', 'cint8
10705:
10706:
10707:
10708:
           cuchar',
10709:
                       'cuint8
           cint16'.
10710:
                      'smallint
10711:
           cuint16', 'word
          cshort', 'cint16
csshort', 'cint16
cushort', 'cuint16
cint32', 'longint
cuint32', 'longword
10712:
10713:
10714:
10715:
10716:
           cint', 'cint32
csint', 'cint32
cuint', 'cuint32
10717:
10718:
10719:
           csigned', 'cint
cunsigned', 'cuint
10720:
10722:
           cint64', 'int64
           clonglong', 'cint64 cslonglong', 'cint64
10723:
10724:
10725:
           cbool', 'longbool
           cfloat', 'single cdouble', 'double
10726:
10727:
           clongdouble', 'extended
10728:
10729:
10730: procedure SIRegister_uLkJSON(CL: TPSPascalCompiler);
10731: begin
10732:
           {\tt TlkJSONtypes','(jsBase,jsNumber,jsString,jsBoolean,jsNull,jsList,jsObject~)}
           SIRegister_TlkJSONdotnetclass(CL);
SIRegister_TlkJSONbase(CL);
10733:
10734:
           SIRegister_TlkJSONnumber(CL);
10735:
10736:
           SIRegister_TlkJSONstring(CL);
10737:
           SIRegister TlkJSONboolean(CL);
10738:
           SIRegister_TlkJSONnull(CL);
10739:
           TlkJSONFuncEnum', 'Procedure ( ElName : string; Elem : TlkJSONba'
10740:
             +'se; data : TObject; var Continue : Boolean)
           SIRegister_TlkJSONcustomlist(CL);
10741:
10742:
           SIRegister_TlkJSONlist(CL);
10743:
           SIRegister_TlkJSONobjectmethod(CL);
10744:
           TlkHashItem', 'record hash : cardinal; index : Integer; end
10745:
           TlkHashFunction', 'Function ( const ws : WideString) : cardinal
           SIRegister_TlkHashTable(CL);
SIRegister_TlkBalTree(CL);
10746:
10747:
10748:
           SIRegister_TlkJSONobject(CL);
10749:
           SIRegister_TlkJSON(CL);
10750:
           SIRegister TlkJSONstreamed(CL);
         Function GenerateReadableText( vObj : TlkJSONbase; var vLevel : Integer): string
10751:
10752: end;
10753:
10754: procedure SIRegister_ZSysUtils(CL: TPSPascalCompiler);
10755: begin
           TZListSortCompare', 'Function (Item1, Item2 : TObject): Integer
10756:
10757:
           SIRegister_TZSortedList(CL);
         Function zFirstDelimiter( const Delimiters, Str : string) : Integer
10758:
10759:
         Function zLastDelimiter( const Delimiters, Str : string) : Integer
10760:
         //Function MemLCompUnicode( P1, P2 : PWideChar; Len : Integer) : Boolean
//Function MemLCompAnsi( P1, P2 : PAnsiChar; Len : Integer) : Boolean
Function zStartsWith( const Str, SubStr : WideString) : Boolean;
10761:
```

```
10763:
         Function StartsWith1( const Str. SubStr : RawByteString) : Boolean;
          Function EndsWith( const Str, SubStr : WideString) : Boolean;
10764:
          Function EndsWith1( const Str, SubStr : RawByteString) : Boolean;
10766:
          Function SQLStrToFloatDef( Str : RawByteString; Def : Extended) : Extended;
          Function SQLStrToFloatDef1( Str : String; Def : Extended) : Extended;
10767:
         Function SQLStrToFloat (const Str : AnsiString) : Extended
//Function BufferToStr( Buffer : PWideChar; Length : LongInt) : string;
10768:
10769:
10770:
          //Function BufferToStr1( Buffer : PAnsiChar; Length : LongInt) : string;
10771:
          Function BufferToBytes( Buffer : TObject; Length : LongInt) : TByteDynArray
10772:
         Function StrToBoolEx( Str : string) : Boolean
Function BoolToStrEx( Bool : Boolean) : String
10773:
          Function IsIpAddr( const Str : string) : Boolean
10774:
10775:
         Function zSplitString( const Str, Delimiters : string) : TStrings
         Procedure PutSplitString( List : TStrings; const Str, Delimiters : string)
Procedure AppendSplitString( List : TStrings; const Str, Delimiters : string)
10776:
10777:
          Function ComposeString( List : TStrings; const Delimiter : string) : string
10779:
         Function FloatToSQLStr( Value : Extended) : string
10780:
         Procedure PutSplitStringEx( List : TStrings; const Str, Delimiter : string)
10781:
         Function SplitStringEx( const Str, Delimiter : string) : TStrings
Procedure AppendSplitStringEx( List : TStrings; const Str, Delimiter : string)
10782:
10783:
          Function zBytesToStr( const Value : TByteDynArray)
                                                                          : AnsiString
10784:
         Function zStrToBytes( const Value : AnsiString) : TByteDynArray;
         Function StrToBytes1( const Value : UTF8String) : TByteDynArray;
10785:
10786:
         Function StrToBytes2( const Value : RawByteString) : TByteDynArray;
         Function StrToBytes3( const Value : WideString) : TByteDynArray;
10787:
          Function StrToBytes4( const Value : UnicodeString) : TByteDynArray;
10788:
10789:
         Function BytesToVar( const Value : TByteDynArray) : Variant
Function VarToBytes( const Value : Variant) : TByteDynArray
Function AnsiSQLDateToDateTime( const Value : string) : TDateTime
10790:
10791:
          Function TimestampStrToDateTime( const Value : string) : TDateTime
10792:
10793:
          Function DateTimeToAnsiSQLDate( Value : TDateTime; WithMMSec : Boolean) : string
         Function EncodeCString( const Value : string) : string
Function DecodeCString( const Value : string) : string
10794:
10795:
         Function zReplaceChar( const Source, Target : Char; const Str : string) : string
Function MemPas( Buffer : PChar; Length : LongInt) : string
10796:
10797:
10798:
         Procedure DecodeSQLVersioning(const FullVersion:Int;out MajorVersion:Int;out MinorVersion:Int;out
         SubVersion: Int.);
10799:
        Function EncodeSOLVersioning(const MajorVersion:Integer;const MinorVersion:Integer;const
        SubVersion:Integer):Int;
10800:
         Function FormatSQLVersion( const SQLVersion : Integer) : String
10801:
         Function ZStrToFloat( Value : AnsiChar) : Extended;
         Function ZStrToFloat1 (Value : AnsiString) : Extended;

Procedure ZSetString( const Src : AnsiChar; var Dest : AnsiString);
10802:
10803:
10804:
          Procedure ZSetString1( const Src : AnsiChar; const Len : Cardinal; var Dest : AnsiString);
10805:
          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);
10806:
10807:
          Procedure ZSetString5( const Src : AnsiChar; var Dest : RawByteString);
10809:
         Procedure ZSetString6( const Src : AnsiChar; const Len : Cardinal; var Dest : RawByteString);
10810:
        end;
10811:
10812: unit uPSI ZEncoding;
        Function StringToAnsiEx( const s : String; const FromCP, ToCP : Word) : RawByteString
10813:
10814:
         Function AnsiToStringEx( const s : RawByteString; const FromCP, ToCP : Word)
                                                                                                           : String
         Function ZRawToUnicode( const S : RawByteString; const CP : Word) : WideString
Function ZUnicodeToRaw( const US : WideString; CP : Word) : RawByteString
Function ZConvertAnsiToRaw( const Src : AnsiString; const RawCP : Word) : RawByteString
10815:
10816:
10817:
         Function ZConvertRawToAnsi( const Src : RawByteString; const RawCP : Word) : AnsiString
10818:
         Function ZConvertAnsiToUTF8( const Src : AnsiString) : UTF8String
Function ZConvertUTF8ToAnsi( const Src : UTF8String) : AnsiString
10819:
10820:
10821:
         Function ZConvertRawToUTF8( const Src : RawByteString; const CP : Word) : UTF8String
10822:
          Function ZConvertUTF8ToRaw( const Src : UTF8String; const CP : Word) : RawByteString
         Function ZConvertRawToString( const Src : RawByteString; const RawCP, StringCP : Word) : StringFunction ZConvertStringToRaw( const Src : String; const StringCP, RawCP : Word) : RawByteString
10823:
10824:
         Function ZConvertStringToRawWithAutoEncode(const Src:String;const StringCP,RawCP:Word):RawByteString;
10825:
          Function ZConvertUTF8ToString( const Src : UTF8String; const StringCP : Word) : String
          Function ZConvertStringToUTF8( const Src : String; const StringCP : Word) : UTF8String
10827:
10828:
         Function ZConvertStringToUTF8WithAutoEncode( const Src : String; const StringCP: Word): UTF8String
10829:
         Function ZConvertStringToAnsi( const Src : String; const StringCP : Word) : AnsiString
Function ZConvertStringToAnsiWithAutoEncode( const Src : String; const StringCP: Word): AnsiString
10830:
          Function ZConvertAnsiToString( const Src : AnsiString; const StringCP : Word) : String
10831:
          Function ZConvertUnicodeToString( const Src : WideString; const StringCP : Word) : String
10832:
         Function ZConvertUnicodeToString_CPUTF8( const Src : WideString; const StringCP : Word) : StringFunction ZConvertStringToUnicode( const Src : String; const StringCP : Word) : WideString
10833:
10834:
          Function ZConvertString_CPUTF8ToUnicode( const Src : String; const StringCP : Word) : WideString
10835:
          Function ZConvertStringToUnicodeWithAutoEncode( const Src: String; const StringCP:Word):WideString
10836:
         Function ZMoveAnsiToRaw( const Src : AnsiString; const RawCP : Word) : RawByteString
Function ZMoveRawToAnsi( const Src : RawByteString; const RawCP : Word) : AnsiString
Function ZMoveAnsiToUTF8( const Src : AnsiString) : UTF8String
10837:
10838:
10839:
          Function ZMoveUTF8ToAnsi( const Src : UTF8String) : AnsiString
10841:
          Function ZMoveRawToUTF8( const Src : RawByteString; const CP : Word) : UTF8String
         Function ZMoveUTF8ToRaw( const Src : UTF8String; const CP : Word) : RawByteString
10842:
         Function ZMoveStringToAnsi( const Src : String; const StringCP : Word) : AnsiString
10843:
          Function ZMoveAnsiToString( const Src : AnsiString; const StringCP : Word) : String
10844:
          Function ZMoveRawToString( const Src : RawByteString; const RawCP, StringCP : Word)
10845:
         Function ZMoveStringToRaw( const Src : String; const StringCP, RawCP : Word) : RawByteStringFunction ZMoveUTF8ToString( const Src : UTF8String; StringCP : Word) : StringFunction ZMoveStringToUTF8( const Src : String; const StringCP : Word) : UTF8String
10846:
10847:
10848:
         Function ZUnknownRawToUnicode( const S : RawByteString; const CP : Word) : WideString
```

```
Function ZUnknownRawToUnicodeWithAutoEncode( const S : RawByteString; const CP : Word) : WideString
10850:
10851:
          Function ZUnicodeToUnknownRaw( const US : WideString; CP : Word) : RawByteString
          Function ZDefaultSystemCodePage : Word
10853:
         Function ZCompatibleCodePages( const CP1, CP2 : Word) : Boolean
10854:
10855:
10856: procedure SIRegister_BoldComUtils(CL: TPSPascalCompiler);
10857:
10858:
          'RPC_C_AUTHN_LEVEL_DEFAULT', 'LongInt').SetInt( 0);
           'RPC_C_AUTHN_LEVEL_NONE', 'LongInt').SetInt( 1);
10859:
            'RPC_C_AUTHN_LEVEL_CONNECT', 'LongInt').SetInt( 2);
10860:
            'RPC_C_AUTHN_LEVEL_CALL', 'LongInt').SetInt( 3);
           'RPC_C_AUTHN_LEVEL_PKT', 'LongInt').SetInt( 4);
'RPC_C_AUTHN_LEVEL_PKT_INTEGRITY', 'LongInt').SetInt( 5);
'RPC_C_AUTHN_LEVEL_PKT_PRIVACY', 'LongInt').SetInt( 6);
10862:
10863:
10864:
           ('alDefault','1').SetString( RPC_C_AUTHN_LEVEL_DEFAULT);
''alNone','2').SetString( RPC_C_AUTHN_LEVEL_NONE);
10865:
10866:
           'alConnect','3').SetString( RPC_C_AUTHN_LEVEL_CONNECT);
'alCall','4').SetString( RPC_C_AUTHN_LEVEL_CALL);
'alPacket','5').SetString( RPC_C_AUTHN_LEVEL_PKT);
10867:
10868:
10869:
10870:
            10871:
           'RPC_C_IMP_LEVEL_DEFAULT','LongInt').SetInt( 0);
'RPC_C_IMP_LEVEL_ANONYMOUS','LongInt').SetInt( 1);
'RPC_C_IMP_LEVEL_IDENTIFY','LongInt').SetInt( 2);
10872:
10873:
10874:
10875:
            'RPC_C_IMP_LEVEL_IMPERSONATE', 'LongInt').SetInt( 3);
10876:
           'RPC_C_IMP_LEVEL_DELEGATE', 'LongInt').SetInt( 4);
           ('ilDefault','0').SetString( RPC_C_IMP_LEVEL_DEFAULT);
'ilAnonymous','1').SetString( RPC_C_IMP_LEVEL_ANONYMOUS);
'ilIdentiry','2').SetString( RPC_C_IMP_LEVEL_IDENTIFY);
10877:
10878:
10879:
           'ilImpersonate','3').SetString( RPC_C_IMP_LEVEL_IMPERSONATE);
'ilDelegate','4').SetString( RPC_C_IMP_LEVEL_DELEGATE);}
'EOAC_NONE','LongWord').SetUInt( $0);
10880:
10881:
10882:
10883:
            'EOAC_DEFAULT', 'LongWord').SetUInt(
            'EOAC_MUTUAL_AUTH','LongWord').SetUInt( $1);
           'EOAC_STATIC_CLOACKING','LongWord').SetUInt( $20);
'EOAC_DYNAMIC_CLOAKING','LongWord').SetUInt( $40);
10885:
10886:
10887:
            'EOAC_ANY_AUTHORITY','LongWord').SetUInt( $80);
10888:
            'RPC_C_AUTHN_WINNT', 'LongInt').SetInt( 10);
10889:
            'RPC_C_AUTHNZ_NONE', 'LongInt').SetInt( 0);
          ('RPC_C_AUTHNZ_NAME','LongInt').SetInt( 1);
('RPC_C_AUTHNZ_DCE','LongInt').SetInt( 2);
FindClass('TOBJECT'),'EBoldCom
10890:
10891:
10892:
          Function BoldVariantIsType( V : OleVariant; TypeCode : Integer) : Boolean
10893:
10894:
          \textbf{Function} \ \ \texttt{BoldMemoryToVariant} ( \ \ \textbf{const} \ \ \texttt{Buffer}, \ \ \texttt{BufSize} \ : \ \ \texttt{Integer}) \ : \ \ \texttt{OleVariant}
         Function BoldStreamToVariant(Stream: TStream): OleVariant
Function BoldStringsToVariant(Strings: TStrings): OleVariant
10895:
10896:
          Function BoldVariantToMemory( V : OleVariant; var Buffer, BufSize : Integer) : Integer
         Function BoldVariantToStream( V : OleVariant; Stream : TStream) : Integer
Function BoldVariantArrayOfArraysOfStringToStrings( V : OleVariant; Strings : TStrings) : Integer
Function BoldVariantIsNamedValues( V : OleVariant) : Boolean
10898:
10899:
10900:
10901:
          Function BoldCreateNamedValues(const Names:array of string;const Values:array of OleVariant):OleVariant;
          Function BoldGetNamedValue( Data : OleVariant; const Name : string) : OleVariant
10902:
10903:
         Procedure BoldSetNamedValue( Data : OleVariant; const Name : string; Value : OleVariant)
10904:
         Function BoldCreateGUID : TGUID
Function BoldCreateComObject( const ClsId, IId : TGUID; out Obj : variant; out Res : HResult) : Boolean
10905:
          Function BoldCreateRemoteComObject(const HostName:string;const ClsId,IId:TGUID;out Obj:variant;out
10906:
        Res:HRes):Bool;
10907: Procedure BoldInitializeComSecurity( AuthenticationLevel, ImpersonationLevel : longint)
10908: Procedure BoldSetSecurityForInterface(AuthenticationLevel,ImpersonationLevel:longint;Unk:IUnknown);
10909:
        end;
10910:
10911: /*--
10912: procedure SIRegister_BoldIsoDateTime(CL: TPSPascalCompiler);
10913: begin
10914: Function ParseISODate( s : string) : TDateTime
          Function ParseISODateTime( s : string) : TDateTime
10915:
10916: Function ParseISOTime( str : string) : TDateTime
10917: end;
10918:
10919:
10920: procedure SIRegister_BoldGUIDUtils(CL: TPSPascalCompiler);
10921: begin
10922:
         Function BoldCreateGUIDAsString( StripBrackets : Boolean) : string
10923:
         Function BoldCreateGUIDWithBracketsAsString : string
10924:
10925:
10926: procedure SIRegister BoldFileHandler(CL: TPSPascalCompiler);
10927: begin
10928:
           FindClass('TOBJECT'),'TBoldFileHandler
10929:
           FindClass('TOBJECT'),'TBoldDiskFileHandler
10930:
            //TBoldFileHandlerClass', 'class of TBoldFileHandler
10931:
           TBoldInitializeFileContents', 'Procedure ( StringList : TStringList)
           SIRegister_TBoldFileHandler(CL);
10932:
           SIRegister_TBoldDiskFileHandler(CL);
10933:
10934:
         Procedure BoldCloseAllFilehandlers
         Procedure BoldRemoveUnchangedFilesFromEditor
10935:
10936:
         Function BoldFileHandlerList : TBoldObjectArray
         Function BoldFileHandlerForFile(path,FileName:String; ModuleType:TBoldModuleType;ShowInEditor:Bool;
         {\tt OnInitializeFileContents} \; : \; {\tt TBoldInitializeFileContents}) \; : \; {\tt TBoldFileHandler}
```

```
10938: end;
10939:
         procedure SIRegister_BoldWinINet(CL: TPSPascalCompiler);
10041:
         begin
            PCharArr', 'array of PChar
10942:
          Function BoldInternetOpen(Agent:String;
10943:
         AccessType:integer;Proxy:string;ProxyByPass:String;Flags:integer):ptr);
10944:
          Function BoldInternetOpenUrl(iNet:Pointer;URL: string; Headers:String;Flags,Context:cardinal):Pointer
          Function BoldInternetReadFile(hFile:Pointer;Buff:Ptr;NumbOfBytesToRead:Card;var
10945:
         NumberOfBytesRead:Card):LongBool;
10946:
          Function BoldInternetCloseHandle( HINet : Pointer) : LongBool
          Function BoldHttpQueryInfo( hRequest : Pointer; InfoLevel : Cardinal; Buffer : Pointer; BufferLength :
10947:
         Cardinal; Reserved : Cardinal) : LongBool
          Function BoldInternetQueryDataAvailable( hFile : Pointer; var NumberOfBytesAvailable : Cardinal; flags :
10948:
         Cardinal; Context : Cardinal) : LongBool
          Function BoldHttpOpenRequest(hConnect: Pointer; Verb, ObjectName, Version, Referrer: String; AcceptTypes
           PCharArr; Flags, Context : Cardinal) : Pointer
10950: Function BoldHttpSendRequest(hRequest:Ptr;Headers:string;Optional:Ptr;OptionalLength:Cardinal): LongBool
10951:
          Function BoldInternetErrorDlg(hWnd:HWND;hRequest:HINTERNET;dwError,dwFlags:DWORD;var lppvData:Ptr):DWORD
10952:
          Function BoldInternetAttemptConnect( dwReserved : DWORD) : DWORD
          Function BoldInternetConnect(hInet: HINTERNET; ServerName: string; nServerPort: INTERNET_PORT;
         Username: string; Password : string; dwService : DWORD; dwFlags : DWORD; dwContext : DWORD): HINTERNET
10954: Function BoldInternetCrackUrl(Url:PChar;UrlLength,dwFlags:DWORD;var lpUrlComponents:TURLComponents):BOOL;
10955: end;
10956:
10957:
         procedure SIRegister_BoldQueryUserDlg(CL: TPSPascalCompiler);
10958: begin
           TBoldQueryResult', '( qrYesAll, qrYes, qrNo, qrNoAll )
10959:
10960:
           SIRegister_TfrmBoldQueryUser(CL);
10961:
          Function QueryUser( const Title, Query : string) : TBoldQueryResult
10962: end;
10963:
10964:
10965: procedure SIRegister_BoldQueue(CL: TPSPascalCompiler);
         begin
10966:
10967:
         //('befIsInDisplayList','').SetString( BoldElementFlag0);
          //('befStronglyDependedOfPrioritized','').SetString( BoldElementFlag1);
//('befFollowerSelected','').SetString( BoldElementFlag2);
10968:
10969:
           FindClass('TOBJECT'),'TBoldQueue
FindClass('TOBJECT'),'TBoldQueueable
10970:
10971:
10972:
           TBoldQueueDisplayMode', '( dmDisplayOne, dmDisplayAll )
           SIRegister_TBoldQueueable(CL);
SIRegister_TBoldQueue(CL);
10973:
10974:
10975:
          Function BoldQueueFinalized : Boolean
10976:
          Function BoldInstalledQueue : TBoldQueue
10977: end;
10978:
10979:
         procedure SIRegister_Barcode(CL: TPSPascalCompiler);
10980:
         begin
10981:
          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'
10982:
10983:
10984:
10985:
             +'bar, bcCodeEAN8, bcCodeEAN13, bcCodeUPC_A, bcCodeUPC_E0, bcCodeUPC_E1, bcC'
           +'odeUPC_supp2, bcCodeUPC_supp5, bcCodeEAN128A, bcCodeEAN128B, bcCodeEAN128C TBarLineType', '( white, black, black_half )
10986:
10987:
            TBarcodeOption',
                                  '( bcoNone, bcoCode, bcoTyp, bcoBoth )
10988:
            TShowTextPosition',
                                      '( stpTopLeft, stpTopRight, stpTopCenter, st'
10989:
10990:
            +'pBottomLeft, stpBottomRight, stpBottomCenter )
TCheckSumMethod', '( csmNone, csmModulo10 )
10991:
            SIRegister_TAsBarcode(CL);
10992:
10993:
          Function CheckSumModulo10( const data : string) : string
          Function ConvertMmToPixelsX( const Value : Double) : Integer Function ConvertMmToPixelsY( const Value : Double) : Integer
10994:
10995:
          Function ConvertInchToPixelsX( const Value : Double) : Integer
Function ConvertInchToPixelsY( const Value : Double) : Integer
10996:
10997:
10998:
10999:
11000: procedure SIRegister Geometry(CL: TPSPascalCompiler); //OpenGL
11001:
         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 THomogeneousBblVector', 'array[0..3] of double
11002:
11003:
11004:
11005:
11006:
11007:
            THomogeneousExtVector', 'array[0..3] of extended
           TAffineByteVector', 'array[0..2] of Byte
TAffineWordVector', 'array[0..2] of Word
TAffineIntVector', 'array[0..2] of Integer
TAffineFltVector', 'array[0..2] of single
TAffineDblVector', 'array[0..2] of double
11008:
11009:
11010:
11011:
11012:
            TAffineExtVector', 'array[0..2] of extended
11013:
           TAITINEEXTVector', 'array[0..2] of extended THomogeneousByteMatrix', 'array[0..3] of THomogeneousByteVector THomogeneousWordMatrix', 'array[0..3] of THomogeneousWordVector THomogeneousIntMatrix', 'array[0..3] of THomogeneousIntVector THomogeneousFltMatrix', 'array[0..3] of THomogeneousFltVector THomogeneousExtMatrix', 'array[0..3] of THomogeneousDblVector THomogeneousExtMatrix', 'array[0..3] of THomogeneousExtVector
11014:
11015:
11016:
11017:
11018:
11019:
            TAffineByteMatrix', 'array[0..2] of TAffineByteVector
```

```
\label{thm:condition} \begin{split} & \texttt{TAffineWordMatrix', 'array[0..2] of TAffineWordVector} \\ & \texttt{TAffineIntMatrix', 'array[0..2] of TAffineIntVector} \\ & \texttt{TAffineFltMatrix', 'array[0..3] of TAffineFltVector} \end{split}
11021:
11022:
11023:
               TAffineDblMatrix',
11024 •
                                               'array[0..3] of TAffineDblVector
11025:
               TAffineExtMatrix', 'array[0..3] of TAffineExtVector
11026:
               TMatrix4b', 'THomogeneousByteMatrix
                                   'THomogeneousWordMatrix
11027:
               TMatrix4w',
11028:
               TMatrix4i',
                                   'THomogeneousIntMatrix
                                   THomogeneousFltMatrix
11029:
               TMatrix4f',
                                   'THomogeneousDblMatrix
11030:
               TMatrix4d',
               TMatrix4e',
                                   'THomogeneousExtMatrix
11031:
                                   'TAffineByteMatrix
11032:
               TMatrix3b',
               TMatrix3w',
TMatrix3i',
11033:
                                   'TAffineWordMatrix
                                   'TAffineIntMatrix
11034:
               TMatrix3f'.
                                   'TAffineFltMatrix
11035:
11036:
               TMatrix3d', 'TAffineDblMatrix
               TMatrix3e', 'TAffineExtMatrix
11037:
               //'PMatrix', '^TMatrix // will not work
TMatrixGL', 'THomogeneousFltMatrix
11038:
11039:
11040:
               THomogeneousMatrix', 'THomogeneousFltMatrix
               Thomogeneous mattrin , TaffineMatrix TAffineMatrix', 'TAffineFltMatrix TQuaternion', 'record Vector : TVector4f; end TRectangle', 'record Left : integer; Top : integer; Width : inte'
11041:
11042:
11043:
               TransType', '(ttScaleX, ttScaleY, ttScaleZ, ttShearXY, ttShear
11044:
11045:
11046:
                +'XZ, ttShearYZ, ttRotateX, ttRotateY, ttRotateZ, ttTranslateX, ttTranslateY'
11047:
             +', ttTranslateZ, ttPerspectiveX, ttPerspectiveY, ttPerspectiveZ, ttPerspectiveW )
'EPSILON','Extended').setExtended( 1E-100);
'EPSILON2','Extended').setExtended( 1E-50);
11048:
11049:
             Function VectorAddGL( V1, V2 : TVectorGL) : TVectorGL
11050:
11051:
             Function VectorAffineAdd( V1, V2 : TAffineVector) : TAffineVector
            Function VectorAffineAdd( V1, V2 : TAffineVector) : TAffineVector
Function VectorAffineCombine(V1,V2:TAffineVector; F1, F2 : Single) : TAffineVector
Function VectorAffineDotProduct( V1, V2 : TAffineVector) : Single
Function VectorAffineLerp( V1, V2 : TAffineVector; t : Single) : TAffineVector
Function VectorAffineSubtract( V1, V2 : TAffineVector) : TAffineVector
Function VectorAngle( V1, V2 : TAffineVector) : Single
Function VectorCombine( V1, V2 : TVectorGL; F1, F2 : Single) : TVectorGL
Function VectorCrossProduct( V1, V2 : TAffineVector) : TAffineVector
11052:
11053:
11054:
11055:
11056:
11057:
11058:
            Function VectorDotProduct( V1, V2 : TAffineVector) : TAffineVectorFunction VectorDotProduct( V1, V2 : TVectorGL) : Single Function VectorLength( V : array of Single) : Single Function VectorLerp( V1, V2 : TVectorGL; t : Single) : TVectorGL Procedure VectorNegate( V : array of Single) Function VectorNorm( V : array of Single) : Single
11059:
11060:
11061:
11062:
11063:
             Function VectorNormalize( V: array of Single): Single
Function VectorPerpendicular( V, N: TAffineVector): TAffineV
Function VectorReflect( V, N: TAffineVector): TAffineVector
11064:
11065:
                                                                         : TAffineVector) : TAffineVector
11066:
             Procedure VectorRotate( var Vector : TVector4f; Axis : TVector3f; Angle : Single)
11067:
             Procedure VectorScale( V : array of Single; Factor : Single)
11068:
             Function VectorSubtractGL( V1, V2 : TVectorGL) : TVectorGL

Function CreateRotationMatrixX( Sine, Cosine : Single) : TMatrixGL

Function CreateRotationMatrixY( Sine, Cosine : Single) : TMatrixGL
11069:
11070:
11071:
11072:
             Function CreateRotationMatrixZ( Sine, Cosine : Single) : TMatrixGL
11073:
             Function CreateScaleMatrix( V : TAffineVector) : TMatrixGL
11074:
             \textbf{Function} \  \, \texttt{CreateTranslationMatrix}(\  \, \texttt{V} \  \, \texttt{TVectorGL}) \  \, \texttt{:} \  \, \texttt{TMatrixGL}
             Procedure MatrixAdjoint( var M : TMatrixGL)
Function MatrixAffineDeterminant( M : TAffineMatrix) : Single
11075:
11076:
             Procedure MatrixAffineTranspose( var M : TAffineMatrix)
11077:
11078:
             Function MatrixDeterminant( M : TMatrixGL) : Single
             Procedure MatrixInvert( var M : TMatrixGL)
Function MatrixMultiply( M1, M2 : TMatrixGL) : TMatrixGL
Procedure MatrixScale( var M : TMatrixGL; Factor : Single)
11079:
11080:
11081:
11082:
             Procedure MatrixTranspose( var M : TMatrixGL)
             Function QuaternionConjugate( Q: TQuaternion): TQuaternion
Function QuaternionFromPoints( V1, V2: TAffineVector): TQuaternion
11083:
11084:
             Function QuaternionMultiply( qL, qR : TQuaternion) : TQuaternion

Function QuaternionSlerp( QStart,QEnd:TQuaternion; Spin:Integer; t:Single):TQuaternion
11085:
             Function QuaternionToMatrix(Q: TQuaternion): TMatrixGL

Procedure QuaternionToPoints(Q: TQuaternion; var ArcFrom, ArcTo: TAffineVector)
11087:
11088:
            Function ConvertRotation(Angles: TAffineVector): TVectorGL
Function CreateRotationMatrix(Axis: TVector3f; Angle: Single): TMatrixGL
//Function MatrixDecompose(M: TMatrixGL; var Tran: TTransformations): Boolean
Function VectorAffineTransform(V: TAffineVector; M: TAffineMatrix): TAffineVector
11089:
11090:
11091:
11092:
             Function VectorTransform( V : TVector4f; M : TMatrixGL) : TVector4f; Function VectorTransform1( V : TVector3f; M : TMatrixGL) : TVector3f;
11093:
11094:
             Function MakeAffineDblVector( V : array of Double) : TAffineDblVector
11095:
11096:
             Function MakeDblVector( V : array of Double) : THomogeneousDblVector
11097:
             Function MakeAffineVector( V : array of Single) : TAffineVector Function MakeQuaternion( Imag : array of Single; Real : Single) : TQuaternion Function MakeVector( V : array of Single) : TVectorGL
11098:
11099:
             Function PointInPolygonGL(xp, yp: array of Single; x, y: Single): Boolean Function VectorAffineDblToFlt( V: TAffineDblVector): TAffineVector
11101:
             Function VectorDblToFlt( V: THomogeneousDblVector): THomogeneousVector
Function VectorAffineFltToDbl( V: TAffineVector): TAffineDblVector
11102:
11103:
             Function VectorFltToDbl( V : TVectorGL) : THomogeneousDblVector
11104:
            Function ArcCosGL( X : Extended) : Extended
Function ArcSinGL( X : Extended) : Extended
11105:
11106:
            Function ArcTan2GL( Y, X : Extended) : Extended
Function CoTanGL( X : Extended) : Extended
11107:
11108:
11109: Function DegToRadGL( Degrees : Extended) : Extended
```

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11110:
             Function RadToDegGL( Radians : Extended) : Extended
             Procedure SinCosGL( Theta : Extended; var Sin, Cos : Extended)
11111:
              Function TanGL( X : Extended) : Extended
             Function Turn( Matrix : TMatrixGL; Angle : Single) : TMatrixGL;
11112.
             Function Turn1( Matrix : TMatrixGL; MasterUp : TAffineVector; Angle: Single): TMatrixGL;
Function Pitch( Matrix : TMatrixGL; Angle : Single) : TMatrixGL;
11114:
11115:
             Function Pitch1 ( Matrix : TMatrixGL; MasterRight:TAffineVector;Angle:Single):TMatrixGL;
11116:
             Function Roll( Matrix: TMatrixGL; Angle: Single): TMatrixGL;
Function Roll( Matrix:TMatrixGL; MasterDirection:TAffineVector;Angle:Single):TMatrixGL;
11117:
11118:
11119:
           end;
11120:
11121:
11122:
           procedure SIRegister_JclRegistry(CL: TPSPascalCompiler);
11123: begin
             Function RegCreateKey( const RootKey : HKEY; const Key, Value : string) : Longint
11124:
11125:
             Function RegDeleteEntry( const RootKey : HKEY; const Key, Name : string) : Boolean
             Function RegDeleteKeyTree( const RootKey : HKEY; const Key : string) : Boolean
11126:
             Function RegReadBool( const RootKey: HKEY; const Key, Name: string): Boolean
Function RegReadBoolDef( const RootKey: HKEY; const Key, Name: string; Def: Boolean): Boolean
Function RegReadInteger( const RootKey: HKEY; const Key, Name: string): Integer
11127 .
11128:
11129:
              Function RegReadIntegerDef( const RootKey : HKEY; const Key, Name : string; Def : Integer) : Integer
             Function RegReadString( const RootKey : HKEY; const Key, Name : string) : string
11131:
             Function RegReadStringDef( const RootKey: HKEY; const Key, Name, Def: string): string
Function RegReadDWORD( const RootKey: HKEY; const Key, Name: string): Int64
11132:
11133:
             Function RegReadDWORDDef( const RootKey: HKEY; const Key, Name: string; Def: Int64): Int64
11134:
11135:
             Procedure RegWriteBool( const RootKey : HKEY; const Key, Name : string;
                                                                                                                                         Value : Boolean)
11136:
             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)
11137:
11138:
             Function RegGetValueNames( const RootKey : HKEY; const Key : string; const List : TStrings) : Boolean
11139:
             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
11140:
11141:
11142:
11143:
               AddTypeS('TExecKind', '( ekMachineRun, ekMachineRunOnce, ekUserRun, ekUser
                                   ekServiceRun, ekServiceRunOnce )
11145:
               AddClassN(FindClass('TOBJECT'),'EJclRegistryError
11146:
             Function UnregisterAutoExec( ExecKind : TExecKind; const Name : string) : Boolean
             Function RegisterAutoExec( ExecKind: TExecKind; const Name, Cmdline: string): Boolean
11147:
11148:
              Function RegSaveList(const RootKey:HKEY;const Key:string; const ListName:string;const
            Items: TStrings): Bool;
11149: Function RegLoadList(const RootKey:HKEY;const Key:string;const ListName:string;const
           SaveTo:TStrings):Bool;
           Function RegDelList( const RootKey: HKEY; const Key: string; const ListName: string): Boolean
11151:
11152:
11153: procedure SIRegister_JclCOM(CL: TPSPascalCompiler);
11154:
           begin
11155:
             CLSID_StdComponentCategoriesMgr','TGUID').SetString('{0002E005-0000-0000-C000-000000000046}}
             CATID_SafeForInitializing','TGUID').SetString('\{\tauD95802-9882-11CF-9FA9-00AA006C42C4\}\)
CATID_SafeForScripting','TGUID').SetString('\{\tauD95801-9882-11CF-9FA9-00AA006C42C4\}\)
icMAX_CATEGORY_DESC_LEN','LongInt').SetInt(128);
11156:
11157:
11158:
               FindClass('TOBJECT'), 'EInvalidParam
11159:
             Function IsDCOMInstalled : Boolean
11160:
             Function IsDCOMEnabled : Boolean
11161:
11162:
             Function GetDCOMVersion : string
Function GetMDACVersion : string
11163:
11164:
              Function MarshalInterThreadInterfaceInVarArray(const iid:TIID;unk:IUnknown;var
            VarArray:OleVariant):HResult;
11165: \quad \textbf{Function} \;\; \texttt{MarshalInterProcessInterfaceInStream} \\ (\textbf{const} \;\; \texttt{iid:TIID:unk:IUnknown:var} \;\; \texttt{stm:IStream}) : \texttt{HResult:} \\ (\textbf{marshalInterProcessInterfaceInStream}) : \texttt{MarshalInterProcessInterfaceInStream} \\ (\textbf{marshalInterfaceInStream}) : \texttt{MarshalInterfaceInStream} \\ (\textbf{marshalInterfaceInStream}) : \texttt
11166:
             Function MarshalInterProcessInterfaceInVarArray(const iid:TIID;unk:IUnknown;var
            VarArray:OleVariant):HResult;
11167: Function MarshalInterMachineInterfaceInStream( const iid:TIID;unk:IUnknown;var stm:IStream):HResult;
11168: Function MarshalInterMachineInterfaceInVarArray(const iid:TIID;unk:IUnknown;var
            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
11172:
             \textbf{Function} \ \texttt{ResetIStreamToStart} ( \ \texttt{Stream} : \ \texttt{IStream}) \ : \ \texttt{Boolean}
11173:
             Function SizeOfIStreamContents( Stream : IStream) : Largeint
             Function StreamToVariantArray(Stream: TStream): OleVariant;
Function StreamToVariantArray1(Stream: IStream): OleVariant;
11174:
11175:
11176:
             Procedure VariantArrayToStream( VarArray : OleVariant; var Stream : TStream);
11177: Procedure VariantArrayToStream1( VarArray : OleVariant; var Stream : IStream);
11178: end;
11179:
11180:
11181: procedure SIRegister JclUnitConv mX2(CL: TPSPascalCompiler);
11182: begin
                         'CelsiusFreezingPoint','Extended').setExtended( 0.0);
11183:
           Const (
              FahrenheitFreezingPoint','Extended').setExtended( 32.0);
11185:
             KelvinFreezingPoint','Extended').setExtended( 273.15);
11186:
             CelsiusAbsoluteZero', 'Extended').setExtended( - 273.15);
             FahrenheitAbsoluteZero', 'Extended').setExtended( - 459.67);
11187:
             KelvinAbsoluteZero','Extended').setExtended( 0.0);
11188:
             DegPerCycle', 'Extended').setExtended( 0.0);
DegPerGrad', 'Extended').setExtended( 360.0);
DegPerRad', 'Extended').setExtended( 0.9);
DegPerRad', 'Extended').setExtended( 57.295779513082320876798154814105);
GradPerCycle', 'Extended').setExtended( 400.0);
11189:
11190:
11191:
11192:
11193: GradPerDeg', 'Extended').setExtended( 1.111111111111111111111111111);
```

```
11194:
        GradPerRad','Extended').setExtended( 63.661977236758134307553505349006);
        RadPerCycle', 'Extended').setExtended( 6.283185307179586476925286766559);
11195:
        RadPerDeg', 'Extended').setExtended( 0.017453292519943295769236907684886);
RadPerGrad', 'Extended').setExtended( 0.015707963267948966192313216916398);
11107.
11198:
         CyclePerDeg','Extended').setExtended( 0.00277777777777777777777777777777777);
         CyclePerGrad', 'Extended').setExtended( 0.0025);
11199:
         CyclePerRad', 'Extended').setExtended( 0.15915494309189533576888376337251);
11200:
         ArcMinutesPerDeg','Extended').setExtended( 60.0);
11201:
        ArcSecondsPerArcMinute','Extended').setExtended( 60.0);
11202:
        \textbf{Function} \ \ \texttt{HowAOneLinerCanBiteYou}( \ \ \textbf{const} \ \ \texttt{Step}, \ \ \texttt{Max} \ : \ \texttt{Longint}) \ : \ \texttt{Longint}
11203:
        Function MakePercentage( const Step, Max : Longint) : Longint Function CelsiusToKelvin( const T : double) : double
11204:
11205:
11206:
        Function CelsiusToFahrenheit( const T : double) : double
11207:
        Function KelvinToCelsius( const T : double) : double
        Function KelvinToFahrenheit( const T : double) : double
11208:
11209:
         Function FahrenheitToCelsius( const T : double) : double
        Function FahrenheitToKelvin( const T : double) : double
11210:
        Function CycleToDeg( const Cycles : double) : double
Function CycleToGrad( const Cycles : double) : double
11211:
11212:
11213:
        Function CycleToRad( const Cycles : double) : double
         Function DegToCycle( const Degrees : double) : double
11214:
        Function DegToGrad( const Degrees : double) : double
11215:
11216:
        Function DegToRad( const Degrees : double) : double
11217:
        Function GradToCvcle( const Grads : double) : double
11218:
        Function GradToDeg( const Grads : double) : double
11219:
         Function GradToRad( const Grads : double) : double
11220:
        Function RadToCycle( const Radians : double) : double
        Function RadToDeg( const Radians : double) : double
Function RadToGrad( const Radians : double) : double
11221:
11222:
         Function DmsToDeg( const D, M : Integer; const S : double) : double
11223:
11224:
        Function DmsToRad( const D, M : Integer; const S : double) : double
11225:
        Procedure DegToDms( const Degrees : double; out D, M : Integer; out S : double)
        Function DegToDmsStr( const Degrees : double; const SecondPrecision : Cardinal) : string
11226:
        Procedure CartesianToPolar( const X, Y : double; out R, Phi : double)
Procedure PolarToCartesian( const R, Phi : double; out X, Y : double)
11227:
11228:
11229:
        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)
11230:
11231:
         Procedure SphericToCartesian( const Rho, Theta, Phi : double; out X, Y, Z : double)
11232:
11233:
         Function CmToInch( const Cm : double) : double
11234:
        Function InchToCm( const Inch : double) : double
        Function FeetToMetre( const Feet : double) : double
11235:
        Function MetreToFeet( const Metre : double) : double
11236:
         Function YardToMetre( const Yard : double) : double
11237:
        Function MetreToYard( const Metre : double) : double
11238:
11239:
        Function NmToKm( const Nm : double) : double
        Function KmToNm( const Km : double) : double
11240:
        Function KmToSm( const Km : double) : double
11242:
        Function SmToKm( const Sm : double) : double
11243:
        Function LitreToGalUs( const Litre : double) : double
        Function GalUsToLitre( const GalUs : double) : double
11244:
        Function GalUsToGalCan( const GalUs : double) : double
11245:
        Function GalCanToGalUs( const GalCan : double)
11246:
        Function GalUsToGalUk( const GalUs : double) : double
11247:
        Function GalUkToGalUs( const GalUk : double) : double
11248:
        Function LitreToGalCan( const Litre : double) : double
11249:
11250:
         Function GalCanToLitre( const GalCan : double) : double
        Function LitreToGalUk( const Litre : double) : double
11251:
11252:
        Function GalUkToLitre( const GalUk : double) : double
        Function KgToLb( const Kg : double) : double
Function LbToKg( const Lb : double) : double
11253:
11254:
11255:
         Function KgToOz( const Kg : double) : double
11256:
        Function OzToKg( const Oz : double) : double
        Function CwtUsToKg( const Cwt : double) : double
Function CwtUkToKg( const Cwt : double) : double
11257:
11258:
        Function KaratToKg( const Karat : double) :
         Function KgToCwtUs( const Kg : double) : double
11260:
11261:
        Function KgToCwtUk( const Kg : double) : double
        Function KgToKarat( const Kg : double) : double
11262:
        Function KgToSton( const Kg : double) : double
Function KgToLton( const Kg : double) : double
11263:
11264:
11265:
        Function StonToKg( const STon : double) : double
11266:
        Function LtonToKg( const Lton : double) : double
        Function OrUsToKq( const Or : double) : double
11267:
        Function QrUkToKg( const Qr : double) : double
11268:
        Function KgToQrUs( const Kg : double) : double
11269:
11270:
        Function KgToQrUk( const Kg : double) : double
        Function PascalToBar( const Pa : double) : double
11271:
        Function PascalToAt( const Pa : double) : double
11272:
         Function PascalToTorr( const Pa : double) : double
11274:
        Function BarToPascal( const Bar : double) : double
        Function AtToPascal( const At : double) : double
Function TorrToPascal( const Torr : double) : double
11275:
11276:
         Function KnotToMs( const Knot : double) : double
11277:
        Function HpElectricToWatt( const HpE : double) : double
11278:
11279:
        Function HpMetricToWatt( const HpM : double) : double
        Function MsToKnot( const ms : double) : double
11280:
11281:
        Function WattToHpElectric( const W : double) : double
        Function WattToHpMetric( const W : double) : double
```

```
11283: function getBigPI: string;
                                                                             //PT of 1000 numbers
11284:
11285: procedure SIRegister_devcutils(CL: TPSPascalCompiler);
11286:
                Function CDExecuteFile( const FileName, Params, DefaultDir : string; ShowCmd : Integer) : THandle
11287:
11288:
                 Procedure CDCopyFile( const FileName, DestName : string)
Procedure CDMoveFile( const FileName, DestName : string)
11289:
                 Function MakeCommaTextToColor( Text : string; Index : Integer; DefaultColor : TColor) : TColor
11290:
11291:
                 Procedure CDDeleteFiles( Sender : TObject; s : string)
11292:
                 Function CDGetTempDir : string
Function CDGetFileSize( FileName : string) : longint
11293:
11294:
                 Function GetFileTime( FileName : string) : longint
11295:
                 Function GetShortName( FileName : string) : string
11296:
                 Function GetFullName( FileName : string) : string
11297:
                 Function WinReboot : boolean
11298:
                 Function WinDir : String
                 Function RunFile( FileToRun : string; Params : string; Dir : string; Wait : boolean) : cardinal
11299:
11300: Function RunFile_( Cmd, WorkDir : string; Wait : boolean) : Boolean 11301: Function devExecutor : TdevExecutor
11302: end;
11303:
11304: procedure SIRegister_FileAssocs(CL: TPSPascalCompiler);
11305: begin
11306: Procedure CheckAssociations // AssociationsCount', 'LongInt').SetInt(7);
11307:
                 Procedure Associate( Index : integer)
11308:
                 Procedure UnAssociate( Index : integer)
11309:
                 Function IsAssociated( Index : integer) : boolean
                Function CheckFiletype( const extension, filetype, description, verb, serverapp: string): boolean Procedure RegisterFiletype( const extension, filetype, description, verb, serverapp, IcoNum: string)
11310:
11311:
                Procedure RegisterDDEServer( const filetype, verb, topic, servername, macro : string)
11312:
11313:
                 procedure RefreshIcons;
11314: function GetShadeColor(ACanvas: TCanvas; clr: TColor; Value: integer): TColor;
11315: function MergColor(Colors: Array of TColor): TColor;
11316: function NewColor(ACanvas: TCanvas; clr: TColor; Value: integer): TColor;
11317: procedure DimBitmap(ABitmap: TBitmap; Value: integer);
11318: function GrayColor(ACanvas: TCanvas; clr: TColor; Value: integer): TColor;
11319: function GetInverseColor(AColor: TColor): TColor;
11320: procedure GrayBitmap(ABitmap: TBitmap; Value: integer);
11321: procedure DrawBitmapShadow(B: TBitmap; ACanvas: TCanvas; X, Y: integer; ShadowColor: TColor);
               procedure DrawCheckMark(ACanvas: TCanvas; X, Y: integer);
11322:
11323: Procedure GetSystemMenuFont(Font: TFont);
11324: end;
11325:
11327: function IsStringConstant(const St: string): Boolean;
11328: function IsIntConstant(const St: string): Boolean;
11329: function IsRealConstant(const St: string): Boolean;
11330: function IsIdentifier(const ID: string): Boolean;
11331: function GetStringValue(const St: string): string;
11332: procedure ParseString(const S: string; Ss: TStrings);
11333: function IsStringConstantW(const St: WideString): Boolean;
11334: function IsIntConstantW(const St: WideString): Boolean;
11335: function IsRealConstantW(const St: WideString): Boolean;
11336: function IsIdentifierW(const ID: WideString): Boolean;
11337: function GetStringValueW(const St: WideString): WideString; 11338: procedure ParseStringW(const S: WideString; Ss: TStrings);
11339:
11340:
11342:
11343: Function JclSimpleSendMail( const ARecipient, AName, ASubject, ABody : string; const AAttachment :
               TFileName; ShowDialog : Boolean; AParentWND : HWND) : Boolean
11344: Function JclSimpleSendFax( const ARecipient, AName, ASubject, ABody : string; const AAttachment :
               TFileName; ShowDialog : Boolean; AParentWND : HWND) : Boolean
11345: Function JclSimpleBringUpSendMailDialog(const ASubject, ABody:string;const
               AAttach:TFileName;AParentWND:HWND):Bool
11346: Function MapiCheck( const Res : DWORD; IgnoreUserAbort : Boolean) : DWORD
11347: Function MapiErrorMessage( const ErrorCode : DWORD) : string
11348:
11349: procedure SIRegister_IdNTLM(CL: TPSPascalCompiler);
11350: begin
11351:
                    //'Pdes_key_schedule', '^des_key_schedule // will not work
11352:
                 Function BuildTypelMessage( ADomain, AHost : String) : String
11353:
                 \textbf{Function} \ \ \texttt{BuildType3Message(ADomain,AHost,AUsername:WideString;APassword,ANonce:String):String} : \textbf{String} : \textbf{Stri
11354: Procedure RegisterAuthenticationMethod( MethodName : String; AuthClass : TIdAuthenticationClass)
                 \textbf{Function} \  \, \texttt{FindAuthClass}(\  \, \texttt{AuthName} \  \, : \  \, \textbf{String}) \  \, : \  \, \texttt{TIdAuthenticationClass}
11355:
11356: \ GBase 64 Code Table ', '\verb|string|'|). Set String ('ABCDEFGHIJKLMNOPQRSTUVWXYZabcdefghijklmnopqrstuvwxyz0123456789+/ABCDEFGHIJKLMNOPQRSTUVWXYZabcdefghijklmnopqrstuvwxyz0123456789+/ABCDEFGHIJKLMNOPQRSTUVWXYZabcdefghijklmnopqrstuvwxyz0123456789+/ABCDEFGHIJKLMNOPQRSTUVWXYZabcdefghijklmnopqrstuvwxyz0123456789+/ABCDEFGHIJKLMNOPQRSTUVWXYZabcdefghijklmnopqrstuvwxyz0123456789+/ABCDEFGHIJKLMNOPQRSTUVWXYZabcdefghijklmnopqrstuvwxyz0123456789+/ABCDEFGHIJKLMNOPQRSTUVWXYZabcdefghijklmnopqrstuvwxyz0123456789+/ABCDEFGHIJKLMNOPQRSTUVWXYZabcdefghijklmnopqrstuvwxyz0123456789+/ABCDEFGHIJKLMNOPQRSTUVWXYZabcdefghijklmnopqrstuvwxyz0123456789+/ABCDEFGHIJKLMNOPQRSTUVWXYZabcdefghijklmnopqrstuvwxyz0123456789+/ABCDEFGHIJKLMNOPQRSTUVWXYZabcdefghijklmnopqrstuvwxyz0123456789+/ABCDEFGHIJKLMNOPQRSTUVWXYZabcdefghijklmnopqrstuvwxyz0123456789+/ABCDEFGHIJKLMNOPQRSTUVWXYZabcdefghijklmnopqrstuvwxyz0123456789+/ABCDEFGHIJKLMNOPQRSTUVWXYZabcdefghijklmnopqrstuvwxyz0123456789+/ABCDEFGHIJKLMNOPQRSTUVWXYZabcdefghijklmnopqrstuvwxyz0123456789+/ABCDEFGHIJKLMNOPQRSTUVWXYZabcdefghijklmnopqrstuvwxyz0123456789+/ABCDEFGHIJKLMNOPQRSTUVWXYZabcdefghijklmnopqrstuvwxyz012345678+/ABCDEFGHIJKLMNOPQRSTUVWXYZabcdefghijklmnopqrstuvwxyz012345678+/ABCDEFGHIJKLMNOPQRSTUVWXYZabcdefghijklmnopqrstuvwxyz012345678+/ABCDEFGHIJKLMNOPQRSTUVWXYZabcdefghijklmnopqrstuvwxyz012345678+/ABCDEFGHIJKLMNOPQRSTUVWXYZabcdefghijklmnopqrstuvwxyz012345678+/ABCDEFGHIJKLMNOPQRSTUVWXYZabcdefghijklmnopqrstuvwxyz01234567+/ABCDEFGHIJKLMNOPQRSTUVWXYZabcdefghijklmnopqrstuvwxyz01234567+/ABCDEFGHIJKLMNOPQRSTUVWXYZabcdeffyhijklmnopqrstuvwxyz01234567+/ABCDEFGHIJKLMNOPQRSTUVWXYZabcdeffyhijklmnopqrstuvwxyz01234567+/ABCDEFGHIJKLMNOPQRSTUVWXYZabcdeffyhijklmnopqrstuvwxyz01234567+/ABCDEFGHIJKLMNOPQRSTUVWXYZabcdeffyhijklmnopqrstuvwxyz01234567+/ABCDEFGHIJKLMNOPQRSTUVWXYZabcdeffyhijklmnopqrstuvwxyz01234567+/ABCDEFGHIJKLMNOPQRSTUVWxyz01234567+/ABCDEFGHIJKLMNOPQRSTUVWxyz01234567+/ABCDEFGHIJKLMNOPQRSTUVWxyz01234567+/ABCDEFGHIJKLMNOPQRSTUVWxyyz01234567-/ABCDEFGHIJKLMNOPQRSTUVWxyyy01234567-/ABCDEFGHIJKLMNOPQRSTUVWx
11357: GXXECodeTable', 'string').SetString('+-0123456789ABCDEFGHIJKLMNOPQRSTUVWXYZabcdefghijklmnopqrstuvwxyz 11358: GUUECodeTable', 'string').SetString('`!"#$\%\''()\*+,-./0123456789:;<=>?@ABCDEFGHIJKLMNOPQRSTUVWXYZ[\]^_
               end
11360:
11361: procedure SIRegister_WDosSocketUtils(CL: TPSPascalCompiler);
11362: begin
11363: ('IpAny', 'LongWord').SetUInt( $00000000);
               ipLoopBack', 'LongWord').SetUInt( $7F000001);
IpBroadcast', 'LongWord').SetUInt( $FFFFFFFF);
11365:
11368: SocketMaxConnections','LongInt').SetInt(5);
```

```
11369: TIpAddr', 'LongWord
11370: TIpRec', 'record IpB1 : byte; IpB2 : byte; IpB3 : byte; IpB4 : Byte; end
               Function HostToNetLong( HostLong : LongWord) : LongWord
11372:
               Function HostToNetShort( HostShort: Word): Word
11373:
               Function NetToHostLong( NetLong : LongWord) : LongWord
11374:
               Function NetToHostShort( NetShort : Word) : Word
11375:
               Function StrToIp( Ip : string) : TIpAddr
11376: Function IpToStr( Ip : TIpAddr) : string
11377: end;
11378:
11379: (*
11380: procedure SIRegister_ALSMTPClient(CL: TPSPascalCompiler);
11381: begin
                 TAlSmtpClientAuthType', '( AlsmtpClientAuthNone, alsmtpClientAut'
11382:
                 +'hPlain, AlsmtpClientAuthLogin, AlsmtpClientAuthCramMD5, AlsmtpClientAuthCr'+'amShal, AlsmtpClientAuthAutoSelect )
11383:
11384:
                 TAlSmtpClientAuthTypeSet', 'set of TAlSmtpClientAuthType
11385:
11386:
                SIRegister_TAlSmtpClient(CL);
11387: end;
11388:
11389: procedure SIRegister WDosPlcUtils(CL: TPSPascalCompiler);
11390: begin
11391: 'TBitNo',
                                'Integer
                TStByteNo', 'Integer
StationNo', 'Integer
11392:
11393: TStationNo',
                                 Integer
11394: TInOutNo',
11395: TIO', '( EE, AA, NE, NA )
11396: TBitSet', 'set of TBitNo
11397: TAddrKind', 'set of ( akBit0, akBit1, akBit2, akOut, akNot, akBus )
11398: TBitAddrRec', 'record Kind : TAddrKind; InOutNo : TInOutNo; ByteNo : Byte; end
11399: TBitAddr', 'LongInt
11400: TByteAddrRec', 'record Kind: TAddrKind; ByteNo: Byte; end 11401: TByteAddr', 'SmallInt 11402: TInOutState', '( iosInit, iosHalt, iosRun, iosError )
 11403: Function BitAddr(aIo: TIo; aInOutNo : TInOutNo; aByteNo : Byte; aBitNo : TBitNo) : TBitAddr
11404: \quad \textbf{Function} \  \, \texttt{BusBitAddr}(\texttt{aIo:TIo}; \texttt{aInOutNo:TInOutNo}; \texttt{aStat:TStatNo}; \texttt{aStByteNo:TStByteNo}; \texttt{aBitNo:TBitAddr}; \\ \text{alo:TIo}; \texttt{aInOutNo:TInOutNo}; \texttt{aStat:TStatNo}; \texttt{aStByteNo}; \texttt{aBitNo:TBitAddr}; \\ \text{alo:TIo}; \texttt{aInOutNo:TInOutNo}; \texttt{aStat:TStatNo}; \texttt{aStByteNo}; \texttt{aBitNo:TBitAddr}; \\ \text{alo:TIo}; \texttt{alo:TotAddr}; \\ \text{alo:TIo}; \\ 
11405: Procedure BitAddrToValues(aBitAdr:TBitAdr;var aIo:TIo;var aInOutNo:TInOutNo;var aByteNo:Byte;var
             aBitNo:TBitNo);
11406: Function BitAddrToStr( Value : TBitAddr)
                                                                                              : string
11407: Function StrToBitAddr( const Value : string) : TBitAddr
11408:
              Function ByteAddr( aIo : TIo; aInOutNo : TInOutNo; aByteNo : Byte) : TByteAddr
               Function BusByteAddr(aIo:TIo;aInOutNo:TInOutNo;aStation:TStationNo;aStByteNo: TStByteNo):TByteAddr
11409:
11410:
               Procedure ByteAddrToValues(aByteAddr:TByteAddr;var aIo:TIo;var aInOutNo:TInOutNo;var aByteNo:Byte)
11411:
               Function ByteAddrToStr( Value : TByteAddr) : string
              Function StrToByteAddr( const Value : string) : TByteAddr
Procedure IncByteAddr( var ByteAddr : TByteAddr; Increment : Integer)
Procedure DecByteAddr( var ByteAddr : TByteAddr; Decrement : Integer)
11412:
11413:
11414:
               Function InOutStateToStr( State : TInOutState) : string
11415:
11416: Function MasterErrorToStr( ErrorCode : TErrorCode) : string
11417: Function SlaveErrorToStr( ErrorCode : TErrorCode) : string
11418: end;
11419:
11420: procedure SIRegister_WDosTimers(CL: TPSPascalCompiler);
11421: begin
11422: TintFreq', '( ifNone, if32768, if16384, if8192, if4096, if2048, '
11423: +'if1024, if512, if256, if128, if64, if32, if16, if8, if4, if2 )
11424: DpmiPmVector', 'Int64
11425: 'DInterval', 'LongInt').SetInt( 1000);
              //'DEnabled','Boolean')BoolToStr( True);
'DIntFreq','string').SetString(' if64
11426:
11427:
              //'DMessages','Boolean').SetString( if64);
11428:
11429:
                 SIRegister_TwdxCustomTimer(CL);
11430:
                 SIRegister_TwdxTimer(CL);
11431:
                 SIRegister TwdxRtcTimer(CL)
11432:
                 SIRegister TCustomIntTimer(CL);
                 SIRegister_TIntTimer(CL);
11434:
                 SIRegister TRtcIntTimer(CL);
11435: Function RealNow : TDateTime
11436: Function MsToDateTime( MilliSecond : LongInt) : TDateTime 11437: Function DateTimeToMs( Time : TDateTime) : LongInt
11438: end;
11439:
11440: procedure SIRegister_IdSysLogMessage(CL: TPSPascalCompiler);
11441: begin
11442: TIdSyslogPRI'
                                         'Integer
11443: TIdSyslogFacility',
                                                    '( sfKernel, sfUserLevel, sfMailSystem, sfSy'
                  +'stemDaemon, sfSecurityOne, sfSysLogInternal, sfLPR, sfNNTP, sfUUCP, sfCloc'
+'kDaemonOne, sfSecurityTwo, sfFTPDaemon, sfNTP, sfLogAudit, sfLogAlert, sfC'
+'lockDaemonTwo, sfLocalUseZero, sfLocalUseOne, sfLocalUseTwo, sfLocalUseThr'
11444:
11445:
11446:
                    +'ee, sfLocalUseFour, sfLocalUseFive, sfLocalUseSix, sfLocalUseSeven
11447:
11448: \ \ TIdSyslogSeverity', '(slEmergency, slAlert, slCritical, slError, slWarning, slNotice, slInformational, slDebug)
11449:
                SIRegister_TIdSysLogMsgPart(CL);
                 SIRegister_TIdSysLogMessage(CL);
11450:
11451:
               Function FacilityToString( AFac : TIdSyslogFacility) : string
               Function SeverityToString( ASec : TIdsyslogSeverity) : string
11452:
11453:
               Function NoToSeverity( ASev : Word) : TIdSyslogSeverity
               Function logSeverityToNo( ASev : TIdSyslogSeverity) : Word
11454:
              Function NoToFacility( AFac : Word) : TIdSyslogFacility
11455:
11456: Function logFacilityToNo( AFac : TIdSyslogFacility) : Word
```

```
11457: end;
11458:
11459:
         procedure SIRegister_TextUtils(CL: TPSPascalCompiler);
11460: begin
            'UWhitespace', 'String').SetString( '(?:\s*)
11461:
           Function StripSpaces( const AText : string) : string
11462:
           Function CharCount( const AText : string; Ch : Char) : Integer
11463:
          Function BalancedText( const AText: string; const Ch1, Ch2: Char; const Count: Integer): string
Function BalancedTextReg( const AText: string; const Ch1, Ch2: Char; const Count: Integer): string
11464:
11465:
11466:
         end;
11467:
11468:
11469:
         procedure SIRegister_ExtPascalUtils(CL: TPSPascalCompiler);
11470: begin
           ExtPascalVersion','String').SetString( '0.9.8
11471:
11472:
            AddTypeS('TBrowser', '( brUnknown, brIE, brFirefox, brChrome, brSafari, br
              +'Opera, brKonqueror, brMobileSafari )
11473:
          AddTypeS('TCSSUnit', '( cssPX, cssPerc, cssEM, cssEX, cssIN, cssCM, cssMM, cssPT, cssPC, cssnone )
AddTypeS('TExtProcedure', 'Procedure

Function DetermineBrowser( const UserAgentStr : string) : TBrowser
11474 .
11475:
11476:
           Function ExtExtract(const Delims:array of string; var S:string; var Matches: TStringList; Remove: bool): bool;
11477:
11478:
           Function ExtExplode( Delim : char; const S : string; Separator : char) : TStringList
11479:
           \textbf{Function} \ \ \texttt{FirstDelimiter}( \ \ \textbf{const} \ \ \texttt{Delimiters}, \ \ \texttt{S} \ : \ \textbf{string}; \ \ \texttt{Offset} \ : \ \ \texttt{integer}) \ : \ \ \texttt{integer}
           Function RPosEx( const Substr, Str : string; Offset : integer) : integer
Function CountStr( const Substr, Str : string; UntilStr : string) : integer
11480:
11481:
11482:
           Function StrToJS( const S : string; UseBR : boolean) : string
11483:
           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
11484:
11485:
           Function SetPaddings(Top:integer;Right:int;Bottom:intr;Left:integer;CSSUnit:TCSSUnit;Header:bool):string;
11486:
11487:
           Function SetMargins(Top:integer;Right:int;Bottom:int;Left:integer;CSSUnit:TCSSUnit;Header:bool): string
           Function ExtBefore( const BeforeS, AfterS, S: string): boolean Function IsUpperCase( S: string): boolean
11488:
11489:
11490:
           Function BeautifyJS(const AScript:string;const StartingLevel:integer;SplitHTMLNewLine: boolean):string;
          Function BeautifyCSS( const AStyle : string) : string
Function LengthRegExp( Rex : string; CountAll : Boolean) : integer
11491:
11492:
11493: Function JSDateToDateTime( JSDate : string) : TDateTime
11494:
         end;
11495:
11496:
         procedure SIRegister_JclShell(CL: TPSPascalCompiler);
11497: begin
            TSHDeleteOption', '( doSilent, doAllowUndo, doFilesOnly )
TSHDeleteOptions', 'set of TSHDeleteOption
TSHRenameOption', '( roSilent, roRenameOnCollision )
TSHRenameOptions', 'set of TSHRenameOption
11498:
11499:
11500:
11501:
           Function SHDeleteFiles( Parent : HWND; const Files : string; Options : TSHDeleteOptions) : Boolean
Function SHDeleteFolder( Parent : HWND; const Folder : string; Options : TSHDeleteOptions) : Boolean
11502:
11503:
           Function SHRenameFile( const Src, Dest: string; Options: TSHRenameOptions): Boolean
11504:
            TEnumFolderFlag', '( efFolders, efMonFolders, efIncludeHidden TEnumFolderFlags', 'set of TEnumFolderFlag
11505:
11506:
            TEnumFolderRec', 'record DisplayName : string; Attributes : DWOR' +'D; IconLarge : HICON; IconSmall : HICON; Item : PItemIdList; EnumIdList : +'IEnumIdList; Folder : IShellFolder; end
11507:
11508:
11509:
11510:
           Function SHEnumFolderFirst(const Folder:string;Flags:TEnumFolderFlags;var F:TEnumFolderRec):Boolean;
11511:
           Function SHEnumSpecialFolderFirst(SpecialFolder:DWORD;Flags:TEnumFolderFlags;var F:TEnumFolderRec):Bool;
           Procedure SHEnumFolderClose( var F : TEnumFolderRec)
Function SHEnumFolderNext( var F : TEnumFolderRec) : Boolean
11512:
11513:
           Function GetSpecialFolderLocation( const Folder : Integer) : string
11514:
11515:
           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
11516:
11517:
11518:
           Function OpenFolder( const Path : string; Parent : HWND) : Boolean
           Function OpenSpecialFolder( FolderID : Integer; Parent : HWND) : Boolean
Function SHReallocMem( var P : Pointer; Count : Integer) : Boolean
11510:
11520:
           Function SHAllocMem( out P : Pointer; Count : Integer) : Boolean
Function SHGetMem( var P : Pointer; Count : Integer) : Boolean
11521:
           Function SHFreeMem( var P : Pointer) : Boolean
11523:
11524:
           Function DriveToPidlBind( const DriveName : string; out Folder : IShellFolder) : PItemIdList
           Function PathToPidl( const Path : string; Folder : IShellFolder) : PItemIdList
Function PathToPidlBind( const FileName : string; out Folder : IShellFolder) : PItemIdList
Function PidlBindToParent(const IdList:PItemIdList;out Folder:IShellFolder;out Last:PItemIdList):Bool;
11525:
11526:
11527:
11528:
           Function PidlCompare( const Pidl1, Pidl2 : PItemIdList) : Boolean
11529:
           \begin{tabular}{ll} Function & PidlCopy( & const & Source : PItemIdList; & out & Dest : PItemIdList) : Boolean \\ & Function & PidlFree( & var & IdList : PItemIdList) : Boolean \\ \end{tabular}
11530:
11531:
           Function PidlGetDepth( const Pidl : PItemIdList) : Integer
11532:
           Function PidlGetLength( const Pidl : PItemIdList) : Integer
11533:
           Function PidlGetNext( const Pidl : PItemIdList) : PItemIdList
           Function PidlToPath( IdList : PItemIdList) : string Function StrRetFreeMem( StrRet : TStrRet) : Boolean
11534:
11535:
           Function StrRetToString( IdList : PItemIdList; StrRet : TStrRet; Free : Boolean) : string
            PShellLink', '^TShellLink // will not work
TShellLink', 'record Arguments : string; ShowCmd : Integer; Work'
11537:
11538:
              +'ingDirectory : string; IdList : PItemIDList; Target : string; Description '+': string; IconLocation : string; IconIndex : Integer; HotKey : Word; end
11539:
11540:
           Procedure ShellLinkFree( var Link : TShellLink)
11541:
          Function ShellLinkResolve( const FileName : string; var Link : TShellLink) : HRESULT Function ShellLinkCreate( const Link : TShellLink; const FileName : string) : HRESULT
11542:
11543:
           Function ShellLinkCreateSystem(const Link:TShellLink;const Folder:Integer; const FileName:string):HRESULT;
11544:
11545: Function ShellLinkGetIcon( const Link: TShellLink; const Icon: TIcon): Boolean
```

```
11546:
         Function SHDllGetVersion( const FileName : string; var Version : TDllVersionInfo) : Boolean
11547:
         Function GetSystemIcon( IconIndex : Integer; Flags : Cardinal) : HICON
         Function OverlayIcon( var Icon: HICON; Overlay: HICON; Large: Boolean): Boolean
Function OverlayIconShortCut( var Large, Small: HICON): Boolean
11540.
         \textbf{Function} \  \, \texttt{OverlayIconShared}(\  \, \textbf{var} \  \, \texttt{Large}, \  \, \texttt{Small} \  \, \vdots \  \, \texttt{HICON}) \  \, \vdots \  \, \texttt{Boolean}
11550:
         Function SHGetItemInfoTip( const Folder : IShellFolder; Item : PItemIdList) : string
11551:
         Function ShellExecEx(const FileName:string;const Parameters:string;const Verb:string; CmdShow:Int):Bool;
11552:
         Function ShellExec(Wnd: Integer; const Operation, FileName, Parameters, Directy: string; ShowCommand:Int):Bool;
11553:
11554:
         Function ShellExecAndWait(const FileName:string;const Paramets:string;const Verb:string;CmdShow:Int):Bool;
11555:
         Function ShellOpenAs( const FileName : string) : Boolean
Function ShellRasDial( const EntryName : string) : Boolean
11556:
         Function ShellRunControlPanel( const NameOrFileName:string; AppletNumber:Integer):Boolean
11558:
         Function GetFileNameIcon( const FileName : string; Flags : Cardinal) : HICON
         TJclFileExeType', '( etError, etMsDos, etWin16, etWin32Gui, etWin32Con )
Function GetFileExeType( const FileName : TFileName) : TJclFileExeType
11559:
11560:
11561:
         Function ShellFindExecutable( const FileName, DefaultDir : string) : string
         Procedure keybd_event( bVk : Byte; bScan : Byte; dwFlags, dwExtraInfo : DWORD)
11562:
11563.
         Function OemKeyScan( wOemChar : Word) : DWORD
11564:
         Procedure mouse_event( dwFlags, dx, dy, dwData, dwExtraInfo : DWORD)
11565:
        end;
11566:
11567:
        procedure SIRegister_cXMLFunctions(CL: TPSPascalCompiler);
11568: begin
        xmlVersion', 'String').SetString( '1.0 FindClass('TOBJECT'), 'Exml
11569:
11570:
          //Function xmlValidChar( const Ch : AnsiChar) : Boolean;
11571:
         Function xmlValidChar1( const Ch : UCS4Char) : Boolean
11572:
         Function xmlValidChar2( const Ch : WideChar) : Boolean;
         Function xmlIsSpaceChar( const Ch : WideChar) : Boolean
11573:
         Function xmlIsDigit( const Ch : WideChar) : Boolean
Function xmlIsDigit( const Ch : WideChar) : Boolean
11574:
11575:
11576:
         Function xmlIsNameStartChar( const Ch : WideChar) : Boolean
         Function xmlIsNameChar( const Ch : WideChar) : Boolean
Function xmlIsPubidChar( const Ch : WideChar) : Boolean
11577:
11578:
11579:
         Function xmlValidName( const Text : UnicodeString) : Boolean
         //xmlSpace','Char').SetString( #$20 or #$9 or #$D or #$A);
11580:
11581:
          //Function xmlSkipSpace( var P : PWideChar) : Boolean
         //Function xmlSkipEq( var P : PWideChar) : Boolean
//Function xmlExtractQuotedText( var P : PWideChar; var S : UnicodeString) : Boolean
11582:
11583:
11584:
         //Function xmlGetEntityEncoding( const Buf : Pointer; const BufSize : Integer; out HeaderSize : Integer)
          TUnicodeCodecClass
11585: Function xmlResolveEntityReference( const RefName : UnicodeString) : WideChar
         Function xmlTag( const Tag : UnicodeString) : UnicodeString
Function xmlEndTag( const Tag : UnicodeString) : UnicodeString
11586:
11587:
         Function xmlAttrTag( const Tag: UnicodeString; const Attr: UnicodeString): UnicodeString
11588:
         Function xmlEmptyTag( const Tag, Attr : UnicodeString) : UnicodeString Procedure xmlSafeTextInPlace( var Txt : UnicodeString)
11589:
11590:
         Function xmlSafeText( const Txt : UnicodeString) : UnicodeString
11591:
         Function xmlSpaceIndent( const IndentLength: Integer; const IndentLevel: Integer):UnicodeString
         Function xmlTabIndent( const IndentLevel: Integer): UnicodeString
Function xmlComment( const Comment: UnicodeString): UnicodeString
11593:
11594:
11595:
         Procedure SelfTestcXMLFunctions
11596:
        end;
11597:
11598:
11599:
        procedure SIRegister_DepWalkUtils(CL: TPSPascalCompiler);
11600: begin
11601:
         Function AWaitCursor : IUnknown
         Function ChangeCursor( NewCursor : TCursor) : IUnknown
11602:
11603:
         Procedure SuspendRedraw( AControl : TWinControl; Suspend : boolean)
         Function YesNo( const ACaption, AMsg : string) : boolean

Procedure strTokenize( const S : string; Delims : TSysCharSet; Results : TStrings)
11604:
11605:
         Function GetBorlandLibPath( Version : integer; ForDelphi : boolean) : string
Function GetExpandedLibRoot( Version : integer; ForDelphi : boolean) : string
11607:
11608:
         Procedure GetPathList( Version : integer; ForDelphi : boolean; Strings : TStrings)
         Procedure GetSystemPaths( Strings: TStrings)
Procedure MakeEditNumeric( EditHandle : integer)
11609:
11610:
11611:
11612:
11613: procedure SIRegister_yuvconverts(CL: TPSPascalCompiler);
11614: begin
           AddTypeS('TVideoCodec','(vcUnknown,vcRGB,vcYUY2,vcUYVY,vcBTYUV,vcYV,U9,vcYUV12,vcY8,vcY211)
11615:
         'BI_YUY2','LongWord').SetUInt( $32595559);
'BI_UYVY','LongWord').SetUInt( $59565955);
11616:
11617:
          'BI BTYUV', 'LongWord').SetUInt( $50313459);
11618:
         BI_YUU9', 'LongWord').SetUInt( $39555659);
'BI_YUU9', 'LongWord').SetUInt( $30323449);
11619:
11620:
          'BI_Y8','LongWord').SetUInt( $20203859);
'BI_Y211','LongWord').SetUInt( $31313259);
11621:
11622:
         Function BICompressionToVideoCodec( Value : DWord) : TVideoCodec
11623:
         Function ConvertCodecToRGB(Codec:TVideoCodec;Src,Dst:Pointer;AWidth,AHeight:Integer):Boolean;
11624:
11625:
11626:
11627: (*----
11628: procedure SIRegister_AviCap(CL: TPSPascalCompiler);
11629: begin
11630: 'WM_USER','LongWord').SetUInt( $0400);
         'WM_CAP_START','LongWord').SetUint($0400);
'WM_CAP_END','longword').SetUint($0400+85);
11631:
11632:
11633: //WM_CAP_START+ 85
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11634:
          // WM\_CAP\_SET\_CALLBACK\_CAPCONTROL = (WM\_CAP\_START+ 85); Function capSetCallbackOnError( hwnd : THandle; fpProc : LongInt) : LongInt
11635:
          Function capSetCallbackOnStatus( hwnd : THandle; fpProc : LongInt) : LongInt
          Function capSetCallbackOnYield( hwnd: THandle; fpProc: LongInt): LongInt
Function capSetCallbackOnFrame( hwnd: THandle; fpProc: LongInt): LongInt
11637:
11638:
          Function capSetCallbackOnVideoStream( hwnd : THandle; fpProc : LongInt) : LongInt
Function capSetCallbackOnWaveStream( hwnd : THandle; fpProc : LongInt) : LongInt
11639:
11640:
          Function capSetCallbackOnCapControl( hwnd : THandle; fpProc : LongInt) : LongInt
11641:
          Function capSetUserData( hwnd: THandle; lUser: LongInt Function capGetUserData( hwnd: THandle): LongInt Function capGetUserData( hwnd: THandle): LongInt Function capDriverConnect( hwnd: THandle; I: Word): LongInt Function capDriverDisconnect( hwnd: THandle): LongInt
11642:
11643:
11644:
11645:
          Function capDriverGetName( hwnd: THandle; szName: LongInt; wSize: Word): LongInt
Function capDriverGetVersion( hwnd: THandle; szVer: LongInt; wSize: Word): LongInt
Function capDriverGetCaps( hwnd: THandle; s: LongInt; wSize: Word): LongInt
11646:
11647:
11648:
          Function capFileSetCaptureFile( hwnd : THandle; szName : LongInt) : LongInt
Function capFileGetCaptureFile( hwnd : THandle; szName : LongInt; wSize : Word):LongInt
11649:
11650:
          Function capFileAlloc( hwnd : THandle; dwSize : LongInt) : LongInt
Function capFileSaveAs( hwnd : THandle; szName : LongInt) : LongInt
11651:
11652:
          Function capFileSetInfoChunk( hwnd : THandle; lpInfoChunk : LongInt) : LongInt
11653:
          Function capFileSaveDIB( hwnd : THandle; szName : LongInt) : LongInt
11654:
11655:
          Function capEditCopy( hwnd : THandle) : LongInt
          Function capSetAudioFormat( hwnd : THandle; s : LongInt; wSize : Word) : LongInt
Function capGetAudioFormat( hwnd : THandle; s : LongInt; wSize : Word) : LongInt
11656:
11657:
          Function capGetAudioFormatSize( hwnd : THandle) : LongInt
11658:
11659:
          Function capDlgVideoFormat( hwnd : THandle) : LongInt
11660:
          Function capDlgVideoSource( hwnd : THandle) : LongInt
          Function capDlgVideoDisplay( hwnd : THandle) : LongInt
11661:
11662:
          Function capDlgVideoCompression( hwnd : THandle) : LongInt
          Function capGetVideoFormat( hwnd : THandle; s : LongInt; wSize : Word) : LongInt
11663:
11664:
          Function capGetVideoFormatSize( hwnd : THandle) : LongInt
          Function capSetVideoFormat( hwnd : THandle; s : LongInt; wSize : Word) : LongInt
Function capPreview( hwnd : THandle; f : Word) : LongInt
11665:
11666:
11667:
          Function capPreviewRate( hwnd : THandle; wMS : Word) : LongInt
          Function capOverlay( hwnd : THandle; f : Word) : LongInt
11669:
          Function capPreviewScale( hwnd : THandle; f : Word) : LongInt
          Function capGetStatus( hwnd: THandle; s: LongInt; wSize: Word): LongInt Function capSetScrollPos( hwnd: THandle; lpP: LongInt): LongInt
11670:
11671:
11672:
          Function capGrabFrame( hwnd : THandle) : LongInt
          Function capGrabFrameNoStop( hwnd : THandle) : LongInt
Function capCaptureSequence( hwnd : THandle) : LongInt
11673:
11674:
          Function capCaptureSequenceNoFile( hwnd : THandle) : LongInt
Function capCaptureStop( hwnd : THandle) : LongInt
11675:
11676:
          Function capCaptureAbort( hwnd : THandle) : LongInt
11677:
11678:
          \textbf{Function} \ \texttt{capCaptureSingleFrameOpen(} \ \texttt{hwnd} \ : \ \texttt{THandle)} \ : \ \texttt{LongInt}
          Function capCaptureSingleFrameClose( hwnd : THandle) : LongInt
11679:
          Function capCaptureSingleFrame( hwnd : THandle) : LongInt
11680:
          Function capCaptureGetSetup( hwnd : THandle; s : LongInt; wSize : Word) : LongInt
11681:
11682:
          Function capCaptureSetSetup( hwnd : THandle; s : LongInt; wSize : Word) : LongInt
          Function capSetMCIDeviceName( hwnd : THandle; szName : LongInt) : LongInt
Function capGetMCIDeviceName( hwnd : THandle; szName : LongInt; wSize : Word) : LongInt
11683:
11684:
          Function capPaletteOpen( hwnd : THandle; szName : LongInt) : LongInt
11685:
          Function capPaletteSave( hwnd : THandle; szName : LongInt) : LongInt
11686:
          Function capPalettePaste( hwnd : THandle) : LongInt
Function capPaletteAuto( hwnd : THandle; iFrames : Word; iColors : LongInt) : LongInt
Function capPaletteManual( hwnd : THandle; fGrab : Word; iColors : LongInt) : LongInt
11687:
11688:
11689:
11690:
            //PCapDriverCaps', '^TCapDriverCaps // will not work
            TCapDriverCaps', 'record wDeviceIndex : WORD; fHasOverlay : BOOL'
11691:
             +'; fHasDlgVideoSource : BOOL; fHasDlgVideoFormat : BOOL; fHasDlgVideoDispla'
+'y : BOOL; fCaptureInitialized : BOOL; fDriverSuppliesPalettes : BOOL; hVid'
11692:
11693:
             +'eoIn : THANDLE; hVideoOut : THANDLE; hVideoExtIn:THANDLE; hVideoExtOut:THANDLE; end
11694:
11695:
            //PCapStatus', '^TCapStatus // will not work
11696:
            TCapStatus', 'record uiImageWidth : UINT; uiImageHeight : UINT; '
             +'fLiveWindow: BOOL; fOverlayWindow: BOOL; fScale: BOOL; ptScroll: TPOIN'
+'T; fUsingDefaultPalette: BOOL; fAudioHardware: BOOL; fCapFileExists: BO'
+'OL; dwCurrentVideoFrame: DWORD; dwCurrentVideoFramesDropped: DWORD; dwCu'
11697:
11698:
11700:
             +'rrentWaveSamples : DWORD; dwCurrentTimeElapsedMS : DWORD; hPalCurrent : HP'
             +'ALETTE; fCapturingNow : BOOL; dwReturn : DWORD; wNumVideoAllocated : WORD;' +' wNumAudioAllocated : WORD; end
11701:
11702:
            //PCaptureParms',
                                     '^TCaptureParms // will not work
11703:
11704:
            TCaptureParms', 'record dwRequestMicroSecPerFrame : DWORD; fMake'
11705:
             +'UserHitOKToCapture : BOOL; wPercentDropForError : WORD; fYield : BOOL; dwI'
             +'ndexSize : DWORD; wChunkGranularity : WORD; fUsingDOSMemory : BOOL; wNumVi' +'deoRequested : WORD; fCaptureAudio : BOOL; wNumAudioRequested : WORD; vKey'
11706:
11707:
             +'Abort: WORD; fAbortLeftMouse: BOOL; fAbortRightMouse: BOOL; fLimitEnabl'
11708:
11709:
             +'ed : BOOL; wTimeLimit : WORD; fMCIControl : BOOL; fStepMCIDevice : BOOL; d'
11710:
             +'wMCIStartTime : DWORD; dwMCIStopTime : DWORD; fStepCaptureAt2x : BOOL; wSt'
             +'epCaptureAverageFrames : WORD; dwAudioBufferSize : DWORD; fDisableWriteCac
11711:
             +'he : BOOL; AVStreamMaster : WORD; end
11712:
          // PCapInfoChunk', '^TCapInfoChunk // will not work
11713:
                                    'record fccInfoID : FOURCC; lpData : LongInt; cbData : LongInt; end
11714:
            //TCapInfoChunk',
           'CONTROLCALLBACK_PREROLL','LongInt').SetInt( 1);
'CONTROLCALLBACK_CAPTURING','LongInt').SetInt( 2);
11715:
11716:
          Function capCreateCaptureWindow( lpszWindowName: PChar; dwStyle : DWord; x, y : Integer; nWidth, nHeight
11717:
          : Integer; hwndParent : THandle; nID : Integer) : THandle
11718: Function
         \verb|capGetDriverDescription(wDriverIndex:DWord;lpszName:PChar;cbName:Integer;lpszVer:PChar;cbVer:Int):Bool;|
         'IDS_CAP_BEGIN', 'LongInt').SetInt( 300);
'IDS_CAP_END', 'LongInt').SetInt( 301);
11719:
```

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11721:
           'IDS_CAP_INFO', 'LongInt').SetInt( 401);
           'IDS_CAP_OUTOFMEM', 'LongInt').SetInt( 402);
11722:
           'IDS_CAP_FILEEXISTS', 'LongInt').SetInt( 403);
11724 .
           'IDS_CAP_ERRORPALOPEN', 'LongInt').SetInt( 404);
11725:
            'IDS_CAP_ERRORPALSAVE', 'LongInt').SetInt( 405);
            'IDS_CAP_ERRORDIBSAVE', 'LongInt').SetInt( 406);
11726:
11727:
           'IDS_CAP_DEFAVIEXT', 'LongInt').SetInt( 407);
           'IDS_CAP_DEFPALEXT', 'LongInt').SetInt( 408);
'IDS_CAP_CANTOPEN', 'LongInt').SetInt( 409);
11728:
11729:
           'IDS_CAP_SEO_MSGSTART','LongInt').SetInt( 410);
'IDS_CAP_SEO_MSGSTOP','LongInt').SetInt( 411);
11730:
11731:
           'IDS_CAP_VIDEDITERR', 'LongInt').SetInt( 412);
11732:
           'IDS_CAP_READONLYFILE','LongInt').SetInt( 413);
'IDS_CAP_WRITEERROR','LongInt').SetInt( 414);
'IDS_CAP_NODISKSPACE','LongInt').SetInt( 415);
'IDS_CAP_SETFILESIZE','LongInt').SetInt( 416);
11733:
11734:
11735:
11736:
           'IDS_CAP_SAVEASPERCENT','LongInt').SetInt( 417);
'IDS_CAP_DRIVER_ERROR','LongInt').SetInt( 418);
11737:
11738:
           'IDS_CAP_WAVE_ALLOC_ERROR', 'LongInt').SetInt( 419);
'IDS_CAP_WAVE_ALLOC_ERROR', 'LongInt').SetInt( 420);
11739:
11740:
           'IDS_CAP_WAVE_PREPARE_ERROR', 'LongInt').SetInt( 421);
11741:
           'IDS_CAP_WAVE_REPARE_ERROR', 'LongInt').SetInt( 422);
'IDS_CAP_WAVE_SIZE_ERROR', 'LongInt').SetInt( 423);
'IDS_CAP_VIDEO_OPEN_ERROR', 'LongInt').SetInt( 424);
'IDS_CAP_VIDEO_ALLOC_ERROR', 'LongInt').SetInt( 425);
11742:
11743:
11744:
11745:
11746:
           'IDS_CAP_VIDEO_PREPARE_ERROR', 'LongInt').SetInt( 426);
           'IDS_CAP_VIDEO_ADD_ERROR','LongInt').SetInt( 427);
'IDS_CAP_VIDEO_SIZE_ERROR','LongInt').SetInt( 428);
'IDS_CAP_FILE_OPEN_ERROR','LongInt').SetInt( 429);
'IDS_CAP_FILE_WRITE_ERROR','LongInt').SetInt( 430);
11747:
11748:
11749:
11750:
           'IDS_CAP_RECORDING_ERROR','LongInt').SetInt( 431);
'IDS_CAP_RECORDING_ERROR2','LongInt').SetInt( 432);
'IDS_CAP_AVI_INIT_ERROR','LongInt').SetInt( 433);
11751:
11752:
11753:
             IDS_CAP_NO_FRAME_CAP_ERROR', 'LongInt').SetInt( 434);
11754:
           'IDS_CAP_NO_PALETTE_WARN', 'LongInt').SetInt( 435);
11755:
           'IDS_CAP_MCI_CONTROL_ERROR', 'LongInt').SetInt( 436);
11756:
           LUS_CAP_MCL_CONTROL_ERROR', 'LongInt').SetInt( 436);
'IDS_CAP_MCI_CANT_STEP_ERROR', 'LongInt').SetInt( 437);
'IDS_CAP_NO_AUDIO_CAP_ERROR', 'LongInt').SetInt( 438);
'IDS_CAP_AVI_DRAWDIB_ERROR', 'LongInt').SetInt( 449);
'IDS_CAP_COMPRESSOR_ERROR', 'LongInt').SetInt( 440);
'IDS_CAP_AUDIO_DROP_ERROR', 'LongInt').SetInt( 441);
'IDS_CAP_STAT_LIVE_MODE', 'LongInt').SetInt( 500);
'LONG AND STAT_COMPANY MODEL'.
11757:
11758:
11759:
11760:
11761:
11762:
           'IDS_CAP_STAT_OVERLAY_MODE', 'LongInt').SetInt( 501);
11763:
           'IDS_CAP_STAT_CAP_INIT', 'LongInt').SetInt( 502);
'IDS_CAP_STAT_CAP_FINI', 'LongInt').SetInt( 503);
11764:
11765:
           'IDS_CAP_STAT_PALETTE_BUILD','LongInt').SetInt( 504);
'IDS_CAP_STAT_OPTPAL_BUILD','LongInt').SetInt( 505);
11766:
11767:
11768:
           'IDS_CAP_STAT_I_FRAMES','LongInt').SetInt( 506);
11769:
            'IDS_CAP_STAT_L_FRAMES', 'LongInt').SetInt( 507);
11770:
           'IDS_CAP_STAT_CAP_L_FRAMES', 'LongInt').SetInt( 508);
'IDS_CAP_STAT_CAP_AUDIO', 'LongInt').SetInt( 509);
11771:
            'IDS_CAP_STAT_VIDEOCURRENT', 'LongInt').SetInt( 510);
11772:
11773:
           'IDS_CAP_STAT_VIDEOAUDIO', 'LongInt').SetInt( 511);
           'IDS_CAP_STAT_VIDEOONLY','LongInt').SetInt( 512);
'IDS_CAP_STAT_FRAMESDROPPED','LongInt').SetInt( 513);
11774:
11775:
11776:
           'AVICAP32', 'String').SetString( 'AVICAP32.dll
11777:
         end;
11778:
11779:
          procedure SIRegister_ALFcnMisc(CL: TPSPascalCompiler);
11780: begin
11781:
         Function AlBoolToInt( Value : Boolean) : Integer
           Function ALMediumPos( LTotal, LBorder, LObject : integer) : Integer
11783:
           Function AlIsValidEmail( const Value : AnsiString) : boolean
11784:
           Function AlLocalDateTimeToGMTDateTime( const aLocalDateTime: TDateTime): TdateTime
           function ALInc( var x : integer; Count : integer): Integer
function ALCopyStr(const aSourceString: AnsiString; aStart, aLength: Integer): AnsiString
11785:
11786:
           function ALGetStringFromFile(filename: AnsiString; const ShareMode: Word = fmShareDenyWrite):AnsiString;
11787:
11788:
           procedure ALSaveStringtoFile(Str: AnsiString; filename: AnsiString);
11789:
           Function ALIsInteger(const S: AnsiString): Boolean;
function ALIsDecimal(const S: AnsiString): boolean;
11790:
11791:
           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;
11792:
11793:
11794:
           function ALDequotedStr(const S: AnsiString; AQuote: AnsiChar): AnsiString;
11795:
           function AlUTF8removeBOM(const S: AnsiString): AnsiString;
11796:
           Function ALRandomStr1(const aLength: Longint; const aCharset: Array of Char): AnsiString;
11797:
           Function ALRandomStr(const aLength: Longint): AnsiString;
          Function ALRandomStrUl(const aLength: Longint; const aCharset: Array of Char): String;
Function ALRandomStrU(const aLength: Longint): String;
11798:
11799:
11800:
         end
11801:
11802: procedure SIRegister ALJSONDoc(CL: TPSPascalCompiler);
11803: begin
         Procedure ALJSONToTStrings(const AJsonStr:AnsiString;aLst:TALStrings; const aNullStr:AnsiString;const
11804:
          aTrueStr: AnsiString; const aFalseStr : AnsiString)
11805: end;
11806:
11807: procedure SIRegister_ALWindows(CL: TPSPascalCompiler);
```

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_ALMEMORYSTATUSEX', 'record dwLength : DWORD; dwMemoryLoad : DWO'
11809:
11810:
                     +'RD; ullTotalPhys : Int64; ullAvailPhys : Int64; ullTotalPageFile : Int64;
                     +'ullAvailPageFile : Int64; ullTotalVirtual : Int64; ullAvailVirtual : Int64'
11811:
11812:
                      +'; ullAvailExtendedVirtual : Int64; end
11813:
                   TALMemoryStatusEx', 'ALMEMORYSTATUSEX
                Function ALGlobalMemoryStatusEx( var lpBuffer : TALMEMORYSTATUSEX) : BOOL
Function ALInterlockedExchange64( var Target : LONGLONG; Value : LONGLONG) : LONGLONG
11814:
11815:
                 'INVALID_SET_FILE_POINTER','LongInt').SetInt( DWORD ( - 1 ));
'QUOTA_LIMITS_HARDWS_MIN_DISABLE','LongWord').SetUInt( $2);
'QUOTA_LIMITS_HARDWS_MIN_ENABLE','LongWord').SetUInt( $1);
'QUOTA_LIMITS_HARDWS_MAX_DISABLE','LongWord').SetUInt( $8);
11816:
11817:
11818:
11819:
                 'QUOTA_LIMITS_HARDWS_MAX_ENABLE', 'LongWord').SetUInt( $4);
11820:
11821: end;
11822:
               procedure SIRegister IPCThrd(CL: TPSPascalCompiler);
11823:
11824: begin
11825:
                   SIRegister THandledObject(CL);
11826:
                   SIRegister_TEvent(CL)
                   SIRegister_TMutex(CL);
11827:
11828:
                   SIRegister_TSharedMem(CL);
                 'TRACE_BUFFER','LongInt').SetInt( 200 * 1024);
'TRACE_BUFFER','String').SetString( 'TRACE_BUFFER'
'TRACE_MUTEX','String').SetString( 'TRACE_MUTEX
11829:
11830:
11831:
                    //PTraceEntry', '^TTraceEntry // will not work
11832:
                   SIRegister_TIPCTracer(CL);
11833:
                 'MAX_CLIENTS', 'LongInt').SetInt( 6);
'IPCTIMEOUT', 'LongInt').SetInt( 2000);
11834:
11835:
                  'IPCBUFFER_NAME','String').SetString( 'BUFFER_NAME
11836:
                  'BUFFER_MUTEX_NAME', 'String').SetString( 'BUFFER_MUTEX
'MONITOR_EVENT_NAME', 'String').SetString( 'MONITOR_EVENT
11837:
11838:
                  'CLIENT_EVENT_NAME','String').SetString('CLIENT_EVENT'CONNECT_EVENT_NAME','String').SetString('CONNECT_EVENT
11839:
11840:
                  'CLIENT_DIR_NAME', 'String').SetString( 'CLIENT_DIRECTORY'

'CLIENT_DIR_MUTEX', 'String').SetString( 'DIRECTORY_MUTEX

FindClass('TOBJECT'), 'EMonitorActive
11841:
11842:
11843:
                   FindClass('TOBJECT'),'TIPCThread
11844:
                   TEventKind', '( evMonitorAttach, evMonitorDetach, evMonitorSigna' +'l, evMonitorExit, evClientStart, evClientStop, evClientAttach, evClientDet'
11845:
11846:
11847:
                                    evClientSwitch, evClientSignal, evClientExit
11848:
                   TClientFlag', '( cfError, cfMouseMove, cfMouseDown, cfResize, cfAttach )
11849:
                   TClientFlags', 'set of TClientFlag
                    //PFventData', '^TFventData // will not work
TEventData', 'record X : SmallInt; Y : SmallInt; Flag : TClientF'
11850:
11851:
                      +'lag; Flags : TClientFlags; end
11852:
                   TConnectEvent', 'Procedure ( Sender : TIPCThread; Connecting : Boolean)
TDirUpdateEvent', 'Procedure ( Sender : TIPCThread)
TIPCNotifyEvent', 'Procedure ( Sender : TIPCThread; Data : TEventData)
//PIPCEventInfo', '^TIPCEventInfo // will not work
11853:
11854:
11855:
11856:
11857:
                    TIPCEventInfo','record FID:Integer;FKind:TEventKind;FData:TEventData;end
                   SIRegister_TIPCEvent(CL);
//PClientDirRecords', '^TClientDirRecords // will not work
11858:
11859:
                    SIRegister_TClientDirectory(CL);
11860:
                    TIPCState', '( stInActive, stDisconnected, stConnected )
11861:
11862:
                   SIRegister_TIPCThread(CL);
11863:
                   SIRegister_TIPCMonitor(CL);
SIRegister_TIPCClient(CL);
11864:
11865:
                Function IsMonitorRunning( var Hndl : THandle) : Boolean
11866: end;
11867:
11868:
11869: procedure SIRegister_ALGSMComm(CL: TPSPascalCompiler);
11870: begin
11871:
                  SIRegister TAlGSMComm(CL);
                Function AlGSMComm_BuildPDUMessage( aSMSCenter, aSMSAddress, aMessage : AnsiString) : AnsiString
11872:
11873:
                Procedure AlgSMComm DecodePDUMessage(aPDUMessage:AnsiString;var aSMSCenter,aSMSAddress,
               AMessage:AnsiString);
11874: Function AlgSMComm_UnicodeToGSM7BitDefaultAlphabet( aMessage : WideString) : AnsiString
11875:
                \textbf{Function} \  \, \texttt{AlgSMComm\_GSM7BitDefaultAlphabetToUnicode} \\ (\text{aMess:AnsiString}) \\ \textbf{const} \\ \text{(aMess:AnsiString)} \\ \textbf{const} \\ \textbf{co
               UseGreekAlphabet:Bool):Widestring;
11876:
                function ALMatchesMask(const Filename, Mask: AnsiString): Boolean
11877:
11878:
11879:
               procedure SIRegister_ALHttpCommon(CL: TPSPascalCompiler);
11880: begin
11881:
                   TALHTTPPropertyChangeEvent','Procedure(sender:Tobject;const PropertyIndex:Integer;
11882:
                    TALHTTPProtocolVersion', '( HTTPpv_1_0, HTTPpv_1_1 )
                   {\tt TALHTTPMethod','(HTTPmt\_Get,HTTPmt\_Post,HTTPmt\_Head,HTTPmt\_Trace,HTTPmt\_Put,HTTPmt\_Delete);}
11883:
                 TInternetScheme', 'integer
TALIPv6Binary', 'array[1..16] of Char;
// TALIPv6Binary = array[1..16] of ansiChar;
11884:
11885:
11886:
11887:
                          TInternetScheme = Integer;
11888:
                   SIRegister_TALHTTPRequestHeader(CL);
11889:
                   SIRegister TALHTTPCookie(CL);
11890:
                   SIRegister_TALHTTPCookieCollection(CL);
                   SIRegister_TALHTTPResponseHeader(CL);
11891:
                Function ALHTTPDecode( const AStr : AnsiString) : AnsiString
11892:
                Procedure ALHTTPEncodeParamNameValues( ParamValues : TALStrings)
11893:
11894:
              // Procedure ALExtractHTTPFields(Separators, WhiteSpace, Quotes:TSysCharSet;
               Content:PAnsiChar;Strings:TALStrings;StripQuotes:Boolean;
```

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11895: // 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
 11897:
 11898:
 11899:
                         Function AlExtractDomainNameFromUrl( aUrl : AnsiString) : AnsiString
 11900:
 11901:
                         \textbf{Function} \  \, \texttt{AlExtractUrlPathFromUrl( aUrl : AnsiString) : AnsiString} \\
                        \textbf{Function} \ \ \texttt{AlInternetCrackUrl} ( \ \ \texttt{aUrl} \ : \ \ \texttt{AnsiString}; \ \ \textbf{var} \ \ \ \texttt{SchemeName}, \\ \texttt{HostName}, \\ \texttt{UserName}, \\ \texttt{Password}, \\ \texttt{UrlPath}, \\ 
11902:
                      ExtraInfo : AnsiString; var PortNumber : integer) : Boolean;
                      Function AlInternetCrackUrl1( aUrl : AnsiString; var SchemeName, HostName, UserName, Password, UrlPath,
11903:
                      Anchor : AnsiString; Query : TALStrings; var PortNumber : integer) : Boolean;
 11904:
                        Function AlInternetCrackUrl2(var Url:AnsiString;var Anchor:AnsiString;Query:TALStrings):Boolean;
                        Function AlRemoveAnchorFromUrl( aUrl : AnsiString; var aAnchor : AnsiString; Function AlRemoveAnchorFromUrl( aUrl : AnsiString) : AnsiString;
 11905:
 11906:
                         Function AlCombineUrl( RelativeUrl, BaseUrl : AnsiString) : AnsiString;
 11907:
 11908:
                        \textbf{Function} \ \ \texttt{AlCombineUrll} ( \texttt{RelativeUrl}, \ \ \texttt{BaseUrl}, \ \ \texttt{Anchor} : \ \ \texttt{AnsiString}; \ \ \texttt{Query:TALStrings}) : \ \ \texttt{AnsiString}; \ \ \texttt{AnsiStrin
                         Function ALGmtDateTimeToRfc822Str( const aValue : TDateTime) : AnsiString
 11909:
                        Function ALDateTimeToRfc822Str( const aValue : TDateTime) : AnsiString
 11910:
                         Function ALTryRfc822StrToGMTDateTime( const S : AnsiString; out Value
 11911:
                                                                                                                                                                                                                                                 : TDateTime) : Boolean
 11912:
                         Function ALRfc822StrToGMTDateTime( const s : AnsiString) : TDateTime
                        Function ALTryIPV4StrToNumeric( aIPv4Str : ansiString; var aIPv4Num : Cardinal) : Boolean
 11913:
                        Function ALIPV4StrToNumeric( aIPv4: ansiString) : Cardinal
Function ALNumericToIPv4Str( aIPv4 : Cardinal) : ansiString
 11914:
 11915:
 11916:
                         Function ALZeroIpV6 : TALIPv6Binary
 11917:
                        Function ALTryIPV6StrToBinary( aIPv6Str : ansiString; var aIPv6Bin : TALIPv6Binary) : Boolean
                        Function ALIPV6StrTobinary( aIPv6 : ansiString) : TALIPv6Binary
Function ALBinaryToIPv6Str( aIPv6 : TALIPv6Binary) : ansiString
 11918:
 11919:
                        Function ALBinaryStrToIPv6Binary( aIPV6BinaryStr : ansiString) : TALIPv6Binary
 11920:
 11921:
 11922:
 11923: procedure SIRegister ALFCnHTML(CL: TPSPascalCompiler);
 11924: begin
                        Procedure ALUTF8ExtractHTMLText(HtmlCont:AnsiString;LstExtractedResourceText:TALStrings;const
                      DecodeHTMLText:Boolean);
 11926:
                        Function ALUTF8ExtractHTMLText1(HtmlContent:AnsiString;const DecodeHTMLText:Boolean): AnsiString;
                        Function ALXMLCDataElementEncode( Src : AnsiString) : AnsiString
 11927:
                        Function ALXMLTextElementEncode(Src : Amsistring) - Amsistring Function ALXMLTextElementEncode(Src : AnsiString) const useNumericReference : boolean) : AnsiString Function ALUTF8XMLTextElementDecode(const Src : AnsiString) : AnsiString
 11928:
 11929:
11930:
                        Function ALUTF8HTMLEncode(const Src:AnsiStr;const EncodeASCIIHtmlEntities:Bool;const
                      useNumRef:bool):AnsiString);
 11931: Function ALUTF8HTMLDecode( const Src : AnsiString) : AnsiString
                         Function ALJavascriptEncode( const Src : AnsiString; const useNumericReference : boolean) : AnsiString
 11932:
 11933:
                        \textbf{Function} \  \, \texttt{ALUTF8JavascriptDecode}( \  \, \textbf{const} \  \, \texttt{Src} \  \, : \  \, \texttt{AnsiString}) \  \, : \  \, \texttt{AnsiString}
                        Procedure ALHideHtmlUnwantedTagForHTMLHandleTagfunct(var HtmlContent:AnsiString; const
 11934:
 DeleteBodyOfUnwantedTag : Boolean; const ReplaceUnwantedTagCharBy : AnsiChar)
11935: Procedure ALCompactHtmlTagParams( TagParams : TALStrings)
 11936: end;
 11937:
 11938: procedure SIRegister_ALInternetMessageCommon(CL: TPSPascalCompiler);
 11939:
                      begin
 11940:
                             SIRegister TALEMailHeader(CL);
 11941:
                            SIRegister_TALNewsArticleHeader(CL);
 11942:
                      Function AlParseEmailAddress(FriendlyEmail:AnsiString;var RealName:AString;const
                      decodeRealName:Bool):AnsiString;
                        Function AlExtractEmailAddress( FriendlyEmail : AnsiString) : AnsiString
                        Function ALMakeFriendlyEmailAddress( aRealName, aEmail : AnsiString) : AnsiString
 11944:
 11945:
                        Function ALEncodeRealName4FriendlyEmailAddress( aRealName : AnsiString) : AnsiString
 11946:
                        Function AlGenerateInternetMessageID : AnsiString;
Function AlGenerateInternetMessageID1( ahostname : AnsiString) : AnsiString;
 11947:
                         Function ALDecodeQuotedPrintableString( src : AnsiString) : AnsiString
 11948:
 11949:
                        \textbf{Function} \ \texttt{AlDecodeInternetMessageHeaderInUTF8} \\ (\texttt{aHeaderStr:AnsiString}; \texttt{aDefaultCodePage:Integer}) \\ : \texttt{AnsiString}; \\ \texttt{ansiSt
 11950:
                      end;
 11951:
 11952:
 11953:
                      procedure SIRegister ALFcnWinSock(CL: TPSPascalCompiler);
 11954: begin
 11955: Function ALHostToIP( HostName : AnsiString; var Ip : AnsiString):Boolean
                        Function ALIPAddrToName( IPAddr : AnsiString) : AnsiString
Function ALgetLocalIPs : TALStrings
 11956:
 11957:
 11958:
                        Function ALgetLocalHostName : AnsiString
 11959: end;
 11960:
 11961: procedure SIRegister_ALFcnCGI(CL: TPSPascalCompiler);
 11962:
                      begin
11963:
                        Procedure AlCGIInitDefaultServerVariablesFromWebRequest(WebRequest :
                      TALWebRequest; ServerVariables: TALStrings);
                        Procedure AlCGIInitDefaultServerVariablesFromWebRequest1(WebRequest: TALWebRequest; ServerVariables :
                      TALStrings; ScriptName, ScriptFileName: AnsiString; Url: AnsiString);
 11965:
                      Procedure ALCGIInitDefaultServerVariables( ServerVariables : TALStrings);
11966:
                        Procedure AlCGIInitDefaultServerVariables1(ServerVars:TALStrings;ScriptName,
                      ScriptFileName: AnsiString; Url: AnsiString);
11967: Procedure AlCGIInitServerVariablesFromWebRequest( WebRequest: TALWebRequest; ServerVariables : TALStrings;
                      ScriptName, ScriptFileName : AnsiString; Url : AnsiString);
11968: Procedure AlCGIExec(InterpreterFilename: AnsiString; ServerVariables: TALStrings; RequestContentStream: Tstream; ResponseContentStream: Tstream; ResponseHeader: TALHTTPResponseHeader);
 11969: Procedure AlcGIExec1(ScriptName, ScriptFileName, Url, X_REWRITE_URL, InterpreterFilename:AnsiString;
                      WebRequest : TALIsapiRequest;
                      overloaded Cookies: \verb|AnsiString|| is overloaded QueryString: \verb|AnsiString|| is overloaded Referer: AnsiString|| is overloaded Referer:
```

```
11970: +'overloadedRequestContentStream:Tstream; var
         ResponseContentStr:AnsiString;ResponseHeader:TALHTTPResponseHeader;
11971: Procedure AlCGIExec2(ScriptName,ScriptFileName,Url,X_REWRITE_URL,
          InterpreterFilename:AnsiString;WebRequest: TALIsapiRequest; var ResponseContentString: AnsiString;
          ResponseHeader : TALHTTPResponseHeader);
11972: end;
11973:
11974: procedure SIRegister_ALFcnExecute(CL: TPSPascalCompiler);
11975: begin
            TStartupInfoA', 'TStartupInfo
11976:
11977:
           'SE_CREATE_TOKEN_NAME', 'String').SetString( 'SeCreateTokenPrivilege
           SE_ASSIGNPRIMARYTOKEN_NAME','String').SetString('SeAssignPrimaryTokenPrivilege
11978:
11979:
           SE_LOCK_MEMORY_NAME','String').SetString( 'SeLockMemoryPrivilege
           SE_INCREASE_QUOTA_NAME', 'String').SetString( 'SeIncreaseQuotaPrivilege SE_UNSOLICITED_INPUT_NAME', 'String').SetString( 'SeUnsolicitedInputPrivilege
11980:
11981:
           SE_MACHINE_ACCOUNT_NAME', 'String').SetString(
11982:
                                                                            'SeMachineAccountPrivilege
           SE_TCB_NAME','String').SetString( 'SeTcbPrivilege
11983:
           SE_SECURITY_NAME','String').SetString( 'SeSecurityPrivilege
SE_TAKE_OWNERSHIP_NAME','String').SetString( 'SeTakeOwnershipPrivilege
SE_LOAD_DRIVER_NAME','String').SetString( 'SeLoadDriverPrivilege
11984:
11985:
11986:
           SE_SYSTEM_PROFILE_NAME','String').SetString( 'SeSystemProfilePrivilege
11987:
          SE_SYSTEM_PROFILE_NAME', 'String').SetString( 'SeSystemtrollerriv1ege SE_SYSTEMTIME_NAME', 'String').SetString( 'SeSystemtimePrivilege SE_PROF_SINGLE_PROCESS_NAME', 'String').SetString( 'SeProfileSingleProcessPrivilege SE_INC_BASE_PRIORITY_NAME', 'String').SetString( 'SeIncreaseBasePriorityPrivilege SE_CREATE_PAGEFILE_NAME', 'String').SetString( 'SeCreatePagefilePrivilege
11988:
11989:
11990:
11991:
11992:
           SE_CREATE_PERMANENT_NAME', 'String').SetString( 'SeCreatePermanentPrivilege
11993:
           SE_BACKUP_NAME','String').SetString( 'SeBackupPrivilege
SE_RESTORE_NAME','String').SetString( 'SeRestorePrivilege
SE_SHUTDOWN_NAME','String').SetString( 'SeShutdownPrivilege
11994:
11995:
           SE_DEBUG_NAME', 'String').SetString( 'SeDebugPrivilege
SE_AUDIT_NAME', 'String').SetString( 'SeAuditPrivilege
11996:
11997:
          SE_AUDIT_NAME', 'String').SetString( 'SeAuditPrivilege SE_SYSTEM_ENVIRONMENT_NAME', 'String').SetString( 'SeSystemEnvironmentPrivilege SE_CHANGE_NOTIFY_NAME', 'String').SetString( 'SeChangeNotifyPrivilege SE_REMOTE_SHUTDOWN_NAME', 'String').SetString( 'SeRemoteShutdownPrivilege SE_UNDOCK_NAME', 'String').SetString( 'SeUndockPrivilege
11998:
11999:
12000:
12001:
          SE_SUNDOCR_NAME', 'String').SetString( 'SeSyncAgentPrivilege
SE_SYNC_AGENT_NAME', 'String').SetString( 'SeSyncAgentPrivilege
SE_ENABLE_DELEGATION_NAME', 'String').SetString( 'SeEnableDelegationPrivilege
SE_MANAGE_VOLUME_NAME', 'String').SetString( 'SeManageVolumePrivilege
Function AlGetEnvironmentString: AnsiString
12002:
12003:
12004:
12005:
           Function ALWinExec32(const FileName, CurrentDir,
12006:
          {\tt Environment:AnsiString;InStream:Tstream:OutStream:Tstream):Dword;}
          Function ALWinExec321(const FileName:AnsiString; InputStream:Tstream;OutputStream:TStream):Dword;
Function ALWinExecAndWait32( FileName : AnsiString; Visibility : integer) : DWORD
12007:
12008:
           Function ALWinExecAndWait32V2( FileName : AnsiString; Visibility : integer) : DWORD
12009:
12010:
           Function ALNTSetPrivilege( sPrivilege : AnsiString; bEnabled : Boolean) : Boolean
12011:
         end;
12012:
12013: procedure SIRegister_ALFcnFile(CL: TPSPascalCompiler);
12014:
         begin
12015:
          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
12016:
          RemoveEmptySubDirectory:Bool; const FileNameMask: ansiString; const MinFileAge: TdateTime): Boolean;
12017: Function AlCopyDirectory( SrcDirectory, DestDirectory: ansiString; SubDirectory: Boolean; const FileNameMask: ansiString; const FailIfExists: Boolean): Boolean

12018: Function ALGetModuleName: ansistring
           Function ALGetModuleFileNameWithoutExtension : ansistring
           Function ALGetModulePath : ansiString
12020:
12021:
           Function AlGetFileSize( const AFileName : ansistring) : int64
           Function AlGetFileVersion( const AFileName : ansistring) : ansiString
Function ALGetFileCreationDateTime( const aFileName : Ansistring) : TDateTime
12022:
12023:
12024:
           Function ALGetFileLastWriteDateTime( const aFileName : Ansistring) : TDateTime
           Function ALGetFileLastAccessDateTime( const aFileName : Ansistring) : TDateTime

Procedure ALSetFileCreationDateTime( const aFileName : Ansistring; const aCreationDateTime : TDateTime)
12025:
12026:
           Function ALIsDirectoryEmpty( const directory : ansiString) : boolean
12027:
           Function ALFileExists( const Path : ansiString) : boolean
           Function ALDirectoryExists( const Directory : Ansistring) : Boolean
12029:
           Function ALCreateDir( const Dir : Ansistring) : Boolean Function ALRemoveDir( const Dir : Ansistring) : Boolean
12030:
12031:
           Function ALDeleteFile( const FileName : Ansistring) : Boolean
12032:
           Function ALRenameFile (const OldName, NewName : ansistring) : Boolean
12033:
12034: end;
12035:
12036: procedure SIRegister_ALFcnMime(CL: TPSPascalCompiler);
12037: begin
12038:
            NativeInt', 'Integer
NativeUInt', 'Cardinal
12039:
           Function ALMimeBase64EncodeString( const S : AnsiString) : AnsiString
12040:
12041:
           Function ALMimeBase64EncodeStringNoCRLF( const S : AnsiString) : AnsiString
           Function ALMimeBase64DecodeString( const S : AnsiString) : AnsiString
12042:
12043:
           Function ALMimeBase64EncodedSize( const InputSize : NativeInt) : NativeInt
12044:
           Function ALMimeBase64EncodedSizeNoCRLF( const InputSize : NativeInt) : NativeInt
12045:
           Function ALMimeBase64DecodedSize( const InputSize : NativeInt) : NativeInt

Procedure ALMimeBase64Encode( const InputBuffer : TByteDynArray; InputOffset : NativeInt; const
12046:
         InputByteCount : NativeInt; out OutputBuffer : TByteDynArray; OutputOffset : NativeInt)
12047:
         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)
```

```
12049: Function ALMimeBase64Decode( const InputBuffer : TByteDynArray; InputOffset : NativeInt; const
            InputByteCount : NativeInt; out OutputBuffer : TByteDynArray; OutputOffset : NativeInt) : NativeInt;
             Function ALMimeBase64DecodePartial( const InputBuffer : TByteDynArray; InputOffset : NativeInt; const
            InputByteCount : NativeInt; out OutputBuffer : TByteDynArray; OutputOffset : NativeInt;
12051:
                 'var ByteBuffer : Cardinal; var ByteBufferSpace : Cardinal) : NativeInt;
           Function ALMimeBase64DecodePartialEnd( out OutputBuffer : TByteDynArray; OutputOffset : NativeInt; const ByteBuffer : Cardinal; const ByteBufferSpace : Cardinal) : NativeInt;
12052:
             Procedure ALMimeBase64Encode(const InputBuf:TByteDynArray;const InputByteCnt:NatInt;out
            OutputBuf:TByteDynArray);
12054:
           Procedure ALMimeBase64EncodeNoCRLF(const InputBuffer:TByteDynArray; const InputByteCount:NativeInt;out
           OutputBuffer: TByteDynArray);
            Procedure ALMimeBase64EncodeFullLines(const InputBuffer:TByteDynArray;const InputByteCount:NativeInt;out
           OutputBuffer: TByteDynArray)
             Function ALMimeBase64Decodel(const InputBuffer:TByteDynArray;const InputByteCount:NativeInt;out
12056:
           OutputBuffer: TBvteDvnArray): NativeInt;
             Function ALMimeBase64DecodePartiall(const InputBuffer:TByteDynArray;const InputByteCount:NativeInt;out
            OutputBuffer: TByteDynArray; var ByteBuffer: Cardinal; var ByteBufferSpace: Cardinal): NativeInt;
12058: Function ALMimeBase64DecodePartialEndl(out OutputBuffer:TByteDynArray;const ByteBuffer:Cardinal;const
            ByteBufferSpace:Cardinal):NativeInt;
12059: Procedure ALMimeBase64EncodeFile( const InputFileName, OutputFileName: TFileName)
              Procedure ALMimeBase64EncodeFileNoCRLF( const InputFileName, OutputFileName: TFileName)
12060:
             Procedure ALMimeBase64DecodeFile( const InputFileName, OutputFileName: TFileName)
12061:
12062:
             Procedure ALMimeBase64EncodeStream( const InputStream: TStream; const OutputStream: TStream)
             Procedure ALMimeBase64EncodeStream(OCRLF( const InputStream : TStream; const OutputStream : TStream)

Procedure ALMimeBase64EncodeStream(OCRLF( const InputStream : TStream; const OutputStream : TStream)
12063:
12064:
12065:
               calMimeBase64_ENCODED_LINE_BREAK', 'LongInt').SetInt( 76);
              'cALMimeBase64_DECODED_LINE_BREAK','LongInt').SetInt( cALMimeBase64_ENCODED_LINE_BREAK div 4 * 3);
12066:
12067:
              'cALMimeBase64_BUFFER_SIZE','LongInt').SetInt( cALMimeBase64_DECODED_LINE_BREAK * 3 * 4 * 4);
             Procedure ALFillMimeContentTypeByExtList( AMIMEList : TALStrings)

Procedure ALFillExtByMimeContentTypeList( AMIMEList : TALStrings)
12068:
12069:
             Function ALGetDefaultFileExtFromMimeContentType( aContentType : AnsiString) : AnsiString Function ALGetDefaultMIMEContentTypeFromExt( aExt : AnsiString) : AnsiString
12070:
12071:
12072: end;
12073:
12074:
           procedure SIRegister ALXmlDoc(CL: TPSPascalCompiler);
12075: begin
12076:
              'CALXMLNodeMaxListSize', 'LongInt').SetInt( Maxint div 16);
12077:
               FindClass('TOBJECT'), 'TALXMLNode
               FindClass('TOBJECT'), 'TALXMLNodeList
FindClass('TOBJECT'), 'TALXMLDocument
12078:
12079:
12080:
               {\tt TAlXMLParseProcessingInstructionEvent', '\textbf{Procedure}} \ \ ({\tt Sender:TObject}; \ \ \textbf{const.} \ \ {\tt Target,Data:AnsiString})
               TAlXMLParseTextEvent', 'Procedure ( Sender : TObject; const str: AnsiString)
TAlXMLParseStartElementEvent', 'Procedure ( Sender : TObject; co'
    +'nst Name : AnsiString; const Attributes : TALStrings)
12081:
12082:
12083:
12084:
               TAlXMLParseEndElementEvent', 'Procedure ( Sender : TObject; const Name : AnsiString)
12085:
               TALXmlNodeType', '( ntReserved, ntElement, ntAttribute, ntText,
                 +'ntCData, ntEntityRef, ntEntity, ntProcessingInstr, ntComment, ntDocument, '+'ntDocType, ntDocFragment, ntNotation )
12086:
12087:
               TALXMLDocOption', '( doNodeAutoCreate, doNodeAutoIndent )
TALXMLDocOptions', 'set of TALXMLDocOption
TALXMLParseOption', '( poPreserveWhiteSpace, poIgnoreXMLReferences )
TALXMLParseOptions', 'set of TALXMLParseOption
TALXMLPrologitem', '( xpVersion, xpEncoding, xpStandalone )
12088:
12089:
12090:
12091:
12092:
               PALPointerXMLNodeList', '^TALPointerXMLNodeList // will not work
12093:
               SIRegister_EALXMLDocError(CL);
SIRegister_TALXMLNodeList(CL);
12094:
12095:
12096:
               SIRegister_TALXMLNode(CL);
12097:
               SIRegister_TALXmlElementNode(CL);
12098:
               SIRegister_TALXmlAttributeNode(CL);
               SIRegister_TALXmlTextNode(CL);
12099:
12100:
               SIRegister_TALXmlDocumentNode(CL);
12101:
               SIRegister_TALXmlCommentNode(CL);
12102:
               SIRegister_TALXmlProcessingInstrNode(CL);
12103:
               SIRegister TALXmlCDataNode(CL);
12104:
               SIRegister_TALXmlEntityRefNode(CL);
12105:
               SIRegister_TALXmlEntityNode(CL);
12106:
               SIRegister_TALXmlDocTypeNode(CL);
12107:
               SIRegister_TALXmlDocFragmentNode(CL);
12108:
               {\tt SIRegister\_TALXmlNotationNode(CL);}
               SIRegister_TALXMLDocument(CL);
12109:
12110:
              cAlXMLUTF8EncodingStr', 'String').SetString( 'UTF-8
             cALXmlUTF8HeaderStr', 'String').SetString('<?xmlversion="1.0"encoding="UTF-8"standalone="yes"?>'+#13#10);
CALNSDelim', 'String').SetString(':
12111:
12112:
12113:
             CALXMI, '.'String'). SetString( 'xml
             CALVersion', 'String').SetString( 'version CALEncoding', 'String').SetString( 'encoding
12114:
12115:
             CALStandalone','String').SetString( 'standalone CALDefaultNodeIndent','String').SetString( 'CALXmlDocument','String').SetString( 'DOCUMENT
12116:
12117:
12118:
              Function ALCreateEmptyXMLDocument( const Rootname : AnsiString) : TalXMLDocument
12120:
             Procedure ALClearXMLDocument(const rootname:AnsiString;xmldoc:TalXMLDocument;const
            EncodingStr:AnsiString);
             Function ALFindXmlNodeByChildNodeValue(xmlrec:TalxmlNode;const ChildNodeName,
12121:
           ChildNodeValue:AnsiString; const Recurse: Boolean) : TalxmlNode
12122:
             Function ALFindXmlNodeByNameAndChildNodeValue( xmlrec : TalxmlNode; const NodeName : ansiString; const
            {\tt ChildNodeName,\ ChildNodeValue\ :\ AnsiString;\ {\tt const}\ {\tt Recurse\ :\ Boolean)\ :\ TalxmlNode}}
12123:
           Function ALFindXmlNodeByAttribute(xmlrec:TalxmlNode;const AttributeName,AttributeValue:AnsiString;const
           Recurse: Boolean):TalxmlNode
12124: \quad \textbf{Function} \ \texttt{ALFindXmlNodeByNameAndAttribute} ( \ \texttt{xmlrec} : \ \texttt{TalxmlNode}; \ \textbf{const} \ \texttt{NodeName} : \ \texttt{ansiString}; \ \textbf{const} \ \texttt{NodeName} : \ \texttt{AlfindXmlNodeByNameAndAttribute} ( \ \texttt{xmlrec} : \ \texttt{TalxmlNode}; \ \textbf{const} \ \texttt{NodeName} : \ \texttt{ansiString}; \ \textbf{const} \ \texttt{NodeName} : \ \texttt{AlfindXmlNodeByNameAndAttribute} ( \ \texttt{xmlrec} : \ \texttt{TalxmlNode}; \ \textbf{const} \ \texttt{NodeName} : \ \texttt{AlfindXmlNodeByNameAndAttribute} ( \ \texttt{xmlrec} : \ \texttt{TalxmlNode}; \ \textbf{const} \ \texttt{NodeName} : \ \texttt{AlfindXmlNodeByNameAndAttribute} ( \ \texttt{xmlrec} : \ \texttt{TalxmlNode}; \ \textbf{const} \ \texttt{NodeName} : \ \texttt{AlfindXmlNodeByNameAndAttribute} ( \ \texttt{xmlrec} : \ \texttt{TalxmlNode}; \ \textbf{const} : \ \texttt{NodeName} : \ \texttt{AlfindXmlNodeByNameAndAttribute} ( \ \texttt{xmlrec} : \ \texttt{TalxmlNode}; \ \textbf{const} : \ \texttt{NodeName} : \ \texttt{AlfindXmlNodeByNameAndAttribute} ( \ \texttt{xmlrec} : \ \texttt{TalxmlNode}; \ \textbf{const} : \ \texttt{NodeNameAndAttribute} ( \ \texttt{xmlrec} : \ \texttt{TalxmlNode}; \ \textbf{const} : \ \texttt{NodeNameAndAttribute} ( \ \texttt{xmlrec} : \ \texttt{TalxmlNode}; \ \textbf{const} : \ \texttt{NodeNameAndAttribute} ( \ \texttt{xmlrec} : \ \texttt{TalxmlNode}; \ \textbf{const} : \ \texttt{NodeNameAndAttribute} ( \ \texttt{xmlrec} : \ \texttt{TalxmlNode}; \ \textbf{const} : \ \texttt{NodeNameAndAttribute} ( \ \texttt{xmlrec} : \ \texttt{xmlrec} :
            AttributeName, AttributeValue : AnsiString; const Recurse : Boolean) : TalxmlNode
```

```
12125: Function ALExtractAttrValue( const AttrName, AttrLine : AnsiString; const Default : AnsiString) :
        AnsiString
12126: end
12127:
12128: procedure SIRegister_TeCanvas(CL: TPSPascalCompiler);
12129:
        //based on TEEProc, TeCanvas, TEEngine, TChart
12130:
        begin
           TeePiStep','Double').setExtended( Pi / 180.0);
12131:
         'TeeDefaultPerspective','LongInt').SetInt( 100);
'TeeMinAngle','LongInt').SetInt( 270);
12132:
12133:
          'teeclMoneyGreen', 'LongWord').SetUInt( TColor ( $CODCCO ));
12134:
          'teeclSkyBlue', 'LongWord').SetUInt( TColor ( $FOCAA6 ));
12135:
12136:
          'teeclCream', 'LongWord').SetUInt( TColor ( $F0FBFF ));
12137:
          'teeclMedGray', 'LongWord').SetUInt( TColor ( $A4A0A0 ));
          'teeclMoneyGreen', 'LongWord').SetUInt( TColor ( $CODCCO ));
12138:
         teeclSkyBlue', 'LongWord').SetUInt( TColor ( $F0CAA ));
'teeclCream', 'LongWord').SetUInt( TColor ( $F0FBFF ));
12139:
12140:
12141 .
          'teeclMedGray','LongWord').SetUInt( TColor ( $A4A0A0 ));
         'TA_LEFT','LongInt').SetInt( 0);
'TA_RIGHT','LongInt').SetInt( 2);
'TA_CENTER','LongInt').SetInt( 6);
12142:
12143:
12144:
12145:
         'TA_TOP','LongInt').SetInt( 0);
         'TA_BOTTOM','LongInt').SetInt( 8);
'teePATCOPY','LongInt').SetInt( 0);
12146:
12147:
12148:
         'NumCirclePoints', 'LongInt').SetInt( 64);
12149:
          'teeDEFAULT_CHARSET', 'LongInt').SetInt( 1);
12150:
         'teeANTIALIASED_QUALITY', 'LongInt').SetInt( 4);
         'TA_LEFT', 'LongInt').SetInt( 0);
'bs_Solid', 'LongInt').SetInt( 0);
'teepf24Bit', 'LongInt').SetInt( 0);
'teepfDevice', 'LongInt').SetInt( 1);
12151:
12152:
12153:
12154:
          'CM_MOUSELEAVE', 'LongInt').SetInt( 10000);
12155:
         'CM_SYSCOLORCHANGE', LongInt').SetInt( 10001);
'DC_BRUSH', LongInt').SetInt( 18);
'DC_PEN', LongInt').SetInt( 19);
12156:
12157:
12158:
           teeCOLORREF', 'LongWord
TLogBrush', 'record lbStyle : Integer; lbColor : TColor; lbHatch: Integer; end
12159:
12160:
12161:
           //TNotifyEvent', 'Procedure ( Sender : TObject)
12162:
           SIRegister_TFilterRegion(CL);
12163:
           SIRegister_IFormCreator(CL);
12164:
           SIRegister_TTeeFilter(CL);
           //TFilterClass', 'class of TTeeFilter
SIRegister_TFilterItems(CL);
12165:
12166:
           SIRegister_TConvolveFilter(CL);
12167:
12168:
           SIRegister_TBlurFilter(CL);
12169:
           SIRegister TTeePicture(CL);
12170:
           TPenEndStyle', '( esRound, esSquare, esFlat )
           SIRegister_TChartPen(CL);
12171:
           SIRegister_TChartHiddenPen(CL);
12172:
12173:
           SIRegister TDottedGrayPen(CL);
12174:
           SIRegister TDarkGravPen(CL);
12175:
           SIRegister_TWhitePen(CL);
12176:
           SIRegister_TChartBrush(CL);
           TTeeView3DScrolled', 'Procedure ( IsHoriz : Boolean)
TTeeView3DChangedZoom', 'Procedure ( NewZoom : Integer)
12177:
12178:
           SIRegister_TView3DOptions(CL);
12179:
           FindClass('TOBJECT'),'TTeeCanvas
TTeeTransparency', 'Integer
12180:
12181:
12182:
           SIRegister_TTeeBlend(CL);
           FindClass('TOBJECT'),'TCanvas3D
SIRegister_TTeeShadow(CL);
12183:
12184:
12185:
           teeTGradientDirection', '( gdTopBottom, gdBottomTop, gdLeftRight, g'
12186:
            + \ 'dRightLeft, \ gdFromCenter, \ gdFromTopLeft, \ gdFromBottomLeft, \ gdRadial, gdDiagonalUp, gdDiagonalDown \ )
           FindClass('TOBJECT'), 'TSubGradient
12187:
12188:
           SIRegister_TCustomTeeGradient(CL);
12189:
           SIRegister_TSubGradient(CL);
12190:
           SIRegister_TTeeGradient(CL);
12191:
           SIRegister_TTeeFontGradient(CL);
12192:
           SIRegister TTeeFont(CL);
           TCanvasBackMode', '( cbmNone, cbmTransparent, cbmOpaque )
TCanvasTextAlign', 'Integer
12193:
12194:
           TTeeCanvasHandle', 'HDC
12195:
12196:
           SIRegister_TTeeCanvas(CL);
TPoint3DFloat', 'record X : Double; Y : Double; Z : Double; end
12197:
12198:
           SIRegister_TFloatXYZ(CL);
12199:
           TPoint3D', 'record x : integer; y : integer; z : Integer; end
           TRGB', 'record blue: byte; green: byte; red: byte; end
12200:
           {TRGB=packed record
12201:
12202:
             Blue : Byte;
12203:
             Green : Byte;
                    : Byte;
12204:
             Red
12205:
             //$IFDEF CLX //Alpha : Byte; // Linux end;}
12206:
12207: TTeeCanvasCalcPoints', 'Function ( x, z : Integer; var P0, P1 : '
12208: +'TPoint3D; var Color0, Color1: TColor): Boolean
12209: TTeeCanvasSurfaceStyle', '( tcsSolid, tcsWire, tcsDot )
12210: TCanvas3DPlane', '( cpX, cpY, cpZ )
12211: //IInterface', 'IUnknown
           SIRegister_TCanvas3D(CL);
```

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12213:
               SIRegister TTeeCanvas3D(CL);
               TTrianglePoints', 'Array[0..2] of TPoint;
12214:
                TFourPoints', 'Array[0..3] of TPoint;
12216:
             Function ApplyDark( Color : TColor; HowMuch : Byte) : TColor
12217:
             Function ApplyBright (Color: TColor; HowMuch: Byte): TColor
             Function Point3D( const x, y, z : Integer) : TPoint3D Procedure SwapDouble( var a, b : Double)
12218:
12219:
             Procedure SwapInteger( var a, b : Integer)
12220:
12221:
             Procedure RectSize( const R : TRect; var RectWidth, RectHeight : Integer)
12222:
             Procedure teeRectCenter( const R : TRect; var X, Y : Integer)
Function RectFromPolygon( const Points : array of TPoint; NumPoints : Integer): TRect
12223:
             Function RectFromTriangle( const Points : TTrianglePoints) : TRect
12225:
             Function RectangleInRectangle( const Small, Big : TRect) : Boolean
12226:
             Procedure ClipCanvas( ACanvas : TCanvas; const Rect : TRect)
12227:
             Procedure UnClipCanvas ( ACanvas : TCanvas)
12228:
             Procedure ClipEllipse( ACanvas : TTeeCanvas; const Rect : TRect)
             Procedure ClipRoundRectangle(ACanvas:TTeeCanvas;const Rect : TRect; RoundSize : Integer)
12229:
12230 •
             Procedure ClipPolygon(ACanvas:TTeeCanvas;const Points:array of TPoint;NumPoints:Integer)
              'TeeCharForHeight','String').SetString('W
'DarkerColorQuantity','Byte').SetUInt( 128);
12231:
12232:
              'DarkColorQuantity', 'Byte').SetUInt( 64);
12233:
               TButtonGetColorProc', 'Function : TColor
12234:
12235:
               SIRegister_TTeeButton(CL);
12236:
               SIRegister TButtonColor(CL);
12237:
               SIRegister_TComboFlat(CL);
12238:
             Procedure TeeSetTeePen(FPen:TPen; APen : TChartPen; AColor : TColor; Handle:TTeeCanvasHandle)
12239:
             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;
12240:
12241:
             Function TeeRect( Left, Top, Right, Bottom : Integer) : TRect
12242:
12243:
             Function OrientRectangle( const R : TRect) : TRect
12244:
             Procedure TeeSetBitmapSize( Bitmap : TBitmap; Width, Height : Integer)
12245:
             Function PolygonBounds( const P : array of TPoint) : TRect
             Function PolygonInPolygon( const A, B: array of TPoint) : Boolean Function RGBValue( const Color : TColor) : TRGB
12246:
12247:
12248:
             Function EditColor( AOwner : TComponent; AColor : TColor) : TColor
             Function EditColorDialog( AOwner : TComponent; var AColor : TColor) : Boolean Function PointAtDistance( AFrom, ATo : TPoint; ADist : Integer) : TPoint
12249:
12250:
             Function TeeCull( const P : TFourPoints) : Boolean;
Function TeeCull( const P0, P1, P2 : TPoint) : Boolean;
12251:
12252:
             TSmoothStretchOption', '( ssBestQuality, ssBestPerformance )

Procedure SmoothStretch( Src, Dst : TBitmap);

Procedure SmoothStretch1( Src, Dst : TBitmap; Option : TSmoothStretchOption);
12253:
12254:
12255:
12256:
             Function TeeDistance( const x, y : Double) : Double
             Function TeeLoadLibrary( const FileName: String): HInst
Procedure TeeFreeLibrary( hLibModule: HMODULE)
12257:
12258:
             Procedure TeeBlendBitmaps( const Percent : Double; ABitmap, BBitmap; BOrigin : TPoint)
12259:
             //Procedure TeeCalcLines( var Lines : TRGBArray; Bitmap : TBitmap)

Procedure TeeShadowSmooth(Bitmap, Back : TBitmap; Left, Top, Width, Height, horz, vert : Integer;
12260:
12261:
            Smoothness: Double; FullDraw: Boolean; ACanvas: TCanvas3D; Clip: Boolean)
12262:
              SIRegister_ICanvasHyperlinks(CL);
12263:
               SIRegister_ICanvasToolTips(CL);
12264:
             Function Supports( const Instance : IInterface; const IID : TGUID) : Boolean
12265: end;
12266:
12267: procedure SIRegister_ovcmisc(CL: TPSPascalCompiler);
12268: begin
               TOvcHdc', 'Integer
12269:
               TOVCHWND', 'Cardinal
TOVCHdc', 'HDC
TOVCHWND', 'HWND
12270:
12271:
12272:
12273:
             Function LoadBaseBitmap( lpBitmapName : PChar) : HBITMAP
12274:
             Function LoadBaseCursor( lpCursorName : PChar) : HCURSOR
12275:
             Function ovCompStruct( const S1, S2, Size : Cardinal) : Integer
12276:
             Function DefaultEpoch : Integer
             Function DrawButtonFrame(Canvas:TCanvas;const Client:TRect;IsDown,IsFlat:Bool;Style:TButtonStyle):TRect;
12277:
             Procedure FixRealPrim( P : PChar; DC : Char)
12278:
12279:
             \textbf{Function} \ \ \texttt{GetDisplayString}( \ \ \texttt{Canvas}: \ \ \textbf{TCanvas}; \ \ \textbf{const} \ \ \texttt{S}: \ \ \textbf{string}; \ \ \texttt{MinChars}, \ \ \texttt{MaxWidth}: \ \ \texttt{Integer}): \ \ \textbf{string}; \\ \textbf{String}: \ \ \ \textbf{MinChars}: \ \ \textbf{MaxWidth}: \ \ \textbf{MaxWidth}: \ \ \textbf{MinChars}: \ \ \textbf{MaxWidth}: \ \ 
12280:
             Function GetLeftButton : Byte
             Function GetNextDlgItem( Ctrl : TOvcHWnd) : hWnd
12281:
             Procedure GetRGB( Clr : TColor; var IR, IG, IB : Byte)
12282:
12283:
             Function GetShiftFlags : Byte
             Function ovCreateRotatedFont( F : TFont; Angle : Integer) : hFont
12284:
             Function GetTopTextMargin(Font:TFont;BorderStyle:TBorderStyle; Height:Integer;Ctl3D:Boolean): Integer
12285:
12286:
             Function ovExtractWord( N : Integer; const S : string; WordDelims : TCharSet) : string
             Function ovIsForegroundTask : Boolean
12287:
12288:
             Function ovTrimLeft( const S : string) : string
             Function ovTrimRight( const S : string) : string
12289:
             Function ovQuotedStr( const S : string) : string
12290:
             Function ovWordCount( const S : string; const WordDelims : TCharSet) : Integer
12292:
             Function ovWordPosition(const N:Integer/const S: string/const WordDelims : TCharSet) : Integer
12293:
             Function PtrDiff( const P1, P2 : PChar) : Word
             Procedure PtrInc( var P, Delta : Word)
Procedure PtrDec( var P, Delta : Word)
12294:
12295:
             Procedure FixTextBuffer( InBuf, OutBuf : PChar; OutSize : Integer)
12296:
12297:
             Procedure TransStretchBlt( DstDC : TOvcHdc; DstX, DstY, DstW, DstH : Integer; SrcDC : TOvcHdc; SrcX, SrcY,
             SrcW, SrcH : Integer; MaskDC : TOvcHdc; MaskX, MaskY : Integer)
12298: Function ovMinI(X,Y:Integer): Integer
12299: Function ovMaxI(X,Y:Integer): Integer
```

```
12300:
              Function ovMinL( X, Y : LongInt) : LongInt
Function ovMaxL( X, Y : LongInt) : LongInt
12301:
              Function GenerateComponentName( PF : TWinControl; const Root : string) : string
Function PartialCompare( const S1, S2 : string) : Boolean
Function PathEllipsis( const S : string; MaxWidth : Integer) : string
12303:
12304:
              Function Facilities (Control: String Function ovCreateDisabledBitmap(FOriginal: TBitmap; OutlineColor: TColor): TBitmap

Procedure ovCopyParentImage(Control: TControl: Dest: TCanvas)
12305:
12306:
              Procedure ovDrawTransparentBitmap( Dest : TCanvas; X, Y, W, H : Integer; Rect : TRect; Bitmap : TBitmap;
12307:
            TransparentColor : TColor)
12308:
            Procedure DrawTransparentBitmapPrim(DC:TOvcHdc;Bitmap:HBitmap;xStart,yStart,Width,Height:Int;Rect:TRect;
             TransparentColor : TColorRef)
            Function ovWidthOf( const R : TRect) : Integer
12310:
              Function ovHeightOf( const R : TRect) : Integer
              Procedure ovDebugOutput( const S : string)
Function GetArrowWidth( Width, Height : Integer) : Integer
12311:
12312:
12313:
              Procedure StripCharSeq( CharSeq : string; var Str : string)
              Procedure StripCharFromEnd( aChr : Char; var Str : string)
12314:
12315:
              Procedure StripCharFromFront( aChr : Char; var Str : string)
              Function SystemParametersInfo( uiAction, uiParam : UINT; pvParam : UINT; fWinIni : UINT) : BOOL
12316:
12317:
              \textbf{Function} \ \ \textbf{SystemParametersInfoNCM} \\ (\textbf{uiAction}, \textbf{uiParam:UINT;pvParam:TNonClientMetrics;fWinIni:UINT):BOOLientMetrics;fWinIni:UINT):BOOLientMetrics;fWinIni:UINT):BOOLientMetrics;fWinIni:UINT):BOOLientMetrics;fWinIni:UINT):BOOLientMetrics;fWinIni:UINT):BOOLientMetrics;fWinIni:UINT):BOOLientMetrics;fWinIni:UINT):BOOLientMetrics;fWinIni:UINT):BOOLientMetrics;fWinIni:UINT):BOOLientMetrics;fWinIni:UINT):BOOLientMetrics;fWinIni:UINT):BOOLientMetrics;fWinIni:UINT):BOOLientMetrics;fWinIni:UINT):BOOLientMetrics;fWinIni:UINT):BOOLientMetrics;fWinIni:UINT):BOOLientMetrics;fWinIni:UINT):BOOLientMetrics;fWinIni:UINT):BOOLientMetrics;fWinIni:UINT):BOOLientMetrics;fWinIni:UINT):BOOLientMetrics;fWinIni:UINT):BOOLientMetrics;fWinIni:UINT):BOOLientMetrics;fWinIni:UINT):BOOLientMetrics;fWinIni:UINT):BOOLientMetrics;fWinIni:UINT):BOOLientMetrics;fWinIni:UINT):BoolientMetrics;fWinIni:UINT):BoolientMetrics;fWinIni:UINT):BoolientMetrics;fWinIni:UINT):BoolientMetrics;fWinIni:UINT):BoolientMetrics;fWinIni:UINT):BoolientMetrics;fWinIni:UINT):BoolientMetrics;fWinIni:UINT):BoolientMetrics;fWinIni:UINT):BoolientMetrics;fWinIni:UINT):BoolientMetrics;fWinIni:UINT):BoolientMetrics;fWinIni:UINT):BoolientMetrics;fWinIni:UINT):BoolientMetrics;fWinIni:UINT):BoolientMetrics;fWinIni:UINT):BoolientMetrics;fWinIni:UINT):BoolientMetrics;fWinIni:UINT):BoolientMetrics;fWinIni:UINT):BoolientMetrics;fWinIni:UINT):BoolientMetrics;fWinIni:UINT):BoolientMetrics;fWinIni:UINT):BoolientMetrics;fWinIni:UINT):BoolientMetrics;fWinIni:UINT):BoolientMetrics;fWinIni:UINT):BoolientMetrics;fWinIni:UINT):BoolientMetrics;fWinIni:UINT):BoolientMetrics;fWinIni:UINT):BoolientMetrics;fWinIni:UINT):BoolientMetrics;fWinIni:UINT):BoolientMetrics;fWinIni:UINT):BoolientMetrics;fWinIni:UINT):BoolientMetrics;fWinIni:UINT):BoolientMetrics;fWinIni:UINT):BoolientMetrics;fWinIni:UINT):BoolientMetrics;fWinIni:UINT):BoolientMetrics;fWinIni:UINT):BoolientMetrics;fWinIni:UINT):BoolientMetrics;fWinIni:UINT):BoolientMetrics;fWinIni:UINT):BoolientMetrics;fWinIni:UINT):BoolientMe
12318:
               Function SystemParametersInfoA( uiAction, uiParam : UINT; pvParam : UINT; fWinIni : UINT) : BOOL
              Function CreateEllipticRgn(pl, p2, p3, p4 : Integer) : HRGN
Function CreateEllipticRgnIndirect(const p1 : TRect) : HRGN
12319:
12320:
12321:
              Function CreateFontIndirect( const p1 : TLogFont) : HFONT
Function CreateMetaFile( p1 : PChar) : HDC
12322:
              Function DescribePixelFormat(DC: HDC;p2:Int;p3:UINT;var p4:TPixelFormatDescriptor): BOOL
12323:
12324:
              Function DrawText(hDC:hDC:pString:PChar;nCount:Integer; var lpRect : TRect;uFormat:UINT):Integer
              Function DrawTextS(hDC:HDC;lpString:string;nCount:Integer; var lpRect:TRect;uFormat:UINT):Integer
Function SetMapperFlags( DC : HDC; Flag : DWORD) : DWORD
12325:
12326:
              Function SetGraphicsMode( hdc : HDC; iMode : Integer) : Integer
12328:
              Function SetMapMode( DC : HDC; p2 : Integer) : Integer
12329:
              Function SetMetaFileBitsEx( Size : UINT; const Data : PChar) : HMETAFILE
               //Function SetPaletteEntries(Palette:HPALETTE;StartIndex,NumEntries:UINT;var PaletteEntries):UINT
12330:
              Function SetPixel( DC : HDC; X, Y : Integer; Color : COLORREF) : COLORREF
Function SetPixelV( DC : HDC; X, Y : Integer; Color : COLORREF) : BOOL
12331:
              //Function SetPixelFormat( DC : HDC; PixelFormat : Integer; FormatDef : PPixelFormatDescriptor) : BOOL Function SetPolyFillMode( DC : HDC; PolyFillMode : Integer) : Integer
12333:
12334:
              Function StretchBlt(DestDC:HDC;X,Y,Width,Height:Int;SrcDC:HDC;XSrc,YSrc,SrcWidth,
12335:
            SrcHeight:Int;Rop:DWORD):BOOL
12336: Function SetRectRgn(Rgn: HRgn; X1, Y1, X2, Y2: Integer): BOOL
12337: Function StretchDIBits(DC: HDC; DestX,DestY,DestWidth,DestHeight,SrcX,SrcY,SrcWidth,
12337:
SrcHeight:Int;Bits:int; var BitsInfo : TBitmapInfo; Usage : UINT; Rop : DWORD) : Integer 12338: Function SetROP2( DC : HDC; p2 : Integer) : Integer
               Function SetStretchBltMode( DC : HDC; StretchMode : Integer) : Integer
12339:
              Function SetSystemPaletteUse( DC : HDC; p2 : UINT) : UINT
Function SetTextCharacterExtra( DC : HDC; CharExtra : Integer) : Integer
12340:
12341:
              Function SetTextColor( DC : HDC; Color : COLORREF)
Function SetTextAlign( DC : HDC; Flags : UINT) : UINT
12342:
              Function SetTextAustification( DC : HDC; BreakExtra, BreakCount : Integer) : Integer Function UpdateColors( DC : HDC) : BOOL
Function GetViewportExtEx( DC : HDC; var Size : TSize) : BOOL
Function GetViewportOrgEx( DC : HDC; var Point : TPoint) : BOOL
12344:
12345:
12346:
12347:
              Function GetWindowExtEx( DC : HDC; var Size : TSize) : BOOL
12348:
              Function GetWindowOrgEx( DC : HDC; var Point : TPoint) : BOOL
12349:
            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;

Mask : HBITMAP; xMask, yMask : Integer; Rop : DWORD) : BOOL
12350:
12351:
12352:
12353:
            Function PlgBlt(DestDC:HDC;const PtsArray,SrcDC:HDC;XSrc,YSrc,Widt,Heigh:Int;Mask:HBITMAP;xMask,
            vMask: Int.): BOOL;
12354: Function OffsetClipRgn( DC : HDC; XOffset, YOffset : Integer) : Integer
12355:
              Function OffsetRgn( RGN : HRGN; XOffset, YOffset : Integer) : Integer
              Function PatBlt( DC : HDC; X, Y, Width, Height : Integer) : Integer
Function PatBlt( DC : HDC; X, Y, Width, Height : Integer; Rop : DWORD) : BOOL
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
12356:
12357:
12358:
              Function PtInRegion( RGN : HRGN; X, Y : Integer) : BOOL
12360:
              Function PtVisible( DC : HDC; X, Y : Integer) : BOOL
Function RectInRegion( RGN : HRGN; const Rect : TRect) : BOOL
Function RectVisible( DC : HDC; const Rect : TRect) : BOOL
Function Rectangle( DC : HDC; X1, Y1, X2, Y2 : Integer) : BOOL
12361:
12362:
12363:
12364:
12365:
              Function RestoreDC( DC : HDC; SavedDC : Integer) : BOOL
12366: end;
12367:
12368: procedure SIRegister_ovcfiler(CL: TPSPascalCompiler);
12369: begin
12370:
                SIRegister_TOvcAbstractStore(CL);
                //PExPropInfo', '^TExPropInfo // will not work
' TExPropInfo', 'record PI : TPropInfo; AObject : TObject; end
12371:
12372: //
                SIRegister_TOvcPropertyList(CL);
12374:
               SIRegister TOvcDataFiler(CL);
12375:
              Procedure UpdateStoredList( AForm : TWinControl; AStoredList : TStrings; FromForm : Boolean)
12376:
              Procedure UpdateStoredList1( AForm : TCustomForm; AStoredList : TStrings; FromForm : Boolean)
              Function CreateStoredItem( const CompName, PropName : string) : string
12377:
              Function ParseStoredItem( const Item: string; var CompName, PropName: string): Boolean
12378:
12379:
              //Function GetPropType( PropInfo : PExPropInfo) : PTypeInfo
12380: end;
12381:
12382: procedure SIRegister_ovccoco(CL: TPSPascalCompiler);
```

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12383: begin
                'ovsetsize','LongInt').SetInt( 16);
'etSyntax','LongInt').SetInt( 0);
'etSymantic','LongInt').SetInt( 1);
'chCR','Char').SetString( #13);
12384:
12385:
12386:
12387:
                  'chLF','Char').SetString( #10);
12388:
12389:
                   'chLineSeparator','').SetString( chCR);
12390:
                    SIRegister_TCocoError(CL);
12391:
                    SIRegister_TCommentItem(CL);
12392:
                    SIRegister_TCommentList(CL);
                    SIRegister_TSymbolPosition(CL);
12393:
12394: TGenListType', '( glNever, glAlways, glOnError )
12395: TovBitSet', 'set of Integer
12396: //PStartTable', '^TStartTable // will not work
12397: 'TovCharSet', 'set of AnsiChar
12398: TAfterGenListEvent', 'Procedure ( Sender : TObject; var PrintErrorCount : boolean)
12399: TCommentEvent', 'Procedure ( Sender : TObject; CommentList : TCommentList)
12400: TCustomErrorEvent', 'Function(Sender:TObject;const ErrorCode: longint;const Data:string): string
12401: TovErrorEvent', 'Procedure ( Sender : Tobject; Error : TCocoError) 12402: TovErrorProc', 'Procedure ( ErrorCode : integer; Symbol : TSymbolP
                          osition; const Data : string; ErrorType : integer)
12403: + Osition, Const Data : String, Effortype : Integer)
12404: TFailureEvent', 'Procedure ( Sender : TObject; NumErrors : integer)
12405: TGetCH', 'Function ( pos : longint) : char
12406: TStatusUpdateProc', 'Procedure ( Sender : TObject; Status: string; LineNum:integer)
12407: SIRegister_TCocoRScanner(CL);
                    SIRegister_TCocoRGrammar(CL);
12408:
12409:
                  '_EF','Char').SetString( #0);
                 '_TAB','Char').SetString( #09);
'_CR','Char').SetString( #13);
'_LF','Char').SetString( #10);
12410:
12411:
12412:
12413:
                  '_EL','').SetString( _CR);
                  '_EOF','Char').SetString( #26);
12414:
                  'LineEnds','TCharSet').SetInt(ord(_CR) or ord(_LF) or ord(_EF));
'minErrDist','LongInt').SetInt( 2);
12415:
12416:
                 Function ovPadL(S: string; ch: char; L: integer): string
12418: end;
12419:
12420:
                    TFormatSettings = record
12421:
                        CurrencyFormat: Byte;
12422:
                         NegCurrFormat: Byte;
12423:
                        ThousandSeparator: Char;
                        DecimalSeparator: Char:
12424:
12425:
                        CurrencyDecimals: Byte;
12426:
                         DateSeparator: Char
12427:
                         TimeSeparator: Char;
12428:
                        ListSeparator: Char;
                        CurrencyString: string;
12429:
                         ShortDateFormat: string;
12431:
                         LongDateFormat: string
12432:
                         TimeAMString: string;
12433:
                        TimePMString: string;
                         ShortTimeFormat: string;
12434:
                         LongTimeFormat: string;
12435:
12436:
                         ShortMonthNames: array[1..12] of string;
12437:
                         LongMonthNames: array[1..12] of string;
                        ShortDayNames: array[1..7] of string;
LongDayNames: array[1..7] of string;
12438:
12439:
12440:
                        TwoDigitYearCenturyWindow: Word;
12441:
                    end;
12442:
12443: procedure SIRegister_OvcFormatSettings(CL: TPSPascalCompiler);
12444:
               begin
12445:
               Function ovFormatSettings : TFormatSettings
12446:
               end;
12447:
 12448: procedure SIRegister_ovcstr(CL: TPSPascalCompiler);
12449: begin
12450:
                    TOvcCharSet', 'set of Char
                   ovBTable', 'array[0..255] of Byte
//BTable = array[0..{$IFDEF UNICODE}}{$IFDEF
12451:
12452:
               12453: Function BinaryBPChar( Dest : PChar; B : Byte) : PChar
12454:
                 Function BinaryLPChar( Dest : PChar; L : LongInt) : PChar
                 Function BinaryWPChar( Dest : PChar; W : Word) : PChar
12455:
12456:
                 Procedure BMMakeTable( MatchString : PChar; var BT : ovBTable)
12457:
                  \textbf{Function} \ \ \texttt{BMSearch}(\textbf{var} \ \ \texttt{Buffer}, \texttt{BufLength}: \texttt{Cardinal}; \textbf{var} \ \ \texttt{BT:ovBTable}; \ \ \texttt{MatchString:PChar}; \textbf{var} \ \ \texttt{Pos:Cardinal}): \texttt{Bool}; \ \ 
12458:
                 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
12459:
12460:
                 Function HexBPChar( Dest : PChar; B : Byte) : PChar
Function HexLPChar( Dest : PChar; L : LongInt) : PChar
Function HexPtrPChar( Dest : PChar; P : TObject) : PChar
12462:
12463:
                 Function HexWPChar( Dest : PChar; W : Word) : PChar
12464:
                 Function LoCaseChar( C : Char) : Char
12465:
                Function OctalLPChar( Dest : PChar; L : LongInt) : PChar
Function StrChDeletePrim( P : PChar; Pos : Cardinal) : PChar
Function StrChInsertPrim( Dest : PChar; C : Char; Pos: Cardinal) : PChar
Function StrChPos( P : PChar; C : Char; var Pos : Cardinal) : Boolean
12466:
12467:
12468:
12469:
12470: Procedure StrInsertChars( Dest : PChar; Ch : Char; Pos, Count : Word)
```

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Function StrStCopy( Dest, S : PChar; Pos, Count : Cardinal) : PChar
Function StrStDeletePrim( P : PChar; Pos, Count : Cardinal) : PChar
12471:
12472:
                Function StrStInsert( Dest, S1, S2 : PChar; Pos : Cardinal) : PChar
12474 •
               \textbf{Function} \  \, \texttt{StrStInsertPrim}(\  \, \texttt{Dest},\  \, \texttt{S}\  \, :\  \, \texttt{PChar};\  \, \texttt{Pos}\  \, :\  \, \texttt{Cardinal})\  \, :\  \, \texttt{PChar}
12475:
               Function StrStPos( P, S : PChar; var Pos : Cardinal) : Boolean
12476:
               Function StrToLongPChar( S : PChar; var I : LongInt) : Boolean
               Procedure TrimAllSpacesPChar( P : PChar)
12477:
               Function TrimEmbeddedZeros( const S : string) : string
Procedure TrimEmbeddedZerosPChar( P : PChar)
12478:
12479:
12480:
               Function TrimTrailPrimPChar( S : PChar) : PChar
               Function TrimTrailPChar( Dest, S : PChar) : PChar
12481:
               Function TrimTrailingZeros( const S : string) : string
12483:
               Procedure TrimTrailingZerosPChar( P : PChar)
               Function UpCaseChar( C : Char) : Char
Function ovcCharInSet( C : Char; const CharSet : TovcCharSet) : Boolean
12484:
12485:
12486:
               Function ovc32StringIsCurrentCodePage( const S : WideString) : Boolean;
                //Function ovc32StringIsCurrentCodePage1( const S:PWideChar; CP : Cardinal) : Boolean;
12487:
12488:
12489:
12490:
             procedure SIRegister_AfUtils(CL: TPSPascalCompiler);
             begin
12491:
12492:
                  //PRaiseFrame', '^TRaiseFrame // will not work
                 TRaiseFrame', 'record NextRaise : PRaiseFrame; ExceptAddr : __Poin' +'ter; ExceptObject : TObject; ExceptionRecord : PExceptionRecord; end
12493:
12494:
               Procedure SafeCloseHandle ( var Handle : THandle)
12495:
12496:
               Procedure ExchangeInteger( X1, X2 : Integer)
12497:
               Procedure FillInteger( const Buffer, Size, Value : Integer)
               Function LongMulDiv( Mult1, Mult2, Div1 : Longint) : Longint
Function afCompareMem( P1, P2 : TObject; Length : Integer) : Boolean
12498:
12499:
12500:
12501: FILENAME ADVAPI32
                                                        = 'ADVAPI32.DLL';
12502:
                     function AbortSystemShutdown; external advapi32 name 'AbortSystemShutdownW';
12503: function AbortSystemShutdown(lpMachineName: PKOLChar): BOOL; stdcall;
12504:
                      function AccessCheckAndAuditAlarm(SubsystemName: PKOLChar;
                         HandleId: Pointer; ObjectTypeName, ObjectName: PKOLChar;
12505:
12506:
                         SecurityDescriptor: PSecurityDescriptor; DesiredAccess: DWORD;
12507:
                         const GenericMapping: TGenericMapping; ObjectCreation: BOOL;
12508:
                         var GrantedAccess: DWORD; var AccessStatus, pfGenerateOnClose: BOOL): BOOL; stdcall;
12509:
                      function AccessCheckByTypeAndAuditAlarm(SubsystemName: PKOLChar;
12510:
                         HandleId: Pointer; ObjectTypeName, ObjectName: PKOLChar;
12511:
                         SecurityDescriptor: PSecurityDescriptor; PrincipalSelfSid: PSID; DesiredAccess: DWORD;
                         Security Descriptor: Flags: DWORD; ObjectTypeList: PObjectTypeList;
ObjectTypeListLength: DWORD; const GenericMapping: TGenericMapping; ObjectCreation: BOOL;
12512:
12513:
                         var GrantedAccess: DWORD; var AccessStatus, pfGenerateOnClose: BOOL): BOOL; stdcall;
12514:
12515:
                      \textbf{function} \  \, \textbf{AccessCheckByTypeResultListAndAuditAlarm(SubsystemName: PKOLCharite Control of Control of
12516:
                         HandleId: Pointer; ObjectTypeName, ObjectName: PKOLChar;
                         SecurityDescriptor: PSecurityDescriptor; PrincipalSelfSid: PSID; DesiredAccess: DWORD;
12517:
                         AuditType: AUDIT_EVENT_TYPE: Flags: DWORD: ObjectTypeList: PObjectTypeList;
                         ObjectTypeListLength: DWORD; const GenericMapping: TGenericMapping; ObjectCreation: BOOL; var GrantedAccess: DWORD; var AccessStatusList:DWORD; var pfGenerateOnClose: BOOL; stdcall;
12519:
12520:
                     function BackupEventLog(hEventLog: THandle; lpBackupFileName: PKOLChar): BOOL; stdcall; function ClearEventLog(hEventLog: THandle; lpBackupFileName: PKOLChar): BOOL; stdcall;
12521:
12522:
12523:
                      function CreateProcessAsUser(hToken: THandle; lpApplicationName: PKOLChar;
12524:
                          lpCommandLine: PKOLChar; lpProcessAttributes: PSecurityAttributes;
12525:
                         lpThreadAttributes: PSecurityAttributes; bInheritHandles: BOOL;
                         dwCreationFlags: DWORD; lpEnvironment: Pointer; lpCurrentDirectory: PKOLChar;
12526:
                         const lpStartupInfo: TStartupInfo; var lpProcessInformation: TProcessInformation): BOOL; stdcall;
12527:
12528:
                      function GetCurrentHwProfile(var lpHwProfileInfo: THWProfileInfo): BOOL; stdcall;
12529:
                     function GetFileSecurity(lpFileName: PKOLChar; RequestedInformation: SECURITY_INFORMATION;
    pSecurityDescriptor: PSecurityDescriptor;nLength:DWORD;var lpnLengthNeeded: DWORD):BOOL; stdcall;
12530:
                      function GetUserName(lpBuffer: PKOLChar; var nSize: DWORD): BOOL; stdcall;
12531:
12532:
                      function InitiateSystemShutdown(lpMachineName, lpMessage: PKOLChar;
12533:
                         {\tt dwTimeout: DWORD: bForceAppsClosed, bRebootAfterShutdown: BOOL: BOOL: {\tt stdcall: brown: brown:
                     function LogonUser(lpszUsername, lpszDomain, lpszPassword: PKOLChar;
  dwLogonType, dwLogonProvider: DWORD; var phToken: THandle): BOOL; stdcall;
function LookupAccountName(lpSystemName, lpAccountName: PKOLChar;
12534:
12535:
12536:
12537:
                         Sid: PSID; var cbSid: DWORD; ReferencedDomainName: PKOLChar;
12538:
                         var cbReferencedDomainName: DWORD; var peUse: SID_NAME_USE): BOOL; stdcall;
                      function LookupAccountSid(lpSystemName: PKOLChar; Sid: PSID;
12539:
                         Name: PKOLChar; var cbName: DWORD; ReferencedDomainName: PKOLChar; var cbReferencedDomainName: DWORD; var peUse: SID_NAME_USE): BOOL; stdcall;
12540:
12541:
12542:
                      function LookupPrivilegeDisplayName(lpSystemName, lpName: PKOLChar;
                     lpDisplayName: PKOLChar; var cbDisplayName, lpLanguageId: DWORD): BOOL; stdcall; function LookupPrivilegeName(lpSystemName: PKOLChar;
12543:
12544:
                         var lpLuid: TLargeInteger; lpName: PKOLChar; var cbName: DWORD): BOOL; stdcall;
12545:
12546:
                      function LookupPrivilegeValue(lpSystemName, lpName: PKOLChar;
12547:
                         var lpLuid: TLargeInteger): BOOL; stdcall;
                      function ObjectCloseAuditAlarm(SubsystemName: PKOLChar;
12548:
                         HandleId: Pointer; GenerateOnClose: BOOL): BOOL; stdcall;
12549:
                      function ObjectDeleteAuditAlarm(SubsystemName: PKOLChar;
12550:
12551:
                         HandleId: Pointer; GenerateOnClose: BOOL): BOOL; stdcall;
                      function ObjectOpenAuditAlarm(SubsystemName: PKOLChar; HandleId: Pointer;
12552:
                         ObjectTypeName: PKOLChar; ObjectName: PKOLChar; pSecurityDescriptor: PSecurityDescriptor;
12553:
                         ClientToken: THandle; DesiredAccess, GrantedAccess: DWORD;
12554:
                          var Privileges: TPrivilegeSet; ObjectCreation, AccessGranted: BOOL;
12555:
                         var GenerateOnClose: BOOL): BOOL; stdcall;
12556:
                     function ObjectPrivilegeAuditAlarm(SubsystemName: PKOLChar;
   HandleId: Pointer; ClientToken: THandle; DesiredAccess: DWORD;
   var Privileges: TPrivilegeSet; AccessGranted: BOOL): BOOL; stdcall;
12557:
12558:
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function OpenBackupEventLog(lpUNCServerName, lpFileName: PKOLChar): THandle; stdcall;
12560:
12561:
                     function OpenEventLog(lpUNCServerName, lpSourceName: PKOLChar): THandle; stdcall;
12562:
                     function PrivilegedServiceAuditAlarm(SubsystemName, ServiceName: PKOLChar;
12563:
                         ClientToken: THandle; var Privileges: TPrivilegeSet; AccessGranted: BOOL): BOOL; stdcall;
                    function ReadEventLog(hEventLog: THandle; dwReadFlags, dwRecordOffset: DWORD;
    lpBuffer: Pointer; nNumberOfBytesToRead: DWORD;
12564:
12565:
                         var pnBytesRead, pnMinNumberOfBytesNeeded: DWORD): BOOL; stdcall;
12566:
12567:
                     function RegConnectRegistry(lpMachineName: PKOLChar; hKey: HKEY;
                    var phkResult: HKEY): Longint; stdcall;
function RegCreateKey(hKey: HKEY; lpSubKey: PKOLChar;
var phkResult: HKEY): Longint; stdcall;
12568:
12569:
12570:
12571:
                     function RegCreateKeyEx(hKey: HKEY; lpSubKey: PKOLChar;
12572:
                         Reserved: DWORD; lpClass: PKOLChar; dwOptions: DWORD; samDesired: REGSAM;
                        lpSecurityAttributes: PSecurityAttributes; var phkResult: HKEY;
lpdwDisposition: PDWORD): Longint; stdcall;
12573:
12574:
12575:
                     function RegDeleteKey(hKey: HKEY; lpSubKey: PKOLChar): Longint; stdcall;
12576:
                     function RegDeleteValue(hKey: HKEY; lpValueName: PKOLChar): Longint; stdcall;
                    function RegEnumKeyEx(hKey: HKEY; dwIndex: DWORD; lpName: PKOLChar;
  var lpcbName: DWORD; lpReserved: Pointer; lpClass: PKOLChar;
  lpcbClass: PDWORD; lpftLastWriteTime: PFileTime): Longint; stdcall;
12577
12578:
12579:
12580:
                     function RegEnumKey(hKey:HKEY; dwIndex:DWORD; lpName:PKOLChar; cbName:DWORD):Longint;stdcall;
12581:
                     function RegEnumValue(hKey: HKEY; dwIndex: DWORD; lpValueName: PKOLChar;
                    var lpcbValueName: DWORD; lpReserved: Pointer; lpType: PDWORD;
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;
12582:
12583:
12584:
12585:
12586:
                     function RegOpenKeyEx(hKey: HKEY; lpSubKey: PKOLChar;
                    ulOptions: DWORD; samDesired: REGSAM; var phkResult: HKEY): Longint; stdcall; function RegQueryInfoKey(hKey: HKEY; lpClass: PKOLChar;
12587:
12588:
                         lpcbClass: PDWORD; lpReserved: Pointer;
12589:
12590:
                         lpcSubKeys, lpcbMaxSubKeyLen, lpcbMaxClassLen, lpcValues,
                         lpcbMaxValueNameLen, lpcbMaxValueLen, lpcbSecurityDescriptor: PDWORD;
12591:
12592:
                         lpftLastWriteTime: PFileTime): Longint; stdcall;
                    function RegQueryMultipleValues(hKey: HKEY; var ValList;
NumVals: DWORD; lpValueBuf: PKOLChar; var ldwTotsize: DWORD): Longint; stdcall;
12593:
12594:
12595:
                     function RegQueryValue(hKey: HKEY; lpSubKey: PKOLChar;
                    lpValue: PKOLChar; var lpcbValue: Longint): Longint; stdcall;
function RegQueryValueEx(hKey: HKEY; lpValueName: PKOLChar;
    lpReserved: Pointer; lpType: PDWORD; lpData: PByte; lpcbData: PDWORD): Longint; stdcall;
12596:
12597:
12598:
                    function RegReplaceKey(hKey: HKEY; lpSubKey: PKOLChar; lpNewFile: PKOLChar; lpOldFile: PKOLChar): Longint; stdcall;
12599:
12600:
                     function RegRestoreKey(hKey: HKEY; lpFile: PKOLChar; dwFlags: DWORD): Longint; stdcall;
12601:
                    function RegResoreRey(hKey: HKEY: 1pFile: FROLChar; function RegSaveKey(hKey: HKEY: 1pFile: PKOLChar; lpSecurityAttributes: PSecurityAttributes): Longint; stdcall;
12602:
12603:
                    function RegSetValue(hKey: HKEY; lpSubKey: PKOLChar;
  dwType: DWORD; lpData: PKOLChar; cbData: DWORD): Longint; stdcall;
function RegSetValueEx(hKey: HKEY; lpValueName: PKOLChar;
12604:
12605:
12606:
                        Reserved: DWORD; dwType: DWORD; lpData: Pointer; cbData: DWORD): Longint; stdcall;
12607:
12608:
                     function RegUnLoadKey(hKey: HKEY; lpSubKey: PKOLChar): Longint; stdcall;
                    function RegisterEventSource(lpUNCServerName, lpSourceName: PKOLChar): THandle; stdcall;
function ReportEvent(hEventLog: THandle; wType, wCategory: Word;
dwEventID: DWORD; lpUserSid: Pointer; wNumStrings: Word;
12609:
12610:
12611:
                         dwDataSize: DWORD; lpStrings, lpRawData: Pointer): BOOL; stdcall;
12612:
                    function SetFileSecurity(lpFileName: PKOLChar; SecurityInformation: SECURITY_INFORMATION;
    pSecurityDescriptor: PSecurityDescriptor): BOOL; stdcall;
12613:
12614:
12615:
12616:
               Function wAddAtom( lpString : PKOLChar) : ATOM
               Function wBeginUpdateResource( pFileName : PKOLChar; bDeleteExistingResources : BOOL) : THandle
12617:
             //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
12618:
             Function wCompareString( Locale : LCID; dwCmpFlags : DWORD; lpString1 : PKOLChar; cchCount1 : Integer; lpString2 : PKOLChar; cchCount2 : Integer) : Integer
12620:
             Function wCopyFile( lpExistingFileName, lpNewFileName : PKOLChar; bFailIfExists : BOOL) : BOOL
12621:
             Function wCopyFile( IpExistingFileName, IpNewFileName : PKOLChar; bFailIfExists : BOOL) : BOOL
//Function wCopyFileEx( lpExistingFileName, lpNewFileName : PKOLChar; lpProgressRoutine :
TFNProgressRoutine; lpData : Pointer; pbCancel : PBool; dwCopyFlags : DWORD) : BOOL
Function wCreateDirectory( lpPathName : PKOLChar; lpSecurityAttributes : PSecurityAttributes) : BOOL
Function wCreateDirectoryEx(lpTemplateDirectory,
lpNewDirectory:PKOLChar; lpSecAttrib:PSecurityAttribts):BOOL;
12623:
12624:
               Function wCreateEvent(lpEventAttribes:PSecurityAttrib;bManualReset,
12625:
             bInitialState:BOOL;lpName:PKOLChar):THandle;
12626: Function wCreateFile( lpFileName : PKOLChar; dwDesiredAccess, dwShareMode : DWORD; lpSecurityAttributes :
PSecurityAttributes; dwCreationDisposition, dwFlagsAndAttributes:DWORD;hTemplateFile:THandle):THandle

12627: Function wCreateFileMapping( hFile : THandle; lpFileMappingAttributes : PSecurityAttributes; flProtect, dwMaximumSizeHigh, dwMaximumSizeLow : DWORD; lpName : PKOLChar) : THandle
             Function wCreateHardLink(lpFileName
             lpExistingFileName:PKOLChar;lpSecurityAttributes:PSecurityAttributes):BOOL
12629:
             Function
             CreateMailslot(lpName:PKOLChar;MaxMessSize:DWORD;lReadTimeout:DWORD;lpSecurityAttrib:PSecurityAttributes):THandle);
12630: Function wCreateNamedPipe(lpName: PKOLChar; dwOpenMode, dwPipeMode, nMaxInstances, nOutBufferSize, nInBufferSize, nDefaultTimeOut: DWORD; lpSecurityAttributes: PSecurityAttributes): THandle
12631: //Function CreateProcess( lpApplicationName : PKOLChar; lpCommandLine : PKOLChar; lpProcessAttributes,
             lpThreadAttributes : PSecurityAttributes; bInheritHandles : BOOL; dwCreationFlags : DWORD; lpEnvironment :
Pointer; lpCurrentDirectory:PKOLChar; const lpStartupInfo; TStartupInfo; var
             lpProcessInfo:TProcessInformation): BOOL
12632:
              Function wCreateSemaphore(lpSemaphoreAttributes: PSecurityAttributes; lInitialCount, lMaximumCount:
             Longint; lpName : PKOLChar) : THandle
             Function
             wCreateWaitableTimer(lpTimerAttributes:PSecurityAttribs;bManualReset:BOOL;lpTimerName:PKOLChar):THandle); wCreateWaitableTimer(lpTimerAttributes:PSecurityAttribs;bManualReset:BOOL;lpTimerName:PKOLChar):Thandle); wCreateWaitableTimer(lpTimerAttributes:PSecurityAttribs;bManualReset:BOOL;lpTimerName:PKOLChar):Thandle); wCreateWaitableTimer(lpTimerAttributes:PSecurityAttribs;bManualReset:BOOL;lpTimerName:PKOLChar):Thandle); wCreateWaitableTimer(lpTimerName:PKOLChar):Thandle); wCreateWaitableTimer(lpTimerName:PKOLChar); wCreateWaitableTimer(lpTimerName:PKOLChar); wCreateWaitableTimer(lpTimerName:PKOLChar); wCre
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12634:
                 Function wDefineDosDevice( dwFlags : DWORD; lpDeviceName, lpTargetPath : PKOLChar) : BOOL
                 Function wDeleteFile( lpFileName : PKOLChar) : BOOL
12635:
                  Function wEndUpdateResource( hUpdate : THandle; fDiscard : BOOL) : BOOL
12636:
12637:
                  //Function
               w {\it EnumCalendar} Info(lp CalInfEnumProc: TFNCalInfEnumProc; Locale: LCID; Calendar: CALID; CalType: CALTYPE): BOOL; and the contract of th
12638:
                  //Function wEnumDateFormats(lpDateFmtEnumProc: TFNDateFmtEnumProc; Locale : LCID; dwFlags : DWORD) : BOOL
                // Function wEnumResourceLanguages(hModule:HMODULE;lpType,
12639:
               lpName:PChar;lpEnumFunc:ENUMRESLANGPROC;lParam:Longint:BOOL'
12640:
                  //Function
               w \textit{EnumResourceNames(hModule:HMODULE;lpType:PKOLChar;lpEnumFunc:ENUMRESNAMEPROC;lParam:Longint):BOOL;} \\
                  //Function wEnumResourceTypes( hModule:HMODULE; lpEnumFunc:ENUMRESTYPEPROC;lParam:Longint):BOOL;
12641:
                  //Function wEnumSystemCodePages( lpCodePageEnumProc : TFNCodepageEnumProc; dwFlags : DWORD)
12643:
                  //Function wEnumSystemLocales( lpLocaleEnumProc : TFNLocaleEnumProc; dwFlags : DWORD) : BOOL
12644:
                  //Function wEnumTimeFormats(lpTimeFmtEnumProc:TFNTimeFmtEnumProc;Locale:LCID;dwFlags:DWORD):BOOL;
                 Function wExpandEnvironmentStrings( lpSrc : PKOLChar; lpDst : PKOLChar; nSize : DWORD) : DWORD
12645:
12646:
                  Procedure wFatalAppExit( uAction : UINT; lpMessageText : PKOLChar)
                  //Function wFillConsoleOutputCharacter( hConsoleOutput : THandle; cCharacter : KOLChar; nLength : DWORD;
               dwWriteCoord : TCoord; var lpNumberOfCharsWritten : DWORD) : BOOL
12648:
                 Function wFindAtom( lpString : PKOLChar) : ATOM
12649:
                 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: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:BWORD):Thandle;bWatchSubtree:BWORD, BWORD, 
               Function wFindFirstFile( lpFileName : PKOLChar; var lpFindFileData : TWIN32FindData) : THandle
12651:
                  //Function wFindFirstFileEx( lpFileName : PKOLChar; fInfoLevelId : TFindexInfoLevels; lpFindFileData :
               Pointer; fSearchOp : TFindexSearchOps; lpSearchFilter : Pointer; dwAdditionalFlags : DWORD) : BOOL Function wFindNextFile( hFindFile : THandle; var lpFindFileData : TWIN32FindData) : BOOL
12653:
                 Function wFindResource( hModule : HMODULE; lpName, lpType : PKOLChar) : HRSRC
12654:
                 Function wFindResourceEx( hModule : HMODULE; lpType, lpName : PKOLChar; wLanguage : Word) : HRSRC
12655:
                 Function
               wFoldString(dwMapFlags:DWORD;lpSrcStr:PKOLChar;cchSrc:Int;lpDestStr:PKOLChar;cchDest:Integer):Integer);
                  //Function wFormatMessage( dwFlags : DWORD; lpSource : Pointer; dwMessageId : DWORD; dwLanguageId :
               DWORD; lpBuffer : PKOLChar; nSize : DWORD; Arguments : Pointer) : DWORD

Function wFreeEnvironmentStrings( EnvBlock : PKOLChar) : BOOL

Function wGetAtomName( nAtom : ATOM; lpBuffer : PKOLChar; nSize : Integer) : UINT
12657:
12658:
12659:
                  Function wGetBinaryType( lpApplicationName : PKOLChar; var lpBinaryType : DWORD) : BOOL
                  Function wGetCommandLine : PKOLChar
                 //Function wGetCompressedFileSize( lpFileName : PKOLChar; lpFileSizeHigh : PDWORD) : DWORD Function wGetComputerName( lpBuffer : PKOLChar; var nSize : DWORD) : BOOL Function wGetConsoleTitle( lpConsoleTitle : PKOLChar; nSize : DWORD) : DWORD
12661:
12662:
12663:
                  //Function wGetCurrencyFormat( Locale : LCID; dwFlags : DWORD; lpValue : PKOLChar; lpFormat :
12664:
                PCurrencyFmt; lpCurrencyStr: PKOLChar; cchCurrency: Integer): Integer
Function wGetCurrentDirectory( nBufferLength : DWORD; lpBuffer : PKOLChar) : DWORD
12665:
                //Function wGetDateFormat( Locale : LCID; dwFlags : DWORD; lpDate : PSystemTime; lpFormat : PKOLChar; lpDateStr : PKOLChar; cchDate : Integer) : Integer
12666:
                  //Function wGetDefaultCommConfig( lpszName:PKOLChar;var lpCC : TCommConfig;var lpdwSize:DWORD):BOOL
               Function wGetDiskFreeSpace( lpRootPathName : PKOLChar; var lpSectorsPerCluster, lpBytesPerSector, lpNumberOfFreeClusters, lpTotalNumberOfClusters : DWORD) : BOOL
12668:
               //Function wGetDiskFreeSpaceEx( lpDirectoryName : PKOLChar; var lpFreeBytesAvailableToCaller, lpTotalNumberOfBytes, lpTotalNumberOfFreeBytes : PLargeInteger) : BOOL
12669:
                 Function wGetDriveType( lpRootPathName : PKOLChar) :
                 Function wGetEnvironmentStrings: PKOLChar

Function wGetEnvironmentStrings: PKOLChar; lpBuffer: PKOLChar; nSize: DWORD): DWORD;

Function wGetEnvironmentVariable( lpName: PKOLChar; lpBuffer: PKOLChar; nSize: DWORD): DWORD;
12671:
12672:
12673:
12674:
               w {\tt GetFileAttributesEx} (1p {\tt FileName:PKOLChar;fInfoLevelId:TGetFileExInfoLevs;lpFileInform:Pointer):BOOL; and {\tt GetFileExInfoLevs;lpFileInform:Pointer):BOOL; and {\tt GetFileExInform:Pointer):BOOL; and {\tt GetFileExInfor
12675:
                 Function wGetFullPathName(lpFileName:PKOLChar;nBufferLength:WORD;lpBuffer:PKOLChar;var
               lpFilePart:PKOLChar):DWORD;
                  -
//Function wGetLocaleInfo(Locale:LCID; LCType:LCTYPE;lpLCData:PKOLChar;cchData:Integer): Integer
                 Function wGetLogicalDriveStrings( nBufferLength : DWORD; lpBuffer : PKOLChar) : DWORD
12677:
12678:
                 Function wGetModuleFileName( hModule : HINST; lpFilename : PKOLChar; nSize : DWORD) : DWORD
                 Function weetModuleHandle( ImModule . HINS); Iprilename : PROLChar) : HMODULE

//Function wGetModuleHandle( lpModuleName : PROLChar) : HMODULE

//Function wGetNamedPipeHandleState( hNamedPipe : THandle; lpState, lpCurInstances, lpMaxCollectionCount,
12679:
12680:
               lpCollectDataTimeout : PDWORD; lpUserName : PKOLChar; nMaxUserNameSize : DWORD) : BOOL
               //Function wGetNumberFormat( Locale : LCTD; dwFlags:DWORD; lpValue:PKOLChar; lpFormat:PNumberFmt; lpNumberStr : PKOLChar; cchNumber : Integer) : Integer
12681:
12682:
                 Function wGetPrivateProfileInt(lpAppName,lpKeyName:PKOLChar;nDefault:Integer;lpFileName:PKOLChar):UINT;
                 Function
                wGetPrivateProfileSection(lpAppName:PKOLChar;lpRetrStr:PKOLChar;nSize:DWORD;pFileName:PKOLChar):DWORD;
12684:
                 \textbf{Function} \ \ w \texttt{GetPrivateProfileSectionNames(lpszReturnBuffer:PKOLChar;nSize:DWORD;lpFileName:PKOLChar):DWORD;} \\
12685:
                 Function wGetPrivateProfileString( lpAppName, lpKeyName, lpDefault : PKOLChar;lpReturnedStr: PKOLChar;
               nSize:DWORD; lpFileName : PKOLChar) : DWORD
               Function wGetProfileInt( lpAppName, lpKeyName : PKOLChar; nDefault : Integer) : UINT
12687:
                 Function wGetProfileSection( lpAppName : PKOLChar; lpReturnedString : PKOLChar; nSize : DWORD) : DWORD
12688:
                 Function wGetProfileString(lpAppName,lpKeyName,
                lpDefault:PKOLChar;lpReturnedStr:PKOLChar;nSize:DWORD):DWORD;
                 Function wGetShortPathName( lpszLongPath:PKOLChar;lpszShortPath: PKOLChar; cchBuffer : DWORD) : DWORD
                  //Procedure wGetStartupInfo( var lpStartupInfo : TStartupInfo)
12690:
12691:
                // Function wGetStringTypeEx(Locale:LCID; dwInfoType:DWORD;lpSrcStr:PKOLChar;cchSrc:Integer;var
                lpCharType):BOOL
12692:
                 Function wGetSystemDirectory( lpBuffer : PKOLChar; uSize : UINT) : UINT
                 Function wGetTempFileName( lpPathName, lpPrefixString: PKOLChar;uUnique:UINT;lpTempFileName:PKOLChar):UINT
Function wGetTempPath( nBufferLength : DWORD; lpBuffer : PKOLChar) : DWORD
12694:
12695:
                //Function
                wGetTimeFormat(Loc:LCID;dwFlqs:DWORD;lpTime:PSystemTime;lpFrm;PKOLChar;lpTimeStr:PKOLChar;cTime:Int):Int
               //Function wGetVersionEx( var lpVersionInformation : TOSVersionInfo) : BOOL
12696:
                //Function GetVolumeInformation( lpRootPathName : PKOLChar; lpVolumeNameBuffer : PKOLChar; nVolumeNameSize
12697:
                   DWORD; lpVolumeSerialNumber : PDWORD; var lpMaximumComponentLength, lpFileSystemFlags : DWORD;
lpFileSystemNameBuffer : PKOLChar; nFileSystemNameSize : DWORD) : BOOL
12698: Function wGetWindowsDirectory( lpBuffer : PKOLChar; uSize : UINT) : UINT
12699: Function wGlobalAddAtom( lpString : PKOLChar) : ATOM
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Function wGlobalFindAtom( lpString : PKOLChar) : ATOM
Function wGlobalGetAtomName( nAtom : ATOM; lpBuffer : PKOLChar; nSize : Integer) : UINT
12700:
12701:
                Function wIsBadStringPtr( lpsz : PKOLChar; ucchMax : UINT) : BOOL
12703:
               Function
              wLCMapString(Loc:LCID;dwMapFlgs:DWORD;lpSrcStr:PKOLChar;cchSrc:Int;lpDestStr:PKOLChar;cchDest:Int):Int;lpDestStr:PKOLChar;cchDest:Int):Int;lpDestStr:PKOLChar;cchDest:Int):Int;lpDestStr:PKOLChar;cchDest:Int):Int;lpDestStr:PKOLChar;cchDest:Int):Int;lpDestStr:PKOLChar;cchDest:Int;lpDestStr:PKOLChar;cchDest:Int;lpDestStr:PKOLChar;cchDest:Int;lpDestStr:PKOLChar;cchDest:Int;lpDestStr:PKOLChar;cchDest:Int;lpDestStr:PKOLChar;cchDest:Int;lpDestStr:PKOLChar;cchDest:Int;lpDestStr:PKOLChar;cchDest:Int;lpDestStr:PKOLChar;cchDest:Int;lpDestStr:PKOLChar;cchDest:Int;lpDestStr:PKOLChar;cchDest:Int;lpDestStr:PKOLChar;cchDest:Int;lpDestStr:PKOLChar;cchDest:Int;lpDestStr:PKOLChar;cchDest:Int;lpDestStr:PKOLChar;cchDest:Int;lpDestStr:PKOLChar;cchDest:Int;lpDestStr:PKOLChar;cchDest:Int;lpDestStr:PKOLChar;cchDest:Int;lpDestStr:PKOLChar;cchDest:Int;lpDestStr:PKOLChar;cchDest:Int;lpDestStr:PKOLChar;cchDest:Int;lpDestStr:PKOLChar;cchDest:Int;lpDestStr:PKOLChar;cchDest:Int;lpDestStr:PKOLChar;cchDest:Int;lpDestStr:PKOLChar;cchDest:Int;lpDestStr:PKOLChar;cchDest:Int;lpDestStr:PKOLChar;cchDest:Int;lpDestStr:PKOLChar;cchDest:Int;lpDestStr:PKOLChar;cchDest:Int;lpDestStr:PKOLChar;cchDest:Int;lpDestStr:PKOLChar;cchDest:Int;lpDestStr:PKOLChar;cchDest:Int;lpDestStr:PKOLChar;cchDest:Int;lpDestStr:PKOLChar;cchDest:Int;lpDestStr:PKOLChar;cchDest:Int;lpDestStr:PKOLChar;cchDest:Int;lpDestStr:PKOLChar;cchDest:Int;lpDestStr:PKOLChar;cchDest:Int;lpDestStr:PKOLChar;cchDest:Int;lpDestStr:PKOLChar;cchDest:Int;lpDestStr:PKOLChar;cchDest:Int;lpDestStr:PKOLChar;cchDest:Int;lpDestStr:PKOLChar;cchDest:Int;lpDestStr:PKOLChar;cchDest:Int;lpDestStr:PKOLChar;cchDest:Int;lpDestStr:PKOLChar;cchDest:Int;lpDestStr:PKOLChar;cchDest:Int;lpDestStr:PKOLChar;cchDest:Int;lpDestStr:PKOLChar;cchDest:Int;lpDestStr:PKOLChar;cchDest:Int;lpDestStr:PKOLChar;cchDest:Int;lpDestStr:PKOLChar;cchDest:Int;lpDest:Int;lpDest:Int;lpDest:Int;lpDest:Int;lpDest:Int;lpDest:Int;lpDest:Int;lpDest:Int;lpDest:Int;lpDest:Int;lpDest:Int;lpDest:Int;lpDest:Int;lpDest:Int;lpDest:Int;lpDest:Int;lpDest:In
               Function wLoadLibrary( lpLibFileName : PKOLChar) : HMODULE
Function wLoadLibraryEx( lpLibFileName : PKOLChar; hFile : THandle; dwFlags : DWORD) : HMODULE
12704:
12705:
12706:
                Function wMoveFile( lpExistingFileName, lpNewFileName : PKOLChar) : BOOL
12707:
                Function wMoveFileEx( lpExistingFileName, lpNewFileName : PKOLChar; dwFlags : DWORD) : BOOL
12708:
                // Function \ w \textit{MoveFileWithProgress} (\ lp \textit{ExistingFileName}, \ lp \textit{NewFileName} : \ PKOLChar; \ lp \textit{ProgressRoutine} : \ lp \textit{NewFileName} : \ l
             TFNProgressRoutine; IpData : Pointer; dwFlags : DWORD) : BOOL

Function wOpenEvent( dwDesiredAccess : DWORD; bInheritHandle : BOOL; lpName: PKOLChar) : THandle
12709:
12710:
                Function wOpenFileMapping( dwDesiredAccess : DWORD; bInheritHandle:BOOL; lpName: PKOLChar):THandle
                Function wOpenMutex( dwDesiredAccess : DWORD; bInheritHandle : BOOL; lpName : PKOLChar) : THandle
12711:
                Function wOpenSemaphore( dwDesiredAccess : DWORD; bInheritHandle : BOOL; lpName : PKOLChar):THandle
12712:
12713:
                Function wOpenWaitableTimer(dwDesiredAccess:DWORD;bInheritHandle:BOOL;lpTimerName:PKOLChar):THandle
12714:
                Procedure wOutputDebugString( lpOutputString : PKOLChar)
12715:
                //Function wPeekConsoleInput(hConsoleInput:THandle;var lpBuffer:TInputRecord;nLength:DWORD;var
              lpNumberOfEventsRead:DWORD):BOOL;
Function wQueryDosDevice( lpDeviceName : PKOLChar; lpTargetPath : PKOLChar; ucchMax : DWORD) : DWORD
                 //Function wQueryRecoveryAgents(p1:PKOLChar;var p2:Pointer;var p3:TRecoveryAgentInformation):DWORD
                 //Function wReadConsole( hConsoleInput : THandle; lpBuffer : Pointer; nNumberOfCharsToRead : DWORD; var
12718:
              lpNumberOfCharsRead : DWORD; lpReserved : Pointer) : BOOL
12719:
                //Function wReadConsoleInput(hConsInp:THandle;var lpBuf:TInpRec;nLength:DWORD;var
              lpNumbOfEventsRead:DWORD):BOOL;
12720:
                //Function wReadConsoleOutput( hConsoleOutput : THandle; lpBuffer : Pointer; dwBufferSize, dwBufferCoord
              //Tunction wReadConsoleOutputCharacter( hConsoleOutput : THandle; lpCharacter : PKOLChar; nLength :
12721:
             DWORD; dwReadCoord: TCoord; var lpNumberOfCharsRead: DWORD): BOOL
Function wRemoveDirectory( lpPathName: PKOLChar): BOOL
                //Function wScrollConsoleScreenBuffer( hConsoleOutput : THandle; const lpScrollRectangle : TSmallRect;
12723:
              lpClipRectangle : PSmallRect; dwDestinationOrigin : TCoord; var lpFill : TCharInfo) : BOOL
               Function wSearchPath( lpPath,lpFileName,lpExtension:PKOLChar;nBufferLength:DWORD;lpBuffer:PKOLChar;var
              lpFilePart:PKOLChar):DWORD;
12725:
               Function wSetComputerName( lpComputerName: PKOLChar): BOOL Function wSetConsoleTitle( lpConsoleTitle: PKOLChar): BOOL
12726:
               Function wSetConsoleTitle( lpConsoleTitle : PKOLChar) : BOOL
Function wSetCurrentDirectory( lpPathName : PKOLChar) : BOOL
//Function wSetDefaultCommConfig( lpszName : PKOLChar) : BOOL
Function wSetEnvironmentVariable( lpName, lpValue : PKOLChar) : BOOL
Function wSetFileAttributes( lpFileName : PKOLChar; dwFileAttributes : DWORD) : BOOL
12727:
12728:
12729:
12730:
               //Function wSetLocaleInfo( Locale : LCID; LCType : LCTYPE; lpLCData : PKOLChar) : BOOL Function wSetVolumeLabel( lpRootPathName : PKOLChar; lpVolumeName : PKOLChar) : BOOL //Function wUpdateResource(hUpdate:THandle;lpType,
12731:
12732:
12733:
               lpName:PKOLChar;wLanguage:Word;lpData:Ptr;cbData:DWORD):BOOL
12734:
                Function wVerLanguageName( wLang : DWORD; szLang : PKOLChar; nSize : DWORD) : DWORD
                \textbf{Function} \ \ \textbf{w} \\ \textbf{WaitNamedPipe} ( \ \ lp \\ \textbf{NamedPipeName} \ : \ \ PKOLChar; \ \ n \\ \textbf{TimeOut} \ : \ \ DWORD) \ : \ BOOL
12735:
                //Function wWriteConsole( hConsoleOutput : THandle; const lpBuffer : Pointer; nNumberOfCharsToWrite :
12736:
              DWORD; var lpNumberOfCharsWritten : DWORD; lpReserved : Pointer) : BOOL
                //Function wWriteConsoleInput( hConsoleInput : THandle; const lpBuffer : TInputRecord; nLength : DWORD;
             var lpNumberOfEventsWritten : DWORD) : BOOL
12738:
               //Function wWriteConsoleOutput(hConsoleOutput:THandle; lpBuffer:Pointer; dwBufferSize,dwBufferCoord :
             TCoord; var lpWriteRegion : TSmallRect) : BOOL
//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
12740:
12741:
                Function wWriteProfileSection( lpAppName, lpString : PKOLChar) : BOOL
12743:
                Function wWriteProfileString( lpAppName, lpKeyName, lpString : PKOLChar) : BOOL
               Function wlstrcat( lpString1, lpString2 : PKOLChar) : PKOLChar
Function wlstrcmp( lpString1, lpString2 : PKOLChar) : Integer
Function wlstrcmpi( lpString1, lpString2 : PKOLChar) : Integer
12744:
12745:
12746:
12747:
                Function wlstrcpy( lpString1, lpString2 : PKOLChar) : PKOLChar
12748:
                \textbf{Function} \  \, \text{wlstrcpyn} \, (\  \, \text{lpString1} \, , \, \, \text{lpString2} \, : \, \, \text{PKOLChar}; \, \, \text{iMaxLength} \, : \, \, \text{Integer}) \, : \, \, \text{PKOLChar}
12749:
                Function wlstrlen( lpString : PKOLChar) : Integer
                // Function \ w \texttt{MultinetGetConnectionPerformance(} \ lp \texttt{NetResource:} \ P \texttt{NetResource;} \ lp \texttt{NetConnectInfoStruc:} \\
12750:
              PNetConnectInfoStruct) : DWORD
12751:
                //Function wWNetAddConnection2(var lpNetResource:TNetResource;lpPassword,
               lpUserName:PKOLChar;dwFlags:DWORD):DWORD;
12752:
               //Function wWNetAddConnection3( hwndOwner : HWND; var lpNetResource:TNetResource;lpPassword,
              lpUserName:PKOLChar; dwFlags: DWORD) : DWORD

Function wWNetAddConnection( lpRemoteName, lpPassword, lpLocalName : PKOLChar) : DWORD
12753:
12754:
                \textbf{Function} \ \ \text{wWNetCancelConnection2} ( \ \ \text{lpName} \ : \ \ \text{PKOLChar}; \ \ \text{dwFlags} \ : \ \ \text{DWORD}; \ \ \text{fForce} \ : \ \ \text{BOOL}) \ : \ \ \text{DWORD} 
                Function wWNetCancelConnection( lpName : PKOLChar; fForce : BOOL) : DWORD //Function wWNetConnectionDialog1( var lpConnDlgStruct : TConnectDlgStruct) : DWORD //Function wWNetDisconnectDialog1( var lpConnDlgStruct : TDiscDlgStruct) : DWORD
12755:
12756:
12757:
12758:
                //Function wWNetEnumResource(hEnum:THandle;var lpcCount:DWORD;lpBuffer:Ptr;var lpBufferSize:DWORD):DWORD;
12759:
                Function wWNetGetConnection(lpLocalName:PKOLChar;lpRemoteName:PKOLChar; var lpnLength:DWORD):DWORD;
               Function wWNetGetLastError( var lpError: DWORD; lpErrorBuf: PKOLChar; nErrorBufSize: DWORD; lpNameBuf: PKOLChar; nNameBufSize: DWORD): DWORD
12760:
                //Function wWNetGetNetworkInformation(lpProvider:PKOLChar;var lpNetInfoStruct:TNetInfoStruct):DWORD;
                Function wWNetGetProviderName(dwNetType:DWORD;lpProviderName:PKOLChar;var lpBufferSize:DWORD):DWORD;
12762:
12763:
                //Function wWNetGetResourceParent(lpNetResource:PNetResource;lpBuffer:Pointer;var cbBuffer:DWORD):DWORD;
12764:
              //Function wWNetGetUniversalName(lpLocalPath:PKOLChar;dwInfoLevel:DWORD;lpBuffer:Ptr;var
              lpBufferSize:DWORD):DWORD;
               Function wWNetGetUser( lpName : PKOLChar; lpUserName : PKOLChar; var lpnLength : DWORD) : DWORD
12766: // Function wWNetOpenEnum(dwScope,dwType,dwUsage:DWORD;lpNetResource:PNetRes;var lphEnum:THandle):DWORD;
12767: // Function wWNetSetConnection( lpName : PKOLChar; dwProperties : DWORD; pvValues : Pointer) : DWORD 12768: //Function wWNetUseConnection(hwndOwner:HWND;var
               lpNetResource:TNetResource;lpUserID:PKOLChar;lpPassword:PKOLChar; dwFlags:DWORD;lpAccessName:PKOLChar;var
              lpBufferSize:DWORD;var lpResult:DWORD):DWORD
```

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\textbf{Function} \ \ \texttt{wGetFileVersionInfo(lptstrFilename:PKOLChar;dwHandle,dwLen:DWORD;lpData:Pointer):BOOL;idevalues and the state of th
12769:
12770:
                     Function wGetFileVersionInfoSize( lptstrFilename : PKOLChar; var lpdwHandle : DWORD) : DWORD
12771: Function wVerFindFile( uFlags : DWORD; szFileName, szWinDir, szAppDir, szCurDir : PKOLChar; var lpuCurDirLen : UINT; szDestDir : PKOLChar; var lpuDestDirLen : UINT) : DWORD
12772: Function wVerInstallFile( uFlags : DWORD; szSrcFileName, szDestFileName, szSrcDir, szDestDir, szCurDir,
                  szTmpFile : PKOLChar; var lpuTmpFileLen : UINT) : DWORD
12773: //Function wVerQueryValue(pBlock:Pointer;lpSubBlock:PKOLChar;var lplpBuffer:Ptr;var puLen:UINT):BOOL;
12774: //Function wGetPrivateProfileStruct(lpszSection,
                   lpszKey:PKOLChar;lpStruct:Ptr;uSizeStruct:UINT;szFile:PKOLChar):BOOL;
12775: //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
12777:
12778:
12779:
                  //Function wCreateColorSpace( var ColorSpace: TLogColorSpace): 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, fdwUnderline, fdwStrikeOut,fdwCharSet,fdwOutputPrec,fdwClipPrecision,fdwQualy,
12781:
12782:
12783:
                   fdwPitchAndFamily:DWORD;lpszFace:PKOLChar):HFONT;
12784:
                    Function wCreateFontIndirect( const p1 : TLogFont) : HFONT
                      //Function wCreateFontIndirectEx( const p1 : PEnumLogFontExDV) : HFONT
12785:
12786:
                    /\!/ \textit{Function wCreateIC( lpszDriver, lpszDevice, lpszOutput : PKOLChar; lpdvmInit : PDeviceMode) : HDC \textbf{Function wCreateMetaFile( pl : PKOLChar) : HDC} 
12788:
                     Function wCreateScalableFontResource( p1 : DWORD; p2, p3, p4 : PKOLChar) : BOOL
12789: //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);
12791:
12792:
                     // Function \ w Enum Fonts (DC:HDC; lpszFace:PKOLChar; fintenmprc:TFNFontEnum Proc; lpszData:PKOLChar): Integer; fintenmproc; f
12793:
                      //Function wEnumICMProfiles( DC : HDC; ICMProc : TFNICMEnumProc; p3 : LPARAM) : Integer
                     //Function wExtTextOut(DC:HDC:X.
12794:
                  Y:Int;Options:Longint;Rect:PRect;Str:PKOLChar;Count:Longint;Dx:PInteger:BOOL
12795:
                    //Function wGetCharABCWidths( DC : HDC; FirstChar, LastChar : UINT; const ABCStructs) : BOOL
12796:
                      //Function wGetCharABCWidthsFloat( DC : HDC; FirstChar, LastChar : UINT; const ABCFloatSturcts) : BOOL
                     //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
12797:
12798:
12799:
12800:
                     // Function wGetCharacterPlacement(DC:HDC;p2:PKOLChar;p3,p4:BOOL;var p5:TGCPResults;p6:DWORD):DWORD
                  Function wGetEnhMetaFile(pl: PKOLChar): HENHMETAFILE

Function wGetEnhMetaFile(pl: PKOLChar): HENHMETAFILE; p2: UINT; p3: PKOLChar): UINT

// Function wGetEnhMetaFileDescription(pl: HENHMETAFILE; p2: UINT; p3: PKOLChar): UINT

// 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;
12801:
12802:
12803:
12804:
                   lpvBuffer : Pointer; const lpmat2 : TMat2) : DWORD
Function wGetICMProfile( DC : HDC; var Size : DWORD; Name : PKOLChar) : BOOL
12805:
                  // Function wGetLogColorSpace( p1 : HCOLORSPACE; var ColorSpace : TLogColorSpace; Size : DWORD) : BOOL
12806:
                     Function wGetMetaFile( p1 : PKOLChar) : HMETAFILE
12808:
                  // Function wGetObject( p1 : HGDIOBJ; p2 : Integer; p3 : Pointer) : Integer
                    //Function wGetOutlineTextMetrics( DC : HDC; p2 : UINT; OTMetricStructs : Pointer) : UINT 
//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
12809:
12810:
12811:
12812:
12813:
                     Function wGetTextFace( DC : HDC; Count : Integer; Buffer : PKOLChar)
                    //Function wGetTextMetrics( DC : HDC; var TM : TTextMetric) : BOOL

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

Function wRemoveFontResource( FileName : PKOLChar) : BOOL
12814:
12815:
12816:
                     //Function wRemoveFontResourceEx( p1 : PKOLChar; p2 : DWORD; p3 : PDesignVector) : BOOL
12817:
                    //Function wRessetDC( 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
12818:
12819:
12820:
12821:
12822:
                     Function wUpdateICMRegKey( p1 : DWORD; p2, p3 : PKOLChar; p4 : UINT) : BOOL
                    Function wwglUseFontBitmaps( DC : HDC; p2, p3, p4 : DWORD) : BOOL
//Function wwglUseFontOutlines(p1:HDC; p2,p3,p4:DWORD;p5,p6:Single;p7:Int;p8:PGlyphMetricsFloat):BOOL
Function wAppendMenu( hMenu : HMENU; uFlags, uIDNewItem : UINT; lpNewItem : PKOLChar) : BOOL
12823:
12824:
                     Function wCallMsgFilter( var lpMsg : TMsg; nCode : Integer) : BOOL
12826:
12827:
                     //Function
                  wCallWindowProc(lpPrevWndFunc:TFNWndProc; hWnd:HWND; Msq:UINT; wParam:WPARAM; lParam:LPARAM):LRESULT
12828:
                     //Function wChangeDisplaySettings( var lpDevMode : TDeviceMode; dwFlags : DWORD) : Longint
                   // Function wChangeDisplaySettingsEx( lpszDeviceName:PKOLChar;var lpDevMode: TDeviceMode; wnd : HWND;
12829:
                  dwFlags : DWORD; lParam : Pointer) : Longint
12830:
                    Function wChangeMenu(hMenu:HMENU;cmd:UINT;lpszNewItem:PKOLChar;cmdInsert:UINT;flags:UINT):BOOL;
12831:
                     Function wCharLower( lpsz : PKOLChar) : PKOLChar
12832:
                     Function wCharLowerBuff( lpsz : PKOLChar; cchLength : DWORD) : DWORD
                     Function wCharNext( lpsz : PKOLChar) : PKOLChar
12833:
12834:
                    //Function wCharNextEx( CodePage : Word; lpCurrentChar : LPCSTR; dwFlags : DWORD) : LPSTR Function wCharPrev( lpszStart : PKOLChar; lpszCurrent : PKOLChar) : PKOLChar
12835:
                   // Function wCharPrevEx( CodePage : Word; lpStart, lpCurrentChar : LPCSTR; dwFlags : DWORD) : LPSTR
Function wCharToOem( lpszSrc : PKOLChar; lpszDst : PKOLChar) : BOOL
12836:
12838:
                     Function wCharToOemBuff( lpszSrc : PKOLChar; lpszDst : PKOLChar; cchDstLength : DWORD) : BOOL
12839:
                    Function wCharUpper( lpsz : PKOLChar) : PKOLChar
                    Function wCharUpperBuff( lpsz : PKOLChar; cchLength : DWORD) : DWORD

Function wCopyAcceleratorTable( hAccelSrc : HACCEL; var lpAccelDst, cAccelEntries : Integer) : Integer
12840:
12841:
                     Function wCreateAcceleratorTable( var Accel, Count : Integer) : HACCEL
12842:
12843:
                     //Function wCreateDesktop(lpszDesktop,
                   lpsz Device: PKOLChar; pDevmode: PDeviceMode; dwFlags: DWORD; dwDesiredAccess: DWORD; lpsa: PSecurityAttribs): HDESK DWORD; dwDesiredAccess: DWORD; lpsa: PSecurityAttribs): HDESK DWORD; dwDesiredAccess: DWORD; lpsa: PSecurityAttribs): HDESK DWORD; dwDesiredAccess: DWO
                  //Function wCreateDialogIndirectParam( hInstance : HINST; const lpTemplate : TDlgTemplate; hWndParent : HWND; lpDialogFunc : TFNDlgProc; dwInitParam : LPARAM) : HWND
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//Function wCreateDialogParam( hInstance : HINST; lpTemplateName : PKOLChar; hWndParent : HWND; lpDialogFunc : TFNDlgProc; dwInitParam : LPARAM) : HWND

Function wCreateMDIWindow( lpClassName, lpWindowName:PKOLChar;dwStyle: DWORD; X,Y,nWidth,nHeight:Integer;
12845:
            hWndParent : HWND; hInstance : HINST; lParam : LPARAM) : HWND
12847: //Function wCreateWindowEx(dwExStyle:DWORD;1pClassName:PKOLChar;1pWindowName:PKOLChar;dwStyle DWORD;X,Y,
            nWidth, nHeight:Int WndParent:HWND;hMenu:HMENU;hInstance:HINST;lpParam:Pointer):HWND
              //Function wCreateWindowStation(lpwinsta:PKOLChar;dwReserv,
            dwDesiredAccess:DWORD;lpsa:PSecurityAttribs):HWINSTA;
12849:
             Function wDefDlgProc( hDlg : HWND; Msg : UINT; wParam : WPARAM; lParam : LPARAM) : LRESULT
12850:
              \textbf{Function} \ \ \text{wPerFrameProc}(\ \text{hWnd}, \ \text{hWndMDIClient}: \ \text{HWND}; \ \text{uMsg}: \ \text{UINT}; \ \text{wParam}: \ \text{WPARAM}; \ \text{1Param}: \ \text{LPARAM}): \ \text{LRESULT}; \ \text{LRESULT}; \ \text{LPARAM} : \ \text{
              Function wDefMDIChildProc( hWnd : HWND; uMsg : UINT; wParam : WPARAM; lParam: LPARAM):LRESULT;
12851:
              Function wDefWindowProc( hWnd : HWND; Msg : UINT; wParam : WPARAM; lParam:LPARAM): LRESULT
12853:
              //Function wDialogBoxIndirectParam( hInstance : HINST; const lpDialogTemplate : TDlgTemplate; hWndParent
               HWND; lpDialogFunc : TFNDlgProc; dwInitParam : LPARAM) : Integer
             //Function wDialogBoxParam( hInstance : HINST; lpTemplateName : PKOLChar; hWndParent : HWND; lpDialogFunc
12854:
             **TFND1gProc; dwInitParam : LPARAM) : Integer

Function wDispatchMessage( const lpMsg : TMsg) : Longint
             Function wDlgDirList(hDlg:HWND;lpPathSpec:PKOLChar;nIDListBox,
12856:
            nIDStaticPath:Integer;uFileType:UINT):Integer;
            Function wDlgDirListComboBox(hDlg:HWND;lpPathSpec:PKOLChar;nIDComboBox,
            nIDStaticPath:Int;uFiletype:UINT):Int;
12858:
            Function wDlgDirSelectComboBoxEx(hDlg: HWND; lpString:PKOLChar;nCount,nIDComboBox:Integer): BOOL
Function wDlgDirSelectEx(hDlg: HWND; lpString: PKOLChar; nCount, nIDListBox: Integer): BOOL
//Function wDrawState(DC:HDC;Brush:HBRUSH;CBFunc:TFNDrawStateProc;lData:LPARA;wDat:WPARA;x,y,cx,
12859:
12860:
            cy:Int;Flags:UINT):BOOL;
12861:
              Function wDrawText(hDC:HDC;lpString:PKOLChar;nCount:Integer;var lpRect:TRect;uFormat:UINT):Integer;
12862:
             Function wFindWindow( lpClassName, lpWindowName : PKOLChar) : HWND
Function wFindWindowEx( Parent, Child : HWND; ClassName, WindowName : PKOLChar) : HWND
12863:
              //Function wGetAltTabInfo(hwnd:HWND;iItem:Int;var
12864:
            pati:TAltTabInfo;pszItemText:PKOLChar;cchItemText:UINT):BOOL;
12865:
            /// 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; nIndex : Integer) : DWORD
Function wGetClassName( hWnd : HWND; lpClassName : PKOLChar; nMaxCount : Integer) : Integer
Function wGetClipboardFormatName( format : UINT; lpszFormatName:PKOLChar; cchMaxCount:Integer):Integer;
12866:
12867:
12868:
12870:
              Function wGetDlgItemText( hDlg: HWND;nIDDlgItem:Integer;lpString:PKOLChar;nMaxCount:Integer):UINT
             Function wGetKeyNameText( lParam : Longint; lpString : PKOLChar; nSize : Integer Function wGetKeyboardLayoutName( pwszKLID : PKOLChar) : BOOL
12871:
12872:
12873:
              //Function wGetMenuItemInfo( p1 : HMENU; p2 : UINT; p3 : BOOL; var p4 : TMenuItemInfo)
12874:
              Function wGetMenuString(hMenu:HMENU;uIDItem:UINT;lpString:PKOLChar;nMaxCount:Integer;uFlag:UINT):Integer;
12875:
              \textbf{Function} \ \ \text{wGetMessage} ( \ \textbf{var} \ \ \text{lpMsg} \ : \ \ \text{TMsg} \ ; \ \ \text{hWnd} \ : \ \ \text{HWND} \ ; \ \ \text{wMsgFilterMin}, \ \ \text{wMsgFilterMax} \ : \ \ \text{UINT}) \ : \ \ \text{BOOL}
             Function wGetProp( hWnd : HWND; lpString : PKOLChar) : THandle

//Function wGetTabbedTextExtent( hDC : HDC; lpString : PKOLChar; nCount, nTabPositions : Integer; var
12876:
12877:
             lpnTabStopPositions) : DWORD
12878:
            //Function wGetUserObjectInformation(hObj:THandle;nIndex:Int;pvInfo:Ptr;nLength:DWORD;var
            lpnLengthNeed:DWORD)BOOL;
Function wGetWindowLong( hWnd : HWND; nIndex : Integer) : Longint
12879:
             Function wGetWindowModuleFileName( hwnd: HWND; pszFileName: PKOLChar; cchFileNameMax: UINT): UINT Function wGetWindowText( hWnd: HWND; pszFileName: PKOLChar; nMaxCount: Integer): Integer
12880:
12881:
12882:
              Function wGetWindowTextLength( hWnd : HWND) : Integer
12883:
            //Function wGrayString(hDC:HDC;hBrush:HBRUSH;lpOutFunc:TFNGrayStrProc;lpDat:LPARA;nCnt,X,Y,nWidt,
            nHeigt:Int):BOOL;
12884:
             Function wInsertMenu( hMenu : HMENU; uPosition, uFlags, uIDNewItem : UINT; lpNewItem : PKOLChar) : BOOL
12885:
              //Function wInsertMenuItem( p1 : HMENU; p2 : UINT; p3 : BOOL; const p4 : TMenuItemInfo) : BOOL
12886:
              Function wIsCharAlpha(ch: KOLChar): BOOL
12887:
              Function wIsCharAlphaNumeric( ch : KOLChar)
12888:
              Function wIsCharLower( ch : KOLChar) : BOOL
              Function wIsCharUpper( ch : KOLChar) : BOOL
12889:
             Function wIsDialogMessage( hDlg : HWND; var lpMsg : TMsg) : BOOL
Function wLoadAccelerators( hInstance : HINST; lpTableName : PKOLChar) : HACCEL
Function wLoadBitmap( hInstance : HINST; lpBitmapName : PKOLChar) : HBITMAP
12890:
12891:
12892:
12893:
              Function wLoadCursor( hInstance : HINST; lpCursorName : PKOLChar) : HCURSOR
12894:
              \textbf{Function} \ \ \texttt{wLoadCursorFromFile(lpFileName: PKOLChar): HCURSOR}
              Function wLoadIcon( hInstance : HINST; lpIconName : PKOLChar) : HICON
12895:
             Function wboadImage(hInst:HINST:ImageName:PKOLChar;ImageType:UINT;X,Y:Integer;Flags:UINT): THandle
Function wboadKeyboardLayout(pwszKLID: PKOLChar; Flags: UINT): HKL
12896:
12897:
12898:
              Function wLoadMenu( hInstance : HINST; lpMenuName : PKOLChar) : HMENU
             //Function wLoadMenuIndirect( lpMenuTemplate : Pointer) : HMENU
Function wLoadString(hInstance:HINST;uID: UINT; lpBuffer :PKOLChar;nBufferMax:Integer):Integer
12899:
12900:
             Function wMapVirtualKey( uCode, uMapType : UINT) : UINT

Function wMapVirtualKeyE( uCode, uMapType : UINT) : UINT
12901:
12902:
12903:
              Function wMessageBox( hWnd : HWND; lpText, lpCaption : PKOLChar; uType : UINT) : Integer
12904:
              //Function wMessageBoxIndirect( const MsgBoxParams : TMsgBoxParams) : BOOL
Function wModifyMenu( hMnu : HMENU; uPosition, uFlags, uIDNewItem : UINT; lpNewItem : PKOLChar) : BOOL
12905:
12906:
12907:
              //Function wOemToAnsi( const lpszSrc : LPCSTR; lpszDst : LPSTR) : BOOL
12908:
              //7Function w0emToAnsiBuff( lpszSrc : LPCSTR; lpszDst : LPSTR; cchDstLength : DWORD) : BOOL
             //Function wOemToChar( lpszSrc : PKOLChar; lpszDst : PKOLChar) : BOOL

Function wOemToCharBuff( lpszSrc : PKOLChar; lpszDst : PKOLChar; cchDstLength : DWORD) : BOOL
12909:
12910:
              Function wOpenDesktop(lpszDesktop:PKOLChar;dwFlags:DWORD;fInherit:BOOL;dwDesiredAccess:DWORD): HDESK
12912:
              Function wOpenWindowStation( lpszWinSta : PKOLChar; fInherit : BOOL; dwDesiredAccess : DWORD): HWINSTA
             Function wPeekMessage( var lpMsg : TMsg; hWnd: HWND; wMsgFilterMin, wMsgFilterMax, wRemoveMsg:UINT):BOOL Function wPostMessage( hWnd : HWND; Msg : UINT; wParam : WPARAM; lParam : LPARAM) : BOOL Function wPostThreadMessage(idThread:DWORD; Msg : UINT; wParam : WPARAM; lParam : LPARAM) : BOOL
12913:
12914:
12915:
              Function wRealGetWindowClass( hwnd : HWND; pszType : PKOLChar; cchType : UINT) : UINT
12916:
12917:
            // Function wRegisterClass( const lpWndClass : TWndClass) : ATOM
12918: // Function wRegisterClassEx( const WndClass : TWndClassEx) : ATOM 12919: Function wRegisterClipboardFormat( lpszFormat : PKOLChar) : UINT
12920: // Function wRegisterDeviceNotification(hRecipient:THandle;NotificFilter:Pointer;Flags:DWORD):HDEVNOTIFY
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Function wRegisterWindowMessage( lpString : PKOLChar) : UINT
12921:
12922:
          Function wRemoveProp( hWnd : HWND; lpString : PKOLChar) : THandle
           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;
12924 .
12925:
         lpResultCallBack: TFNSendAsyncProc; dwData: DWORD): BOOL

Function wSendMessageTimeout(hWnd:HWND;Msg:UINT;wParam:WPARAM;lParam:LPARAM; fuFlags,uTimeout:UINT;var
         lpdwResult:DWORD): LRESULT
          Function wSendNotifyMessage( hWnd : HWND; Msg : UINT; wParam : WPARAM; lParam : LPARAM) : BOOL Function wSetClassLong( hWnd : HWND; nIndex : Integer; dwNewLong : Longint) : DWORD
12927:
12928:
          Function wSetDlgItemText( hDlg : HWND; nIDDlgItem : Integer; lpString : PKOLChar) : BOOL
//Function wSetMenuItemInfo( p1 : HMENU; p2 : UINT; p3 : BOOL; const p4 : TMenuItemInfo) : BOOL
12929:
12931:
           Function wSetProp( hWnd : HWND; lpString : PKOLChar; hData : THandle) : BOOL
12932:
          // 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
12933:
          //Function wSetWindowsHook( nFilterType : Integer; pfnFilterProc : TFNHookProc) : HHOOK
12935:
12036 .
           //Function wSetWindowsHookEx(idHook:Integer;lpfn:TFNHookProc;hmod:HINST;dwThreadId:DWORD):HHOOK;
         // Function wSystemParametersInfo( uiAction, uiParam : UINT; pvParam : Pointer; fWinIni: UINT):BOOL Function wTabbedTextOut(hDC:HDC;X,Y:Int;lpString:PKOLChar;nCount,nTabPositions:Int;var
12937:
12938:
         lpnTabStopPositions,nTabOrigin:Int):Longint;
12939:
          Function wTranslateAccelerator( hWnd : HWND; hAccTable : HACCEL; var lpMsg : TMsg) : Integer
12940:
          \textbf{Function} \ \ \texttt{wUnregisterClass( lpClassName : PKOLChar; hInstance : HINST) : BOOL}
          Function wVkKeyScan( ch : KOLChar) : SHORT
12941:
          Function wVkKeyScanEx(ch: KOLChar; dwhkl: HKL): SHORT
12942:
12943:
          Function wWinHelp( hWndMain : HWND; lpszHelp : PKOLChar; uCommand : UINT; dwData : DWORD) : BOOL
12944:
          Function wwsprintf( Output : PKOLChar; Format : PKOLChar) : Integer
          Function www.sprintf( Output : PKOLChar; Format : PKOLChar; arglist : va_list) : Integer
12945:
12946:
12947:
12948:
         'SID_REVISION', 'LongInt').SetInt(1);'FILENAME_ADVAPI32','String').SetString('ADVAPI32.DLL
12949:
           'PROC_CONVERTSIDTOSTRINGSIDA','String').SetString( 'ConvertSidToStringSidA
12950:
          Function GetDomainUserSidS(const domainName:String;const userName:String; var foundDomain:String):String;
          Function GetLocalUserSidStr( const UserName : string) : string
Function getPid4user( const domain : string; const user : string; var pid : dword) : boolean
12951:
12952:
          Function Impersonate2User( const domain : string/ const user : string) : boolean
Function GetProcessUserSypid( pid : DWORD; var UserName, Domain : AnsiString) : Boolean
Function KillProcessbyname( const exename : string; var found : integer) : integer
Function getWinProcessList : TStringList
12953:
12954:
12955:
12956:
12957:
12958:
         procedure SIRegister_AfSafeSync(CL: TPSPascalCompiler);
12959:
12960:
         begin
12961:
           'AfMaxSyncSlots','LongInt').SetInt( 64);
12962:
           'AfSynchronizeTimeout','LongInt').SetInt( 2000);
            TAfSyncSlotID' 'DWORD
12963:
            TAfSyncStatistics', 'record MessagesCount:Int;TimeoutMessages:Int;DisabledMessages:Int;end;
TAfSafeSyncEvent', 'Procedure (ID: TAfSyncSlotID)
12964:
12965:
12966:
           TAfSafeDirectSyncEvent', 'Procedure
12967:
          Function AfNewSyncSlot( const AEvent : TAfSafeSyncEvent) : TAfSyncSlotID
          Function AfReleaseSyncSlot( const ID : TAfSyncSlotID) : Boolean
12968:
          Function AfEnableSyncSlot( const ID : TAfSyncSlotID; Enable : Boolean) : Boolean
12969:
          Function AfValidateSyncSlot( const ID : TAfSyncSlotID) : Boolean
12970:
12971:
          Function AfSyncEvent( const ID : TAfSyncSlotID; Timeout : DWORD) : Boolean
12972:
          Function AfDirectSyncEvent( Event : TAfSafeDirectSyncEvent; Timeout : DWORD) : Boolean
12973:
          Function AfIsSyncMethod : Boolean
           Function AfSyncWnd : HWnd
12974:
12975:
          Function AfSyncStatistics : TAfSyncStatistics
12976:
          Procedure AfClearSyncStatistics
12977:
12978:
12979:
         procedure SIRegister AfComPortCore(CL: TPSPascalCompiler);
12980: begin
          'fBinary','LongWord').SetUInt( $00000001);
'fParity','LongWord').SetUInt( $00000002);
12981:
12982:
           'fOutxCtsFlow', 'LongWord').SetUInt( $0000004);
'fOutxDsrFlow', 'LongWord').SetUInt( $00000008);
12984:
           'fDtrControl', 'LongWord').SetUInt( $00000030);
12985:
           'fDtrControlDisable','LongWord').SetUInt( $00000000);
'fDtrControlEnable','LongWord').SetUInt( $00000010);
12986:
12987:
           'fDtrControlHandshake', 'LongWord').SetUInt( $00000020);
12988:
           'fDsrSensitivity','LongWord').SetUInt( $00000040);
'fTXContinueOnXoff','LongWord').SetUInt( $00000080);
12989:
12990:
           'fOutX','LongWord').SetUInt( $00000100);
'fInX','LongWord').SetUInt( $00000200);
12991:
12992:
12993:
           'fErrorChar', 'LongWord').SetUInt( $00000400);
           'fNull', 'LongWord').SetUInt( $00000800);
'fRtsControl', 'LongWord').SetUInt( $00003000);
'fRtsControlDisable', 'LongWord').SetUInt( $00001000);
'fRtsControlEnable', 'LongWord').SetUInt( $00001000);
12994:
12995:
12996:
12997:
12998:
           'fRtsControlHandshake', 'LongWord').SetUInt( $00002000);
           'fRtsControlToggle','LongWord').SetUInt( $00003000);
'fAbortOnError','LongWord').SetUInt( $00004000);
'fDummy2','LongWord').SetUInt( $FFFF8000);
12999:
13000:
13001:
13002:
            TAfCoreEvent', '( ceOutFree, ceLineEvent, ceNeedReadData, ceException )
           TafCoreEvent', 'Ceoutree, Cethnesvent, CeneedReadBata, Cethcep
FindClass('TOBJECT'), 'EafComPortCoreError
FindClass('TOBJECT'), 'TafComPortCore
TafComPortCoreEvent', 'Procedure ( Sender : TafComPortCore; Even'
13003:
13004:
13005:
             +'tKind : TAfCoreEvent; Data : DWORD)
```

```
13007:
                     SIRegister_TAfComPortCoreThread(CL);
13008:
                     SIRegister_TAfComPortEventThread(CL);
13009:
                      SIRegister_TAfComPortWriteThread(CL);
13010:
                     SIRegister TAfComPortCore(CL);
                  Function FormatDeviceName( PortNumber : Integer) : string
13011:
13012: end;
13013:
13014:
                procedure SIRegister_ApplicationFileIO(CL: TPSPascalCompiler);
13015: begin
                     TAFIOFileStreamEvent', 'Function ( const fileName : String; mode: Word) : TStream
13016:
                     TAFIOFileStreamExistsEvent', 'Function ( const fileName : String) : Boolean SIRegister_TApplicationFileIO(CL);
13017:
13018:
                     TDataFileCapability', '( dfcRead, dfcWrite )
TDataFileCapabilities', 'set of TDataFileCap
13019:
                     TDataFileCapabilities', 'set of TDataFileCapability
SIReqister TDataFile(CL);
13020:
13021:
                  //TDataFileClass', 'class of TDataFile
Function ApplicationFileIODefined : Boolean
13022:
13023:
13024 •
                  \textbf{Function} \ \texttt{CreateFileStream} (\textbf{const} \ \texttt{fileName} \colon \ \textbf{String}; \ \texttt{mode} \colon \ \texttt{WordfmShareDenyNone}) \colon \texttt{TStream} (\textbf{const} \ \texttt{fileName} ) \cap \texttt{TStream} (\textbf{const} \ \texttt{fileName}) \cap \texttt{TStream} (\textbf{const} \ \texttt{fileN
13025:
                  Function FileStreamExists(const fileName: String) : Boolean
13026:
                  //Procedure Register
13027:
13028:
                procedure SIRegister_ALFBXLib(CL: TPSPascalCompiler);
13029:
13030: begin
                     TALFBXFieldType', '( uftUnKnown, uftNumeric, uftChar, uftVarchar)
13031:
13032:
                        +', uftCstring, uftSmallint, uftInteger, uftQuad, uftFloat, uftDoublePrecisi'
13033:
                        +'on, uftTimestamp, uftBlob, uftBlobId, uftDate, uftTime, uftInt64, uftArray, uftNull )
                     TALFBXScale', 'Integer
FindClass('TOBJECT'),'EALFBXConvertError
13034:
13035:
                     SIRegister_EALFBXError(CL);
13036:
13037:
                     SIRegister_EALFBXException(CL);
                     FindClass('TOBJECT'), 'EALFBXGFixError
FindClass('TOBJECT'), 'EALFBXDSQLError
13038:
13039:
                     FindClass('TOBJECT'), 'EALFBXDynError
FindClass('TOBJECT'), 'EALFBXGBakError
13040:
13041:
13042:
                     FindClass('TOBJECT'), 'EALFBXGSecError
                     FindClass('TOBJECT'), 'EALFBXLicenseError
FindClass('TOBJECT'), 'EALFBXGStatError
13043:
13044:
                      //EALFBXExceptionClass', 'class of EALFBXError
TALFBXCharacterSet', '(csNONE, csASCII, csBIG_5, csCYRL, csDOS4'
13045:
13046:
                       +'37, csDOS850, csDOS852, csDOS857, csDOS860, csDOS861, csDOS863, csDOS865, '
+'csEUCJ_0208, csGB_2312, csISO8859_1, csISO8859_2, csKSC_5601, csNEXT, csOC'
+'TETS, csSJIS_0208, csUNICODE_FSS, csUTF8, csWIN1250, csWIN1251, csWIN1252,'
13047:
13048:
13049:
                        +' csWIN1253, csWIN1254, csDOS737, csDOS775, csDOS858, csDOS862, csDOS864, c'
13050:
                        +'sDOS866, csDOS869, csWIN1255, csWIN1256, csWIN1257, csISO8859_3, csISO8859'+'_4, csISO8859_5, csISO8859_6, csISO8859_7, csISO8859_8, csISO8859_9, csISO'+'8859_13, csKO18R, csKO18U, csWIN1258, csTIS620, csGBK, csCP943C)
13051:
13052:
13053:
                                                                    '( tpConsistency, tpConcurrency, tpShared, tp'
                     TALFBXTransParam',
                        +'Protected, tpExclusive, tpWait, tpNowait, tpRead, tpWrite, tpLockRead, tpL'
+'ockWrite, tpVerbTime, tpCommitTime, tpIgnoreLimbo, tpReadCommitted, tpAuto'
13055:
13056:
13057:
                        +'Commit, tpRecVersion, tpNoRecVersion, tpRestartRequests, tpNoAutoUndo, tpLockTimeout)
13058:
                     TALFBXTransParams', 'set of TALFBXTransParam
                   \textbf{Function} \ \texttt{ALFBXStrToCharacterSet} ( \ \textbf{const} \ \texttt{CharacterSet} : \ \texttt{AnsiString}) : \ \texttt{TALFBXCharacterSet}
13059:
                  Function ALFBXStrToCharacterSet ( const CharacterSet : AnsiString) : TALFBXCharacterS
Function ALFBXCreateDBParams ( Params : AnsiString; Delimiter : Char) : AnsiString
Function ALFBXCreateBlobParams ( Params : AnsiString; Delimiter : Char) : AnsiString
'cALFBXMaxParamLength', 'LongInt').SetInt( 125);
TALFBXParamsFlag', '( pfNotInitialized, pfNotNullable )
TALFBXParamsFlags', 'set of TALFBXParamsFlag
//PALFBXSQLVar', '^TALFBXSQLVar // will not work
//PALFBXSQLDaData', '^TALFBXSQLDaData // will not work
TALFBXStatementType', '( stSelect, stInsert, stUpdate, stDelete,'

**LatFBXStatementType', '( stSelect, stInsert, stUpdate, stStantTrang, stCommit
13060:
13061:
13062:
13063:
13064:
13065:
13066:
13067:
13068:
                       +' stDDL, stGetSegment, stPutSegment, stExecProcedure, stStartTrans, stCommi'
13069:
                        +'t, stRollback, stSelectForUpdate, stSetGenerator, stSavePoint )
13070:
                     SIRegister TALFBXSOLDA(CL);
                      //PALFBXPtrArray', '^TALFBXPtrArray // will not work
SIRegister_TALFBXPoolStream(CL);
13071:
13072:
                     //PALFBXBlobData', '^TALFBXBlobData // will not work
TALFBXBlobData', 'record Size : Integer; Buffer : string; end
//PALFBXArrayDesc', 'ATALFBXArrayDesc // will not work
//TALFBXArrayDesc', 'TISCArrayDesc
13073:
13074:
13075:
13076:
                                                                   'TISCBlobDesc
13077:
                      //TALFBXBlobDesc',
                      //PALFBXArrayInfo', '^TALFBXArrayInfo // will not work
//TALFBXArrayInfo', 'record index : Integer; size : integer; info: TALFBXArrayDesc; end
13078:
13079:
13080:
                     SIRegister TALFBXSOLResult(CL);
13081:
                       //TALFBXSQLResultClass', 'class of TALFBXSQLResult
13082:
                      SIRegister_TALFBXSQLParams(CL);
13083:
                      //TALFBXSQLParamsClass', 'class of TALFBXSQLParams
                     TALFBXDSQLInfoData', 'record InfoCode : byte; InfoLen : Word; St' +'atementType : TALFBXStatementType; end
13084:
13085:
                     FindClass('TOBJECT'), 'TALFBXLibrary
//PALFBXStatusVector', '^TALFBXStatusVector'/ will not work
TALFBXOnConnectionLost', 'Procedure ( Lib : TALFBXLibrary)
13086:
13087:
13088:
                      //TALFBXOnGetDBExceptionClass', 'Procedure ( Number : Integer; out'
13089:
                        //+' Excep : EALFBXExceptionClass)
13090:
13091:
                      SIRegister_TALFBXLibrary(CL);
                    SIRegister_TALFBALLDIALY(LL),
'calFBXDateOffset','LongInt').SetInt( 15018);
'calFBXTimeCoeff','LongInt').SetInt( 864000000);
13092:
13093:
                   //Procedure ALFBXDecodeTimeStamp( v : PISCTimeStamp; out DateTime : Double);
//Procedure ALFBXDecodeTimeStamp1( v : PISCTimeStamp; out TimeStamp : TTimeStamp);
13094:
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13096:
          //Function ALFBXDecodeTimeStamp2( v: PISCTimeStamp): Double;
Procedure ALFBXDecodeSQLDate( v: Integer; out Year: SmallInt; out Month, Day: Word)
13097:
          Procedure ALFBXDecodeSQLTime(v:Cardinal;out Hour, Minute, Second: Word; out Fractions: LongWord)
13098:
13099:
           // Procedure \ ALFBXEncodeTimeStamp( \ const \ DateTime : \ TDateTime; \ v : PISCTimeStamp);
13100:
           //Procedure ALFBXEncodeTimeStamp1( const Date : Integer; v : PISCTimeStamp);
          //Procedure ALFBXEncodeTimeStamp2( const Time : Cardinal; v : PISCTimeStamp);
Function ALFBXEncodeSQLDate( Year : Integer; Month, Day : Integer) : Integer
13101:
13102:
13103:
          Function ALFBXEncodeSQLTime( Hour, Minute, Second : Word; var Fractions :
                                                                                                                LongWord): Cardinal
           TALFBXParamType', '( prNone, prByte, prShrt, prCard, prStrg, prIgno )
TALFBXDPBInfo', 'record Name : AnsiString; ParamType : TALFBXParamType; end
13104:
13105:
          Function ALFBXSQLQuote( const name : AnsiString) : AnsiString
Function ALFBXSQLUnQuote( const name : AnsiString) : AnsiString
13106:
13107:
13108: end;
13109:
         procedure SIRegister ALFBXClient(CL: TPSPascalCompiler);
13110:
13111: begin
            TALFBXClientSQLParam', 'record Value : AnsiString; IsNull : Boolean; end
13112:
            TALFBXClientSQLParams', 'array of TALFBXClientSQLParam
TALFBXClientSelectDataSQL', 'record SQL : AnsiString; Params : T'
+'ALFBXClientSQLParams; RowTag : AnsiString; ViewTag : AnsiString; Skip : in'
12112 •
13114:
13115:
              +'teger; First : Integer; CacheThreshold : Integer; end
13116:
            TALFBXClientSelectDataSQLs', 'array of TALFBXClientSelectDataSQL
TALFBXClientUpdateDataSQL', 'record SQL : AnsiString' Params: TALFBXClientSQLParams; end
TALFBXClientUpdateDataSQLs', 'array of TALFBXClientUpdateDataSQL
TALFBXClientMonitoringIOStats', 'record page_reads : int64; page'
+'_writes : int64; page_fetches : int64; page_marks : int64; end
13117:
13118:
13119:
13120:
13121:
13122:
            SIRegister TALFBXClient(CL);
13123:
            SIRegister_TALFBXConnectionStatementPoolBinTreeNode(CL);
13124:
            SIRegister_TALFBXConnectionStatementPoolBinTree(CL);
            {\tt SIRegister\_TALFBXConnectionWithStmtPoolContainer(CL)}
13125:
13126:
            SIRegister_TALFBXConnectionWithoutStmtPoolContainer(CL);
13127:
            SIRegister TALFBXReadTransactionPoolContainer(CL);
            SIRegister TALFBXReadStatementPoolContainer(CL);
13128:
13129:
            SIRegister_TALFBXStringKeyPoolBinTreeNode(CL);
            SIRegister_TALFBXConnectionPoolClient(CL)
13130:
13131:
            SIRegister TALFBXEventThread(CL);
13132:
            Function AlMySqlClientSlashedStr( const Str : AnsiString) : AnsiString
13133:
         end;
13134:
13135:
         procedure SIRegister_ovcBidi(CL: TPSPascalCompiler);
13136: begin
         _OSVERSIONINFOA = record
13137:
13138:
               dwOSVersionInfoSize: DWORD;
13139:
               dwMajorVersion: DWORD;
13140:
               dwMinorVersion: DWORD;
13141:
               dwBuildNumber: DWORD;
               dwPlatformId: DWORD;
13142:
13143:
               szCSDVersion: array[0..127] of AnsiChar; { Maintenance AnsiString for PSS usage }
13144:
          TOSVersionInfoA', '_OSVERSIONINFOA
TOSVersionInfo', 'TOSVersionInfoA
13145:
13146:
           'WS_EX_RIGHT','LongWord').SetUInt( $00001000);
'WS_EX_LEFT','LongWord').SetUInt( $00000000);
13147:
13148:
          WS_EX_LEFT , LongWord ').SetUInt( $00002000);
'WS_EX_RTLREADING', 'LongWord').SetUInt( $00002000);
'WS_EX_LTRREADING', 'LongWord').SetUInt( $00000000);
'WS_EX_LEFTSCROLLBAR', 'LongWord').SetUInt( $00004000);
'WS_EX_RIGHTSCROLLBAR', 'LongWord').SetUInt( $00000000);
13149:
13150:
13151:
13152:
13153:
          Function SetProcessDefaultLayout( dwDefaultLayout : DWORD) : BOOL
           'LAYOUT_RTL','LongWord').SetUInt( $00000001);
'LAYOUT_BTT','LongWord').SetUInt( $00000002);
13154:
13155:
13156:
           'LAYOUT_VBH', 'LongWord').SetUInt( $00000004);
           'LAYOUT_BITMAPORIENTATIONPRESERVED','LongWord').SetUInt( $00000008);
13157:
13158:
          'NOMIRRORBITMAP','LongWord').SetUInt( DWORD ( $80000000 ));
          Function SetLayout( dc : HDC; dwLayout : DWORD) : DWORD
Function GetLayout( dc : hdc) : DWORD
13159:
13160:
          Function IsBidi : Boolean
          Function GetCurrentHwProfile( var lpHwProfileInfo : THWProfileInfo) : BOOL
13162:
13163:
          \textbf{Function} \ \ \texttt{GetVersionEx}( \ \ \textbf{var} \ \ \texttt{lpVersionInformation} \ : \ \ \texttt{TOSVersionInfo}) \ : \ \ \texttt{BOOL}
13164:
          Function SetPriorityClass( hProcess : THandle; dwPriorityClass: DWORD) : BOOL
Function GetPriorityClass( hProcess : THandle) : DWORD
13165:
13166:
          Function OpenClipboard( hWndNewOwner : HWND) : BOOL
13167:
          Function CloseClipboard : BOOL
13168:
          Function GetClipboardSequenceNumber : DWORD
13169:
          Function GetClipboardOwner : HWND
13170:
          Function SetClipboardViewer( hWndNewViewer : HWND) : HWND
13171:
          Function GetClipboardViewer : HWND
          Function ChangeClipboardChain( hWndRemove, hWndNewNext : HWND) : BOOL Function SetClipboardData( uFormat : UINT; hMem : THandle) : THandle Function GetClipboardData( uFormat : UINT) : THandle
13172:
13173:
13174:
          Function RegisterClipboardFormat( lpszFormat : PChar) : UINT
Function CountClipboardFormats : Integer
13176:
          Function EnumClipboardFormats( format : UINT) : UINT
13177:
          Function GetClipboardFormatName(format:UINT;lpszFormatName:PChar;cchMaxCount:Integer):Integer
13178:
13179:
          Function EmptyClipboard : BOOL
          Function IsClipboardFormatAvailable( format : UINT) : BOOL
13180:
          Function GetPriorityClipboardFormat( var paFormatPriorityList, cFormats: Integer): Integer Function GetOpenClipboardWindow: HWND
13181:
13182:
13183: Function EndDialog( hDlg : HWND; nResult : Integer) : BOOL
13184: Function GetDlgItem( hDlg : HWND; nIDDlgItem : Integer) : HWND
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Function SetDlgItemInt( hDlg : HWND; nIDDlgItem : Integer; uValue : UINT; bSigned: BOOL): BOOL
13185:
               Function GetDlgItemInt(hDlg:HWND;nIDDlgItem:Integer;var lpTranslated:BOOL;bSigned: BOOL): UINT
13186:
              Function SetDlgItemText( hDlg : HWND; nIDDlgItem : Integer; lpString : PChar) : BOOL Function CheckDlgButton( hDlg : HWND; nIDButton : Integer; uCheck : UINT) : BOOL
13188:
13189:
               Function CheckRadioButton( hDlg : HWND; nIDFirstButton, nIDLastButton, nIDCheckButton:Integer) : BOOL
              Function IsDlgButtonChecked( hDlg : HWND; nIDButton : Integer) : UINT
13190:
              Function SendDlgItemMessage(hDlg:HWND;nIDDlgItem:Int;Msg:UINT;wParam:WPARAM;lParam:LPARAM):Longint;
13191:
13192:
13193:
13194: procedure SIRegister DXPUtils(CL: TPSPascalCompiler);
13195: begin
13196:
             Function glExecuteAndWait(cmdLine:String; visibility:Word; timeout:Cardinal; killAppOnTimeOut:Bool):Int;
13197:
              Function GetTemporaryFilesPath : String
13198:
              Function GetTemporaryFileName : String
13199:
              Function FindFileInPaths( const fileName, paths : String) : String
13200:
               Function PathsToString( const paths : TStrings) : String
              Procedure StringToPaths( const pathsString : String; paths : TStrings)
13201:
13202:
               //Function MacroExpandPath( const aPath : String) : String
13203: end;
13204:
13205:
             procedure SIRegister ALMultiPartBaseParser(CL: TPSPascalCompiler);
13206: begin
13207:
                SIRegister_TALMultiPartBaseContent(CL);
                 SIRegister_TALMultiPartBaseContents(CL);
13208:
                SIRegister_TAlMultiPartBaseStream(CL);
13209:
13210:
                 SIRegister_TALMultipartBaseEncoder(CL);
13211:
                SIRegister_TALMultipartBaseDecoder(CL);
              Function ALMultipartExtractBoundaryFromContentType( aContentType : AnsiString) : AnsiString Function ALMultipartExtractSubValueFromHeaderLine(aHeaderLine:AnsiString;aName:AnsiString):AnsiString;
13212:
13213:
13214:
              \textbf{Function} \  \, \texttt{ALMultipartSetSubValueInHeaderLine} \\ (\text{aHeaderLine} : \texttt{AnsiString}; \\ \text{aName}, \\ \texttt{AValue} : \\ \texttt{AnsiString}) : \\ \texttt{AnsiString}; \\ \texttt{A
13215: end;
13216:
13217: procedure SIRegister SmallUtils(CL: TPSPascalCompiler);
13218: begin
13219:
                 TdriveSize', 'record FreeS : Int64; TotalS : Int64; end
13220:
                TWinVerRec', 'record WinPlatform : Integer; WinMajorVersion : In'
                   +teger; WinMinorVersion :Integer; WinBuildNumber : Integer; WinCSDVersion: String; end
13221:
13222:
              Function aAllocPadedMem( Size : Cardinal) : TObject
13223:
               Procedure aFreePadedMem( var P : TObject);
               Procedure aFreePadedMem1( var P : PChar);
13224:
13225:
              Function aCheckPadedMem( P : Pointer) : Byte
Function aGetPadMemSize( P : Pointer) : Cardinal
13226:
13227:
              Function aAllocMem( Size : Cardinal) : Pointer
               Function aStrLen( const Str : PChar) : Cardinal
13228:
              Function aStrLCopy( Dest : PChar; const Source : PChar; MaxLen : Cardinal) : PChar Function aStrECopy( Dest : PChar; const Source : PChar) : PChar
13229:
13230:
              Function aStrCopy( Dest : PChar; const Source : PChar) : PChar
13231:
              Function aStrEnd( const Str : PChar) : PChar
              Function aStrScan( const Str : PChar; aChr : Char) : PChar
13233:
13234:
              Function aStrMove( Dest : PChar; const Source : PChar; Count : Cardinal) : PChar
13235:
              Function aPCharLength( const Str : PChar) : Cardinal
              Function aPCharUpper(Str : PChar) : PChar
Function aPCharLower(Str : PChar) : PChar
13236:
13237:
              Function aStrCat( Dest: PChar; const Source: PChar): PChar
Function aStatCat( Dest: PChar; const Source: PChar): PChar
Function aLastDelimiter( const Delimiters, S: String): Integer
Function aCopyTail( const S: String; Len: Integer): String
Function aInt2Thos( I: Int64): String
13238:
13239:
13240:
13241:
              Function aUpperCase( const S : String) : String
13242:
13243:
              Function aLowerCase( const S : string) : String
              Function aCompareText( const S1, S2: string) : Integer Function aSameText( const S1, S2: string) : Boolean
13244:
13245:
13246:
               Function aInt2Str( Value : Int64) : String
              Function aStr2Int( const Value : String) : Int64
Function aStr2IntDef( const S : string; Default : Int64) : Int64
Function aGetFileExt( const FileName : String) : String
13247:
13248:
13249:
              Function aGetFilePath( const FileName : String) : String
               Function aGetFileName( const FileName : String) : String
13251:
13252:
              Function aChangeExt( const FileName, Extension : String) : String
13253:
              Function aAdjustLineBreaks( const S : string) : string
              Function aGetWindowStr( WinHandle : HWND) : String
Function aDiskSpace( Drive : String) : TdriveSize
13254:
13255:
13256:
              Function aFileExists( FileName : String) : Boolean
              Function aFileSize( FileName : String) : Int64
Function aDirectoryExists( const Name : string) : Boolean
13257:
13258:
               Function aSysErrorMessage( ErrorCode : Integer) : string
13259:
              Function aShortPathName( const LongName : string) : string
Function aGetWindowVer : TWinVerRec
13260:
13261:
              procedure InitDriveSpacePtr;
13262:
13263:
            end;
13264:
13265:
             procedure SIRegister_MakeApp(CL: TPSPascalCompiler);
13266: begin
13267:
              aZero', 'LongInt').SetInt( 0);
              aZeF0 , LongInt ( );
'makeappDEF','LongInt').SetInt( - 1);
'CS_WREDRAW','LongInt').SetInt( DWORD ( 1 ));
'CS_HREDRAW','LongInt').SetInt( DWORD ( 2 ));
'CS_KEYCVTWINDOW','LongInt').SetInt( 4);
13268:
13269:
13270:
13271:
             'CS_DBLCLKS','LongInt').SetInt( 8);
'CS_OWNDC','LongWord').SetUInt( $20);
13272:
```

```
'CS_CLASSDC','LongWord').SetUInt( $40);
'CS_PARENTDC','LongWord').SetUInt( $80);
'CS_NOKEYCVT','LongWord').SetUInt( $100);
'CS_NOCLOSE','LongWord').SetUInt( $200);
'CS_SAVEBITS','LongWord').SetUInt( $800);
13274:
13275:
13277.
13278:
          'CS_BYTEALIGNCLIENT', 'LongWord').SetUInt( $1000);
'CS_BYTEALIGNWINDOW', 'LongWord').SetUInt( $2000);
13279:
13280:
13281:
          'CS_GLOBALCLASS', 'LongWord').SetUInt( $4000);
          'CS_IME', 'LongWord').SetUInt( $10000);
'CS_DROPSHADOW', 'LongWord').SetUInt( $20000);
13282:
13283:
           //PPanelFunc', '^TPanelFunc // will not work
TPanelStyle', '(psEdge, psTabEdge, psBorder, psTabBorder, psTab, psNone )
13284:
13285:
         TFontLook', '( flBold, flItalic, flUnderLine, flStrikeOut )
TFontLooks', 'set of TFontLook
TMessagefunc', 'function(hWnd,iMsg,wParam,lParam:Integer):Integer)
13286:
13287:
13288:
13289:
          Function SetWinClass(const ClassName:String; pMessFunc: Tmessagefunc; wcStyle : Integer): Word
         Function SetWinClass() const ClassName: String; pMessFunc: TObject; wcStyle: Integer): Word Function SetWinClass( const ClassName: String; pMessFunc: TObject; wcStyle: Integer): Word Function MakeForm(Left,Top,Width,Height:Integer;const Caption:String;WinStyle:Integer):Integer
13290:
13291 .
13292:
         Procedure RunMsgLoop( Show : Boolean)
13293:
          Function MakeFont(Height, Width: Integer; const FontName: String; Look: TFontLooks; Roman: Boolean): Integer
13294:
         Function MakeButton(Left, Top, Width, Height:Integer; pCaption:PChar; hParent,
13295:
        ID_Number:Cardinal;hFont:Int):Int;
         Function MakeListBox(Left, Top, Width, Height, Parent:Integer; const ListItems: String; WinStyle:Integer):Integer
13296:
         Function MakeComboBox(Left, Top, Width, Height, Parent:Integer; const ListItems:String; WinStyle:Integer):Int
13297:
13298:
          Function MakePanel(Left, Top, Width, Height,
        hParent:Int;WndFunc:TPanelFunc;ID_Number:Card;Style:TPanelStyle):Int;
13299:
        Function MakeSubMenu(const ItemList: String; ID1, ID2: Cardinal; hMenu: Integer): Integer Function id4menu(a, b: Byte; c: Byte; d: Byte): Cardinal
13300:
         Procedure DoInitMakeApp //set first to init formclasscontrol
13301:
13302:
13303:
13304: procedure SIRegister ScreenSaver(CL: TPSPascalCompiler);
13305:
        begin
13306:
           TScreenSaverOption', '( ssoAutoAdjustFormProperties, ssoAutoHook'
13307:
            + {\tt 'KeyboardEvents, ssoAutoHookMouseEvents, ssoEnhancedMouseMoveDetection })\\
        TScreenSaverOptions', 'set of TScreenSaverOption
'cDefaultScreenSaverOptions','LongInt').Value.ts32:=ord(ssoAutoAdjustFormProperties) or
ord(ssoAutoHookKeyboardEvents) or ord(ssoEnhancedMouseMoveDetection);
13308:
13309:
13310:
           TScreenSaverPreviewEvent',
                                              'Procedure ( Sender : TObject; previewHwnd: HWND)
           SIRegister_TScreenSaver(CL);
13311:
13312:
          //Procedure Register
          Procedure SetScreenSaverPassword
13313:
13314:
13315:
13316: procedure SIRegister XCollection(CL: TPSPascalCompiler);
13317:
        begin
13318:
           FindClass('TOBJECT'), 'TXCollection
13319:
           SIRegister_EFilerException(CL);
13320:
           SIRegister TXCollectionItem(CL);
13321:
           //TXCollectionItemClass', 'class of TXCollectionItem
           SIRegister_TXCollection(CL);
13322:
13323:
         Procedure RegisterXCollectionDestroyEvent( notifyEvent : TNotifyEvent)
13324:
         Procedure DeRegisterXCollectionDestroyEvent( notifyEvent : TNotifyEvent)
         Procedure RegisterXCollectionItemClass( aClass : TXCollectionItemClass)
Procedure UnregisterXCollectionItemClass( aClass : TXCollectionItemClass)
13325:
13326:
          Function FindXCollectionItemClass( const className : String) : TXCollectionItemClass
13327:
13328:
         Function GetXCollectionItemClassesList( baseClass : TXCollectionItemClass) : TList
13329: end;
13330:
13331: procedure SIRegister_XOpenGL(CL: TPSPascalCompiler);
13332:
        begin
13333:
           TMapTexCoordMode', '(mtcmUndefined, mtcmNull, mtcmMain, mtcmDual, mtcmSecond, mtcmArbitrary);
13334:
         Procedure xglMapTexCoordToNull
         Procedure xglMapTexCoordToMain
13335:
         Procedure xglMapTexCoordToSecond
          Procedure xglMapTexCoordToDual
13337:
         Procedure xglMapTexCoordToArbitrary( const units : array of Cardinal);
Procedure xglMapTexCoordToArbitrary1( const bitWiseUnits : Cardinal);
13338:
13339:
         Procedure xglMapTexCoordToArbitraryAdd( const bitWiseUnits : Cardinal)
13340:
13341:
          Procedure xglBeginUpdate
13342:
         Procedure xglEndUpdate
13343:
         Procedure xglPushState
13344:
         Procedure xglPopState
13345:
         Procedure xglForbidSecondTextureUnit
13346:
          Procedure xglAllowSecondTextureUnit
13347:
         Function xqlGetBitWiseMapping : Cardinal
13348: end;
13349:
13350:
        procedure SIRegister_VectorLists(CL: TPSPascalCompiler);
13351:
           TBaseListOption', '( bloExternalMemory, bloSetCountResetsMemory)
TBaseListOptions', 'set of TBaseListOption
13352:
13353:
13354:
           SIRegister_TBaseList(CL);
13355:
           SIRegister_TBaseVectorList(CL);
13356:
           SIRegister_TAffineVectorList(CL);
           SIRegister_TVectorList(CL);
SIRegister_TTexPointList(CL);
13357:
13358:
           SIRegister_TXIntegerList(CL);
```

```
//PSingleArrayList', '^TSingleArrayList // will not work
13360:
13361:
           SIRegister_TSingleList(CL);
13362:
           SIRegister_TByteList(CL);
13363:
          SIRegister_TQuaternionList(CL);
         Procedure QuickSortLists( startIndex, endIndex : Integer; refList : TSingleList; objList : TList);

Procedure QuickSortLists( startIndex, endIndex : Integer; refList : TSingleList; objList : TBaseList);
13364:
13365:
         Procedure FastQuickSortLists(startIndex,
13366:
        endIndex:Integer;refList:TSingleList;objList:TPersistentObjectList);
13367:
13368:
13369:
        procedure SIRegister_MeshUtils(CL: TPSPascalCompiler);
13370:
        begin
13371:
         Procedure ConvertStripToList( const strip : TAffineVectorList; list : TAffineVectorList);
         Procedure ConvertStripToList1( const strip : TIntegerList; list : TIntegerList);
Procedure ConvertStripToList2(const strip:TAffineVectorList;const
13372:
13373:
        indices:TIntegerList;list:TAffineVectorList);
         Procedure ConvertIndexedListToList(const data:TAffineVectlist;const
        indices:TIntegerList;list:TAffineVectorList);
13375: Function BuildVectorCountOptimizedIndices(const vertices:TAffineVectorList; const
        normals:TAffineVectorList; const texCoords : TAffineVectorList) : TIntegerList
         Procedure RemapReferences ( reference : TAffineVectorList; const indices : TIntegerList);
         Procedure RemapReferences1( reference : TIntegerList; const indices : TIntegerList);
13377:
         Procedure RemapAndCleanupReferences (reference: TAffineVectorList; indices: TIntegerList)
Function RemapIndicesToIndicesMap(remapIndices: TIntegerList): TIntegerList
13378:
13379:
         Procedure RemapTrianglesIndices( indices, indicesMap : TIntegerList)
13380:
13381:
         Procedure RemapIndices( indices, indicesMap : TIntegerList)
13382:
         Procedure UnifyTrianglesWinding( indices : TIntegerList)
Procedure InvertTrianglesWinding( indices : TIntegerList)
Function BuildNormals( reference : TAffineVectorList; indices : TIntegerList) : TAffineVectorList
13383:
13384:
         Function BuildNonOrientedEdgesList(triangleIndices:TIntegerList; triangleEdges : TIntegerList;
        edgesTriangles : TIntegerList) : TIntegerList
         Procedure WeldVertices( vertices : TAffineVectorList; indicesMap : TIntegerList; weldRadius : Single)
13386:
         Function StripifyMesh(indices:TIntegerList; maxVertexIndex:Integer; agglomerateLoneTriangles:Boolean):
13387:
        TPersistentObjectList;
         Procedure IncreaseCoherency( indices : TIntegerList; cacheSize : Integer)

Procedure SubdivideTriangles( smoothFactor : Single; vertices : TAffineVectorList; triangleIndices :
13389:
        TIntegerList; normals : TAffineVectorList; onSubdivideEdge : TSubdivideEdgeEvent)
13390:
        end;
13391:
13392:
        procedure SIRegister_JclSysUtils(CL: TPSPascalCompiler);
13393:
        begin
         Procedure GetAndFillMem( var P : TObject; const Size : Integer; const Value : Byte)
Procedure FreeMemAndNil( var P : TObject)
13394:
13395:
         Function PCharOrNil( const S : string) : PChar
13396:
13397:
          SIRegister_TJclReferenceMemoryStream(CL);
13398:
          FindClass('TOBJECT'), 'EJclVMTError
         {Function GetVirtualMethodCount( AClass : TClass) : Integer
Function GetVirtualMethod( AClass : TClass; const Index : Integer) : Pointer
13399:
         Procedure SetVirtualMethod( AClass : TClass; const Index : Integer; const Method:Pointer)
13401:
          PDynamicIndexList', '^TDynamicIndexList // will not work
PDynamicAddressList', '^TDynamicAddressList // will not work
13402:
13403:
         Function GetDynamicIndexList( AClass : TClass) : Integer
Function GetDynamicIndexList( AClass : TClass) : PDynamicIndexList
13404:
13405:
13406:
         Function GetDynamicAddressList( AClass : TClass) : PDynamicAddressList
13407:
         Function HasDynamicMethod( AClass : TClass; Index : Integer) : Boolean Function GetDynamicMethod( AClass : TClass; Index : Integer) : Pointer
13408:
         Function GetInitTable( AClass : TClass) : PTypeInfo PFieldEntry', '^TFieldEntry // will not work}
13409:
13410:
          TFieldEntry',
13411:
                           'record OffSet : Integer; IDX : Word; Name : Short'
            +'String; end
13412:
13413:
         Function JIsClass( Address : Pointer) : Boolean
13414:
          Function JIsObject( Address : Pointer) : Boolean
13415:
         \textbf{Function} \ \ \texttt{GetImplementorOfInterface} ( \ \ \textbf{const} \ \ \texttt{I} \ : \ \ \texttt{IInterface}) \ : \ \ \texttt{TObject}
13416:
          TDigitCount',
                           'Integer
          SIRegister_TJclNumericFormat(CL);
13417:
         Function JIntToStrZeroPad( Value, Count : Integer) : AnsiString
13418:
           TTextHandler', 'Procedure ( const Text : string)
13419:
13420: // 'ABORT_EXIT_CODE', 'LongInt').SetInt( ERROR_CANCELLED 1223);
13421:
         Function JExecute(const
        CommandLine: string;OutputLineCallback:TTextHandler;RawOutpt:Bool;AbortPtr:PBool):Card;
13422:
        Function JExecutel(const CommandLine:string; var Output:string; RawOutput:Bool; AbortPtr:PBool):Cardinal;
13423:
         Function ReadKey : Char
                                         //to and from the DOS console !
13424:
          TModuleHandle', 'HINST
//TModuleHandle', 'Pointer
13425:
           INVALID_MODULEHANDLE_VALUE','LongInt').SetInt( TModuleHandle ( 0 ));
13426:
13427:
         Function LoadModule( var Module: TModuleHandle; FileName: string): Boolean
         Function LoadModuleEx( var Module : TModuleHandle; FileName : string; Flags : Cardinal) : Boolean Procedure UnloadModule( var Module : TModuleHandle)
13428:
13429:
         Function GetModuleSymbol( Module : TModuleHandle; SymbolName : string) : Pointer
13430:
          Function GetModuleSymbolEx( Module : TModuleHandle; SymbolName : string; var Accu : Boolean) : Pointer
         Function ReadModuleData(Module:TModuleHandle;SymbolName:string;var Buffer,Size: Cardinal):Boolean;
13432:
13433:
         Function WriteModuleData(Module:TModuleHandle;SymbolName:string;var Buffer,Size:Cardinal):Boolean;
          FindClass('TOBJECT'), 'EJclConversionError
13434:
         Function JStrToBoolean( const S : string) : Boolean
13435:
         Function JBooleanToStr( B : Boolean) : string
13436:
         Function JIntToBool( I : Integer) : Boolean
Function JBoolToInt( B : Boolean) : Integer
13437:
13438:
        'ListSeparator','String').SetString(';
'ListSeparator','String').SetString(':
13439:
```

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13441:
             Procedure ListAddItems( var List : string; const Separator, Items : string)
13442:
             Procedure ListIncludeItems( var List : string; const Separator, Items : string)
             Procedure ListRemoveItems( var List : string; const Separator, Items : string)
13444:
             Procedure ListDelItem( var List: string; const Separator: string; const Index: Integer)
             Function ListItemCount( const List, Separator : string) : Integer
Function ListGetItem( const List, Separator : string; const Index : Integer) : string
Procedure ListSetItem(var List:string; const Separator:string; const Index:Integer; const Value:string)
13445:
13446:
13447:
             Function ListItemIndex( const List, Separator, Item : string) : Integer
13448:
13449:
             Function SystemTObjectInstance : LongWord
13450:
             Function IsCompiledWithPackages : Boolean
             Function JJclGUIDToString( const GUID : TGUID) : string
13451:
             Function JJclStringToGUID( const S : string) : TGUID
13453:
               SIRegister_TJclIntfCriticalSection(CL);
13454:
               SIRegister_TJclSimpleLog(CL);
13455:
             Procedure InitSimpleLog( const ALogFileName : string)
13456:
13457:
13458 .
           procedure SIRegister_JclBorlandTools(CL: TPSPascalCompiler);
13459: begin
13460:
               FindClass('TOBJECT'),'EJclBorRADException
               TJclBorRADToolKind', '( brDelphi, brCppBuilder, brBorlandDevStudio )
13461:
               TJclBorRADToolEdition', '( deOPEN, dePRO, deSVR )
13462:
               TJclBorRADToolEdition', '( deSTD, dePRO, deCSS, deARC )
TJclBorRADToolPath', 'string
'SupportedDelphiVersions', 'LongInt').SetInt( 5 or 6 or 7 or 8 or 9 or 10 or 11);
13463:
13464:
13465:
             SupportedBCBVersions', 'LongInt').SetInt( 5 or 6 or 10 or 11);
'SupportedBDSVersions', 'LongInt').SetInt( 1 or 2 or 3 or 4 or 5);
13466:
13467:
             BorRADToolRepositoryPagesSection','String').SetString( 'Repository Pages BorRADToolRepositoryDialogsPage','String').SetString( 'Dialogs BorRADToolRepositoryFormsPage','String').SetString( 'Forms
13468:
13469:
13470:
13471:
             BorRADToolRepositoryProjectsPage', 'String').SetString( 'Projects
13472:
             {\tt BorRADToolRepositoryDataModulesPage', 'String'). SetString('Data ModulesPage', 'String')}. \\
             BorRADToolRepositoryObjectType','String').SetString('Type
BorRADToolRepositoryFormTemplate','String').SetString('FormTemplate
13473:
13474:
13475:
             BorRADToolRepositoryProjectTemplate','String').SetString('ProjectTemplate
             BorRADToolRepositoryProjectTemplate', 'String').SetString( 'ProjectTemplate', 'String').SetString( 'Name BorRADToolRepositoryObjectDage', 'String').SetString( 'Page BorRADToolRepositoryObjectIcon', 'String').SetString( 'Icon BorRADToolRepositoryObjectDescr', 'String').SetString( 'Description BorRADToolRepositoryObjectAuthor', 'String').SetString( 'Author BorRADToolRepositoryObjectAncestor', 'String').SetString( 'Ancestor BorRADToolRepositoryObjectAncestor', 'String').SetString( 'ProjectOr BorRADToolRepositoryObjectAncestor', 'String').SetString( 'DescriptoryObjectAncestor', 'String').SetString( 'DescriptoryObjectAncestor', 'String').SetString( 'DescriptoryObjectAncestor', 'String').SetString( 'DescriptoryObjectAncestor', 'String').SetString( 'DescriptoryObjectAncestor', 'String').SetString( 'DescriptoryObjectAncestor').
13476:
13477:
13478:
13479:
13480:
13481:
             BorRADToolRepositoryObjectDesigner', 'String').SetString( 'Designer
13482:
             BorRADToolRepositoryDesignerDfm', 'String').SetString( 'dfm BorRADToolRepositoryDesignerXfm', 'String').SetString( 'xfm
13483:
13484:
             BorRADToolRepositoryObjectNewForm', 'string').SetString( 'DefaultNewForm BorRADToolRepositoryObjectMainForm', 'String').SetString( 'DefaultMainForm
13485:
13486:
             SourceExtensionDelphiPackage','String('.dpk
13487:
             SourceExtensionBCBPackage', 'String').SetString('.bpk
13488:
13489:
             SourceExtensionDelphiProject','String').SetString(
             SourceExtensionBCBProject','string').SetString('.bpr
SourceExtensionBDSProject','string').SetString('.bdsproj
13490:
13491:
             SourceExtensionDProject', 'String').SetString('.dp:
BinaryExtensionPackage', 'String').SetString('.bpl
                                                                                              '.dproj
13492:
13493:
             BinaryExtensionLibrary','String').SetString('.dll
13494:
             BinaryExtensionExecutable', 'String').SetString('.all
BinaryExtensionExecutable', 'String').SetString('.exe
CompilerExtensionDCP', 'String').SetString('.dcp
CompilerExtensionBPI', 'String').SetString('.bpi
13495:
13496:
13497:
13498:
             CompilerExtensionLIB', 'String').SetString(
             CompilerExtensionTDS','String').SetString(
CompilerExtensionMAP','String').SetString(
13499:
                                                                                        '.tds
                                                                                        '.map
13500:
             CompilerExtensionDRC', 'String').SetString(
13501:
                                                                                          .drc
             CompilerExtensionDEF','String').SetString(
13502:
             SourceExtensionCPP', 'String').SetString('.SourceExtensionH', 'String').SetString('.h
13503:
13504:
             SourceExtensionPAS', 'String').SetString( '.pas
13505:
             SourceExtensionDFM',
                                                 'String').SetString(
13506:
13507:
             SourceExtensionXFM', 'String').SetString('.xfm
             SourceDescriptionCPP', 'String').SetString( 'Pascal source file SourceDescriptionCPP', 'String').SetString( 'C++ source file
13508:
13509:
             DesignerCLY', 'String').SetString( 'VCL DesignerCLX', 'String').SetString( 'CLX
13510:
13511:
             ProjectTypePackage', 'String').SetString( 'package ProjectTypeLibrary', 'String').SetString( 'library ProjectTypeProgram', 'String').SetString( 'program 'projectTypeProgram', 'String').SetString( 'program 'program')
13512:
13513:
13514:
             Personality32Bit', 'String').SetString( '32 bit
Personality64Bit', 'String').SetString( '64 bit
PersonalityDelphi', 'String').SetString( 'Delphi
13515:
13516:
13517:
             PersonalityDelphilotNet', 'String').SetString( 'Delphi.net PersonalityBelphiDotNet', 'String').SetString( 'C++Builder PersonalityBcB', 'String').SetString( 'C#Builder PersonalityVB', 'String').SetString( 'Visual Basic
13518:
13519:
13521:
             PersonalityDesign','string').SetString( 'Design
PersonalityUnknown','String').SetString( 'Unknown personality
13522:
13523:
             PersonalityBDS', 'String').SetString( 'Borland Developer Studio
13524:
            DOFDirectoriesSection', 'String').SetString( 'Borland Developer's DOFUnitOutputDirKey', 'String').SetString( 'UnitOutputDir DOFSearchPathName', 'String').SetString( 'SearchPath DOFConditionals', 'String').SetString( 'Conditionals DOFLinkerSection', 'String').SetString( 'Linker
13525:
13526:
13527:
13528:
```

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13530:
          DOFPackagesKey', 'String'). SetString( 'Packages
          DOFFCompilerSection', 'String').SetString( 'Compiler DOFPackageNoLinkKey', 'String').SetString( 'PackageNoLink DOFAdditionalSection', 'String').SetString( 'Additional
13531:
13533.
          DOFOptionsKey', 'String').SetString( 'Options

TJclBorPersonality', '( bpDelphi32, bpDelphi64, bpBcBuilder32, b'
+'pBcBuilder64, bpDelphiNet32, bpDelphiNet64, bpCSBuilder32, bpCSBuilder64, '
+'bpVisualBasic32, bpVisualBasic64, bpDesign, bpUnknown )
13534:
13535:
13536:
13537:
            TJclBorPersonalities', 'set of TJclBorPersonality
TJclBorDesigner', '( bdVCL, bdCLX )
TJclBorDesigners', 'set of TJclBorDesigner
13538:
13539:
13540:
                                    '( bp32bit, bp64bit )
13541:
            TJclBorPlatform',
13542:
            FindClass('TOBJECT'), 'TJclBorRADToolInstallation
            SIRegister TJclBorRADToolInstallationObject(CL);
13543:
13544:
            SIRegister TJclBorlandOpenHelp(CL);
            TJclHelp2Object', '(hoRegisterSession, hoRegister, hoPlugin)
TJclHelp2Objects', 'set of TJclHelp2Object
13545:
                                      'set of TJclHelp2Object
13546:
13547 .
            SIRegister_TJclHelp2Manager(CL);
            SIRegister TJclBorRADToolIdeTool(CL);
13548:
13549:
            SIRegister_TJclBorRADToolIdePackages(CL);
            SIRegister_IJclCommandLineTool(CL);
13550:
13551:
            FindClass('TOBJECT'),'EJclCommandLineToolError
13552:
            SIRegister_TJclCommandLineTool(CL);
            SIRegister_TJclBorlandCommandLineTool(CL);
13553:
            SIRegister_TJclBCC32(CL);
13554:
            SIRegister_TJclDCC32(CL);
13555:
13556:
            TJclDCC', 'TJclDCC32
            SIRegister_TJclBpr2Mak(CL);
13557:
13558:
            SIRegister_TJclBorlandMake(CL);
            SIRegister_TJclBorRADToolPalette(CL)
13559:
13560:
            SIRegister_TJclBorRADToolRepository(CL);
            TCommandLineTool', '( clAsm, clBcc32, clDcc32, clDccIL, clMake,clProj2Mak ) TCommandLineTools', 'set of TCommandLineTool
13561:
13562:
            //TJclBorRADToolInstallationClass', 'class of TJclBorRADToolInstallation
13563:
            SIRegister_TJclBorRADToolInstallation(CL);
13564:
            SIRegister_TJclBCBInstallation(CL);
13565:
13566:
            SIRegister_TJclDelphiInstallation(CL);
13567:
            SIRegister TJclDCCIL(CL)
13568:
            SIRegister_TJclBDSInstallation(CL);
13569:
            TTraverseMethod', 'Function ( Installation : TJclBorRADToolInstallation) : Boolean
13570:
            SIRegister_TJclBorRADToolInstallations(CL);
          Function BPLFileName( const BPLPath, PackageFileName : string) : string
13571:
          Function BinaryFileName( const OutputPath, ProjectFileName : string) : string
13572:
          Function IsDelphiPackage( const FileName : string) : Boolean
13573:
13574:
          \textbf{Function} \  \, \texttt{IsDelphiProject(} \  \, \textbf{const} \  \, \texttt{FileName} \  \, : \  \, \textbf{string)} \  \, : \  \, \texttt{Boolean}
          Function IsBCBPackage( const FileName : string) : Boolean Function IsBCBProject( const FileName : string) : Boolean
13575:
13576:
13577:
          Procedure GetDPRFileInfo(const DPRFileName:string;out BinaryExtensio:string;const LibSuffx:PString);
13578:
          Procedure GetBPRFileInfo(const BPRFileName:string;out BinaryFileName:string;const Descript:PString);
13579:
          Procedure GetDPKFileInfo(const DPKFileName:string;out RunOnly:Bool;const LibSuffix:PString;const
         Descript: PString;
13580:
         Procedure GetBPKFileInfo(const BPKFileName:string;out RunOnly:Bool;const BinaryFName:PString;const
         Descript:PString
13581: function SamePath(const Path1, Path2: string): Boolean;
13582: end;
13583:
13584: procedure SIRegister_JclFileUtils_max(CL: TPSPascalCompiler);
13585: begin
         'ERROR_NO_MORE_FILES','LongInt').SetInt( 18);
13586:
          //Function stat64( FileName: PChar;var StatBuffer : TStatBuf64) : Integer //Function fstat64( FileDes: Integer;var StatBuffer : TStatBuf64) : Integer
13587:
13588:
13589:
          //Function lstat64( FileName: PChar;var StatBuffer : TStatBuf64) : Integer
           'LPathSeparator', 'String').SetString( '/
'LDirDelimiter', 'String').SetString( '/
'LDirSeparator', 'String').SetString( ':
13590:
13591:
13592:
           'JXPathDevicePrefix','String').SetString( '\\.\
13593:
13594:
           'JXPathSeparator', 'String').SetString(
13595:
           'JXDirDelimiter','String').SetString(
          'JXDirSeparator','String').SetString(';
'JXPathUncPrefix','String').SetString('\\
'faNormalFile','LongWord').SetUInt($00000080);
13596:
13597:
13598:
          //'faUnixSpecific','').SetString(faSymLink);

JXTCompactPath', '(cpCenter, cpEnd)

_WIN32_FILE_ATTRIBUTE_DATA', 'record dwFileAttributes: DWORD; f'
+'tCreationTime: TFileTime; ftLastAccessTime: TFileTime; ftLastWriteTime:'
13599:
13600:
13601:
13602:
              +' TFileTime; nFileSizeHigh : DWORD; nFileSizeLow : DWORD; end
13603:
            TWin32FileAttributeData', '_WIN32_FILE_ATTRIBUTE_DATA WIN32_FILE_ATTRIBUTE_DATA', '_WIN32_FILE_ATTRIBUTE_DATA
13604:
13605:
13606:
13607:
          Function jxPathAddSeparator( const Path : string) : string
13608:
          Function jxPathAddExtension( const Path, Extension: string): string
13609:
          Function jxPathAppend( const Path, Append : string) : string
          Function jxPathBuildRoot( const Drive : Byte) : string
Function jxPathCanonicalize( const Path : string) : string
Function jxPathCommonPrefix( const Path1, Path2 : string)
13610:
13611:
                                                                                         : Integer
13612:
13613:
          Function jxPathCompactPath(const DC:HDC;const Path:string;const Width:Integer;CmpFmt:TCompactPath):string
13614: Procedure jxPathExtractElements( const Source : string; var Drive, Path, FileName, Ext : string)
13615: Function jxPathExtractFileDirFixed( const S : string) : string
13616: Function jxPathExtractFileNameNoExt( const Path : string) : string
```

```
13617:
         Function ixPathExtractPathDepth( const Path : string; Depth : Integer) : string
13618:
         Function jxPathGetDepth( const Path : string) : Integer
          Function jxPathGetLongName( const Path : string) : string
13620:
         Function jxPathGetShortName( const Path : string) : string
13621:
         Function jxPathGetLongName( const Path : string) : string
         Function jxPathGetShortName( const Path : string) : string
13622:
13623:
         Function jxPathGetRelativePath( Origin, Destination : string) : string
13624:
         Function jxPathGetTempPath : string
         Function jxPathIsAbsolute( const Path : string) : Boolean
13625:
13626:
         Function jxPathIsChild( const Path, Base : string) : Boolean
Function jxPathIsDiskDevice( const Path : string) : Boolean
13627:
         Function jxPathIsUNC( const Path : string) : Boolean
13629:
         Function jxPathRemoveSeparator( const Path : string) :
         Function jxPathRemoveExtension( const Path : string) : string
13630:
13631:
         Function ixPathGetPhysicalPath( const LocalizedPath : string)
13632:
         Function jxPathGetLocalizedPath( const PhysicalPath : string)
                                                                                      : string
          JxTFileListOption', '( flFullNames, flRecursive, flMaskedSubfolders)
JxTFileListOptions', 'set of TFileListOption
          JxTJcllAttributeMatch', '( amAny, amExact, amSubSetOf, amSuperSetOf, amCustom )
TFileHandler', 'Procedure ( const FileName : string)
TFileHandlerEx', 'Procedure ( const Directory : string)
13634:
13635:
13636:
                                'Procedure ( const Directory : string; const FileInfo : TSearchRec)
         Function BuildFileList( const Path : string; const Attr : Integer; const List : TStrings) : Boolean
13638:
          //Function AdvBuildFileList( const Path : string; const Attr : Integer; const Files : TStrings; const
13639:
         AttributeMatch:TJclAttributeMatch;const Optis:TFileListOptions;const SubfoldersMask:string;const
        FileMatchFunc:TFileMatchFunc):Bool;
13640:
         Function jxVerifyFileAttributeMask( var RejectedAttributes, RequiredAttributes: Int): Boolean
13641:
          Function jxIsFileAttributeMatch(FileAttributes,RejectedAttributes,RequiredAttributes:Int):Boolean;
13642:
          \textbf{Function} \hspace{0.1cm} \texttt{jxFileAttributesStr}(\hspace{0.1cm} \textbf{const} \hspace{0.1cm} \texttt{FileInfo} \hspace{0.1cm} : \hspace{0.1cm} \texttt{TSearchRec}) \hspace{0.1cm} : \hspace{0.1cm} \textbf{string}
          Function jxIsFileNameMatch(FileName:string;const Mask:string;const CaseSensitive:Boolean):Boolean;
13643:
         Procedure jxEnumFiles(const Path:string; HandleFile:TFileHandlerEx;
13644:
        RejectedAttributes:Integer;RequiredAttributes: Integer; Abort: TObject)
13645:
         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
13646:
13648:
         \textbf{Function} \text{ jxDeleteDirectory(} \textbf{ const} \text{ DirectoryName } : \textbf{string;} \text{ MoveToRecycleBin } : \text{Boolean)} : \text{Boolean})
         Function jxCopyDirectory( ExistingDirectoryName, NewDirectoryName : string) : Boolean Function jxMoveDirectory( ExistingDirectoryName, NewDirectoryName : string) : Boolean
13649:
13650:
13651:
          Function jxDelTree( const Path : string) : Boolean
          //Function DelTreeEx(const Path:string; AbortOnFailure: Boolean; Progress: TDelTreeProgress): Boolean
13652:
13653:
         Function jxDiskInDrive( Drive : Char) : Boolean
         Function jxDirectoryExists( const Name : string; ResolveSymLinks : Boolean) : Boolean
13654:
13655:
         Function jxFileCreateTemp( var Prefix : string) : THandle
          Function jxFileBackup( const FileName : string; Move : Boolean) : Boolean
13656:
         Function jxFileCopy( const ExistingFileName, NewFileName: string; ReplaceExisting: Boolean): Boolean
Function jxFileDelete( const FileName: string; MoveToRecycleBin: Boolean): Boolean
Function jxFileExists( const FileName: string): Boolean
13657:
13658:
13659:
13660:
         Function jxFileMove( const ExistingFileName, NewFileName: string; ReplaceExisting: Boolean): Boolean
13661:
         Function jxFileRestore( const FileName : string) : Boolean
         Function jxGetBackupFileName( const FileName: string): string
Function jxIsBackupFileName( const FileName: string): Boolean
13662:
13663:
         Function jxFileGetDisplayName( const FileName : string) : string
13664:
         Function jxFileGetGroupName( const FileName : string; ResolveSymLinks : Boolean) : string
13665:
         Function jxFileGetOwnerName( const FileName : string; ResolveSymLinks : Boolean) : string
13666:
         Function jxFileGetSize( const FileName : string) : Int64
Function jxFileGetTempName( const Prefix : string) : string
Function jxFileGetTypeName( const FileName : string) : string
13667:
13668:
13669:
13670:
         Function jxFindUnusedFileName(FileName:string; const FileExt: string; NumberPrefix: string): string
13671:
         Function jxForceDirectories( Name : string) : Boolean
         Function jxGetDirectorySize( const Path: string): Int64
Function jxGetDriveTypeStr( const Drive: Char): string
13672:
13673:
13674:
          Function jxGetFileAgeCoherence( const FileName : string) : Boolean
13675:
         Procedure jxGetFileAttributeList( const Items : TStrings; const Attr : Integer)
         Procedure jxGetFileAttributeListEx( const Items : TStrings; const Attr : Integer)
Function jxGetFileInformation( const FileName : string; out FileInfo : TSearchRec) : Boolean;
Function jxGetFileInformation1( const FileName : string) : TSearchRec;
13676:
13677:
13678:
          //Function GetFileStatus(const FileName:string;out StatBuf:TStatBuf64;const
13679:
         ResolveSymLinks:Boolean):Integer
         Function jxGetFileLastWrite( const FName : string) : TFileTime;
13680:
         Function jxGetFileLastWritel( const FName : string; out LocalTime : TDateTime) : Boolean;
13681:
          Function jxGetFileLastAccess( const FName : string) : TFileTime;
13682:
13683:
         Function jxGetFileLastAccess1( const FName : string; out LocalTime : TDateTime) : Boolean;
13684:
         Function jxGetFileCreation( const FName : string) : TFileTime;
Function jxGetFileCreation1( const FName : string; out LocalTime : TDateTime) : Boolean;
13685:
         Function jxGetFileLastWrite( const FName : string;out TimeStamp:Integer;ResolveSymLinks : Bool):Bool;
13686:
         Function jxGetFileLastWrite1(const FName:string; out LocalTime:TDateTime;ResolveSymLinks:Bool): Bool;
13687:
13688:
         Function jxGetFileLastWrite2( const FName : string; ResolveSymLinks : Boolean) : Integer;
         Function jxGetFileLastAccess(const FName:string; out TimeStamp:Integer;ResolveSymLinks: Bool): Bool;
Function jxGetFileLastAccess(const FName:string; out LocalTime:TDateTime;ResolveSymLinks:Bool):Bool;
13689:
13690:
          Function jxGetFileLastAccess2(const FName:string; ResolveSymLinks:Boolean): Integer;
13691:
         Function jxGetFileLastAttrChange(const FName:string;out TimeStamp:Integer;ResolveSymLinks:Bool): Bool;
13692:
13693:
         Function jxGetFileLastAttrChange1(const FName:string; out LocalTime:TDateTime;ResolveSymLinks:Bool):Bool;
13694:
         Function jxGetFileLastAttrChange2( const FName : string; ResolveSymLinks:Boolean): Integer;
Function jxGetModulePath( const Module : HMODULE) : string
13695:
         Function jxGetSizeOfFile( const FileName : string) : Int64;
13696:
         Function jxGetSizeOfFile1( const FileInfo : TSearchRec) : Int64;
13697:
         Function jxGetSizeOfFile2( Handle : THandle) : Int64;
13698:
         Function jxGetStandardFileInfo( const FileName : string) : TWin32FileAttributeData
13699:
         Function jxIsDirectory( const FileName : string; ResolveSymLinks : Boolean) : Boolean
```

```
13701:
         Function jxIsRootDirectory( const CanonicFileName : string) : Boolean
          Function jxLockVolume( const Volume : string; var Handle : THandle) : Boolean
13702:
          Function jxOpenVolume( const Drive : Char) : THandle
          Function jxSetDirLastWrite( const DirName : string; const DateTime : TDateTime) : Boolean
13704:
         Function jxSetDirLastAccess( const DirName : string; const DateTime : TDateTime) : Boolean

Function jxSetDirCreation( const DirName : string; const DateTime : TDateTime) : Boolean
13705:
13706:
13707:
          Function jxSetFileLastWrite( const FileName : string; const DateTime : TDateTime) : Boolean
13708:
          Function jxSetFileLastAccess( const FileName : string; const DateTime : TDateTime) : Boolean
13709:
          Function jxSetFileCreation( const FileName : string; const DateTime : TDateTime) : Boolean
13710:
         Procedure jxShredFile( const FileName : string; Times : Integer)
Function jxUnlockVolume( var Handle : THandle) : Boolean
13711:
          Function jxCreateSymbolicLink( const Name, Target : string) : Boolean
13712:
13713:
          Function jxSymbolicLinkTarget( const Name : string) : string
           TAttributeInterest', '( alIgnored, aiRejected, aiRequired
SIRegister_TJclCustomFileAttrMask(CL);
13714:
13715:
13716:
           SIRegister_TJclFileAttributeMask(CL);
           TFileSearchOption', '( fsIncludeSubDirectories, fsIncludeHiddenS'
13717:
           +'ubDirectories, fsLastChangeAfter, fsLastChangeBefore, fsMaxSize, fsMinSize)
TFileSearchOptions', 'set of TFileSearchOption
TFileSearchTaskID', 'Integer
13718 .
13719:
13720:
13721:
                                                 'Procedure ( const ID : TFileSearc'
           TFileSearchTerminationEvent',
13722:
             +'hTaskID; const Aborted : Boolean)
13723:
           TFileEnumeratorSyncMode', '( smPerFile, smPerDirectory )
           SIRegister_IJclFileEnumerator(CL);
13724:
13725:
           SIRegister_TJclFileEnumerator(CL);
13726:
         Function JxFileSearch : IJclFileEnumerator
13727:
           {\tt JxTFileFlag', '(ffDebug, ffInfoInferred, ffPatched, ffPreRelease, ffPrivateBuild, ffSpecialBuild')}
13728:
           JxTFileFlags
                               'set of TFileFlag
13729:
           FindClass('TOBJECT'), 'EJclFileVersionInfoError
           SIRegister_TJclFileVersionInfo(CL);
13730:
13731:
         Function jxOSIdentToString( const OSIdent : DWORD) : string
13732:
          Function jxOSFileTypeToString( const OSFileType : DWORD; const OSFileSubType : DWORD) : string
13733:
         Function jxVersionResourceAvailable( const FileName : string) : Boolean
          TFileVersionFormat', '( vfMajorMinor, vfFull )
Function jxFormatVersionString( const HiV, LoV : Word) :
13734:
                                                                                  string
13736:
          Function jxFormatVersionString1( const Major, Minor, Build, Revision : Word) : string;
13737:
          //Function FormatVersionString2( const FixedInfo : TVSFixedFileInfo; VersionFormat:TFileVersionFormat):str;
//Procedure VersionExtractFileInfo(const FixedInfo:TVSFixedFileInfo; var Major, Minor, Build, Revision:Word);
13738:
13739:
          //Procedure VersionExtractProductInfo(const FixedInfo:TVSFixedFileInfo;var Major,Minor,Build,
         Revision:Word);
13740:
         //Function VersionFixedFileInfo( const FileName : string; var FixedInfo : TVSFixedFileInfo) : Boolean Function jxVersionFixedFileInfoString( const FileName : string; VersionFormat : TFileVersionFormat; const
13741:
        NotAvailableText : string) : string
13742:
           SIRegister_TJclTempFileStream(CL)
13743:
           FindClass('TOBJECT'),'TJclCustomFileMapping
           STRegister TJclFileMappingView(CL);
13744:
           TJclFileMappingRoundOffset', '( rvDown, rvUp )
13745:
           SIRegister_TJclCustomFileMapping(CL);
13746:
13747:
           SIRegister_TJclFileMapping(CL);
13748:
           SIRegister_TJclSwapFileMapping(CL);
13749:
           SIRegister_TJclFileMappingStream(CL);
13750:
           TJclMappedTextReaderIndex', '( tiNoIndex, tiFull )
            //PPCharArray', '^TPCharArray // will not work
13751:
13752:
           SIRegister_TJclMappedTextReader(CL);
           SIRegister_TJclFileMaskComparator(CL);
FindClass('TOBJECT'),'EJclPathError
FindClass('TOBJECT'),'EJclFileUtilsError
13753:
13754:
13755:
13756:
           FindClass('TOBJECT'),'EJclTempFileStreamError
           FindClass('TOBJECT'),'EJclTempFileStreamError
FindClass('TOBJECT'),'EJclFileMappingError
13757:
13758:
           FindClass('TOBJECT'), 'EJclFileMappingViewError
13759:
13760:
          Function jxPathGetLongName2( const Path : string) : string
13761:
         Function jxWin32DeleteFile( const FileName : string; MoveToRecycleBin : Boolean) : Boolean
         Function jxWin32MoveFileReplaceExisting( const SrcFileName, DstFileName: string): Boolean Function jxWin32BackupFile( const FileName: string; Move: Boolean): Boolean Function jxWin32RestoreFile( const FileName: string): Boolean
13762:
13763:
13764:
13765:
          Function jxSamePath( const Path1, Path2 : string) : Boolean
13766:
         Procedure jxPathListAddItems( var List : string; const Items : string)
13767:
         Procedure jxPathListIncludeItems( var List : string; const Items : string)
         Procedure jxPathListDelItems( var List : string; const Items : string)
Procedure jxPathListDelItems( var List : string; const Items : string)
13768:
13769:
13770:
          \textbf{Function} \hspace{0.1cm} \texttt{jxPathListItemCount} ( \hspace{0.1cm} \textbf{const} \hspace{0.1cm} \texttt{List} \hspace{0.1cm} : \hspace{0.1cm} \textbf{string}) \hspace{0.1cm} : \hspace{0.1cm} \texttt{Integer}
13771:
         Function jxPathListGetItem( const List : string; const Index : Integer) : string
Procedure jxPathListSetItem( var List : string; const Index : Integer; const Value : string)
13772:
          Function jxPathListItemIndex( const List, Item: string) : Integer
13773:
13774:
          Function jxParamName(Idx:Int:const Separator:string:const AllowedPrefixChars:string:TrimName:Bool):string:
13775:
          Function jxParamValue(Index : Integer; const Separator : string; TrimValue : Boolean) : string;
         Function jxParamValue1(const SearchName:string; const Separator: string; CaseSensitive: Boolean; const
13776:
        AllowedPrefixCharacters : string; TrimValue : Boolean) : string;
13777:
         Function jxParamPos( const SearchName : string; const Separator : string; CaseSensitive : Boolean; const
        AllowedPrefixCharacters : string) : Integer
13778: end;
13779:
13780: procedure SIRegister_FileUtil(CL: TPSPascalCompiler);
13781:
        begin
          'UTF8FileHeader','String').SetString( #$ef#$bb#$bf);
13782:
         Function lCompareFilenames( const Filename1, Filename2 : string) : integer
Function lCompareFilenamesIgnoreCase( const Filename1, Filename2 : string) : integer
Function lCompareFilenames( const Filename1, Filename2 : string; ResolveLinks : boolean) : integer
13783:
13784:
```

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13786:
          Function | CompareFilenames(Filename1:PChar;Len1:int;Filename2:PChar;Len2:int;ResolveLinks:boolean):int;
13787:
          Function lFilenameIsAbsolute( const TheFilename : string) : boolean
          Function lFilenameIsWinAbsolute( const TheFilename : string) : boolean Function lFilenameIsUnixAbsolute( const TheFilename : string) : boolean
13789:
13790:
          Procedure lCheckIfFileIsExecutable( const AFilename : string)
13791:
          Procedure lCheckIfFileIsSymlink( const AFilename : string)
          Function lFileIsReadable( const AFilename : string) : boolean
13792:
          Function lFileIsWritable( const AFilename : string) : boolean
13793:
13794:
          Function lFileIsText( const AFilename : string) : boolean
          \textbf{Function} \ \texttt{lFileIsText} ( \ \textbf{const} \ \texttt{AFilename} \ : \ \textbf{string}; \ \textbf{out} \ \texttt{FileReadable} \ : \ \texttt{boolean}) \ : \ \texttt{boolean}
13795:
          Function lFileIsExecutable( const AFilename : string) : boolean
13796:
          Function lFileIsSymlink( const AFilename : string) : boolean
13798:
          Function lFileIsHardLink( const AFilename : string) : boolean
          Function lfileSize(const Filename: string): int64;
Function lGetFileDescription(const AFilename: string): string
13799:
13800:
13801:
          Function | ReadAllLinks( const Filename : string; ExceptionOnError : boolean) : string
          Function lTryReadAllLinks( const Filename : string) : string
13802:
          Function lDirPathExists( const FileName : String) : Boolean Function lForceDirectory( DirectoryName : string) : boolean
13803:
13804:
          Function | DeleteDirectory( const DirectoryName : string; OnlyChildren : boolean) : boolean
13805:
13806:
          Function lProgramDirectory : string
          Function lDirectoryIsWritable( const DirectoryName : string) : boolean
13807:
13808:
          \textbf{Function} \ \texttt{lExtractFileNameOnly}( \ \textbf{const} \ \texttt{AFilename} \ : \ \textbf{string}) \ : \ \textbf{string}
          Function lExtractFileNameWithoutExt( const AFilename: string): string
Function lCompareFileExt( const Filename, Ext: string; CaseSensitive: boolean): integer;
13809:
13810:
13811:
          Function | CompareFileExt( const Filename, Ext : string) : integer;
13812:
          Function lFilenameIsPascalUnit( const Filename : string) : boolean
          Function lAppendPathDelim( const Path : string) : string
Function lChompPathDelim( const Path : string) : string
13813:
13814:
          Function lTrimFilename( const AFilename : string) : string
                                                                                       : string
13816:
          Function lCleanAndExpandFilename( const Filename : string)
         Function lCleanAndExpandDirectory( const Filename : string) : string
Function lCreateAbsoluteSearchPath( const SearchPath, BaseDirectory : string) : string
13817:
13818:
13819:
          Function | CreateRelativePath( const Filename, BaseDirectory: string; UsePointDirectory: boolean;
         AlwaysRequireSharedBaseFolder : Boolean) : string
13820:
        Function | CreateAbsolutePath( const Filename, BaseDirectory : string) : string
          Function lFileIsInPath( const Filename, Path : string) : boolean
Function lFileIsInDirectory( const Filename, Directory : string) : boolean
13821:
13822:
          TSearchFileInPathFlag', '( sffDontSearchInBasePath, sffSearchLoUpCase )
TSearchFileInPathFlags', 'set of TSearchFileInPathFlag
'AllDirectoryEntriesMask','String').SetString( '*
13823:
13824:
13825:
          Function | GetAllFilesMask : string
13826:
13827:
          Function | GetExeExt : string
          Function | SearchFileInPath( const Filename, BasePath, SearchPath, Delimiter : string; Flags :
13828:
        TSearchFileInPathFlags): string
Function lSearchAllFilesInPath( const Filename, BasePath, SearchPath, Delimiter:string;Flags:
13829:
         TSearchFileInPathFlags) : TStrings
        Function lFindDiskFilename( const Filename : string) : string
          Function | FrindDiskFileCaseInsensitive( const Filename : string) : string
Function | 1FindDefaultExecutablePath( const Executable : string; const BaseDir: string):string
13831:
13832:
          Function lGetDarwinSystemFilename(Filename: string): string
13833:
           SIRegister_TFileIterator(CL);
13834:
            TFileFoundEvent', 'Procedure ( FileIterator : TFileIterator)
13835:
13836:
           TDirectoryFoundEvent', 'Procedure (FileIterator: TFileIterator)
TDirectoryEnterEvent', 'Procedure (FileIterator: TFileIterator)
13837:
13838:
           SIRegister TFileSearcher(CL);
13839:
          Function lFindAllFiles(const SearchPath:String;SearchMsk:String;SearchSubDirs:Bool):TStringList
          Function | FindAllDirectories( const SearchPath : string; SearchSubDirs : Boolean) : TStringList
13840:
          // TCopyFileFlag', '( cffOverwriteFile, cffCreateDestDirectory, cffPreserveTime )
// TCopyFileFlags', 'set of TCopyFileFlag
Function lCopyFile( const SrcFilename, DestFilename : string; Flags : TCopyFileFlags) : boolean
13841:
13842:
13843:
13844:
          Function | CopyFile( const | SrcFilename, DestFilename : string; PreserveTime : boolean) : boolean
13845:
          \textbf{Function} \ \texttt{lCopyDirTree}( \ \textbf{const} \ \texttt{SourceDir}, \ \texttt{TargetDir}: \ \textbf{string}; \ \texttt{Flags}: \ \texttt{TCopyFileFlags}): \ \texttt{Boolean}
13846:
          \textbf{Function} \ \texttt{lReadFileToString}(\ \textbf{const}\ \texttt{Filename}\ :\ \textbf{string})\ :\ \textbf{string}
          Function lGetTempFilename( const Directory, Prefix : string) : string
13847:
          {Function NeedRTLAnsi : boolean
          Procedure SetNeedRTLAnsi( NewValue : boolean)
13849:
          Function UTF8ToSys( const s : string) : string
Function SysToUTF8( const s : string) : string
13850:
13851:
          Function ConsoleToUTF8( const s : string) : string
Function UTF8ToConsole( const s : string) : string}
13852:
13853:
13854:
          Function FileExistsUTF8( const Filename : string)
          Function FileAgeUTF8( const FileName : string) : Longint
Function DirectoryExistsUTF8( const Directory : string) : Boolean
13855:
13856:
          Function ExpandFileNameUTF8( const FileName : string) : string
13857:
          Function ExpandUNCFileNameUTF8( const FileName : string) : string
13858:
          Function ExtractShortPathNameUTF8( const FileName : String) : String
Function FindFirstUTF8(const Path: string; Attr : Longint; out Rslt : TSearchRec) : Longint
Function FindNextUTF8( var Rslt : TSearchRec) : Longint
13859:
13860:
13861:
          Procedure FindCloseUTF8( var F : TSearchrec)

Function FileSetDateUTF8( const FileName : String; Age : Longint) : Longint
13863:
13864:
          Function FileGetAttrUTF8( const FileName : String) : Longint
13865:
          Function FileSetAttrUTF8( const Filename : String; Attr : longint) : Longint
13866:
          Function DeleteFileUTF8( const FileName : String) : Boolean
          Function RenameFileUTF8( const OldName, NewName : String) : Boolean
13867:
         Function FileSearchUTF8( const Name, DirList: string; ImplicitCurrentDir: Boolean): String
Function FileIsReadOnlyUTF8( const FileName: String): Boolean
Function GetCurrentDirUTF8: String
13868:
13869:
13870:
13871: Function SetCurrentDirUTF8( const NewDir : String) : Boolean
```

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13872:
         Function CreateDirUTF8( const NewDir : String) : Boolean
13873:
          Function RemoveDirUTF8( const Dir : String) : Boolean
          Function ForceDirectoriesUTF8( const Dir : string) : Boolean
13875:
          Function FileOpenUTF8( const FileName : string; Mode : Integer) : THandle
13876:
         \textbf{Function} \  \, \texttt{FileCreateUTF8} \, ( \  \, \textbf{const} \  \, \texttt{FileName} \  \, : \  \, \textbf{string}) \  \, : \  \, \texttt{THandle} \, ;
         Function FileCreateUTF81( const FileName : string; Rights : Cardinal) : THandle;
13877:
13878:
         Function ParamStrUTF8( Param : Integer) : string
13879:
          Function GetEnvironmentStringUTF8( Index : Integer) : string
         Function GetEnvironmentVariableUTF8( const EnvVar : string) : String
Function GetAppConfigDirUTF8( Global : Boolean; Create : boolean) : string
13880:
13881:
         Function GetAppConfigFileUTF8(Global:Boolean; SubDir:boolean; CreateDir: boolean): string
13882:
         Function SysErrorMessageUTF8( ErrorCode : Integer) : String
13884: end;
13885:
        procedure SIRegister Keyboard(CL: TPSPascalCompiler);
13886:
13887: begin
13888:
         //VK_F23 = 134;
13889:
           //{$EXTERNALSYM VK_F24}
         //VK_F24 = 135;
TVirtualKeyCode', 'Integer
'VK_MOUSEWHEELUP', 'integer').SetInt(134);
13890:
13891:
13892:
          'VK_MOUSEWHEELDOWN', 'integer').SetInt(135);
13893:
13894:
         \textbf{Function} \  \, \texttt{glIsKeyDown(c:Char):Boolean;}
13895:
         Function glisKevDown1( vk : TVirtualKevCode) : Boolean;
         Function glKeyPressed( minVkCode : TVirtualKeyCode) : TVirtualKeyCode
13896:
13897:
          Function glVirtualKeyCodeToKeyName( vk : TVirtualKeyCode) : String
13898:
         Function glKeyNameToVirtualKeyCode( const keyName : String) : TVirtualKeyCode
         Function glCharToVirtualKeyCode( c : Char) : TVirtualKeyCode
13899:
13900:
         Procedure glKeyboardNotifyWheelMoved( wheelDelta : Integer)
13901:
13902:
13903: procedure SIRegister GLCrossPlatform(CL: TPSPascalCompiler);
13904: begin
           TGLPoint', 'TPoint
//PGLPoint', '^TGL
13905:
13906:
                           '^TGLPoint // will not work
           TDelphiColor', 'TColor
13907:
13908:
13909:
           TGLPicture', 'TPicture
13910:
           TGLPicture , ifical TGLGraphic', 'TGraphic TGLBitmap', 'TBitmap
13911:
13912:
           //TGraphicClass', 'class of TGraphic
TGLTextLayout', '( tlTop, tlCenter, tlBottom )
13913:
           //TGraphicClass', 'Class of TGraphic
TGLTextLayout', '(tlTop, tlCenter, tlBottom)
TGLMouseButton', '(mbLeft, mbRight, mbMiddle)
TGLMouseEvent', 'Procedure (Sender: TObject; Button: TGLMouse'
+'Button; Shift: TShiftState; X, Y: Integer)
TGLMouseMoveEvent', 'TMouseMoveEvent
13914:
13915:
13916:
13917:
13918:
13919:
           TGLKeyEvent', 'TKeyEvent
           TGLKeyPressEvent', 'TKeyP:
EGLOSError', 'EWin32Error
EGLOSError', 'EWin32Error
13920:
                                   'TKeyPressEvent
13921:
13922:
          'EGLOSError', 'EOSError
'glsAllFilter','string').SetString('All // sAllFilter
13923:
13924:
         Function GLPoint( const x, y : Integer) : TGLPoint Function GLRGB( const r, g, b : Byte) : TColor Function GLColorToRGB( color : TColor) : TColor
13925:
13926:
                                                           : TColor
13927:
13928:
          Function GLGetRValue( rgb : DWORD) : Byte
         Function GLGetGValue( rgb : DWORD) : Byte
13929:
13930:
         Function GLGetBValue( rgb : DWORD) : Byte
13931:
         Procedure GLInitWinColors
13932:
         Function GLRect( const aLeft, aTop, aRight, aBottom : Integer) : TGLRect
13933:
          Procedure GLInflateGLRect( var aRect : TGLRect; dx, dy : Integer)
13934:
         Procedure GLIntersectGLRect( var aRect : TGLRect; const rect2 : TGLRect)
13935:
         Procedure GLInformationDlg( const msg : String)
         Function GLQuestionDlg( const msg: String) : Boolean
Function GLInputDlg( const aCaption, aPrompt, aDefault : String) : String
Function GLSavePictureDialog( var aFileName : String; const aTitle : String) : Boolean
13936:
13938:
         Function GLOpenPictureDialog( var aFileName : String; const aTitle : String) : Boolean
13939:
13940:
         Function GLApplicationTerminated : Boolean
13941:
         Procedure GLRaiseLastOSError
          Procedure GLFreeAndNil( var anObject: TObject)
13942:
13943:
          Function GLGetDeviceLogicalPixelsX( device : Cardinal) : Integer
13944:
         Function GLGetCurrentColorDepth : Integer
Function GLPixelFormatToColorBits( aPixelFormat : TPixelFormat) : Integer
13945:
         Function GLBitmapScanLine( aBitmap: TGLBitmap; aRow: Integer): Pointer
Procedure GLSleep( length: Cardinal)
13946:
13947:
13948:
         Procedure GLQueryPerformanceCounter( var val : Int64)
         \textbf{Function} \  \, \texttt{GLQueryPerformanceFrequency}(\  \, \textbf{var} \  \, \texttt{val} \  \, : \  \, \texttt{Int64}) \  \, : \  \, \texttt{Boolean}
13949:
         Function GLStartPrecisionTimer : Int64
13950:
          Function GLPrecisionTimerLap( const precisionTimer : Int64) : Double
13952:
          Function GLStopPrecisionTimer( const precisionTimer : Int64) : Double
13953:
         Function GLRDTSC : Int64
         Procedure GLLoadBitmapFromInstance( ABitmap : TBitmap; AName : string)
13954:
13955:
          Function GLOKMessageBox( const Text, Caption : string) : Integer
         Procedure GLShowHTMLUrl( Url : String)
13956:
13957:
         Procedure GLShowCursor( AShow : boolean)
13958:
         Procedure GLSetCursorPos( AScreenX, AScreenY : integer)
Procedure GLGetCursorPos( var point : TGLPoint)
13959:
13960: Function GLGetScreenWidth : integer
```

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13961:
         Function GLGetScreenHeight : integer
13962:
          Function GLGetTickCount : int64
          function RemoveSpaces(const str : String) : String;
13964 .
            TNormalMapSpace', '( nmsObject, nmsTangent )
          Procedure CalcObjectSpaceLightVectors(Light:TAffineVector; Vertices TAffineVectorList; Colors:TVectorList)
13965:
         Procedure SetupTangentSpace( Vertices, Normals, TexCoords, Tangents, BiNormals: TAffineVectorList)
Procedure CalcTangentSpaceLightVectors( Light: TAffineVector; Vertices, Normals, Tangents, BiNormals
13966:
13967:
         TAffineVectorList; Colors : TVectorList)
13968:
        Function CreateObjectSpaceNormalMap( Width, Height: Integer; HiNormals,
        \verb|HiTexCoords:TAffineVectorList||: TGLBitmap|
13969:
         Function CreateTangentSpaceNormalMap( Width, Height : Integer; HiNormals, HiTexCoords, LoNormals,
        LoTexCoords, Tangents, BiNormals : TAffineVectorList) : TGLBitmap
13970: end;
13971:
13972: procedure SIRegister GLStarRecord(CL: TPSPascalCompiler);
13973: begin
13974:
           TGLStarRecord', 'record RA: Word; DEC: SmallInt; BVColorIndex: Byte; VMagnitude: Byte; end
         // PGLStarRecord', '^TGLStarRecord // will not work
Function StarRecordPositionZUp( const starRecord: TGLStarRecord): TAffineVector
Function StarRecordPositionYUp( const starRecord: TGLStarRecord): TAffineVector
13975 .
13976:
13977:
         Function StarRecordColor( const starRecord: TGLStarRecord; bias: Single) : TVector
13978:
13979: end;
13980:
13981:
13982: procedure SIRegister_GeometryBB(CL: TPSPascalCompiler);
13983: begin
13984:
           TAABB',
                    'record min : TAffineVector; max : TAffineVector; end
         //PAABB', '^TAABB // will not work
TBSphere', 'record Center : TAffineVector; Radius : single; end
13985:
13986:
                         'record Left : Single; Top:Single; Right:Single; Bottom : Single; end
13987:
13988:
          {\tt TSpaceContains', '(scNoOverlap, scContainsFully, scContainsPartially')}
13989:
         Function AddBB( var c1 : THmgBoundingBox; const c2 : THmgBoundingBox) : THmgBoundingBox
13990:
         Procedure AddAABB( var aabb : TAABB; const aabb1 : TAABB)
13991:
         Procedure SetBB( var c : THmgBoundingBox; const v : TVector)
          Procedure SetAABB( var bb : TAABB; const v : TVector)
13992:
13993:
         Procedure BBTransform( var c : THmgBoundingBox; const m : TMatrix)
         Procedure AABBTransform( var bb : TAABB; const m : TMatrix)
Procedure AABBScale( var bb : TAABB; const v : TAffineVector)
13994:
13995:
13996:
          Function BBMinX( const c : THmgBoundingBox) : Single
13997:
          Function BBMaxX( const c : THmgBoundingBox) : Single
13998:
         Function BBMinY( const c : THmgBoundingBox) : Single
13999:
         Function BBMaxY( const c : THmgBoundingBox) : Single
14000:
          Function BBMinZ( const c : THmgBoundingBox) : Single
          Function BBMaxZ( const c : THmgBoundingBox) : Single
14001:
         Procedure AABBInclude( var bb : TAABB; const p : TAffineVector)
Procedure AABBFromSweep( var SweepAABB : TAABB; const Start, Dest : TVector; const Radius : Single)
14002:
14003:
          Function AABBIntersection( const aabb1, aabb2 : TAABB) : TAABB
14004:
          Function BBToAABB( const aBB : THmgBoundingBox) : TAABB
14006:
          Function AABBToBB( const anAABB : TAABB) : THmgBoundingBox;
         Function AABBToBB1( const anAABB : TAABB; const m : TMatrix) : THmgBoundingBox;
14007:
         Procedure OffsetAABB( var aabb : TAABB; const delta : TAffineVector);
Procedure OffsetAABB1( var aabb : TAABB; const delta : TVector);
14008:
14009:
          Function IntersectAABBs( const aabb1, aabb2 : TAABB; const m1To2, m2To1 : TMatrix) : Boolean;
14010:
         Function IntersectAABBsAbsoluteXY( const aabb1, aabb2 : TAABB) : Boolean Function IntersectAABBsAbsoluteXZ( const aabb1, aabb2 : TAABB) : Boolean
14011:
14012:
         Function IntersectAABBsAbsolute( const aabb1, aabb2 : TAABB) : Boolean
Function AABBFitsInAABBAbsolute( const aabb1, aabb2 : TAABB) : Boolean
14013:
         Function PointInAABB( const p : TAffineVector; const aabb : TAABB) : Boolean;
14015:
         Function PointInAABB1( const p : TVector; const aabb : TAABB) : Boolean;
Function PlaneIntersectAABB( Normal : TAffineVector; d : single; aabb : TAABB) : boolean
14016:
14017:
         Function TriangleIntersectAABB( const aabb : TAABB; v1, v2, v3 : TAffineVector) : boolean
14018:
14019:
          Procedure ExtractAABBCorners( const AABB : TAABB; var AABBCorners : TAABBCorners)
14020:
         Procedure AABBToBSphere( const AABB : TAABB; var BSphere : TBSphere)
         Procedure BSphereToAABB( const BSphere : TBSphere; var AABB : TAABB);
Function BSphereToAABB1( const center : TAffineVector; radius : Single) : TAABB;
Function BSphereToAABB2( const center : TVector; radius : Single) : TAABB;
14021:
14022:
          Function AABBContainsAABB( const mainAABB, testAABB : TAABB) : TSpaceContains
14024:
14025:
         Function BSphereContainsAABB( const mainBSphere : TBSphere; const testAABB : TAABB) : TSpaceContains
         \textbf{Function} \ \ \texttt{BSphereContainsBSphere(} \ \ \textbf{const} \ \ \texttt{mainBSphere, testBSphere:} \ \ \texttt{TBSphere):} \ \ \texttt{TSpaceContains}
14026:
14027:
         Function AABBContainsBSphere( const mainAABB : TAABB; const testBSphere : TBSphere) : TSpaceContains
         Function PlaneContainsBSphere(const Location, Normal: TAffineVector; const
         testBSphere:TBSphere):TSpaceContains
14029:
         Function FrustumContainsBSphere( const Frustum: TFrustum; const testBSphere: TBSphere): TSpaceContains
         Function FrustumContainsAABB( const Frustum : TFrustum; const testAABB : TAABB) : TSpaceContains
14030:
          Function ClipToAABB( const v : TAffineVector; const AABB : TAABB) : TAffineVector
          \textbf{Function} \ \texttt{BSphereIntersectsBSphere} ( \ \textbf{const} \ \texttt{mainBSphere}, \ \texttt{testBSphere} : \ \texttt{TBSphere}) \ : \ \texttt{boolean} 
14032:
          Procedure IncludeInClipRect( var clipRect : TClipRect; x, y : Single)
14033:
         Function AABBToClipRect(const aabb:TAABB;modelViewProjection:TMatrix;viewportSizeX,
14034:
         viewportSizeY:Int):TClipRect
14035:
14036:
14037:
        procedure SIRegister_GeometryCoordinates(CL: TPSPascalCompiler);
14038: begin
14039:
         Procedure Cylindrical_Cartesian( const r, theta, z1 : single; var x, y, z : single);
          Procedure Cylindrical_Cartesian1( const r, theta, z1 : double; var x, y, z : double);
14040:
14041: Procedure Cylindrical_Cartesian2( const r, theta,z1: single; var x, y, z: single; var ierr: integer);
14042: Procedure Cylindrical_Cartesian3( const r, theta,z1: double; var x, y, z: single; var ierr: integer);
14043: Procedure Cartesian_Cylindrical( const x, y, z1: single; var r, theta, z: single);
14044: Procedure Cartesian_Cylindrical1( const x, y, z1: double; var r, theta, z: single);
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14045:
            \textbf{Procedure} \ \ \textbf{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);
14046:
           Procedure Spherical_Cartesian2( const r, theta, phi : single; var x, y, z : single; var ierr : integer);
14047:
14048:
           Procedure Spherical_Cartesian3( const r,theta, phi : double; var x, y, z : double; 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);
Procedure Cartesian_Spherical2( const x, y, z : double; var r, theta, phi : double);
14049:
14050:
14051:
           Procedure ProlateSpheroidal_Cartesian( const xi, eta, phi, a : single; var x, y, z : single);
14052:
14053:
            \textbf{Procedure} \ \texttt{ProlateSpheroidal\_Cartesian1}( \ \textbf{const} \ \texttt{xi}, \ \texttt{eta}, \ \texttt{phi}, \ \texttt{a} \ \texttt{:} \ \texttt{double}; \ \textbf{var} \ \texttt{x}, \ \texttt{y}, \ \texttt{z} \ \texttt{:} \ \texttt{double}); 
           Procedure ProlateSpheroidal_Cartesian2(const xi,eta,phi,a:single;var x,y,z:single;var ierr: integer);
Procedure ProlateSpheroidal_Cartesian3(const xi,eta,phi,a:double;var x,y,z:double;var ierr: integer);
14054:
14055:
           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);
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);
14057:
14058:
14059:
14060:
           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);
14061:
          Procedure BipolarCylindrical_Cartesian2(const u,v,z1,a: single; var x,y,z:single; var ierr : integer);
Procedure BipolarCylindrical_Cartesian3(const u,v,z1,a: double; var x,y,z:double; var ierr : integer);
14062
14063:
14064:
         end;
14065:
14066:
          procedure SIRegister VectorGeometry(CL: TPSPascalCompiler);
14067:
         begin
14068:
            'EPSILON', 'Single').setExtended( 1e-40);
           'EPSILON2', 'Single').setExtended( 1e-30);
14069:
14070:
           TRenderContextClippingInfo', 'record origin': TVector; clippingD'
14071:
             +'irection : TVector; viewPortRadius : Single; farClippingDistance:Single;frustum:TFrustum; end HmgPlane', 'TVector
14072:
           THmgPlane',
14073:
            TDoubleHmgPlane', 'THomogeneousDblVector
           {TTransType', '( ttScaleX, ttScaleY, ttScaleZ, ttShearXY, ttShear'
14074:
14075:
              +'XZ, ttShearYZ, ttRotateX, ttRotateY, ttRotateZ, ttTranslateX, ttTranslateY'
14076:
              +', ttTranslateZ, ttPerspectiveX, ttPerspectiveY, ttPerspectiveZ, ttPerspectiveW )}
14077:
            TSingleArray', 'array of Single
            TTransformations','array [0..15] of Single)
TPackedRotationMatrix','array [0..2] of Smallint)
14078:
14079:
14080:
            TVertex', 'TAffineVector
            //TVectorGL', 'THomogeneousFltVector
//TMatrixGL', 'THomogeneousFltMatrix
14081:
14082:
           // TPackedRotationMatrix = array [0..2] of SmallInt;
Function glTexPointMake( const s, t : Single) : TTexPoint
14083:
14084:
14085:
            \begin{tabular}{lll} Function & glAffineVectorMake( & const x, y, z : Single) : TAffineVector; \\ Function & glAffineVectorMakel( & const v : TVectorGL) : TAffineVector; \\ \end{tabular} 
14086:
           Procedure glSetVector( var v : TAffineVector; const x, y, z : Single);

Procedure glSetVector( var v : TAffineVector; const x, y, z : Single);
14087:
14088:
           Procedure glSetVector1( var v : TAffineVector; const vSrc : TVectorGL);
Procedure glSetVector2( var v : TAffineVector; const vSrc : TAffineVector);
14089:
14090:
           Procedure glSetVector3( var v : TAffineDblVector; const vSrc : TAffineVector);
14091:
           Procedure glSetVector4( var v : TAffineDblVector; const vSrc : TVectorGL);
          Function glVectorMake( const v : TAffineVector; w : Single) : TVectorGL;
Function glVectorMakel( const x, y, z : Single; w : Single) : TVectorGL;
Function glPointMake( const x, y, z : Single) : TVectorGL;
Function glPointMakel( const v : TAffineVector) : TVectorGL;
14093:
14094:
14095:
14096:
           Function glPointMake2( const v : TVectorGL) : TVectorGL;
14097:
           Procedure glSetVector5( var v : TVectorGL; const x, y, z : Single; w : Single);

Procedure glSetVector6( var v : TVectorGL; const av : TAffineVector; w : Single);

Procedure glglSetVector7( var v : TVectorGL; const vSrc : TVectorGL);
14098:
14099:
14100:
           Procedure glMakePoint( var v : TVectorGL; const x, y, z : Single);
14101:
           Procedure glMakePoint1( var v : TVectorGL; const av : TAffineVector);
14102:
14103:
           Procedure glMakePoint2( var v : TVectorGL; const av : TVectorGL);
           Procedure glMakeVector( var v : TAffineVector; const x, y, z : Single);
Procedure glMakeVector1( var v : TVectorGL; const x, y, z : Single);
Procedure glMakeVector2( var v : TVectorGL; const x, y, z : Single);
14104:
14105:
14106:
14107:
           Procedure glMakeVector3( var v : TVectorGL; const av : TVectorGL);
14108:
           Procedure glRstVector( var v : TAffineVector);
           Procedure glRstVector1( var v : TVectorGL);
14109:
           Function glVectorAdd( const v1, v2 : TAffineVector) : TAffineVector;
14110:
           Procedure glVectorAdd1( const v1, v2 : TAffineVector; var vr : TAffineVector);
14111:
14112:
           //Procedure VectorAdd2( const v1, v2 : TAffineVector; vr : PAffineVector);
14113:
           Function glVectorAdd3( const v1, v2 : TVectorGL) : TVectorGL;
           Procedure glVectorAdd4( const v1, v2 : TvectorGL);

Function glVectorAdd5( const v : TAffineVector; const f : Single) : TAffineVector;
14114:
14115:
14116:
           Function glVectorAdd6( const v : TVectorGL; const f : Single) : TVectorGL;
           Procedure glAddVector7( var v1 : TAffineVector; const v2 : TAffineVector);
Procedure glAddVector8( var v1 : TAffineVector; const v2 : TVectorGL);
14117:
14118:
14119:
           Procedure glAddVector9( var v1 : TVectorGL; const v2 : TVectorGL);
           Procedure glAddVector10( var v : TAffineVector; const f : Single);
14120:
14121:
           Procedure glAddVector11( var v : TVectorGL; const f : Single);
14122:
           //Procedure TexPointArrayAdd(const src:PTexPointArray;const delta:TTexPoint;const
         nb:Int;dest:PTexPointArray);
           //Procedure TexPointArrayScaleAndAdd(const src:PTexPointArray;const delta:TTexPoint;const
14123:
         nb:Integer;const scale: TTexPoint; dest : PTexPointArray);
14124:
           //Procedure VectorArrayAdd(const src:PAffineVectorArray;const delta:TAffineVector;const nb:Integer;dest:
          PAffineVectorArray):
         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);

Function glVectorSubtract4( const v1, V2 : TVectorGL) : TVectorGL;

Procedure glVectorSubtract5( const v1, v2 : TVectorGL; var result : TVectorGL);
14126:
14127:
14128:
14129:
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14131:
14132:
                Function glVectorSubtract8( const v1 : TVectorGL; delta : Single)
               Procedure glSubtractVector9( var V1 : TAffineVector);

Procedure glSubtractVector10( var V1 : TVectorGL; const V2 : TAffineVector);
14134:
14135:
               Procedure glCombineVector( var vr : TAffineVector; const v : TAffineVector; var f : Single);

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

Function glTexPointCombine( const t1, t2 : TTexPoint; f1, f2 : Single) : TTexPoint
14136:
14137:
14138:
               Function glVectorCombine2( const V1, V2 : TAffineVector; const F1, F2 : Single) : TAffineVector;
Function glVectorCombine33( const V1, V2, V3 : TAffineVector; const F1, F2, F3 : Single) : TAffineVector;
14139:
14140:
               Procedure glvectorCombine34(const V1,V2,V3:TAffineVector; const F1,F2,F3: Single; var vr : TAffineVector);
14141:
               Procedure glCombineVector5( var vr : TVectorGL; const v : TVectorGL; var f : Single);
14143:
               Procedure glCombineVector6( var vr : TVectorGL; const v : TAffineVector; var f : Single);
               Function glVectorCombine7( const V1, V2 : TVectorGL; const F1, F2 : Single) : TVectorGL;
Function glVectorCombine8( const V1 : TVectorGL; const V2: TAffineVector; const F1,F2:Single): TVectorGL;
14144:
14145:
14146:
               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);
14147:
               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;

Procedure glVectorCombine31( const V1, V2, V3 : TvectorGL; const F1, F2, F3 : Single) : TvectorGL;

Function glVectorCombine31( const V1, V2, V3 : TvectorGL; const F1, F2, F3:Single; var Vr : TvectorGL);

Function glVectorDotProduct( const V1, V2 : TAffineVector) : Single;
14148 .
14149:
14150:
               Function glVectorDotProduct1( const V1, V2 : TVectorGL) : Single;
Function glVectorDotProduct2( const V1 : TVectorGL; const V2 : TAffineVector) : Single;
14152:
14153:
               Function glPointProject( const p, origin, direction : TAffineVector) : Single;
Function glPointProjectl( const p, origin, direction : TVectorGL) : Single;
14154:
14155:
14156:
               Function glVectorCrossProduct( const V1, V2 : TAffineVector) : TAffineVector;
14157:
               Function glVectorCrossProduct1( const V1, V2 : TVectorGL) : TVectorGL;
               Procedure glVectorCrossProduct2( const v1, v2 : TVectorGL; var vr : TVectorGL);
Procedure glVectorCrossProduct3( const v1, v2 : TAffineVector; var vr : TVectorGL);
14158:
14159:
               Procedure glVectorCrossProduct4( const v1, v2 : TVectorGL; var vr : TAffineVector);
14161:
               Procedure glVectorCrossProduct5( const v1, v2 : TAffineVector; var vr : TAffineVector);
               Function glLerp( const start, stop, t : Single) : Single Function glAngleLerp( start, stop, t : Single) : Single
14162:
14163:
14164:
               Function glDistanceBetweenAngles( angle1, angle2 : Single) : Single
               Function glTexPointLerp( const t1, t2 : TTexPoint; t : Single) : TTexPoint;
Function glVectorLerp( const v1, v2 : TAffineVector; t : Single) : TAffineVector;
14166:
14167:
               Procedure glVectorLerp1( const v1, v2 : TAffineVector; t : Single; var vr : TAffineVector);
               Function glVectorLerp2( const v1, v2 : TVectorGL; t : Single) : TVectorGL;
14168:
               Procedure glVectorLerp3( const v1, v2 : TVectorGL);

Function glVectorAngleLerp( const v1, v2 : TAffineVector; t : Single) : TAffineVector;
14169:
14170:
14171:
               \textbf{Function} \ \ \text{glVectorAngleCombine(} \ \ \textbf{const} \ \ \text{v1, v2} \ : \ \ \text{TAffineVector}; \ \ \text{f: Single)} \ : \ \ \text{TAffineVector}; \ \ \text{TAffineV
14172: // Procedure VectorArrayLerp( const src1, src2:PVectorArray; t:Single; n:Integer; dest:PVectorArray); 14173: // Procedure VectorArrayLerp1( const src1, src2: PAffineVectorArray; t : Single; n : Integer; dest :
             PAffineVectorArray);
               Function glVectorLength( const x, y : Single) : Single;
Function glVectorLength1( const x, y, z : Single) : Single;
Function glVectorLength2( const v : TAffineVector) : Single;
14174:
14175:
14176:
               Function glVectorLength3( const v : TVectorGL) : Single;
               Function glVectorLength4( const v : array of Single) : Sin
Function glVectorNorm( const x, y : Single) : Single;
Function glVectorNorm1( const v : TAffineVector) : Single;
14178:
14179:
14180:
               Function glVectorNorm2( const v : TVectorGL) : Single;
14181:
               Function glVectorNorm3( var V : array of Single) : Single;
               Procedure glNormalizeVector( var v : TAffineVector);
Procedure glNormalizeVector1( var v : TVectorGL);
14183:
14184:
               Function glVectorNormalize( const v : TAffineVector) : TAffineVector;
14185:
                Function glVectorNormalize1( const v : TVectorGL) : TVectorGL;
14186:
              // Procedure NormalizeVectorArray( list : PAffineVectorArray; n : Integer);
14187:
14188:
               Function glVectorAngleCosine( const V1,
                                                                                               V2 : TAffineVector) : Single
               Function glvectorAngletosine(const v: TAffineVector) : Sing
Function glVectorNegate(const v: TAffineVector) : TAffineVector;
Function glVectorNegatel(const v: TVectorGL) : TVectorGL;
14189:
14190:
               Procedure glNegateVector( var V : TAffineVector);
Procedure glNegateVector2( var V : TVectorGL);
Procedure glNegateVector3( var V : array of Single);
14191:
14192:
14193:
               Procedure glScaleVector( var v : TAffineVector; factor : Single);

Procedure glScaleVector1( var v : TAffineVector; const factor : TAffineVector);
14194:
14196:
               Procedure glScaleVector2( var v : TVectorGL; factor : Single);
14197:
               Procedure glScaleVector3( var v : TVectorGL; const factor : TVectorGL);
14198:
               Function glVectorScale( const v : TAffineVector; factor : Single) : TAffineVector;
               Procedure glVectorScale1( const v : TAffineVector; factor : Single; var vr : TAffineVector);
14199:
               Function glVectorScale2( const v : TVectorGL; factor : Single) : TVectorGL;
14200:
               Procedure glVectorScale3( const v : TVectorGL; factor : Single; var vr : TVectorGL);

Procedure glVectorScale4( const v : TVectorGL; factor : Single; var vr : TAffineVector);
14201:
14202:
14203:
               Procedure glDivideVector( var v : TVectorGL; const divider : TVectorGL);
               Function glVectorEquals( const V1, V2 : TVectorGL) : Boolean;
14204:
               Function glVectorEquals1( const V1, V2 : TAffineVector) : Boolean;
14205:
               Function glAffineVectorEquals( const V1, V2 : TVectorGL) : Boolean; Function glVectorIsNull( const v : TVectorGL) : Boolean; Function glVectorIsNull1( const v : TAffineVector) : Boolean;
14206:
14207:
14208:
               Function glVectorSpacing( const v1, v2 : TTexPoint) : Single;
Function glVectorSpacing1( const v1, v2 : TAffineVector) : Si
14210:
14211:
               Function glVectorSpacing2( const v1, v2 : TVectorGL) : Single;
14212:
               Function glVectorDistance( const v1, v2 : TAffineVector) : Single;
               Function glVectorDistance1( const v1, v2 : TMfIneVector) : Single;
Function glVectorDistance2( const v1, v2 : TAffineVector) : Single;
14213:
14214:
              Function glVectorDistance21( const v1, v2 : TarfineVector() : Single;

Function glVectorPistance21( const v1, v2 : TVectorGL) : Single;

Function glVectorPerpendicular( const V, N : TAffineVector) : TAffineVector

Function glVectorReflect( const V, N : TAffineVector) : TAffineVector

Procedure glRotateVector( var vector : TVectorGL; const axis : TAffineVector; angle : Single);
14215:
14216:
14217:
```

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14219:
           Procedure glRotateVector1( var vector : TVectorGL; const axis : TVectorGL; angle : Single);
14220:
           Procedure glRotateVectorAroundY( var v : TAffineVector; alpha : Single)
            Function glVectorRotateAroundX( const v : TAffineVector; alpha : Single) : TAffineVector;
14222:
           Function glVectorRotateAroundY( const v : TAffineVector; alpha : Single) : TAffineVector;
           Procedure glVectorRotateAroundY1(const v : TAffineVector; alpha : Single; var vr : TAffineVector);
14223:
           Function glVectorRotateAroundZ( const v : TAffineVector; alpha : Single) : TAffineVector;
14224:
14225:
           Procedure glAbsVector( var v : TVectorGL);
            Procedure glAbsVector1( var v : TAffineVector);
14226:
14227:
           Function glVectorAbs( const v : TVectorGL) : TVectorGL;
           Function glVectorAbs1( const v : TAffineVector) : TAffineVector;
Procedure glSetMatrix( var dest : THomogeneousDblMatrix; const src : TMatrixGL);
14228:
14229:
           Procedure glSetMatrix1( var dest : TAffineMatrix; const src : TMatrixGL);
14231:
           Procedure glSetMatrix2( var dest : TMatrixGL; const src : TAffineMatrix);
           Procedure glSetMatrixRow( var dest : TMatrixGL; rowNb : Integer; const aRow : TVectorGL);
14232:
           Function glCreateScaleMatrix( const v : TAffineVector) : TMatrixGL;
14233:
14234:
           Function glCreateScaleMatrix1( const v : TVectorGL) : TMatrixGL;
           Function glCreateTranslationMatrix( const V : TAffineVector) : TMatrixGL;
14235:
14236:
           Function glCreateTranslationMatrix1( const V : TVectorGL) : TMatrixGL;
           Function glCreateScaleAndTranslationMatrix( const scale, offset : TVectorGL) : TMatrixGL;
Function glCreateRotationMatrixX( const sine, cosine : Single) : TMatrixGL;
14237:
14238:
            Function glCreateRotationMatrixX1( const angle : Single) : TMatrixGL;
14239:
14240:
           Function glCreateRotationMatrixY( const sine, cosine : Single) : TMatrixGL;
14241:
           \textbf{Function} \  \, \texttt{glCreateRotationMatrixY1( const } \  \, \texttt{angle} \  \, : \  \, \texttt{Single)} \  \, : \  \, \texttt{TMatrixGL};
           Function glCreateRotationMatrixZ( const sine, cosine : Single) : TMatrixGL;
Function glCreateRotationMatrixZ1( const angle : Single) : TMatrixGL;
Function glCreateRotationMatrix( const anAxis : TAffineVector; angle : Single) : TMatrixGL;
14242:
14243:
14244:
14245:
           Function glCreateRotationMatrix1( const anAxis : TVectorGL; angle : Single) : TMatrixGL;
           Function glCreateAffineRotationMatrix( const anAxis: TAffineVector; angle:Single):TAffineMatrix
Function glMatrixMultiply( const M1, M2: TAffineMatrix): TAffineMatrix;
Function glMatrixMultiply1( const M1, M2: TMatrixGL): TMatrixGL;
14246:
14247:
14249:
           Procedure glMatrixMultiply2( const M1, M2 : TMatrixGL; var MResult : TMatrixGL);
           Function glVectorTransform( const V : TVectorGL; const M : TMatrixGL) : TVectorGL;
Function glVectorTransform1( const V : TVectorGL; const M : TAffineMatrix) : TVectorGL;
Function glVectorTransform2( const V : TAffineVector; const M : TMatrixGL) : TAffineVector;
Function glVectorTransform3( const V : TAffineVector; const M : TAffineMatrix) : TAffineVector;
14250:
14251:
14252:
14253:
14254:
           Function glMatrixDeterminant( const M : TAffineMatrix) : Single;
           Function glMatrixDeterminant( const M : TMatrixGL) : Single;
Procedure glAdjointMatrix( var M : TMatrixGL);
14255:
14256:
14257:
           Procedure glAdjointMatrix1( var M : TAffineMatrix);
14258:
           Procedure glScaleMatrix( var M : TAffineMatrix; const factor : Single);
           Procedure glScaleMatrix1( var M : TMatrixGL; const factor : Single);
14259:
           Procedure glTranslateMatrix( var M : TMatrixGL; const v : TAffineVector);
Procedure glTranslateMatrix1( var M : TMatrixGL; const v : TVectorGL);
14260:
14261:
14262:
            Procedure glNormalizeMatrix( var M : TMatrixGL)
           Procedure glTransposeMatrix( var M : TAffineMatrix);
Procedure glTransposeMatrix1( var M : TMatrixGL);
14263:
14264:
           Procedure glInvertMatrix( var M : TMatrixGL);
Procedure glInvertMatrix1( var M : TAffineMatrix);
14265:
14266:
14267:
           Function glAnglePreservingMatrixInvert( const mat : TMatrixGL) : TMatrixGL
14268:
           \textbf{Function} \ \texttt{glMatrixDecompose}( \ \textbf{const} \ \texttt{M} \ : \ \texttt{TMatrixGL}; \ \textbf{var} \ \texttt{Tran} \ : \ \texttt{TTransformations}) \ : \ \texttt{Boolean}
           Function glPlaneMake( const pl, p2, p3 : TAffineVector): THmgPlane;
Function glPlaneMake1( const p1, p2, p3 : TVectorGL): THmgPlane;
14269:
14270:
           Function glPlaneMake2( const point, normal : TAffineVector): THmgPlane;
Function glPlaneMake3( const point, normal : TVectorGL) : THmgPlane;
14271:
14272:
           Procedure glSetPlane( var dest : TDoubleHmgPlane; const src : THmgPlane)
14273:
           Procedure glNormalizePlane( var plane : THmgPlane)
14274:
14275:
            Function glPlaneEvaluatePoint( const plane : THmgPlane; const point : TAffineVector) : Single;
14276:
           Function glPlaneEvaluatePoint1( const plane : THmgPlane; const point : TVectorGL) : Single;
           Function glCalcPlaneNormal( const p1, p2, p3 : TAffineVector) : TAffineVector;

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

Procedure glCalcPlaneNormal2( const p1, p2, p3 : TVectorGL; var vr : TAffineVector);
14277:
14278:
14279:
14280:
            Function glPointIsInHalfSpace( const point, planePoint, planeNormal : TVectorGL) : Boolean;
14281:
           Function glPointIsInHalfSpace1( const point, planePoint, planeNormal : TAffineVector) : Boolean;
           Function glPointPlaneDistance( const point, planePoint, planeNormal : TVectorGL) : Single;
Function glPointPlaneDistance1( const point, planePoint, planeNormal : TAffineVector) : Single;
Function glPointSegmentClosestPoint( const point, segmentStart, segmentStop:TAffineVector):TAffineVector
14282:
14283:
           Function glPointSegmentDistance( const point, segmentStart, segmentStop: TAffineVector): single Function glPointLineClosestPoint( const point, linePoint, lineDirection: TAffineVector): TAffineVector
14285:
14286:
           \textbf{Function} \ \ \text{glPointLineDistance} ( \ \ \textbf{const} \ \ \text{point}, \ \ \text{lineDirection} : \ \ \text{TAffineVector}) : \ \ \text{Single} \\
14287:
           Procedure SglegmentSegmentClosestPoint( const S0Start, S0Stop, S1Start, S1Stop : TAffineVector; var
14288:
          SegmentOClosest, Segment1Closest : TAffineVector)
14289:
            \overline{\textbf{Function}} \ \text{glSegmentSegmentDistance} ( \ \textbf{const} \ \text{S0Start}, \ \text{S0Start}, \ \text{S1Start}, \ \text{S1Stop} : \ \text{TAffineVector}) : \ \text{single} 
14290:
           TEulerOrder', '( eulXYZ, eulXZY, eulYXZ, eulYZX, eulZXY, eulZYX)
Function glQuaternionMake( const Imag : array of Single; Real : Single) : TQuaternion
14291:
           Function glQuaternionConjugate( const Q : TQuaternion) : TQuaternion
14292:
14293:
           \textbf{Function} \  \, \texttt{glQuaternionMagnitude}(\  \, \textbf{const} \  \, \texttt{Q} \  \, \texttt{TQuaternion}) \  \, \texttt{Single}
           Procedure glNormalizeQuaternion( var Q : TQuaternion)
Function glQuaternionFromPoints( const V1, V2 : TAffineVector) : TQuaternion
Procedure glQuaternionToPoints( const Q : TQuaternion; var ArcFrom, ArcTo : TAffineVector)
14294:
14295:
14296:
            Function glQuaternionFromMatrix( const mat : TMatrixGL)
                                                                                                : TOuaternion
14298:
           Function glQuaternionToMatrix( quat : TQuaternion) : TMatrixGL
14299:
           Function glQuaternionToAffineMatrix( quat : TQuaternion) : TAffineMatrix
           Function glQuaternionToAffineMatrix( quat : TQuaternion) : TAffineMatrix
Function glQuaternionFromAngleAxis( const angle : Single; const axis : TAffineVector) : TQuaternion
Function glQuaternionFromEnglePitchYaw( const r, p, y : Single) : TQuaternion
Function glQuaternionFromEngler( 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;
Function glQuaternionSlerp1( const source, dest : TQuaternion; const t : Single) : TQuaternion;
14300:
14301:
14302:
14303:
14304:
14305:
           Function glLnXP1( X : Extended) : Extended
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14307:
         Function glLog10( X : Extended) : Extended
          Function glLog2( X : Extended) : Extended;
14308:
          Function glLog21( X : Single) : Single;
14310:
          Function glLogN( Base, X : Extended) : Extended
          Function glIntPower( Base : Extended; Exponent : Integer) : Extended
14311:
         Function glPower( const Base, Exponent : Single) : Single;
14312:
         Function glPower1( Base : Single; Exponent : Integer) : Single
14313:
         Function glDegToRad( const Degrees : Extended) : Extended;
Function glDegToRadl( const Degrees : Single) : Single;
14314:
14315:
         Function glRadToDeg( const Radians : Extended) : Extended;
Function glRadToDeg1( const Radians : Single) : Single;
14316:
14317:
         Function glNormalizeAngle( angle : Single) : Single
14319:
         Function glNormalizeDegAngle( angle : Single) : Single
         Procedure glSinCos( const Theta : Extended; var Sin, Cos : Extended);
Procedure glSinCos1( const Theta : Double; var Sin, Cos : Double);
14320:
14321:
14322:
         Procedure glSinCos( const Theta : Single; var Sin, Cos : Single);
         Procedure glSinCos1( const theta, radius : Double; var Sin, Cos : Extended);
14323:
         Procedure glSinCos2( const theta, radius : Double; var Sin, Cos : Double);
Procedure glSinCos3( const theta, radius : Single; var Sin, Cos : Single);
14324 .
14325:
14326:
         Procedure glPrepareSinCosCache( var s, c : array of Single; startAngle, stopAngle : Single)
          Function glArcCos( const X : Extended) : Extended;
14327:
         Function glArcCos1( const x : Single) : Single;
14328:
         Function glArcSin( const X : Extended) : Extended;
Function glArcSin1( const X : Single) : Single;
14329:
14330:
         Function glArcTan21( const Y, X : Extended) : Extended;
14331:
14332:
         Function glArcTan21( const Y, X : Single) : Single;
14333:
         Function glFastArcTan2( y, x : Single) : Single
         Function glTan( const X : Extended) : Extended;
Function glTanl( const X : Single) : Single;
14334:
14335:
         Function glCoTan( const X : Extended) : Extended;
         Function glCoTanl( const X : Single) : Single;
14337:
         Function glSinh( const x : Single) : Single;
Function glSinh1( const x : Double) : Double;
14338:
14339:
14340:
         Function glCosh( const x : Single) : Single;
          Function glCosh1( const x : Double) : Double;
14341:
14342:
         Function glRSqrt( v : Single) : Single
         Function glRLength( x, y : Single) : Single
Function glISqrt( i : Integer) : Integer
14343:
14344:
         Function gllLength(x, y : Integer) : Integer;
Function gllLength(x, y, z : Integer) : Integer;
14345:
14346:
14347:
         \textbf{Procedure} \ \texttt{glRegisterBasedExp}
         Procedure glRandomPointOnSphere( var p : TAffineVector)
14348:
14349:
         Function glRoundInt( v : Single) : Single;
          Function glRoundIntl( v : Extended) : Extended;
14350:
14351:
         Function glTrunc(v:Single):Integer;
         Function glTrunc64( v : Extended) : Int64;
14352:
         Function glInt( v : Single) : Single;
Function glInt( v : Extended) : Extended;
14353:
14354:
         Function glFrac( v : Single) : Single;
14355:
         Function glFrac1( v : Extended) : Extended;
Function glRound( v : Single) : Integer;
14356:
14357:
         Function glRound64( v : Single) : Int64;
14358:
         Function glRound641( v : Extended) : Int64;
14359:
         Function glTrunc( X : Extended) : Int64
Function glRound( X : Extended) : Int64
14360:
14361:
         Function glFramc( X : Extended) : Integer;
Function glCeil( v : Single) : Integer;
14362:
14363:
         Function glCeil64( v : Extended) : Int64;
14364:
         Function glFloor( v : Single) : Integer;
Function glFloor64( v : Extended) : Int64;
14365:
14366:
         Function glScaleAndRound( i : Integer; var s : Single) : Integer
14367:
14368:
          Function glSign( x : Single) : Integer
14369:
         Function glIsInRange( const x, a, b : Single) : Boolean;
         Function glIsInRangel( const x, a, b : Double) : Boolean;
Function glIsInCube( const p, d : TAffineVector) : Boolean;
Function glIsInCubel( const p, d : TVectorGL) : Boolean;
14370:
14371:
14373:
         //Function MinFloat( values : PSingleArray; nbItems : Integer) : Single;
14374:
         //Function MinFloat1( values : PDoubleArray; nbItems : Integer) : Double;
14375:
         //Function MinFloat2( values : PExtendedArray; nbItems : Integer) : Extended;
Function glMinFloat3( const v1, v2 : Single) : Single;
14376:
14377:
         Function glMinFloat4( const v : array of Single) :
         Function glMinFloat5( const v1, v2 : Double) : Double;
Function glMinFloat6( const v1, v2 : Extended) : Extended;
14378:
14379:
         Function glMinFloat7( const v1, v2, v3 : Single) : Single;
14380:
         Function glMinFloat8( const v1, v2, v3 : Double) : Double;
14381:
          Function glMinFloat9( const v1, v2, v3 : Extended) : Extended;
14382:
14383:
          //Function MaxFloat10( values : PSingleArray; nbItems : Integer) : Single;
         //Function MaxFloat( values : PDoubleArray; nbItems : Integer) : Double;
//Function MaxFloat1( values : PExtendedArray; nbItems : Integer) : Extended;
14384:
14385:
         Function glMaxFloat2( const v : array of Single) : Single;
         Function glMaxFloat3( const v1, v2 : Single) : Single;
Function glMaxFloat4( const v1, v2 : Double) : Double;
14387:
14388:
14389:
         Function glMaxFloat5( const v1, v2 : Extended) : Extended;
14390:
         Function glMaxFloat6( const v1, v2, v3 : Single) : Single;
         Function glMaxFloat7( const v1, v2, v3 : Double) : Double;
14391:
14392:
         Function glMaxFloat8( const v1, v2, v3 : Extended) : Extended;
14393: Function glMinInteger9( const v1, v2 : Integer) : Integer;
14394: Function glMinInteger( const v1, v2 : Cardinal) : Cardinal;
14395: Function glMaxInteger( const v1, v2 : Integer) : Integer;
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Function glMaxInteger1( const v1, v2 : Cardinal) : Cardinal;
Function glTriangleArea( const p1, p2, p3 : TAffineVector) : Single;
14396:
14397:
           //Function PolygonArea( const p : PAffineVectorArray; nSides : Integer) : Single;
14300.
           Function glTriangleSignedArea( const p1, p2, p3 : TAffineVector) : Single;
14400:
           // Function \ Polygon Signed Area (\ const\ p\ :\ PAffine Vector Array;\ nSides\ :\ Integer)\ :\ Single;
          //Procedure ScaleFloatArray( values : PSingleArray; nb : Integer; var factor : Single);
Procedure glScaleFloatArray( var values : TSingleArray; factor : Single);
14401:
14402:
          //Procedure OffsetFloatArray( values : PSingleArray, nb : Integer; var delta : Single);
Procedure glOffsetFloatArray1( var values : array of Single; delta : Single);
14403:
14404:
14405:
           //Procedure OffsetFloatArray2( valuesDest, valuesDelta : PSingleArray; nb : Integer);
          Function glMaxXYZComponent( const v : TVectorGL) : Single;
Function glMaxXYZComponent1( const v : TAffineVector) : single;
14406:
14408:
          Function glMinXYZComponent( const v : TVectorGL) : Single;
          Function glMinXYZComponent1( const v : TAffineVector) : single;
14409:
          Function glMaxAbSXYZComponent( v : TVectorGL) : Single
Function glMinAbSXYZComponent( v : TVectorGL) : Single
14410:
14411:
          Procedure glMaxVector( var v : TVectorGL; const v1 : TVectorGL);
14412:
          Procedure glMaxVector1( var v : TAffineVector; const v1 : TAffineVector);
Procedure glMinVector( var v : TVectorGL; const v1 : TVectorGL);
Procedure glMinVector1( var v : TAffineVector; const v1 : TAffineVector);
14413.
14414:
14415:
           Procedure glSortArrayAscending( var a : array of Extended)
14416:
          Function glClampValue( const aValue, aMin, aMax : Single) : Single;
14417:
          Function glClampValue1( const aValue, aMin : Single) : Single;
Function glGeometryOptimizationMode : String
14418:
14419:
14420:
          Procedure glBeginFPUOnlySection
14421:
          Procedure glEndFPUOnlySection
14422:
          Function glConvertRotation( const Angles : TAffineVector) : TVectorGL
          Function glMakeAffineDblVector( var v : array of Double) : TAffineDblVector
Function glMakeDblVector( var v : array of Double) : THomogeneousDblVector
14423:
14424:
          Function glVectorAffineDblToFlt( const v : TAffineDblVector) : TAffineVector
14426:
          \textbf{Function} \  \, \texttt{glVectorDblToFlt}( \  \, \textbf{const} \  \, \texttt{v} \  \, \texttt{:} \  \, \texttt{THomogeneousDblVector}) \  \, \texttt{:} \  \, \texttt{THomogeneousVector}
14427:
          \textbf{Function} \  \, \texttt{glVectorAffineFltToDbl}( \  \, \textbf{const} \  \, \texttt{v} \  \, \texttt{:} \  \, \texttt{TAffineVector}) \  \, \texttt{:} \  \, \texttt{TAffineDblVector}
          Function glVectorFltToDbl( const v : TVectorGL) : THomogeneousDblVector
14428:
          Function glPointInPolygon( var xp, yp : array of Single; x, y : Single) : Boolean

Procedure glDivMod( Dividend : Integer; Divisor : Word; var Result, Remainder : Word)
14429:
          Function glTurn( const Matrix : TMatrixGL; angle : Single) : TMatrixGL;
14431:
          Function glTurn1( const Matrix : TMatrixGL; const MasterUp:TAffineVector;Angle:Single):TMatrixGL;
Function glPitch( const Matrix : TMatrixGL; Angle : Single) : TMatrixGL;
14432:
14433:
14434:
          Function glPitch1( const Matrix:TMatrixGL;const MasterRight:TAffineVector;Angle:Single):TMatrixGL;
          Function glRoll(const Matrix: TMatrixGL; Angle : Single) : TMatrixGL;

Function glRoll(const Matrix: TMatrixGL; Angle : Single) : TMatrixGL;
14435:
14436:
         Function glRayCastMinDistToPoint( const rayStart, rayVector: TVectorGL; const point:TVectorGL):Single
Function glRayCastIntersectsSphere( const rayStart, rayVector : TVectorGL; const
sphereCenter:TVectorGL; const sphereRadius : Single) : Boolean;
14437:
14438:
14439:
          \textbf{Function} \ \ \texttt{glRayCastSphereIntersect} ( \ \ \textbf{const} \ \ \texttt{rayVector} : \ \ \texttt{TVectorGL}; \ \ \textbf{const} \ \ \texttt{sphereCenter} : \ \ \texttt{TVectorGL}; 
         const sphereRadius : Single; var i1, i2 : TVectorGL) : Integer;
          Function glSphereVisibleRadius( distance, radius : Single) : Single
14440:
           Function glExtractFrustumFromModelViewProjection( const modelViewProj : TMatrixGL) : TFrustum
14441:
          Function glIsVolumeClipped( const objPos : TVectorGL; const objRadius : Single; const rcci
14442:
         TRenderContextClippingInfo) : Boolean;
         Function glIsVolumeClipped1( const objPos : TAffineVector; const objRadius : Single; const rcci :
         TRenderContextClippingInfo) : Boolean;
         Function gllsVolumeClipped2(const min, max:TAffineVector; const rcci : TRenderContextClippingInfo) : Bool;
          Function glIsVolumeClipped3(const objPos:TAffineVector;const objRadius:Single;const
14445:
         Frustum: TFrustum): Bool;
14446: Function glMakeParallelProjectionMatrix( const plane : THmgPlane; const dir : TVectorGL) : TMatrixGL
           Function glMakeShadowMatrix( const planePoint, planeNormal, lightPos: TVectorGL): TMatrixGL
          Function glMakeReflectionMatrix( const planePoint, planeNormal : TAffineVector) : TMatrixGL
14448:
          Function glPackRotationMatrix( const mat : TMatrixGL) : TPackedRotationMatrix
Function glUnPackRotationMatrix( const packedMatrix : TPackedRotationMatrix) : TMatrixGL
'cPI','Single').setExtended( 3.141592654);
14449:
14450:
14451:
14452:
           'cPIdiv180', 'Single').setExtended( 0.017453292);
14453:
           'c180divPI','Single').setExtended( 57.29577951);
           'c2PI','Single').setExtended( 6.283185307);
'cPIdiv2','Single').setExtended( 1.570796326);
'cPIdiv4','Single').setExtended( 0.785398163);
14454:
14455:
14457:
           'c3PIdiv4', 'Single').setExtended( 2.35619449);
           'cInv2PI','Single').setExtended( 1 / 6.283185307);
'cInv360','Single').setExtended( 1 / 360);
14458:
14459:
           'c180','Single').setExtended( 180);
'c360','Single').setExtended( 360);
14460:
14461:
14462:
           'cOneHalf','Single').setExtended( 0.5);
           'cLn10','Single').setExtended( 2.302585093);
14463:
           {'MinSingle','Extended').setExtended( 1.5e-45);
14464:
            'MaxSingle','Extended').setExtended( 3.4e+38);
14465:
           'MinDouble', 'Extended').setExtended( 5.0e-324);
14466:
14467:
           'MaxDouble', 'Extended').setExtended( 1.7e+308);
           'MinExtended','Extended').setExtended( 3.4e-4932);
'MaxExtended','Extended').setExtended( 1.1e+4932);
14468:
14469:
           'MinComp','Extended').setExtended( - 9.223372036854775807e+18);
14471:
          'MaxComp','Extended').setExtended( 9.223372036854775807e+18);}
14472: end;
14473:
14474: procedure SIRegister_GLVectorFileObjects(CL: TPSPascalCompiler);
14475:
         begin
            AddClassN(FindClass('TOBJECT'),'TMeshObjectList
14476:
14477:
            (FindClass('TOBJECT'),'TFaceGroups
TMeshAutoCentering','( macCenterX, macCenterY, macCenterZ, macUseBarycenter )
14478:
            TMeshAutoCenterings', 'set of TMeshAutoCentering
```

```
TMeshObjectMode', '( momTriangles, momTriangleStrip, momFaceGroups )
14480:
14481:
           SIRegister_TBaseMeshObject(CL);
14482:
            (FindClass('TOBJECT'),'TSkeletonFrameList
           TSkeletonFrameTransform', '( sftRotation, sftQuaternion )
14483:
14484:
           SIRegister TSkeletonFrame(CL);
           SIRegister TSkeletonFrameList(CL);
14485:
           (FindClass('TOBJECT'),'TSkeleton
(FindClass('TOBJECT'),'TSkeletonBone
14486:
14487:
14488:
           SIRegister_TSkeletonBoneList(CL);
14489:
           SIRegister_TSkeletonRootBoneList(CL);
14490:
           SIRegister_TSkeletonBone(CL);
           (FindClass('TOBJECT'), 'TSkeletonColliderList
14491:
14492:
           SIRegister_TSkeletonCollider(CL);
           SIRegister_TSkeletonColliderList(CL);
14493:
           (FindClass('TOBJECT'),'TGLBaseMesh
14494:
14495:
           TBlendedLerpInfo', 'record frameIndex1 : Integer; frameIndex2 : '
            +'Integer; lerpFactor : Single; weight : Single; externalPositions : TAffine'
14496:
14497 .
             +'VectorList; externalRotations : TAffineVectorList; externalQuaternions : T'
14498:
             +'OuaternionList; end
14499:
           SIRegister_TSkeleton(CL);
           TMeshObjectRenderingOption', '( moroGroupByMaterial )
TMeshObjectRenderingOptions', 'set of TMeshObjectRenderingOption
14500:
14501:
14502:
           SIRegister_TMeshObject(CL);
           SIRegister_TMeshObjectList(CL);
14503:
           //TMeshObjectListClass', 'class of TMeshObjectList (FindClass('TOBJECT'), 'TMeshMorphTargetList
14504:
14505:
14506:
           SIRegister_TMeshMorphTarget(CL);
           SIRegister_TMeshMorphTargetList(CL);
SIRegister_TMorphableMeshObject(CL);
14507:
14508:
           TVertexBoneWeight', 'record BoneID : Integer; Weight : Single; end
14509:
           //PVertexBoneWeightArray', '^TVertexBoneWeightArray // will not wo'rk
//PVerticesBoneWeights', '^TVerticesBoneWeights // will not work
14510:
14511:
           TVertexBoneWeightDynArray', 'array of TVertexBoneWeight
14512:
           SIRegister_TSkeletonMeshObject(CL);
14513:
           SIRegister_TFaceGroup(CL);
14514:
           TFaceGroupMeshMode', '( fgmmTriangles, fgmmTriangleStrip, fgmmFl' +'atTriangles, fgmmTriangleFan, fgmmQuads )
SIRegister_TFGVertexIndexList(CL);
14515:
14516:
14517:
14518:
           SIRegister_TFGVertexNormalTexIndexList(CL);
14519:
           SIRegister_TFGIndexTexCoordList(CL);
14520:
           SIRegister_TFaceGroups(CL);
           TMeshNormalsOrientation', '
SIRegister_TVectorFile(CL);
                                             '( mnoDefault, mnoInvert )
14521:
14522:
            //TVectorFileClass', 'class of TVectorFile
14523:
           SIRegister_TGLGLSMVectorFile(CL);
14524:
           SIRegister_TGLBaseMesh(CL);
SIRegister_TGLFreeForm(CL);
14525:
14526:
           TGLActorOption', '( aoSkeletonNormalizeNormals )
TGLActorOptions', 'set of TGLActorOption
14527:
14528:
14529:
           'cDefaultGLActorOptions','LongInt').Value.ts32:= ord(aoSkeletonNormalizeNormals);
(FindClass('TOBJECT'),'TGLActor
14530:
           TActorAnimationReference', '( aarMorph, aarSkeleton, aarNone )
14531:
           SIRegister_TActorAnimation(CL);
14532:
14533:
           TActorAnimationName', 'String
           SIRegister_TActorAnimations(CL);
SIRegister_TGLBaseAnimationControler(CL);
14534:
14535:
14536:
           SIRegister_TGLAnimationControler(CL);
14537:
           TActorFrameInterpolation', '( afpNone, afpLinear )
           TActorAnimationMode', '( aamNone, aamPlayOnce, aamLoop, aamBounc'
    +'eForward, aamBounceBackward, aamLoopBackward, aamExternal )
SIRegister_TGLActor(CL);
14538:
14539:
14540:
14541:
           SIRegister_TVectorFileFormat(CL);
14542:
           SIRegister_TVectorFileFormatsList(CL);
14543:
           (FindClass('TOBJECT'), 'EInvalidVectorFile
          Function GetVectorFileFormats: TVectorFileFormatsList
Function VectorFileFormatsFilter: String
14544:
14545:
14546:
          Function VectorFileFormatsSaveFilter : String
14547:
          \textbf{Function} \ \ \texttt{VectorFileFormatExtensionByIndex} ( \ \ \texttt{index} \ : \ \ \texttt{Integer}) \ : \ \ \textbf{String}
         Procedure RegisterVectorFileFormat( const aExtension, aDescription : String; aClass : TVectorFileClass)

Procedure UnregisterVectorFileClass( aClass : TVectorFileClass)
14548:
14549:
14550: end;
14551:
14552: procedure SIRegister AxCtrls(CL: TPSPascalCompiler);
14553:
        begin
          'Class_DColorPropPage','TGUID').SetString( '{5CFF5D59-5946-11D0-BDEF-00A024D1875C}
'Class_DFontPropPage','TGUID').SetString( '{5CFF5D5B-5946-11D0-BDEF-00A024D1875C}
14554:
14555:
          'Class_DFicturePropPage','TGUID').SetString( '{5CFF5D5A-5946-11D0-BDEF-00A024D1875C}'Class_DStringPropPage','TGUID').SetString( '{F42D677E-754B-11D0-BDFB-00A024D1875C}
14556:
14557:
14558:
           SIRegister TOleStream(CL);
           (FindClass('TOBJECT'),'TConnectionPoints
TConnectionKind', '(ckSingle, ckMulti)
14559:
14560:
14561:
           SIRegister_TConnectionPoint(CL);
14562:
           SIRegister TConnectionPoints(CL);
14563:
           TDefinePropertyPage', 'Procedure ( const GUID : TGUID)
            FindClass('TOBJECT'),'TActiveXControlFactory
14564:
           SIRegister_TActiveXControl(CL);
14565:
14566:
           //TActiveXControlClass', 'class of TActiveXControl
SIRegister_TActiveXControlFactory(CL);
14567:
14568:
           SIRegister_TActiveFormControl(CL);
```

```
14569:
            SIRegister TActiveForm(CL);
14570:
            //TActiveFormClass', 'class of TActiveForm
14571:
            SIRegister_TActiveFormFactory(CL);
14572 .
            (FindClass('TOBJECT'), 'TPropertyPageImpl
14573:
            SIRegister_TPropertyPage(CL);
14574:
            //TPropertyPageClass', 'class of TPropertyPage
SIRegister_TPropertyPageImpl(CL);
14575:
14576:
            SIRegister_TActiveXPropertyPage(CL);
14577:
            SIRegister_TActiveXPropertyPageFactory(CL);
14578:
            SIRegister_TCustomAdapter(CL);
14579:
            SIRegister_TAdapterNotifier(CL);
            SIRegister_IFontAccess(CL);
14581:
            SIRegister_TFontAdapter(CL);
            SIRegister_IPictureAccess(CL);
SIRegister TPictureAdapter(CL);
14582:
14583:
14584:
            SIRegister_TOleGraphic(CL);
14585:
            SIRegister_TStringsAdapter(CL);
14586
            SIRegister TReflectorWindow(CL);
          Procedure EnumDispatchProperties(Dispatch:IDispatch;PropType:TGUID;VTCode:Int;PropList:TStrings);
14587:
          Procedure GetOleFont (Font : TFont; var OleFont : IFontDisp)

Procedure SetOleFont (Font : TFont; OleFont : IFontDisp)
14588:
14589:
14590:
          Procedure GetOlePicture( Picture : TPicture; var OlePicture : IPictureDisp)
14591:
          Procedure SetOlePicture( Picture : TPicture; OlePicture : IPictureDisp)
          Procedure GetOleStrings (Strings: TStrings; var OleStrings: IStrings)
14592:
          Procedure SetOleStrings ( Strings : TStrings; OleStrings : IStrings)
14593:
14594:
          Function ParkingWindow : HWND
14595: end;
14596:
14597: procedure SIRegister_synaip(CL: TPSPascalCompiler);
14598: begin
14599:
           // TIp6Bytes = array [0..15] of Byte;
         {:binary form of IPv6 adress (for string conversion routines)}
// TIp6Words = array [0..7] of Word;
14600:
14601:
          AddTypeS('TIp6Bytes', 'array [0..15] of Byte;');
AddTypeS('TIp6Bytes', 'array [0..15] of Word;');
AddTypeS('TIp6Words', 'array [0..7] of Word;');
AddTypeS('TIPAdr', 'record Octl : Byte; Oct2 : Byte; Oct3 : Byte; Oct4: Byte; end');
Function synaIsIP( const Value : string) : Boolean');
Function synaIsIP6( const Value : string) : Boolean');
14602:
14603:
14604:
14605:
14606:
14607:
          Function synaIPToID( Host : string) : Ansistring');
          Function synaStrToIp6( value : string) : TIp6Bytes');
Function synaIp6ToStr( value : TIp6Bytes) : string');
14608:
14609:
          Function synaStrToIp( value : string) : integer');
Function synaIpToStr( value : integer) : string');
14610:
14611:
          Function synaReverseIP( Value : AnsiString) : AnsiString');
14612:
          Function synaReverseIP6( Value : AnsiString) : AnsiString');
Function synaExpandIP6( Value : AnsiString) : AnsiString');
Function xStrToIP( const Value : String) : TIPAdr');
14613:
14614:
14615:
          Function xIPToStr( const Adresse : TIPAdr) : String');
14617:
          Function IPToCardinal( const Adresse : TIPAdr) : Cardinal');
          Function CardinalToIP( const Value : Cardinal) : TIPAdr');
14618:
14619:
         end;
14620:
14621:
         procedure SIRegister_synacode(CL: TPSPascalCompiler);
14622: begin
          AddTypeS('TSpecials', 'set of Char');
14623:
          Const('SpecialChar','TSpecials').SetSet( '=()[]<>:;,@/?\"_');
14624:
          Const('URLFullSpecialChar','TSpecials').SetSet( ';/?:@=&#+');
14625:
          Const('TableBase64'ABCDEFGHIJKLMNOPQRSTUVWXYZabcdefghijklmnopqrstuvwxyz0123456789+/=');
14626:
14627:
          \textbf{Const} ( \ ^{\texttt{TableBase64mod}} \ ^{\texttt{ABCDEFGHIJKLMNOPQRSTUVWXYZabcdefghijklmnopqrstuvwxyz0123456789+,='}) \ ; \\
          Const('TableUU'(`!"#$%&''()*+,-./0123456789:;<=>?@ABCDEFGHIJKLMNOPQRSTUVWXYZ[\]^_')
Const('TableXX'(+-0123456789ABCDEFGHIJKLMNOPQRSTUVWXYZabcdefghijklmnopqrstuvwxyz');
14628:
14629:
14630:
           Function DecodeTriplet( const Value : AnsiString; Delimiter : Char) : AnsiString;);
          Function DecodeQuotedPrintable( const Value : AnsiString) : AnsiString');
Function DecodeURL( const Value : AnsiString) : AnsiString');
14631:
14632:
          Function EncodeTriplet( const Value : AnsiString; Delimiter : Char; Specials : TSpecials) : AnsiString');
Function EncodeQuotedPrintable( const Value : AnsiString) : AnsiString');
14633:
          Function EncodeSafeQuotedPrintable( const Value : AnsiString) : AnsiString');
14635:
14636:
          Function EncodeURLElement( const Value : AnsiString) : AnsiString');
          Function EncodeURL( const Value : AnsiString) : AnsiString');
Function Decode4to3( const Value, Table : AnsiString) : AnsiString');
Function Decode4to3Ex( const Value, Table : AnsiString) : AnsiString');
14637:
14638:
14639:
14640:
          Function Encode3to4( const Value, Table : AnsiString) : AnsiString');
14641:
          Function synDecodeBase64( const Value : AnsiString) : AnsiString');
Function synEncodeBase64( const Value : AnsiString) : AnsiString');
14642:
14643:
          Function DecodeBase64mod( const Value : AnsiString) : AnsiString');
          Function EncodeBase64mod( const Value : AnsiString) : AnsiString');
14644:
          Function DecodeUU( const Value : AnsiString) : AnsiString');
Function EncodeUU( const Value : AnsiString) : AnsiString');
14645:
14646:
          Function DecodeXX( const Value : AnsiString) : AnsiString');
14647:
14648:
          Function DecodeYEnc( const Value : AnsiString) : AnsiString');
          Function UpdateCrc32( Value : Byte; Crc32 : Integer) : Integer');
14649:
14650:
          Function synCrc32( const Value : AnsiString) : Integer');
          Function UpdateCrcl6( Value : Byte; Crcl6 : Word) : Word');
Function Crcl6( const Value : AnsiString) : Word');
14651:
14652:
          Function CrCID( const value : Ansistring) : Nota ;

Function synMD5( const Value : Ansistring) : Ansistring');

Function HMAC_MD5( Text, Key : Ansistring) : Ansistring');

Function MD5LongHash( const Value : Ansistring; Len : integer) : Ansistring');
14653:
14654:
14655:
14656: Function synSHA1( const Value : AnsiString): AnsiString');
14657: Function HMAC_SHA1( Text, Key : AnsiString) : AnsiString');
```

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14658:
                 Function SHAlLongHash( const Value : AnsiString; Len : integer) : AnsiString');
                 Function synMD4( const Value : AnsiString) : AnsiString');
14659:
14661:
14662:
               procedure SIRegister_synachar(CL: TPSPascalCompiler);
14663: 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'
                   AddTypeS('TMimeChar',
14664:
14665:
14666:
                     +'4, CP1255, CP1256, CP1257, CP1258, KOI8_R, CP895, CP852, UCS_2, UCS_4, UTF'+'_8, UTF_7, UTF_7mod, UCS_2LE, UCS_4LE, UTF_16, UTF_16LE, UTF_32, UTF_32LE,'
14667:
14668:
                            C99, JAVA, ISO_8859_16, KOI8_U, KOI8_RU, CP862, CP866, MAC, MACCE, MACICE'
14670:
                      +', MACCRO, MACRO, MACCYR, MACUK, MACGR, MACTU, MACHEB, MACAR, MACTH,
                     +', NEXTSTEP, ARMASCII, GEORGIAN_AC, GEORGIAN_PS, KOI8_T, MULELAO, CP1133, T'
+'IS620, CP874, VISCII, TCVN, ISO_IR_14, JIS_X0201, JIS_X0208, JIS_X0212, GB'
14671:
14672:
                     +'19820, CP8/4, VISCII, TCVN, ISO_IR_14, JIS_X0201, JIS_X0208, JIS_X0212, GB'
+'1988_80, GB2312_80, ISO_IR_165, ISO_IR_149, EUC_JP, SHIFT_JIS, 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, '
+'ISO_2022_KR, CP737, CP775, CP853, CP855, CP857, CP858, CP860, CP861, CP863'
+', CP864, CP865, CP869, CP1125 )');
AddTypeS('TMimeSetChar', 'set of TMimeChar');
14673:
14674:
14675 .
14676:
14677:
                    AddTypeS('TMimeSetChar',
14678:
14679:
                 Function CharsetConversion(const Value:AnsiString;CharFrom:TMimeChar;CharTo:TMimeChar):AnsiString;
14680:
                 \textbf{Function} \ \ \texttt{CharFrom:TMimeChar}; \\ \textbf{Const} \ \ \texttt{Value:AnsiString:CharFrom:TMimeChar}; \\ \textbf{Const} \ \ \texttt{Const} \ \ \ \texttt{Const} 
TransformTable : array of Word) : AnsiString');

14681: Function CharsetConversionTrans( Value : AnsiString; CharFrom : TMimeChar; CharTo : TMimeChar; const
               TransformTable : array of Word; Translit : Boolean) : AnsiString');
14682:
              Function GetCurCP : TMimeChar');
Function GetCurOEMCP : TMimeChar');
14683:
                 Function GetCPFromID( Value : AnsiString) : TMimeChar');
Function GetIDFromCP( Value : TMimeChar) : AnsiString');
14684:
14686:
                 Function NeedCharsetConversion( const Value : AnsiString) : Boolean');
14687:
                 Function GetBOM( Value : TMimeChar) : AnsiString');
Function StringToWide( const Value : AnsiString) : WideString');
14688:
14689:
                 Function WideToString( const Value : WideString) : AnsiString');
14690:
14691: end;
14692:
14693: procedure SIRegister synamisc(CL: TPSPascalCompiler);
14694:
               begin
                 AddTypeS('TProxySetting', 'record Host : string; Port : string; Bypass : string; end');

Procedure WakeOnLan( MAC, IP : string)');
14695:
14696:
14697:
                 Function GetDNS : string');
14698:
                 Function GetIEProxy( protocol : string) : TProxySetting');
14699:
                 Function GetLocalIPs : string');
14700: end;
14701:
14702:
14703: procedure SIRegister_synaser(CL: TPSPascalCompiler);
14704:
               begin
                 AddConstantN('synCR','Char').SetString( #$0d);
14705:
                 Const('synLF','Char').SetString( #$0a);
14706:
14707:
                 Const('cSerialChunk','LongInt').SetInt( 8192);
                  Const('LockfileDirectory','String').SetString('/var/lock');
14708:
14709:
                 Const('PortIsClosed','LongInt').SetInt( - 1)
                 Const('ErrAlreadyOwned','LongInt').SetInt( 9991);
Const('ErrAlreadyInUse','LongInt').SetInt( 9992);
14710:
14711:
                 Const('ErrWrongParameter','LongInt').SetInt( 9993);
14712:
14713:
                 Const('ErrPortNotOpen','LongInt').SetInt( 9994);
14714:
                 Const('ErrNoDeviceAnswer','LongInt').SetInt( 9995);
                 Const('ErrMaxBuffer','LongInt').SetInt( 9996);
Const('ErrTimeout','LongInt').SetInt( 9997);
14715:
14716:
14717:
                  Const('ErrNotRead','LongInt').SetInt( 9998);
14718:
                 Const('ErrFrame','LongInt').SetInt( 9999);
                 Const('ErrOverrun','LongInt').SetInt( 10000);
Const('ErrRxOver','LongInt').SetInt( 10001);
14719:
14720:
                 Const('ErrRxParity','LongInt').SetInt( 10002);
Const('ErrTxFull','LongInt').SetInt( 10003);
Const('dcb_Binary','LongWord').SetUInt( $00000001);
14721:
14722:
14723:
                 Const('dcb_ParityCheck','LongWord').SetUInt( $00000002);
Const('dcb_OutxCtsFlow','LongWord').SetUInt( $00000004);
14724:
14725:
                               'dcb_OutxDsrFlow','LongWord').SetUInt( $00000008);
14726:
14727:
                  Const('dcb_DtrControlMask','LongWord').SetUInt( $00000030);
14728:
                 Const('dcb_DtrControlDisable','LongWord').SetUInt( $0000000);
Const('dcb_DtrControlEnable','LongWord').SetUInt( $00000010);
14729:
14730:
                 Const (
                                dcb_DtrControlHandshake','LongWord').SetUInt( $00000020);
14731:
                                'dcb_DsrSensivity', 'LongWord').SetUInt( $00000040);
                 Const('dcb_TXContinueOnXoff','LongWord').SetUInt( $00000080);
Const('dcb_OutX','LongWord').SetUInt( $00000100);
Const('dcb_InX','LongWord').SetUInt( $00000200);
14732:
14733:
14734:
                               'dcb_ErrorChar','LongWord').SetUInt( $0000400);
'dcb_NullStrip','LongWord').SetUInt( $00000800);
                 Const (
14736:
                  Const (
14737:
                 Const (
                                'dcb_RtsControlMask','LongWord').SetUInt( $00003000);
                                'dcb_RtsControlDisable', 'LongWord').SetUInt( $0000000);
'dcb_RtsControlEnable', 'LongWord').SetUInt( $00001000);
14738:
                 Const (
14739:
                 Const (
                 Const('dcb_RtsControlHandshake', 'LongWord').SetUInt( $00002000);
Const('dcb_RtsControlToggle', 'LongWord').SetUInt( $00003000);
Const('dcb_AbortOnError', 'LongWord').SetUInt( $00004000);
14740:
14741:
14742:
                 Const('dcb_Reserveds','LongWord').SetUInt( $FFFF8000);
14743:
                 Const('synSB1','LongInt').SetInt( 0);
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Const('SBlandHalf','LongInt').SetInt( 1);
14745:
14746:
               Const('synSB2','LongInt').SetInt( 2);
                Const('synINVALID_HANDLE_VALUE', 'LongInt').SetInt( THandle ( - 1 ));
14748 .
                Const('CS7fix','LongWord').SetUInt( $0000020);
                 AddTypeS('synTDCB', 'record DCBlength : DWORD; BaudRate : DWORD; Flags : Long'
+'int; wReserved : Word; XonLim : Word; XoffLim : Word; ByteSize : Byte; Par'
14749:
14750:
14751:
                    +'ity : Byte; StopBits : Byte; XonChar : CHAR; XoffChar : CHAR; ErrorChar :
                    +'CHAR; EofChar : CHAR; EvtChar : CHAR; wReserved1 : Word; end');
14752:
               //AddTypeS('PDCB', '^TDCB // will not work');
//Const('MaxRates','LongInt').SetInt( 18);
14753:
14754:
               //Const('MaxRates','LongInt').SetInt( 30);
//Const('MaxRates','LongInt').SetInt( 19);
14755:
14756:
               Const('0_SYNC','LongWord').SetUInt( $0080);
Const('synOK','LongInt').SetInt( 0);
Const('synErr','LongInt').SetInt( integer ( - 1 ));
14757:
14758:
14759:
14760:
                 AddTypeS('ThookSerialReason', '( HR_SerialClose, HR_Connect, HR_CanRead, HR_CanWrite, HR_ReadCount,
             HR_WriteCount, HR_Wait )');
14761:
               Type('ThookSerialStatus',Procedure(Sender: TObject; Reason:ThookSerialReason; const Value:string)');
14762:
                 SIRegister_ESynaSerError(CL);
14763:
                 SIRegister_TBlockSerial(CL);
14764:
               Function GetSerialPortNames : string');
14765: end;
14766:
14767:
             procedure SIRegister synaicny(CL: TPSPascalCompiler);
14768: begin
               Const('DLLIconvName','String').SetString('libiconv.so');
14769:
               Const('DLLIconvName','String').SetString('iconv.dll');
AddTypeS('size_t', 'Cardinal');
AddTypeS('iconv_t', 'Integer');
14770:
14771:
14772:
14773:
                 //AddTypeS('iconv_t', 'Pointer');
14774:
                 AddTypeS('argptr',
                                                      'iconv_t');
14775:
               Function SynaIconvOpen( const tocode, fromcode : Ansistring) : iconv_t');
              Function SynaIconvOpenTranslit( const tocode, fromcode: Ansistring): iconv_t');
Function SynaIconvOpenIgnore( const tocode, fromcode: Ansistring): iconv_t');
14776:
14777:
               Function SynaIconv(cd:iconv_t; inbuf: AnsiString; var outbuf: AnsiString): integer');
Function SynaIconvClose( var cd: iconv_t): integer');
14778:
14779:
14780:
               Function SynaIconvCtl( cd : iconv_t; request : integer; argument : argptr) : integer');
Function IsIconvloaded : Boolean');
14781:
14782:
               Function InitIconvInterface : Boolean');
14783:
               Function DestroyIconvInterface : Boolean');
               Const('ICONV_TRIVIALP','LongInt').SetInt( 0);
Const('ICONV_GET_TRANSLITERATE','LongInt').SetInt( 1);
Const('ICONV_SET_TRANSLITERATE','LongInt').SetInt( 2);
14784:
14785:
14786:
               Const('ICONV_GET_DISCARD_ILSEQ','LongInt').SetInt( 3);
14787:
               Const('ICONV_SET_DISCARD_ILSEQ','LongInt').SetInt(4);
14788:
14789: end;
14790:
14791: procedure SIRegister_pingsend(CL: TPSPascalCompiler);
14792:
             begin
14793:
               Const 'ICMP ECHO', 'LongInt').SetInt( 8);
               Const('ICMP_ECHOREPLY', 'LongInt').SetInt( 0);
Const('ICMP_UNREACH', 'LongInt').SetInt( 3);
14794:
14795:
                Const('ICMP_TIME_EXCEEDED','LongInt').SetInt( 11);
14796:
14797:
               Const('ICMP6_ECHO','LongInt').SetInt( 128);
               Const('ICMP6_ECHO', 'LongInt').SetInt( 120);
Const('ICMP6_ECHOREPLY', 'LongInt').SetInt( 129);
Const('ICMP6_UNREACH', 'LongInt').SetInt( 1);
14798:
14799:
14800:
               Const('ICMP6_TIME_EXCEEDED','LongInt').SetInt( 3);
               AddTypeS('TICMPError', '( IE_NoError, IE_Other, IE_TTLExceed, IE_UnreachOt'
14801:
14802:
                   +'her, IE_UnreachRoute, IE_UnreachAdmin, IE_UnreachAddr, IE_UnreachPort )');
                 STRegister TPINGSend(CL);
14803:
14804:
               Function PingHost( const Host : string) : Integer');
14805:
               Function TraceRouteHost( const Host : string) : string');
14806: end;
14807:
             procedure SIRegister asnlutil(CL: TPSPascalCompiler);
14808:
14809:
             begin
               AddConstantN('synASN1_BOOL','LongWord').SetUInt( $01);
14810:
14811:
               Const('synASN1_INT','LongWord').SetUInt( $02);
14812:
               Const('synASN1 OCTSTR','LongWord').SetUInt( $04);
               Const('synASN1_NULL','LongWord').SetUInt( $05);
Const('synASN1_OBJID','LongWord').SetUInt( $06);
14813:
14814:
              Const('synASN1_ENUM','LongWord').SetUInt( $0a);
Const('synASN1_SEQ','LongWord').SetUInt( $30);
Const('synASN1_SETOF','LongWord').SetUInt( $31);
Const('synASN1_IPADDR','LongWord').SetUInt( $40)
Const('synASN1_COUNTER','LongWord').SetUInt( $41)
14815:
14816:
14817:
14818:
14819:
14820:
               Const('synASN1_GAUGE','LongWord').SetUInt( $42);
               Const('synAsN1_TIMETICKS','LongWord').SetUInt( $43);
Const('synAsN1_TIMETICKS','LongWord').SetUInt( $43);
Function synAsN1_OPAQUE','LongWord').SetUInt( $44);
Function synAsNEncOIDItem( Value : Integer) : AnsiString');
14821:
14822:
               Function synASNDecOIDItem( var Start : Integer; const Buffer : AnsiString) : Integer');
Function synASNEncLen( Len : Integer) : AnsiString');
14824:
14825:
               Function synASNDecLen( var Start : Integer; const Buffer : AnsiString) : Integer');
Function synASNEncInt( Value : Integer) : AnsiString');
14826:
14827:
               Function synASNEncUInt( Value : Integer) : AnsiString');
14828:
               Function synASNObject( const Data : AnsiString; ASNType : Integer) : AnsiString;);
14829:
               \textbf{Function} \  \, \text{synASNItem} \\ (\textbf{var} \  \, \text{Start:Integer}; \textbf{const} \  \, \text{Buffer:AnsiString}; \textbf{var} \  \, \text{ValueType:Integer}) \\ : AnsiString; \textbf{var} \\ : \textbf{valueType:Integer}) \\ : \textbf{AnsiString}; \textbf{var} \\ : \textbf{valueType:Integer}) \\ : \textbf{valueType:Integer} \\ : \textbf{valueType:Integer}) \\ : \textbf{valueType:Integer} \\ : \textbf{va
14830:
14831:
               Function synMibToId( Mib : String) : AnsiString');
14832: Function synIdToMib( const Id : AnsiString) : String');
```

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14833:
          Function synIntMibToStr( const Value : AnsiString) : AnsiString');
14834:
          Function ASNdump( const Value : AnsiString) : AnsiString');
          Function GetMailServers( const DNSHost, Domain : AnsiString; const Servers:TStrings): Boolean');
Function LDAPResultDump( const Value : TLDAPResultList) : AnsiString');
14835:
14836 .
14837:
         end;
14838:
14839: procedure SIRegister_ldapsend(CL: TPSPascalCompiler);
14840:
         begin
         Const('cLDAPProtocol','String').SetString('389');
Const('LDAP_ASN1_BIND_REQUEST','LongWord').SetUInt($60);
Const('LDAP_ASN1_BIND_RESPONSE','LongWord').SetUInt($61);
Const('LDAP_ASN1_UNBIND_REQUEST','LongWord').SetUInt($42)
14841:
14842:
14843:
14845:
          Const (
                   'LDAP_ASN1_SEARCH_REQUEST', 'LongWord').SetUInt(
                  'LDAP_ASN1_SEARCH_ENTRY','LongWord').SetUInt( $64);
'LDAP_ASN1_SEARCH_DONE','LongWord').SetUInt( $65);
14846:
          Const (
14847:
          Const (
14848:
          Const (
                   'LDAP_ASN1_SEARCH_REFERENCE', 'LongWord').SetUInt( $73);
                   'LDAP_ASN1_MODIFY_REQUEST','LongWord').SetUInt( $60;'LDAP_ASN1_MODIFY_RESPONSE','LongWord').SetUInt( $67);
14849:
14850 .
          Const (
          Const('LDAP_ASN1_ADD_REQUEST','LongWord').SetUInt($68);
Const('LDAP_ASN1_ADD_RESPONSE','LongWord').SetUInt($69);
Const('LDAP_ASN1_DEL_REQUEST','LongWord').SetUInt($4A);
Const('LDAP_ASN1_DEL_RESPONSE','LongWord').SetUInt($6B);
14851:
14852:
14853:
14854:
          Const('LDAP_ASN1_MODIFYDN_REQUEST','LongWord').SetUInt( $6C);
Const('LDAP_ASN1_MODIFYDN_RESPONSE','LongWord').SetUInt( $6D);
14855:
14856:
                  'LDAP_ASN1_COMPARE_REQUEST', 'LongWord').SetUInt( $6E);
'LDAP_ASN1_COMPARE_RESPONSE', 'LongWord').SetUInt( $6F);
14857:
          Const (
14858:
14859:
          Const('LDAP_ASN1_ABANDON_REQUEST', 'LongWord').SetUInt($70);
          Const('LDAP_ASN1_EXT_REQUEST','LongWord').SetUInt( $77);
Const('LDAP_ASN1_EXT_RESPONSE','LongWord').SetUInt( $78);
14860:
14861:
           SIRegister_TLDAPAttribute(CL);
14862:
14863:
           SIRegister_TLDAPAttributeList(CL);
14864:
           SIRegister TLDAPResult(CL);
14865:
           SIRegister TLDAPResultList(CL);
           AddTypeS('TLDAPModifyOp', '( MO_Add, MO_Delete, MO_Replace )');
AddTypeS('TLDAPSearchScope', '( SS_BaseObject, SS_SingleLevel, SS_WholeSubtree )');
14866:
14867:
14868:
           AddTypeS('TLDAPSearchAliases', '( SA_NeverDeref, SA_InSearching, SA_FindingBaseObj, SA_Always )');
14869:
           SIRegister TLDAPSend(CL);
14870:
          Function LDAPResultDump( const Value : TLDAPResultList) : AnsiString');
14871: end;
14872:
14873:
14874: procedure SIRegister slogsend(CL: TPSPascalCompiler);
14875: begin
14876:
          Const('cSysLogProtocol','String').SetString('514');
14877:
          Const('FCL_Kernel','LongInt').SetInt( 0);
          Const('FCL_UserLevel','LongInt').SetInt( 1);
Const('FCL_MailSystem','LongInt').SetInt( 2);
14878:
14879:
                  'FCL_System', 'LongInt').SetInt( 3);
14880:
          Const (
          Const('FCL_Security','LongInt').SetInt( 4)
Const('FCL_Syslogd','LongInt').SetInt( 5);
Const('FCL_Printer','LongInt').SetInt( 6);
14881:
14882:
14883:
14884:
          Const('FCL_News','LongInt').SetInt( 7);
          Const('FCL_UUCP','LongInt').SetInt( 8);
14885:
14886:
          Const('FCL_Clock','LongInt').SetInt( 9);
          Const('FCL_Authorization','LongInt').SetInt( 10);
Const('FCL_FTP','LongInt').SetInt( 11);
Const('FCL_NTP','LongInt').SetInt( 12);
14887:
14888:
14889:
          Const('FCL_LogAudit','LongInt').SetInt( 13);
14890:
14891:
          Const('FCL_LogAlert','LongInt').SetInt( 14);
          Const('FCL_Time','LongInt').SetInt( 15);
Const('FCL_Local0','LongInt').SetInt( 16);
14892:
14893:
14894:
          Const('FCL_Local1','LongInt').SetInt( 17);
14895:
          Const('FCL_Local2','LongInt').SetInt( 18);
14896:
          Const('FCL_Local3','LongInt').SetInt( 19);
14897:
          Const('FCL_Local4','LongInt').SetInt( 20);
                   'FCL_Local5', 'LongInt').SetInt( 21);
14898:
          Const (
14899:
          Const('FCL_Local6','LongInt').SetInt( 22);
14900:
          Const('FCL_Local7','LongInt').SetInt( 23);
14901:
          AddTypeS('TSyslogSeverity', '( Emergency, Alert, Critical, Error, Warning,'
             +' Notice, Info, Debug )'
14902:
           SIRegister_TSyslogMessage(CL);
14903:
14904:
           SIRegister_TSyslogSend(CL);
14905: Function ToSysLog(const SyslogServer:string; Facil:Byte; Sever:TSyslogSeverity; const
         Content:string):Boolean;
14906: end
14907:
14908:
14909: procedure SIRegister mimemess(CL: TPSPascalCompiler);
14910: begin
14911:
            AddTypeS('TMessPriority', '( MP_unknown, MP_low, MP_normal, MP_high )');
14912:
           SIRegister_TMessHeader(CL);
           //AddTypeS('TMessHeaderClass', 'class of TMessHeader');
SIRegister_TMimeMess(CL);
14913:
14914:
14915:
         end;
14916:
14917: procedure SIRegister_mimepart(CL: TPSPascalCompiler);
14918: begin
14919:
            (FindClass('TOBJECT'),'TMimePart');
           AddTypeS('THookWalkPart', 'Procedure ( const Sender : TMimePart)');
```

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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 )');
SIRegister_TMimePart(CL);
14921:
14922:
14923:
14924 .
         Const('MaxMimeType','LongInt').SetInt( 25);
14925:
         Function GenerateBoundary : string');
14926: end;
14927:
14928:
        procedure SIRegister mimeinln(CL: TPSPascalCompiler);
14929: begin
14930: Function InlineDecode( const Value : string; CP : TMimeChar) : string');
         Function InlineEncode( const Value : string; CP, MimeP : TMimeChar) : string');
14931:
         Function NeedInline( const Value : AnsiString) : boolean');
14933:
         Function InlineCodeEx( const Value : string; FromCP : TMimeChar) : string');
14934:
         Function InlineCode( const Value : string) : string');
         Function InlineEmailEx( const Value : string; FromCP : TMimeChar) : string');
Function InlineEmail( const Value : string) : string');
14935:
14936:
14937: end;
14938 .
14939: procedure SIRegister ftpsend(CL: TPSPascalCompiler);
14940: begin
14941:
         Const('cFtpProtocol','String').SetString('21');
         Const('cftpDataProtocol','String').SetString( '20');
Const('FTP_OK','LongInt').SetInt( 255);
Const('FTP_ERR','LongInt').SetInt( 254);
14942:
14943:
14944:
          AddTypeS('TFTPStatus', 'Procedure ( Sender : TObject; Response : Boolean; const Value : string)');
14945:
14946:
           SIRegister_TFTPListRec(CL);
14947:
          SIRegister_TFTPList(CL);
14948:
          SIRegister TFTPSend(CL);
14949:
         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,
14951:
        ToPort, ToFile, ToUser, ToPass : string) : Boolean');
14952: end;
14953:
14954:
        procedure SIRegister httpsend(CL: TPSPascalCompiler);
14955: begin
14956: Const('cHttpProtocol','String').SetString('80');
          AddTypeS('TTransferEncoding', '( TE_UNKNOWN, TE_IDENTITY, TE_CHUNKED )');
14957:
14958:
          SIRegister_THTTPSend(CL);
14959:
         Function HttpGetText( const URL : string; const Response : TStrings) : Boolean');
14960:
         Function HttpGetBinary( const URL : string; const Response : TStream) : Boolean');
         Function HttpPostBinary( const URL : string; const Data : TStream) : Boolean');
14961:
         Function HttpPostURL( const URL, URLData : string; const Data : TStream) : Boolean');
14962:
         Function HttpPostFile(const URL,FieldName,FileName:string;const Data:TStream;const
14963:
        ResultData:TStrings):Bool;
14964: end;
14965:
14966: procedure SIRegister_smtpsend(CL: TPSPascalCompiler);
14967:
        begin
         Const('cSmtpProtocol','String').SetString( '25');
14968:
          SIRegister TSMTPSend(CL);
14969:
14970:
         Function SendToRaw(const MailFrom, MailTo, SMTPHost:string;const MailData:TStrings;const Usrname,
        Passw:string):Bool;
14971: Function SendTo(const MailFrom, MailTro, Subject, SMTPHost:string; const MailData:TStrings):Boolean;
14972: Function SendToEx(const MailFrom, MailTo, Subject, SMTPHost : string; const MailData : TStrings; const
        Username, Password : string):Boolean');
14973: end;
14974:
14975: procedure SIRegister_snmpsend(CL: TPSPascalCompiler);
14976: begin
14977:
        Const('cSnmpProtocol','String').SetString( '161');
14978:
         Const('cSnmpTrapProtocol','String').SetString( '162');
14979:
         Const('SNMP_V1','LongInt').SetInt( 0);
14980:
         Const('SNMP_V2C','LongInt').SetInt( 1);
14981:
                 'SNMP_V3','LongInt').SetInt( 3);
         Const (
                 'PDUGetRequest', 'LongWord').SetUInt( $A0);
14982:
         Const (
14983:
         Const('PDUGetNextRequest', 'LongWord').SetUInt( $A1);
         Const('PDUGetResponse','LongWord').SetUInt( $A2);
Const('PDUSetRequest','LongWord').SetUInt( $A3);
14984:
14985:
         Const('PDUGrap','LongWord').SetUInt( $A4);
Const('PDUGetBulkRequest','LongWord').SetUInt( $A5);
14986:
14987:
14988:
         Const('PDUInformRequest', 'LongWord').SetUInt( $A6);
         Const('PDUTrapV2','LongWord').SetUInt( $A7);
Const('PDUReport','LongWord').SetUInt( $A8);
Const('ENoError','LongInt').SetInt( 0);
Const('ETooBig','LongInt').SetInt( 1);
14989:
14990:
14991:
14992:
         Const('ENoSuchName','LongInt').SetInt( 2);
Const('EBadValue','LongInt').SetInt( 3);
Const('EReadOnly','LongInt').SetInt( 4);
Const('EGenErr','LongInt').SetInt( 5);
14993:
14994:
14995:
14996:
         Const('ENOAccess','LongInt').SetInt( 6);
Const('EWrongType','LongInt').SetInt( 7);
14997:
14998:
                 'EWrongLength', 'LongInt').SetInt(8);
'EWrongEncoding', 'LongInt').SetInt(9);
14999:
         Const (
15000:
         Const (
                 'EWrongValue', 'LongInt').SetInt( 10);
'ENoCreation', 'LongInt').SetInt( 11);
15001:
         Const (
15002:
         Const (
15003:
         Const('EInconsistentValue','LongInt').SetInt( 12);
Const('EResourceUnavailable','LongInt').SetInt( 13);
15004:
15005: Const('ECommitFailed','LongInt').SetInt( 14);
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15006:
         Const('EUndoFailed','LongInt').SetInt( 15);
15007:
         Const('EAuthorizationError','LongInt').SetInt( 16);
         Const('ENotWritable','LongInt').SetInt( 17);
15008:
         Const('ElnconsistentName','LongInt').SetInt( 18);
15000.
          AddTypeS('TV3Flags', '( NoAuthNoPriv, AuthNoPriv, AuthPriv )');
AddTypeS('TV3Auth', '( AuthMD5, AuthSHA1 )');
AddTypeS('TV3Priv', '( PrivDES, Priv3DES, PrivAES )');
15010:
15011:
15012:
15013:
           SIRegister_TSNMPMib(CL);
15014:
          AddTypeS('TV3Sync', 'record EngineID : AnsiString; EngineBoots : integer; '
            +'EngineTime : integer; EngineStamp : Cardinal; end');
15015:
15016:
           SIRegister_TSNMPRec(CL);
          SIRegister_TSNMPSend(CL);
15018:
         Function SNMPGet( const OID, Community, SNMPHost : AnsiString; var Value : AnsiString) : Boolean');
         Function SNMPSet( const OID, Community, SNMPHost, Value: Ansistring; ValueType: Integer): Boolean';
Function SNMPGetNext(var OID:AnsiString; const Community, SNMPHost:AnsiString; var Value:AnsiString):Boolean;
15019:
15020:
15021:
         Function SNMPGetTable(const BaseOID, Community, SNMPHost : AnsiString; const Value : TStrings): Boolean;
         Function SNMPGetTableElement(const BaseOID, RowID, ColID, Community, SNMPHost: AnsiStr; var Value: AnsiStr):
        Boolean:
15023: Function SendTrap(const Dest, Source, Enterprise, Community: AnsiString; Generic, Specific, Seconds:
        Integer; const MIBName, MIBValue : AnsiString; MIBtype : Integer) ; Integer);
        Function RecvTrap( var Dest, Source, Enterprise, Community: AnsiString; var Generic, Specific, Seconds: Integer; const MIBName, MIBValue: TStringList): Integer);
15024:
15025: end;
15026:
15027:
        procedure SIRegister_NetWork(CL: TPSPascalCompiler);
15028: begin
15029:
        Function GetDomainName2: AnsiString');
15030:
         Function GetDomainController( Domain : AnsiString) : AnsiString');
15031:
         Function GetDomainUsers( Controller : AnsiString) : AnsiString');
         Function GetDomainGroups( Controller : AnsiString) : AnsiString');
15032:
15033:
         Function GetDateTime( Controller : AnsiString) : TDateTime');
15034: Function GetFullName2( Controller, UserID : AnsiString) : AnsiString');
15035: end;
15036:
15037:
        procedure SIReqister wwSystem(CL: TPSPascalCompiler);
15038: begin
          AddTypeS('TwwDateOrder', '( doMDY, doDMY, doYMD )');
15039:
           TwwDateTimeSelection','(wwdsDay,wwdsMonth,wwdsYear,wwdsHour,wwdsMinute,wwdsSecond,wwdsAMPM);
15040:
         Function wwStrToDate( const S : string) : boolean | ;
Function wwStrToTime( const S : string) : boolean | ;
15041:
15042:
15043:
         Function wwStrToDateTime( const S : string) : boolean');
15044:
         Function wwStrToTimeVal( const S : string) : TDateTime');
         Function wwStrToDateVal( const S : string) : TDateTime');
15045:
15046:
         Function wwStrToDateTimeVal( const S : string) : TDateTime');
         Function wwStrToInt( const S : string) : boolean');
Function wwStrToFloat( const S : string) : boolean');
15047:
15048:
         Function wwGetDateOrder( const DateFormat : string) : TwwDateOrder');
15049:
         Function wwNextDay( Year, Month, Day : Word) : integer');
15051:
         Function wwPriorDay( Year, Month, Day : Word) : integer');
15052:
         Function wwDoEncodeDate( Year, Month, Day : Word; var Date : TDateTime) : Boolean');
Function wwDoEncodeTime( Hour, Min, Sec, MSec : Word; var Time : TDateTime) : Boolean');
15053:
         Function wwGetDateTimeCursorPosition(SelStart:int;Text:string;TimeOnly:Bool):TwwDateTimeSelection');
15054:
         Function wwGetTimeCursorPosition( SelStart : integer; Text : string) : TwwDateTimeSelection');
15055:
15056:
         Function wwScanDate( const S : string; var Date : TDateTime) : Boolean');
         Function wwScanDateEpoch( const S : string; var Date : TDateTime; Epoch : integer) : Boolean');
Procedure wwSctDateTimeCursorSelection(dateCursor:TwwDateTimeSelection;edit:TCustomEdit;TimeOnly:Bool;
15057:
15058:
15059:
         Function wwStrToFloat2( const S : string; var FloatValue : Extended; DisplayFormat: string): boolean');
15060: end;
15061:
15062: unit uPSI Themes;
15063: Function ThemeServices : TThemeServices');
15064: Function ThemeControl( AControl: TControl): Boolean');
15065: Function UnthemedDesigner( AControl : TControl) : Boolean');
15066: procedure SIRegister_UDDIHelper(CL: TPSPascalCompiler);
15067: begin
15068: Function GetBindingkeyAccessPoint(const Operator : String; const key : String) : String');
15069: end;
15070: Unit uPSC menus;
15071: Function StripHotkey( const Text : string) : string');
15072:
         Function GetHotkev( const Text : string) : string
         Function AnsiSameCaption( const Text1, Text2 : string) : Boolean');
15073:
15074:
         Function IsAltGRPressed : boolean');
15075:
15076: procedure SIRegister IdIMAP4Server(CL: TPSPascalCompiler);
15077: begin
15078:
          TCommandEvent', 'Procedure(Thread:TIdPeerThread; const Tag,CmdStr:String;var Handled:Boolean);
15079:
          SIRegister_TIdIMAP4Server(CL);
15080: end;
15081:
15082:
        procedure SIRegister_VariantSymbolTable(CL: TPSPascalCompiler);
15083: begin
         'HASH SIZE', 'LongInt').SetInt( 256);
15084:
          'HASH_SIZE', Longint'), SetInt( 250),

CL.FindClass('TOBJECT'), 'EVariantSymbolTable');

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');
15085:
15086:
15087:
15088:
15089:
           //CL.AddTypeS('PSymbolArray', '^TSymbolArray // will not work');
15090:
           SIRegister_TVariantSymbolTable(CL);
15091:
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15092: end;
15093:
15094:
                  procedure SIRegister_udf_glob(CL: TPSPascalCompiler);
15095
15096:
                       SIRegister TThreadLocalVariables(CL);
                    Function MakeResultString( Source, OptionalDest : PChar; Len : DWORD) : PChar');
//Function MakeResultQuad( Source, OptionalDest : PISC_QUAD) : PISC_QUAD');
15097:
15098:
                     Function ThreadLocals : TThreadLocalVariables );
15099:
15100:
                     Procedure WriteDebug( sz : String)');
                     CL.AddConstantN('UDF_SUCCESS', 'LongInt').SetInt( 0);
15101:
                     'UDF_FAILURE','LongInt').SetInt( 1);
'cSignificantlyLarger','LongInt').SetInt( 1024 * 4);
15102:
15103:
15104:
                     CL.AddTypeS('mTByteArray', 'array of byte;');
                     function ChangeOEPFromBytes(bFile:mTByteArray):Boolean;
15105:
                     function ChangeOEPFromFile(sFile:string; sDestFile:string):Boolean;
15106:
15107:
                     procedure CopyEXIF(const FileNameEXIFSource, FileNameEXIFTarget: string);
                     function IsNetworkConnected: Boolean;
15108:
15109:
                     function IsInternetConnected: Boolean;
15110:
                     function IsCOMConnected: Boolean;
15111:
                    function IsNetworkOn: Boolean;
                     function IsInternetOn: Boolean;
15112:
15113:
                     function IsCOMOn: Boolean;
                    Function SetTimer(hWnd: HWND; nIDEvent, uElapse: UINT; lpTimerFunc: TFNTimerProc):UINT;
Function KillTimer(hWnd: HWND; uIDEvent: UINT): BOOL');
Function wIsWindowUnicode(hWnd: HWND): BOOL');
15114:
15115:
15116:
15117:
                     Function wEnableWindow( hWnd : HWND; bEnable : BOOL) : BOOL');
15118:
                    Function wIsWindowEnabled( hWnd : HWND) : BOOL');
                    Function GetMenu( hWnd : HWND) : HMENU');
Function SetMenu( hWnd : HWND; hMenu : HMENU) : BOOL');
15119:
15120:
15121:
                  end
15122:
15123:
                  procedure SIRegister SockTransport(CL: TPSPascalCompiler);
15124: begin
15125:
                       SIRegister IDataBlock(CL);
                        SIRegister_ISendDataBlock(CL);
15126:
15127:
                       SIRegister_ITransport(CL);
15128:
                       SIRegister TDataBlock(CL);
                        //CL.AddTypeS('PIntArray', '^TIntArray // will not work');
15129:
                       //CL.AddTypeS('TVariantArray', 'ATVariantArray', will not work');
CL.AddTypeS('TVarFlag', '( vfByRef, vfVariant)');
CL.AddTypeS('TVarFlags', 'set of TVarFlag');
15130:
15131:
15132:
                       SIRegister_TCustomDataBlockInterpreter(CL);
15133:
15134:
                       SIRegister_TSendDataBlock(CL);
                        'CallSig','LongWord').SetUInt( $D800);
'ResultSig','LongWord').SetUInt( $D400);
'asMask','LongWord').SetUInt( $00FF);
15135:
15136:
15137:
                       CL.AddClassN(CL.FindClass('TOBJECT'), 'EInterpreterError');
CL.AddClassN(CL.FindClass('TOBJECT'), 'ESocketConnectionError');
15138:
15139:
15140:
                    Procedure CheckSignature( Sig : Integer)');
15141: end;
15142:
15143: procedure SIRegister_WinInet(CL: TPSPascalCompiler);
15144: begin
                        //CL.AddTypeS('HINTERNET', '___Pointer');
CL.AddTypeS('HINTERNET1', 'THANDLE');
15145:
                       CL.AddTypeS('HINTERNET1', 'THANDLE')
CL.AddTypeS('HINTERNET', 'Integer');
15146:
15147:
                       CL.AddTypeS('HINTERNET2', '__
15148:
                                                                                                     Pointer');
                       //CL.AddTypes('PHINTERNET', '^HINTERNET');
//CL.AddTypes('LPHINTERNET', 'PHINTERNET');
CL.AddTypes('INTERNET_PORT', 'Word');
                                                                                                '^HINTERNET // will not work');
15149:
15150:
15151:
                       CH.AddTypeS( 'PINTERNET_PORT', '^INTERNET_PORT // will not work');
//CL.AddTypeS('LPINTERNET_PORT', '^INTERNET_PORT');
15152:
15153:
15154:
                        Function InternetTimeFromSystemTime(const pst:TSystemTime;dwRFC:DWORD;lpszTime:LPSTR;cbTime:DWORD):BOOL;
                      'INTERNET_RFC1123_FORMAT','LongInt').SetInt( 0);
'INTERNET_RFC1123_BUFSIZE','LongInt').SetInt( 30);
15155:
15156:
                     Function InternetCrackUrl(lpszUrl:PChar; dwUrlLength,dwFlags:DWORD; var
15157:
                  lpUrlComponents:TURLComponents):BOOL;
15158:
                    \textbf{Function} \  \, \texttt{InternetCreateUrl} \\ (\textbf{var} \  \, \texttt{lpUrlComponts:TURLCompons:dwFlags:DWORD:lpszUrl:PChar}; \textbf{var} \\ (\textbf{var} \  \, \texttt{lpUrlComponts:TURLCompons:dwFlags:DWORD:lpszUrl:PChar}; \textbf{var}) \\ (\textbf{var} \  \, \texttt{lpUrlComponts:TURLCompons:dwFlags:DWORD:lpszUrl:PChar; \textbf{var}; \textbf{var
                  dwUrlLength:DWORD):BOOL;
15159:
                    Function InternetCloseHandle( hInet : HINTERNET) : BOOL');
15160:
                   InternetConnect (hInet: HINTERNET; lpszServerName: PChar; nServerPort: INTERNET\_PORT; lpszUsername: PChar; nServerPort: INTERNET\_PORT: PChar; nServerPort: PChar; nS
                   {\tt lpszPassword:PChar;dwService:DWORD;dwFlags:DWORD;dwContext:DWORD):HINTERNET;}
15161:
                  Function InternetOpenUrl(hInet:HINTERNET;|pszUrl:PChar;|pszHeaders:PChar;dwHeadLength:DWORD;dwFlags:DWORD
15162:
                     ;dwContext:DWORD):HINTERNET;
                     Function InternetOpen(lpszAgent:PChar;dwAccessType:DWORD;lpszProxy,
15163:
                  lpszProxBypass:PChar;dwFlags:DWORD):HINTERNET
15164:
                    Function InternetQueryDataAvailable(hFile:HINTERNET; var lpdwNumbOfBytesAvail:DWORD; dwFlags,
                  dwContext:DWORD):BOOL;
15165: Function InternetUnlockRequestFile( hLockRequestInfo : THANDLE) : BOOL');
15166:
                    Function
                  Function InternetHangUp( dwConnection : DWORD; dwReserved : DWORD) : DWORD');
Function InternetGoOnline( lpszURL : pchar; hwndParent : HWND; dwFlags : DWORD) : BOOL');
Function InternetAutodial( dwFlags : DWORD; dwReserved : DWORD) : BOOL');
15167:
15168:
                    Function InternetAutodialHangup( dwReserved : DWORD) : BOOL');
Function InternetGetConnectedState( lpdwFlags : DWORD; dwReserved : DWORD) : BOOL');
15170:
15171:
15172:
                    Function InternetCanonicalizeUrl(lpszUrl:PChar;lpszBuffer:PChar; var
                  lpdwBufferLength:DWORD;dwFlags:DWORD):BOOL;
```

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15173: 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
                        ;|pszPassword:PChar;dwService:DWORD;dwFlags:DWORD; dwContext:DWORD):HINTERNET;
15175:
15176:
                       Function InternetQueryDataAvailable(hFile:HINTERNET; var lpdwNumbOfBytesAvail:DWORD; dwFlgs,
                     dwContext:DWORD):BOOL;
                     Function FtpFindFirstFile( hConnect : HINTERNET; lpszSearchFile : PChar; var lpFindFileData :
TWin32FindData; dwFlags: DWORD; dwContext: DWORD): HINTERNET();
15178: Function WFtpGetFile( hConnect: HINTERNET; lpszRemoteFile: PChar; lpszNewFile: PChar; fFailIfExists:
                     BOOL; dwFlagsAndAttributes : DWORD; dwFlags : DWORD; dwContext : DWORD) : BOOL');
15179:
                       Function
                     WFtpPutFile(hConct:HINTERNET;lpszLocFile:PChar;lpszNewRemFile:PChar;dwFlags:DWORD;dwCotx:DWORD):BOOL;
15180: Function FtpDeleteFile( hConnect : HINTERNET; lpszFileName : PChar) : BOOL');
15181: Function FtpRenameFile(hConnect:HINTERNET; lpszExisting:PChar; lpszNew:PChar):BOOL;
15182:
                       Function
                     Function FtpCreateDirectory( hConnect : HINTERNET; lpszDirectory : PChar) : BOOL');
Function FtpRemoveDirectory( hConnect : HINTERNET; lpszDirectory : PChar) : BOOL');
Function FtpSetCurrentDirectory(hConnect:HINTERNET; lpszDirectory : PChar) : BOOL');
15184 .
15185:
                       Function FtpGetCurrentDirectory(hConnect:HINTER;lpszCurrentDir:PChar;var lpdwCurrentDir:DWORD):BOOL;
15186:
15187:
                     \texttt{FtpCommand}(\texttt{hConnect:HINTER}; \texttt{fExpectResponse:BOOL}; \texttt{dwFlags:DWORD}; \texttt{lpszCommd:PChar}; \texttt{dwContxt:DWORD}): \texttt{BOOL}; \texttt{dwFlags:DWORD}; \texttt{lpszCommd:PChar}; \texttt{dwContxt:DWORD}): \texttt{BOOL}; \texttt{dwFlags:DWORD}; \texttt{lpszCommd:PChar}; \texttt{dwContxt:DWORD}): \texttt{bool}; \texttt{lost} 
                    Function IS_GOPHER_FILE( GopherType : DWORD) : BOOL');
Function IS_GOPHER_DIRECTORY( GopherType : DWORD) : BOOL');
Function IS_GOPHER_PHONE_SERVER( GopherType : DWORD) : BOOL');
15188:
15189:
15190:
15191:
                        Function IS_GOPHER_ERROR( GopherType : DWORD) : BOOL');
15192:
                       Function IS_GOPHER_INDEX_SERVER( GopherType : DWORD) : BOOL');
                       Function IS_GOPHER_TELNET_SESSION( GopherType : DWORD) : BOOL');
Function IS_GOPHER_BACKUP_SERVER( GopherType : DWORD) : BOOL');
Function IS_GOPHER_TN3270_SESSION( GopherType : DWORD) : BOOL');
15193:
 15194:
 15195:
15196:
                       Function IS_GOPHER_ASK( GopherType : DWORD) : BOOL');
                       Function IS_GOPHER_PLUS( GopherType : DWORD) : BOOL');
15197:
                       Function IS_GOPHER_TYPE_KNOWN( GopherType : DWORD) : BOOL');
15198:
15199:
                       Function
                     {\tt GopherCreateLocator(lpszHost:PChar;nServerPort:INTERNET\_PORT;lpszDisplayString:PChar;lpszSelectorString:PChar;lpszSelectorString:PChar;lpszSelectorString:PChar;lpszSelectorString:PChar;lpszSelectorString:PChar;lpszSelectorString:PChar;lpszSelectorString:PChar;lpszSelectorString:PChar;lpszSelectorString:PChar;lpszSelectorString:PChar;lpszSelectorString:PChar;lpszSelectorString:PChar;lpszSelectorString:PChar;lpszSelectorString:PChar;lpszSelectorString:PChar;lpszSelectorString:PChar;lpszSelectorString:PChar;lpszSelectorString:PChar;lpszSelectorString:PChar;lpszSelectorString:PChar;lpszSelectorString:PChar;lpszSelectorString:PChar;lpszSelectorString:PChar;lpszSelectorString:PChar;lpszSelectorString:PChar;lpszSelectorString:PChar;lpszSelectorString:PChar;lpszSelectorString:PChar;lpszSelectorString:PChar;lpszSelectorString:PChar;lpszSelectorString:PChar;lpszSelectorString:PChar;lpszSelectorString:PChar;lpszSelectorString:PChar;lpszSelectorString:PChar;lpszSelectorString:PChar;lpszSelectorString:PChar;lpszSelectorString:PChar;lpszSelectorString:PChar;lpszSelectorString:PChar;lpszSelectorString:PChar;lpszSelectorString:PChar;lpszSelectorString:PChar;lpszSelectorString:PChar;lpszSelectorString:PChar;lpszSelectorString:PChar;lpszSelectorString:PChar;lpszSelectorString:PChar;lpszSelectorString:PChar;lpszSelectorString:PChar;lpszSelectorString:PChar;lpszSelectorString:PChar;lpszSelectorString:PChar;lpszSelectorString:PChar;lpszSelectorString:PChar;lpszSelectorString:PChar;lpszSelectorString:PChar;lpszSelectorString:PChar;lpszSelectorString:PChar;lpszSelectorString:PChar;lpszSelectorString:PChar;lpszSelectorString:PChar;lpszSelectorString:PChar;lpszSelectorString:PChar;lpszSelectorString:PChar;lpszSelectorString:PChar;lpszSelectorString:PChar;lpszSelectorString:PChar;lpszSelectorString:PChar;lpszSelectorString:PChar;lpszSelectorString:PChar;lpszSelectorString:PChar;lpszSelectorString:PChar;lpszSelectorString:PChar;lpszSelectorString:PChar;lpszSelectorString:PChar;lpszSelectorString:PChar;lpszSelectorString:PChar;lpszSe
                     PChar; dwGopherType:DWORD;lpszLocator:PChar; var lpdwBufferLength:DWORD):BOOL;
Function GopherGetLocatorType( lpszLocator : PChar; var lpdwGopherType : DWORD):BOOL');
15200:
15201:
                       Function
                      \texttt{GopherOpenFile(hConect:HINTERNET;lpszLocat:PChar;lpszView:PChar;dwFlags:DWORD;dwContext:DWORD):HINTERNET;lpszView:PChar;dwFlags:DWORD;dwContext:DWORD):HINTERNET;lpszView:PChar;dwFlags:DWORD;dwContext:DWORD):HINTERNET;lpszView:PChar;dwFlags:DWORD;dwContext:DWORD):HINTERNET;lpszView:PChar;dwFlags:DWORD;dwContext:DWORD):HINTERNET;lpszView:PChar;dwFlags:DWORD;dwContext:DWORD):HINTERNET;lpszView:PChar;dwFlags:DWORD;dwContext:DWORD):HINTERNET;lpszView:PChar;dwFlags:DWORD;dwContext:DWORD):HINTERNET;lpszView:PChar;dwFlags:DWORD;dwContext:DWORD):HINTERNET;lpszView:PChar;dwFlags:DWORD;dwContext:DWORD):HINTERNET;lpszView:PChar;dwFlags:DWORD;dwContext:DWORD):HINTERNET;lpszView:PChar;dwFlags:DWORD;dwContext:DWORD):HINTERNET;lpszView:PChar;dwFlags:DWORD;dwContext:DWORD):HINTERNET;lpszView:PChar;dwContext:DWORD;dwContext:DWORD):HINTERNET;lpszView:PChar;dwContext:DWORD;dwContext:DWORD;dwContext:DWORD;dwContext:DWORD;dwContext:DWORD;dwContext:DWORD;dwContext:DWORD;dwContext:DWORD;dwContext:DWORD;dwContext:DWORD;dwContext:DWORD;dwContext:DWORD;dwContext:DWORD;dwContext:DWORD;dwContext:DWORD;dwContext:DWORD;dwContext:DWORD;dwContext:DWORD;dwContext:DWORD;dwContext:DWORD;dwContext:DWORD;dwContext:DWORD;dwContext:DWORD;dwContext:DWORD;dwContext:DWORD;dwContext:DWORD;dwContext:DWORD;dwContext:DWORD;dwContext:DWORD;dwContext:DWORD;dwContext:DWORD;dwContext:DWORD;dwContext:DWORD;dwContext:DWORD;dwContext:DWORD;dwContext:DWORD;dwContext:DWORD;dwContext:DWORD;dwContext:DWORD;dwContext:DWORD;dwContext:DWORD;dwContext:DWORD;dwContext:DWORD;dwContext:DWORD;dwContext:DWORD;dwContext:DWORD;dwContext:DWORD;dwContext:DWORD;dwContext:DWORD;dwContext:DWORD;dwContext:DWORD;dwContext:DWORD;dwContext:DWORD;dwContext:DWORD;dwContext:DWORD;dwContext:DWORD;dwContext:DWORD;dwContext:DWORD;dwContext:DWORD;dwContext:DWORD;dwContext:DWORD;dwContext:DWORD;dwContext:DWORD;dwContext:DWORD;dwContext:DWORD;dwContext:DWORD;dwContext:DWORD;dwContext:DWORD;dwContext:DWORD;dwContext:DWORD;dwContext:DWORD;dwContext:DWORD;dwContext:DWORD;dwContext:DWORD;dwConte
                     Function HttpOpenRequest( hConnect:HINTERNET; lpszVerb: PChar; lpszObjectName: PChar; lpszVersion:
PChar; lpszReferrer: PChar; lplpszAcceptTypes: PLPSTR; dwFlags: DWORD; dwContext:DWORD):HINTERNET;
15202:
15203:
                       Function
                     HttpAddRequestHeaders(hReq:HINTERNET;lpszHeaders:PChar;dwHeadersLength:DWORD;dwModifiers:DWORD):BOOL;
                       Function HttpSendRequest(hRequest: HINTERNET; lpszHeaders: PChar;
                     {\tt dwHeadersLength:DWORD;lpOptional:Tobject: dwOptionalLength:DWORD):BOOL;}
15205:
                     Function InternetGetCookie(lpszUrl,lpszCookieName,lpszCookieData:PChar; var lpdwSize:DWORD):BOOL;
                        Function InternetAttemptConnect( dwReserved : DWORD) : DWORD');
15206:
                        Function InternetCheckConnection( lpszUrl : PChar; dwFlags : DWORD; dwReserved : DWORD) : BOOL');
 15208:
                        Function InternetErrorDlg(hWnd:HWND;hRequest:HINTERNET;dwError,dwFlags:DWORD;var lppvData:TObject):DWORD;
                       Function InternetConfirmZoneCrossing( hWnd : HWND; szUrlPrev, szUrlNew : LPSTR; bPost : BOOL) : DWORD');
Function CreateUrlCacheGroup( dwFlags : DWORD; lpReserved : Tobject) : Int64');
15209:
15210:
                        Function DeleteUrlCacheGroup( GroupId : Int64; dwFlags : DWORD; lpReserved : TObject) : Bool');
15211:
                       Function FindFirstUrlCacheEntry(lpszUrlSearchPattern PChar;var
15212:
                     {\tt lpFirstCacheEntryInfo:TInternetCacheEntryInfo:} {\tt var} ~ {\tt lpdwFirstCacheEntryInfoBufferSize:DWORD}) : {\tt THandle:Thandle:Thandle:Thandle:Thandle:Thandle:Thandle:Thandle:Thandle:Thandle:Thandle:Thandle:Thandle:Thandle:Thandle:Thandle:Thandle:Thandle:Thandle:Thandle:Thandle:Thandle:Thandle:Thandle:Thandle:Thandle:Thandle:Thandle:Thandle:Thandle:Thandle:Thandle:Thandle:Thandle:Thandle:Thandle:Thandle:Thandle:Thandle:Thandle:Thandle:Thandle:Thandle:Thandle:Thandle:Thandle:Thandle:Thandle:Thandle:Thandle:Thandle:Thandle:Thandle:Thandle:Thandle:Thandle:Thandle:Thandle:Thandle:Thandle:Thandle:Thandle:Thandle:Thandle:Thandle:Thandle:Thandle:Thandle:Thandle:Thandle:Thandle:Thandle:Thandle:Thandle:Thandle:Thandle:Thandle:Thandle:Thandle:Thandle:Thandle:Thandle:Thandle:Thandle:Thandle:Thandle:Thandle:Thandle:Thandle:Thandle:Thandle:Thandle:Thandle:Thandle:Thandle:Thandle:Thandle:Thandle:Thandle:Thandle:Thandle:Thandle:Thandle:Thandle:Thandle:Thandle:Thandle:Thandle:Thandle:Thandle:Thandle:Thandle:Thandle:Thandle:Thandle:Thandle:Thandle:Thandle:Thandle:Thandle:Thandle:Thandle:Thandle:Thandle:Thandle:Thandle:Thandle:Thandle:Thandle:Thandle:Thandle:Thandle:Thandle:Thandle:Thandle:Thandle:Thandle:Thandle:Thandle:Thandle:Thandle:Thandle:Thandle:Thandle:Thandle:Thandle:Thandle:Thandle:Thandle:Thandle:Thandle:Thandle:Thandle:Thandle:Thandle:Thandle:Thandle:Thandle:Thandle:Thandle:Thandle:Thandle:Thandle:Thandle:Thandle:Thandle:Thandle:Thandle:Thandle:Thandle:Thandle:Thandle:Thandle:Thandle:Thandle:Thandle:Thandle:Thandle:Thandle:Thandle:Thandle:Thandle:Thandle:Thandle:Thandle:Thandle:Thandle:Thandle:Thandle:Thandle:Thandle:Thandle:Thandle:Thandle:Thandle:Thandle:Thandle:Thandle:Thandle:Thandle:Thandle:Thandle:Thandle:Thandle:Thandle:Thandle:Thandle:Thandle:Thandle:Thandle:Thandle:Thandle:Thandle:Thandle:Thandle:Thandle:Thandle:Thandle:Thandle:Thandle:Thandle:Thandle:Thandle:Thandle:Thandle:Thandle:Thandle:Thandle:Thandle:Thandle:Thandle:Thandle:Thandle:Thandle:Thandle:Thandle:Thandle:Thandle:Thandle:Thandle:Thandle:Thand
15213:
                       Function FindNextUrlCacheEntry(hEnumHandle:THandle;var lpNextCacheEntryInfo:TInternetCacheEntryInfo; var
                     IpdwNextCacheEntryInfoBufferSize: DWORD): BOOL;
Function FindCloseUrlCache(hEnumHandle: THandle):BOOL;
15214:
                       Function DeleteUrlCacheEntry( lpszUrlName : LPCSTR):BOOL;
15215:
15216:
                       Function
                     InternetDial(hwndParent:HWND;]pszConnect:Pchar;dwFlgs:DWORD;]pdwConnect:DWORD;dwReserved:DWORD):DWORD;
15217: Function InternetSetDialState( lpszConnectoid : PChar; dwState : DWORD; dwReserved: DWORD) : BOOL');
15218: end;
15219:
15220: procedure SIRegister Wwstr(CL: TPSPascalCompiler);
15221: begin
                           AddTypeS('strCharSet', 'set of char');
                            TwwGetWordOption','(wwgwSkipLeadingBlanks, wwgwQuotesAsWords,wwgwStripQuotes , wwgwSpacesInWords);
 15223:
15224:
                           AddTypeS('TwwGetWordOptions', 'set of TwwGetWordOption');
15225:
                       Procedure strBreakApart( s : string; delimeter : string; parts : TStrings)');
                       Function strGetToken(s: string; delimeter: string; var APos: integer): string');
Procedure strStripPreceding(var s: string; delimeter: strCharSet)');
 15226:
15227:
15228:
                        Procedure strStripTrailing( var s : string; delimeter : strCharSet)');
15229:
                       Procedure strStripWhiteSpace( var s : string)');
Function strRemoveChar( str : string; removeChar : char) : string');
15230:
                       Function wwstrReplaceChar(str:string; removeChar, replaceChar: char): string');
Function strReplaceCharWithStr(str:string; removeChar: char; replaceStr:string): string');
Function wwEqualStr(s1, s2:string): boolean');
 15231:
15232:
15233:
                       Function strCount( s : string; delimeter : char) : integer');
Function strWhiteSpace : strCharSet');
15234:
15235:
                        Function wwExtractFileNameOnly( const FileName : string) : string');
15237:
                        Function wwGetWord(s:string; var APos:integer;Options:TwwGetWordOptions;DelimSet:strCharSet):string;
                       Function strTrailing( s : string; delimeter : char) : string');
Function strPreceding( s : string; delimeter : char) : string');
15238:
15239:
15240:
                       Function wwstrReplace( s, Find, Replace : string) : string');
 15241: end;
15242:
15243:
                     procedure SIRegister DataBkr(CL: TPSPascalCompiler);
15244: begin
                          SIRegister_TRemoteDataModule(CL);
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15246:
             SIRegister TCRemoteDataModule(CL);
15247:
            Procedure RegisterPooled( const ClassID : string; Max, Timeout : Integer; Singleton : Boolean) ');
            Procedure UnregisterPooled( const ClassID : string) '
           Procedure EnableSocketTransport( const ClassID : string)');
Procedure DisableSocketTransport( const ClassID : string)');
15249 .
15250:
           Procedure EnableWebTransport( const ClassID : string)')
Procedure DisableWebTransport( const ClassID : string)'
15251:
15252:
15253:
15254:
15255: procedure SIRegister_Mathbox(CL: TPSPascalCompiler);
15256:
          begin
           Function mxArcCos( x : Real) : Real');
15258:
           Function mxArcSin( x : Real) : Real');
           \textbf{Function} \ \texttt{Comp2Str}(\ \texttt{N} \ : \ \texttt{Comp}) \ : \ \textbf{String'}) \ ;
15259:
           Function Int2StrPad0( N : LongInt; Len : Integer) : String');
15260:
15261:
            Function Int2Str( N : LongInt) : String');
            Function mxIsEqual( R1, R2 : Double) : Boolean');
           Function LogXY( x, y : Real) : Real');
Function Pennies2Dollars( C : Comp) : String');
15263:
15264:
           Function mxPower( X : Integer; Y : Integer) : Real');
Function Real2Str( N : Real; Width, Places : integer) : String');
15265:
15266:
           Function mxStr2Comp( MyString : string) : Comp');
15267:
           Function mxStr2Pennies( S : String) : Comp');
Function Str2Real( MyString : string) : Real');
Function XToTheY( x, y : Real) : Real');
15268:
15269:
15271: end;
15272:
begin
15276:
              CL.AddTypeS('TContentTypeMessage', '( cmPlainText, cmPlainText_Attach, cmHtml'
               +'_Attach, cmHtml_RelatedAttach, cmAlterText_Html, cmAlterText_Html_Attach, '
+'cmAlterText_Html_RelatedAttach, cmAlterText_Html_Attach, cmReadNotification )');
15277:
15278:
15279:
            MessagePlainText','String').SetString( 'text/plain');
            CL.AddConstantN('MessagePlainText_Attach','String').SetString('multipart/mixed');
15280:
15281:
           MessageAlterText_Html','String').SetString( 'multipart/alternative');
           MessageHtml_Attach', 'String').SetString( 'multipart/mixed');
MessageHtml_RelatedAttach', 'String').SetString( 'multipart/related; type="text/html"');
15282:
15283:
           MessageAlterText_Html_Attach', 'String').SetString( 'multipart/mixed');
MessageAlterText_Html_RelatedAttach', 'String')('multipart/related;type="multipart/alternative"';
15284:
15285:
15286:
            MessageAlterText_Html_Attach_RelatedAttach','String').SetString( 'multipart/mixed');
           MessageReadNotification','String').( 'multipart/report; report-type="disposition-notification";
Function ForceDecodeHeader( aHeader : String) : String');
15287:
15288:
            Function Base64_EncodeString( Value : String; const aEncoding : TEncoding) : string');
15289:
           Function Base64_DecodeToString( Value : String; const aBytesEncoding : TEncoding) : String;');
Function Base64_DecodeToBytes( Value : String) : TBytes;');
15290:
15291:
            Function IdHttp_DownloadFile(aSrcUrlFile, aDestFile: String; const OnWorkEvent: TWorkEvent): Boolean;
15292:
           Function Get_MD5( const aFileName : string) : string');
Function Get_MD5FromString( const aString : string) : string');
15294:
15295:
15296:
15297:
          procedure SIRegister_cySysUtils(CL: TPSPascalCompiler);
15298:
          begin
15299:
           Function IsFolder( SRec : TSearchrec) : Boolean');
           Function isFolderReadOnly( Directory: String): Boolean');
Function DirectoryIsEmpty( Directory: String): Boolean');
15300:
15301:
            Function DirectoryWithSubDir( Directory : String) : Boolean');
           Procedure GetSubDirs( FromDirectory : String; aList : TStrings)');
Function DiskFreeBytes( Drv : Char) : Int64');
15303:
15304:
           Function DiskFreesytes( Drv : Char) : Int64');
Function DiskSytes( Drv : Char) : Int64');
Function GetFileBytes( Filename : String) : Int64');
15305:
15306:
15307:
            Function GetFilesBytes( Directory, Filter : String) : Int64');
15308:
            SE_CREATE_TOKEN_NAME','String').SetString( 'SeCreateTokenPrivilege');
           SE_ASSIGNPRIMARYTOKEN_NAME', 'String').SetString( SeAssignPrimaryTokenPrivilege');
SE_LOCK_MEMORY_NAME', 'String').SetString( 'SeLockMemoryPrivilege');
SE_INCREASE_QUOTA_NAME', 'String').SetString( 'SeIncreaseQuotaPrivilege');
15309:
15310:
15312:
            SE_UNSOLICITED_INPUT_NAME','String').SetString( 'SeUnsolicitedInputPrivilege');
           SE_MACHINE_ACCOUNT_NAME', 'String').SetString( 'SeMachineAccountPrivilege');
SE_TCB_NAME', 'String').SetString( 'SeTcbPrivilege');
15313:
15314:
           SE_SECURITY_NAME', 'String').SetString( 'SeSecurityPrivilege');
SE_TAKE_OWNERSHIP_NAME', 'String').SetString( 'SeTakeOwnershipPrivilege');
15315:
15316:
15317:
            SE_LOAD_DRIVER_NAME', 'String').SetString( 'SeLoadDriverPrivilege');
           SE_DOAD_DRIVER_NAME , String ).SetString ( SeSystemProfilePrivilege');
SE_SYSTEM_PROFILE_NAME', 'String').SetString ( 'SeSystemtimePrivilege');
SE_SYSTEMTIME_NAME', 'String').SetString ( 'SeSystemtimePrivilege');
SE_PROF_SINGLE_PROCESS_NAME', 'String').SetString ( 'SeProfileSingleProcessPrivilege');
SE_INC_BASE_PRIORITY_NAME', 'String').SetString ( 'SeIncreaseBasePriorityPrivilege');
15318:
15319:
15320:
15321:
           SE_CREATE_PAGEFILE_NAME','String').SetString( 'SeCreatePagefilePrivilege');
SE_CREATE_PERMANENT_NAME','String').SetString( 'SeCreatePermanentPrivilege');
15322:
15323:
           SE_BACKUP_NAME', 'String').SetString( 'SeBackupPrivilege');
SE_RESTORE_NAME', 'String').SetString( 'SeRestorePrivilege');
SE_SHUTDOWN_NAME', 'String').SetString( 'SeShutdownPrivilege');
15324:
15326:
           SE_DEBUG_NAME','String').SetString( 'SeDebugPrivilege');
SE_AUDIT_NAME','String').SetString( 'SeAuditPrivilege');
15327:
15328:
            SE_SYSTEM_ENVIRONMENT_NAME', 'String').SetString( 'SeSystemEnvironmentPrivilege');
15329:
           SE_SYSTEM_ENVIRONMENI_NAME', 'String').SetString( 'SeSystemEnVironmentPrivilege');
SE_CHANGE_NOTIFY_NAME', 'String').SetString( 'SeChangeNotifyPrivilege');
SE_REMOTE_SHUTDOWN_NAME', 'string').SetString( 'SeRemoteShutdownPrivilege');
SE_UNDOCK_NAME', 'string').SetString( 'SeUndockPrivilege');
SE_SYNC_AGENT_NAME', 'String').SetString( 'SeSyncAgentPrivilege');
SE_ENABLE_DELEGATION_NAME', 'String').SetString( 'SeEnableDelegationPrivilege');
15330:
15331:
15332:
15333:
```

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15335: SE MANAGE VOLUME_NAME', 'String').SetString( 'SeManageVolumePrivilege');
15336: end;
15337:
15338:
15339:
                procedure SIRegister_cyWinUtils(CL: TPSPascalCompiler);
15340: begin
                    Type(TWindowsVersion', '( wvUnknown, wvWin31, wvWin95, wvWin98, wvWin' +'Me, wvWinNt3, wvWinNt4, wvWin2000, wvWinXP, wvWinVista, wvWin7, wvWin8, wvWin8_Or_Upper )');
15341:
15342:
15343:
                  Function ShellGetExtensionName( FileName : String) : String');
15344:
                  Function ShellGetIconIndex( FileName : String) : Integer');
Function ShellGetIconHandle( FileName : String) : HIcon');
15345:
                   Procedure ShellThreadCopy( App_Handle : THandle; fromFile : string; toFile : string) ');
15347:
                   Procedure ShellThreadMove( App_Handle : THandle; fromFile : string; toFile : string) );
                  Procedure ShellRenameDir( DirFrom, DirTo : string)');
Function cyShellExecute(Operation, FileName, Parameters, Directory: String; ShowCmd: Integer): Cardinal;
15348:
15349:
15350:
                   Procedure cyShellExecute1(ExeFilename, Parameters, ApplicationName, ApplicationClass: String; Restore: Boolean);
                   Procedure ShellExecuteAsModal( ExeFilename, ApplicationName, Directory : String)');
15351:
15352.
                  Procedure ShellExecuteExAsAdmin( hWnd : HWND; Filename : string; Parameters : string)');
                  Function ShellExecuteEx(aFileName: string; const Parameters:string; const Directory: string; const
15353:
                WaitCloseCompletion : boolean) : Boolean');
15354:
                  Procedure RestoreAndSetForegroundWindow( Hnd : Integer)');
15355:
                   Function RemoveDuplicatedPathDelimiter( Str : String) : String');
                  Function cyFileTimeToDateTime( _FT : TFileTime) : TDateTime');
Function GetModificationDate( Filename : String) : TDateTime');
15356:
15357:
                  Function GetCreationDate(Filename: String): TDateTime');
15358:
                   Function GetLastAccessDate(Filename: String): TDateTime');
15359:
15360:
                  Function FileDelete( Filename : String) : Boolean');
15361:
                  Function FileIsOpen( Filename : string) : boolean');
                  Procedure FilesDelete( FromDirectory: String): Boolean');
Function DirectoryDelete( Directory: String): Boolean');
Function GetPrinters( PrintersList: TStrings): Integer');
15362:
15363:
15364:
15365:
                  Procedure SetDefaultPrinter( PrinterName : String)');
15366:
                  Procedure ShowDefaultPrinterWindowProperties( FormParent_Handle : Integer)');
                  Function WinToDosPath( WinPathName : String) : String');
Function DosToWinPath( DosPathName : String) : String');
15367:
                                                                                                                           : String
15369:
                  Function cyGetWindowsVersion : TWindowsVersion');
                  Function NTSetPrivilege( sPrivilege: string; bEnabled: Boolean): Boolean');
Procedure WindowsShutDown( Restart: boolean)');
15370:
15371:
15372:
                   Procedure CreateShortCut(FileSrc,Parametres,FileLnk,Descript,DossierDeTravail,
                FileIcon: string; NumIcone: integer);
15373:
                Procedure GetWindowsFonts( FontsList : TStrings)');
                  Function GetAvailableFilename( DesiredFileName : String): String');
15374:
15375:
                end;
15376:
15377:
                 procedure SIRegister_cyStrUtils(CL: TPSPascalCompiler);
15378: begin
15379:
                     Type(TStrLocateOption', '( strloCaseInsensitive, strloPartialKey )');
                     Type(TStrLocateOptions', 'set of TStrLocateOption');
15380:
                     Type(TStringRead', '( srFromLeft, srFromRight )');
Type(TStringReads', 'set of TStringReads');
15381:
15382:
                     Type(TCaseSensitive', '( csCaseSensitive, csCaseNotSensitive )');
Type(TWordsOption', '( woOnlyFirstWord, woOnlyFirstCar )');
Type(TWordsOptions', 'set of TWordsOption');
15383:
15384:
15385:
                     Type(TCarType', '(ctAlphabeticUppercase, ctAlphabeticLowercase, ctNumeric, ctOther )');
Type(TCarTypes', 'set of TCarType');
//CL.AddTypeS('TUnicodeCategories', 'set of TUnicodeCategory');
15386:
15387:
15388:
                   CarTypeAlphabetic', 'LongInt'):= ord(ctAlphabeticUppercase) or ord(ctAlphabeticLowercase);
15389:
                  Function Char_GetType( aChar : Char) : TCarType');
15390:
                  Function SubString_Count( Str : String; Separator : Char) : Integer');
Function SubString_AtPos( Str : String; Separator : Char; SubStringIndex : Word) : Integer');
Function SubString_Get( Str : String; Separator : Char; SubStringIndex : Word) : String');
15391:
15392:
15393:
15394:
                   Function SubString_Length( Str : String; Separator : Char; SubStringIndex : Word) : Integer');
15395:
                  Procedure SubString_Add( var Str : String; Separator : Char; Value : String)');
                  Procedure SubString_Insert(var Str:String;Separator:Char; SubStringIndex:Word; Value : String)');
15396:
                  Procedure SubString_Edit(var Str:String;Separator:Char;SubStringIndex:Word; NewValue : String)');
15397:
                   Function SubString_Remove(var Str:string; Separator:Char; SubStringIndex: Word): Boolean');
15399:
                   \textbf{Function} \ \ \text{SubString\_Locate} ( \texttt{Str} : \textbf{string}; \texttt{Separator} : \texttt{Char}; \texttt{SubString} : \textbf{String}; \texttt{Options} : \texttt{TStrLocateOptions}) : \texttt{Integer}; \\ \textbf{SubString} : \textbf{String} 
15400:
                  Function SubString_Ribbon( Str : string; Separator : Char; Current: Word; MoveBy : Integer):Integer; ');
15401:
                  Function SubString_Ribbon1(Str:string;Separator:Char;Current:String; MoveBy:Integer):String;');
                  Function String_Quote( Str : String) : String');
Function String_GetCar( Str : String; Position : Word; ReturnCarIfNotExists : Char) : Char');
15402:
15403:
15404:
                   \textbf{Function} \ \texttt{String\_ExtractCars} ( \texttt{fromStr} : \textbf{String} ; \texttt{CarTypes} : \texttt{TCarTypes} ; \texttt{IncludeCars}, \texttt{ExcludeCars} : \textbf{String} ) : \textbf{String} ; \texttt{String} ; \texttt{String}
15405:
                   Function String_GetWord( Str : String; StringRead : TStringRead) : String');
                  Function String_GetInteger( Str : String; StringRead : TStringRead) : String');
15406:
15407:
                   Function String_ToInt( Str : String) : Integer');
15408:
                   Function String_Uppercase( Str : String; Options : TWordsOptions) : String');
15409:
                   Function String_Lowercase( Str : String; Options : TWordsOptions) : String');
                  Function String_Reverse(Str:String): String');
Function String_Pos(SubStr:String;Str:String;fromPos:Integer;CaseSensitive:TCaseSensitive)Integer;
15410:
15411:
15412:
                   Function String_Posl(SubStr:String; Str:String; StringRead:TStringRead; Occurrence:Word; CaseSensitive:
                TCaseSensitive):Integer;');
15413: Function String_Copy( Str : String; fromIndex : Integer; toIndex : Integer) : String; );
                  Function String_Copy1(Str:String;StringRead:TStringRead;UntilFind:String;_Inclusive:Boolean):String;
15414:
                  Function String_Copy2(Str:String;Between1:String;Between1MustExist:Boolean; Between2:String;
15415:
                                                               Boolean; CaseSensitive : TCaseSensitive) : String; ');
                 Function String_Delete(Str: String; fromIndex: Integer; toIndex: Integer): String;');
Function String_Delete(Str: String; delStr: String; CaseSensitive:TCaseSensitive): String;');
Function String_BoundsCut(Str: String; CutCar: Char; Bounds: TStringReads): String');
Function String_BoundsAdd(Str: String; AddCar: Char; ReturnLength: Integer): String');
15416:
15417:
15418:
```

```
Function String_Add(Str:String;StringRead:TStringRead;aCar:Char;ReturnLength:Integer):String');
15420:
             Function String_End( Str : String; Cars : Word) : String');
15421:
             Function String_Subst(OldStr:String; NewStr:String; Str:String; CaseSensitive : TCaseSensitive;
            AlwaysFindFromBeginning : Boolean) : String');
           Function String_SubstCar( Str : String; Old, New : Char) : String');
15423:
             Function String_Count( Str : String; SubStr : String; CaseSenSitive : TCaseSensitive) : Integer');
15424:
             Function String_SameCars(Str1,Str2:String;StopCount_IfDiferent:Bool;CaseSensitive:TCaseSensitive):Integer;
15425:
             Function String_IsNumbers( Str : String) : Boolean');
Function SearchPos( SubStr : String; Str : String; MaxErrors : Integer) : Integer');
15426:
15427:
15428:
             Function StringToCsvCell( aStr : String) : String');
15429:
           end;
15431:
           procedure SIRegister_cyDateUtils(CL: TPSPascalCompiler);
15432:
           begin
            Function LongDayName( aDate : TDate) : String');
15433:
15434:
             Function LongMonthName( aDate : TDate) : String');
             Function ShortYearOf( aDate : TDate) : byte');
             Function DateToStrYYYYMMDD( aDate : TDate) : String');
Function StrYYYYMMDDToDate( aStr : String) : TDate');
15436:
15437:
15438:
             Function SecondsToMinutes( Seconds : Integer) : Double');
             Function MinutesToSeconds( Minutes : Double) : Integer');
15440:
             Function MinutesToHours( Minutes : Integer) : Double');
             Function HoursToMinutes( Hours : Double) : Integer');
Function ShortTimeStringToTime( ShortTimeStr : String; const ShortTimeFormat : String) : TDateTime');
15441:
15442:
             Procedure cyAddMonths( var aMonth, aYear : Word; Months : Integer)');
15443:
15444:
             Function MergeDateWithTime( aDate : TDate; aTime : TDateTime) : TDateTime');
15445:
             Function GetMinutesBetween( DateTime1, DateTime2 : TDateTime) : Int64;');
15446:
             \textbf{Function} \ \ \texttt{GetMinutesBetween1} ( \texttt{From\_ShortTimeStr}, \texttt{To\_ShortTimeStr}; \textbf{String}; \textbf{const} \ \ \texttt{ShortTimeFormat:String}) : \texttt{Int64}; \textbf{const} \ \ \texttt{Int64}; \textbf{const} \ \ \texttt{ShortTimeFormat:String}) : \texttt{Int64}; \textbf{const} \ \ \texttt{Int6
             Function GetSecondsBetween( DateTime1, DateTime2 : TDateTime) : Int64; ')
15447:
             Function IntersectPeriods(PeriodlBegin,PeriodlEnd,Period2Begin,Period2End:TDateTime; var RsltBegin:
            TDateTime; RsltEnd : TDateTime) : Boolean;')
15449:
             Function IntersectPeriods1(Period1Beqin,Period1End,Period2Beqin,Period2End:TDateTime):Boolean;
15450:
             Function TryToEncodeDate( Year, Month, Day : Integer; var RsltDate : TDateTime) : Boolean');
15451:
15453:
           procedure SIRegister_cyObjUtils(CL: TPSPascalCompiler);
15454: begin
              Type(TStringsSortType', '( stNone, stStringSensitive, stStringInsensitive, stExtended )');
Type(TStringsValueKind', '( skStringSensitive, skStringInsensitive, skExtended )');
Type(TcyLocateOption', '( lCaseInsensitive, lPartialKey )');
Type(TcyLocateOptions', 'set of TcyLocateOption');
15455:
15456:
15457:
15458:
             Function StringsLocate( aList : TStrings; Value : String; Options : TcyLocateOptions) : Integer;');
Function StringsLocate1( aList : TStrings; Value : String; ValueKind : TStringsValueKind) : Integer;');
15459:
15460:
             Function StringsAdd(aList:TStrings;Value:String;Unique:Boolean; SortType:TStringsSortType) : Integer');
15462:
             Procedure StringsSort( aList : TStrings; SortType : TStringsSortType)');
Function TreeNodeLocate( ParentNode : TTreeNode; Value : String) : TTreeNode');
15463:
15464:
             Function TreeNodeLocateOnLevel( TreeView: TTreeView: OnLevel: Integer: Value: String) : TTreeNode');
15465:
15466:
            TreeNodeGetChildFromIndex(TreeView:TTreeView:ParentNode:TTreeNode;ChildIndex:Integer):TTreeNode');
15467:
           Function TreeNodeGetParentOnLevel( ChildNode : TTreeNode; ParentLevel : Integer) : TTreeNode');
             Procedure TreeNodeCopy(FromNode:TTreeNode;ToNode:TTreeNode;const CopyChildren:Boolean;const
15468:
            CopySubChildren:Bool;
15469:
             Procedure RichEditSetStr( aRichEdit : TRichEdit; FormatedString : String)');
15470:
             Procedure RichEditStringReplace( aRichEdit : TRichEdit; OldPattern, NewPattern : string; Flags :
            TReplaceFlags)');
             Function GetTopMostControlAtPos( FromControl : TWinControl; aControlPoint : TPoint) : TControl');
             Procedure cyCenterControl( aControl : TControl)');
15472:
             Function GetLastParent( aControl : TControl) : TWinControl');
Function GetControlBitmap( aControl : TWinControl) : TBitmap');
Function GetRichEditBitmap( aRichEdit : TRichEdit) : TBitmap');
15473:
15474:
15475:
15476:
15477:
15478: procedure SIRegister cyBDE(CL: TPSPascalCompiler);
15479:
           begin
             Function TablePackTable( Tab : TTable) : Boolean');
             Function TableRegenIndexes( Tab : TTable) : Boolean');
15481:
             Function TableShowDeletedRecords( Tab : TTable; Show : Boolean) : Boolean');
15482:
             Function TableUndeleteRecord( Tab : TTable) : Boolean');
15483:
             Function TableAddIndex(Tab:TTable;FieldName String;FieldExpression:String;IOpt:TIndexOptions):Bool;
15484:
             Function TableDeleteIndex( Tab : TTable; IndexFieldName : String) : Boolean );
15485:
             Function TableEmptyTable( Tab : TTable) : Boolean');
Function TableFindKey( aTable : TTable; Value : String) : Boolean');
15486:
15487:
             Procedure TableFindNearest( aTable: TTable; Value: String)');
15488:
             Function
15489:
            TableCreate(Owner:TComponent;DataBaseName:ShortString;TableName:String;IndexName:ShortString;ReadOnly :
            Boolean): TTable;
15490:
             Function
            \texttt{TableOpen(Tab:TTable;FileName:String;IndexFieldName:String;RecordIndexValue:Variant;GotoRecordIndexValue:Bool):Bool; } \\
             Function DateToBDESQLDate( aDate: TDate; const DateFormat: String): String');
15492: end;
15493:
15494: procedure SIRegister cyClasses(CL: TPSPascalCompiler);
15495: begin
               SIRegister_TcyRunTimeDesign(CL);
15496:
15497:
               SIRegister_TcyShadowText(CL);
15498:
               SIRegister_TcyBgPicture(CL);
15499:
               SIRegister_TcyGradient(CL);
               SIRegister_tcyBevel(CL);
```

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15501:
            //CL.AddTypeS('TcyBevelClass', 'class of tcyBevel');
15502:
            SIRegister tcyBevels(CL);
            SIRegister_TcyImagelistOptions(CL);
15504:
          Procedure cyDrawBgPicture( aCanvas : TCanvas; aRect : TRect; aBgPicture : TcyBgPicture)');
15505:
         end;
15506:
15507: procedure SIRegister_cyGraphics(CL: TPSPascalCompiler);
15508:
15509:
         Procedure cyGradientFill( aCanvas : TCanvas; aRect : TRect; fromColor, toColor : TColor;
         adgradOrientation : TdgradOrientation; Balance, AngleDegree : Word; balanceMode : TDgradBalanceMode;
         Maxdegrade : Byte;
            SpeedPercent : Integer; const AngleClipRect : Boolean; const AngleBuffer : TBitmap)')
15511:
          Procedure cyGradientFillVertical(aCanvas:TCanvas;aRect:TRect;fromColor,toColor:TColor;MaxDegrad : byte);
15512:
          Procedure cyGradientFillHorizontal(aCanvas:TCanvas;aRect:TRect;fromColor,toColor:TColor;MaxDegrad:byte);
          Procedure cyGradientFillShape( aCanvas : TCanvas; aRect : TRect; fromColor, toColor : TColor; MaxDegrad :
15513:
         Byte; toRect : TRect; OrientationShape : TDgradOrientationShape)');
         Procedure cyGradientFillAngle( aCanvas : TCanvas; aRect : TRect; fromColor, toColor : TColor; MaxDegrad :
         Procedure Cygradueler Finance (activas: Icanwas; anect: Irect; Ironicolor, techor; maxbegrad Byte; AngleDegree: Word; const ClipRect: Boolean; const Buffer: TBitmap)');

Procedure DrawRectangleInside( aCanwas: TCanwas; InsideRect: TRect; FrameWidth: Integer)');

Procedure cyFrame( aCanwas: TCanwas; var InsideRect: TRect; Color: TColor; const Width: Integer);');

Procedure cyFramel( Canwas: TCanwas; var InsideRect: TRect; LeftColor, TopColor, RightColor,
BottomColor: TColor; const Width: Integer; const RoundRect: boolean);');
15515:
15516:
         Procedure cyFrame3D(Canvas:TCanvas;var Rect:TRect;TopLeftColor;
         BottomRightColor:TColor;Width:Integer;const DrawLeft:Boolean;const DrawTop:Bool;const DrawRight:Bool;const
         DrawBottom:Bool;const RoundRect:bool;
         Procedure cyDrawButtonFace(Canvas : TCanvas; var Rect : TRect; GradientColor1, GradientColor2 : TColor;
         aState : TButtonState; Focused, Hot : Boolean) ');
15520: Procedure cyDrawButton(Canvas:TCanvas; Caption:String; ARect:TRect; GradientColor1, GradientColor2:TColor;
         aState : TButtonState; Focused, Hot : Boolean)');
15521: Procedure cyDrawSpeedButtonFace( Canvas : TCanvas; var Rect : TRect; GradientColor1, GradientColor2 :
         TColor; aState : TButtonState; Focused, Hot : Boolean)');
15522: Procedure cyDrawSpeedButton( Canvas : TCanvas; Caption : String; ARect : TRect; GradientColor1, GradientColor2 : TColor; aState : TButtonState; Focused, Hot : Boolean)');
| GradientColorz : Icolor, astate : IButtonstate; rocused, not : Boolean)');
| 15523: Procedure cyDrawCheckBox( Canvas : TCanvas; ISChecked : Boolean; ARect : TRect; const BgColor : TColor; const DarkFrameColor : TColor; const MarkColor : TColor)');
| 15524: Procedure cyDrawSingleLineText( Canvas : TCanvas; Text : String; ARect : TRect; Alignment : TAlignment; TextLayout : TTextLayout; const IndentX : Integer; const IndentY : Integer)');
15525: Function DrawTextFormatFlags(aTextFormat:LongInt;Alignment
         TAlignment; Layout: TTextLayout; WordWrap: Bool): LongInt;
15526: 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;');
15527:
15528:
           Function cyCreateFontIndirect1( fromFont : TFont; CaptionOrientation : TCaptionOrientation) : TFont; ');
         Procedure cyDrawVerticalText( Canvas: TCanvas; Text: String; var Rect: TRect; TextFormat: Longint; CaptionOrientation: TCaptionOrientation; Alignment: TAlignment; Layout: TTextLayout)');

Function DrawLeftTurnPageEffect( Canvas: TCanvas; PageColor: TColor; PageRect: TRect; PercentDone: Integer; const OnlyCalcFoldLine: Boolean): TLineCoord');
15530:
15531:
         Function DrawRightTurnPageEffect( Canvas: TCanvas; PageColor: TColor; PageRect: TRect; PercentDone: Integer; const OnlyCalcFoldLine: Boolean): TLineCoord');
15532:
15533:
         Function PictureIsTransparentAtPos( aPicture : TPicture; aPoint : TPoint):boolean');
           Function IconIsTransparentAtPos( aIcon : TIcon; aPoint : TPoint) : boolean');
15534:
           Function MetafileIsTransparentAtPos( aMetafile : TMetafile; aPoint : TPoint) : boolean');
           Function PngImageIsTransparentAtPos( aPngImage : TPngImage; aPoint : TPoint) : boolean');
15536:
15537:
          Procedure DrawCanvas( Destination : TCanvas; DestRect : TRect; Source : TCanvas; SourceRect : TRect);');
Procedure DrawCanvas1(Destination:TCanvas; DestRect:TRect;Src:TCanvas; SrcRect : TRect; TransparentColor
15538:
            TColor; const aStyle: TBgStyle; const aPosition: TBgPosition; const IndentX : Integer; const IndentY :
15539:
         const IntervalX : Integer; const IntervalY : Integer; const RepeatX : Integer; const RepeatY :
         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;
15541:
          Procedure DrawGraphic1(Destination: TCanvas; DestRect: TRect; aGraphic: TGraphic; Transparent:
          Boolean; const aStyle : TBgStyle; const aPosition : TBgPosition; const IndentX : Integer; const IndentY :
          Integer; const IntervalX:Integer; const IntervalY: Integer; const RepeatX:Integer; const
         RepeatY:Integer);');
15542:
         Procedure DrawMosaicPortion( Destination : TCanvas; Portion : TRect; Pattern : TBitmap)');
          Function ValidGraphic( aGraphic : TGraphic) : Boolean');
Function ColorSetPercentBrightness( Color : TColor; PercentLight : Integer) : TColor');
15543:
15544:
15545:
           Function ColorModify( Color: TColor; incR, incG, incB: Integer): TColor');
          Function ColorSetPercentContrast( Color : TColor; IncPercent : Integer) : TColor');
Function ColorSetPercentPale( Color : TColor; IncPercent : integer) : TColor');
Function MediumColor( Color1, Color2 : TColor) : TColor');
15546:
15547:
15548:
          Function ClientToScreenRect( aControl : TControl; aControlRect : TRect) : TRect');
Function ScreenToClientRect( aControl : TControl; aScreenRect : TRect) : TRect');
15549:
15550:
          Function CombineRectKeepingCenterPosition( RectPos, AddRect : TRect) : TRect');
Procedure InflateRectPercent( var aRect : TRect; withPercent : Double)');
15551:
15552:
           Function GetIntermediateRect( Rect1, Rect2 : TRect; Percent : Double) : TRect');
15554:
           Function GetProportionalRect( fromRect, InsideRect : TRect) : TRect');
15555:
          Function PointInRect( const aPt : TPoint; const aRect : TRect) : boolean');
          Function PointInEllispe( const aPt : TPoint; const aRect : TRect) : boolean');
Function CanvasAcceleratorTextWidth( aCanvas : TCanvas; aText : String) : Integer');
15556:
15557:
15559:
15560:
         procedure SIRegister cyTypes(CL: TPSPascalCompiler);
15561: begin
            Type(TGlyphAlignment', '( gaLeft, gaCenter, gaRight )');
```

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Type(TGlyphLayout', '( glTop, glCenter, glBottom )');
Type(TDisabledGlyphOptions', '( dgDoNotDraw, dgDrawNormal, dgDrawMonochrome )');
15563:
15564:
                                     '( crNormal, crPathEllipsis, crEndEllipsis, crWordEllipsis )');
15565:
          Type (TCaptionRender',
          Type(TCaptionOrientation', '( coHorizontal, coHorizontalReversed, coVertical, coVerticalReversed )');
15566:
15567:
          \textbf{Type} (\texttt{TBgPosition'}, \ '( \ \texttt{bgCentered}, \ \texttt{bgTopLeft}, \ \texttt{bgTopCenter}, \ \texttt{bgTopRight}, '
          +' bgCenterRight, bgBottomRight, bgBottomCenter, bgSottomLeft, bgCenterLeft)');

Type(TBgStyle', '( bgNone, bgNormal, bgMosaic, bgStretch, bgStretchProportional )');
15568:
15569:
15570:
          Type (TcyBevelCut',
                                 '( bcLowered, bcRaised, bcNone, bcTransparent, bcGradientToNext )');
          Type(TDgradOrientation', '( dgdVertical, dgdHorizontal, dgdAngle, dgdRadial, dgdRectangle )');
Type(TDgradOrientationShape', '( osRadial, osRectangle )');
Type(TDgradBalanceMode(bmNormal,bmMirror,bmReverse,bmReverseFromColor,bmInvertReverse,
15571:
15572:
15573:
        bmInvertReverseFromColor);
15574:
          \textbf{Type} (\texttt{TRunTimeDesignJob}^{\text{!`}}, \text{ '( rjNothing, rjMove, rjResizeTop, rjResizeBottom, rjResizeLeft, } \\
       rjResizeTopLeft, rjResizeBottomLeft, rjResizeRight, rjResizeTopRight, rjResizeBottomRight )');

Type(TLineCoord', 'record BottomCoord: TPoint; TopCoord: TPoint; end');
15576: cCaptionOrientationWarning','String')('Note that text orientation doesn't work with all fonts!');
15577: end;
15578 .
15579: Functions_max hex in the box maXbox
15580: functionslist.txt
15581: FunctionsList1 3.9.9.86/88/91/92/94
15582:
15583: *
15584: Procedure
15585: PROCEDURE SIZE 7507 7401 6792 6310 5971 4438 3797 3600
15587: Procedure ( ACol, ARow : Integer; Items : TStrings)
15588: Procedure ( Agg : TAggregate)
15589: Procedure (
                      ASender : TComponent; const AReplyStatus : TReplyStatus)
                      ASender : TComponent; const AString : String; var AMsg : TIdMessage)
15590: Procedure (
15591: Procedure
                      ASender : TComponent; var AMsg : TIdMessage)
                     ASender : TObject; const ABytes : Integer)
ASender : TObject; VStream : TStream)
15592: Procedure
15593: Procedure (
15594: Procedure (
                      AThread : TIdThread)
                      AWebModule : TComponent)
15595: Procedure
15596: Procedure (
                      Column : TColumn)
15597: Procedure (
                      const AUsername : String; const APassword : String; AAuthenticationResult : Boolean)
15598: Procedure (
                      const iStart : integer; const sText : string)
15599: Procedure (
                      Control : TCustomTabControl; TabIndex : Integer; const Rect : TRect; Active : Boolean)
15600: Procedure
                      Database : TDatabase; LoginParams : TStrings)
15601: Procedure (DataSet:TCustomClientDataSet;E:EReconcileError;UpdateKind:TUpdateKind;var Action:
        TReconcileAction)
15602: Procedure ( DATASET : TDATASET)
15603: Procedure
                      \texttt{DataSet:TDataSet}; \ \texttt{E:EDatabaseError;UpdateKind:TUpdateKind:TUpdateAction:} \ \ \texttt{TUpdateAction})
15604: Procedure
                      DATASET: TDATASET; E: TObject; var ACTION: TDATAACTION)

DataSet: TDataSet; UpdateKind: TUpdateKind; var UpdateAction: TUpdateAction)
15605: Procedure (
                      DATASET : TDATASET; var ACCEPT : BOOLEAN)
15606: Procedure (
15607: Procedure (
                      DBCtrlGrid : TDBCtrlGrid; Index : Integer)
15608: Procedure
                      Done : Integer)
15609: Procedure
                      HeaderControl: TCustomHeaderControl; Section: THeaderSection)
15610: Procedure (HeaderControl:TCustomHeaderControl;Section:THeaderSection; const Rect:TRect;Pressed:Boolean)
15611: Procedure
        (\texttt{HeaderControl:} TCustom \texttt{HeaderControl:} Section: THeaderSection: \texttt{Width:} Integer: State: TSectionTrackState)) \\
15612: Procedure ( HeaderControl : THeaderControl; Section : THeaderSection)
15613: Procedure (HeaderControl:THeaderControl;Section: THeaderSection; const Rect:TRect; Pressed : Boolean)
15614: Procedure (HeaderControl:TheaderControl;Section:TheaderSection;Width:Integer;State : TSectionTrackState)
15615: Procedure (Sender: TCustomListView; const ARect: TRect; Stage: TCustomDrawStage; var DefaultDraw: Boolean)
15616: Procedure
                      Sender : TCustomListView; const ARect : TRect; var DefaultDraw : Boolean)
                      Sender : TCustomListView; Item : TListItem; Rect : TRect; State : TOwnerDrawState)
Sender : TCustomTreeView; const ARect : TRect; var DefaultDraw : Boolean)
15617: Procedure
15618: Procedure
15619: Procedure
                                TFIELD; const TEXT : String)
15620: Procedure
                      SENDER :
                                TFIELD; var TEXT : STRING; DISPLAYTEXT : BOOLEAN)
15621: Procedure
                      Sender : TIdTelnet; const Buffer : String)
                                TIdTelnet; Status : TIdTelnetCommand)
TOBJECT; ACANVAS : TCANVAS; ARECT : TRECT; SELECTED : BOOLEAN)
TOBJECT; ACANVAS : TCANVAS; ARECT : TRECT; STATE : TOWNERDRAWSTATE)
15622: Procedure
                      Sender :
15623: Procedure
                      SENDER :
15624: Procedure
                      SENDER :
15625: Procedure
                      SENDER :
                                 TOBJECT; ACANVAS : TCANVAS; var WIDTH, HEIGHT : INTEGER)
15626: Procedure
                      Sender : TObject; ACol, ARow : Longint; const Value : string)
                                TObject; ACol, ARow : Longint; Rect : TRect; State : TGridDrawState)
15627: Procedure
                      Sender :
                      Sender : TObject; ACol, ARow : Longint; var CanSelect : Boolean)
Sender : TObject; ACol, ARow : Longint; var Value : string)
15628: Procedure
15629: Procedure
15630: Procedure
                      Sender : TObject; Button : TMPBtnType)
15631: Procedure
                      Sender : TObject; Button : TMPBtnType; var DoDefault : Boolean)
                                TObject; Button : TUDBtnType)
15632: Procedure (
                      Sender :
15633: Procedure (
                      Sender :
                                 TObject; Canvas: TCanvas; PageRect: TRect; var DoneDrawing: Boolean)
15634: Procedure
                      Sender: TObject; ClientSocket: TServerClientWinSocket; var SocketThread: TServerClientThread)
                     Sender : TObject; Column : TListColumn)
Sender : TObject; Column : TListColumn; Point : TPoint)
15635: Procedure
15636: Procedure (
15637: Procedure ( Sender : TObject; Connecting : Boolean)
15638: Procedure (Sender:TObject;const PapSize:SmallInt;const Orient:TPrtOrient;const PageTy:TPageTy;var
        DoneDraw: Bool
15639: Procedure (Sender:TObject; const Rect : TRect; DataCol : Integer; Column: TColumn; State : TGridDrawState)
15640: Procedure (Sender : TObject; const Rect : TRect; Field : TField; State : TGridDrawState)
15641: Procedure (Sender: TObject; const UserString: string; var DateAndTime: TDateTime; var AllowChange: Boolean)
15642: Procedure
                      Sender : TObject; E : Exception; var Handled : Boolean)
15643: Procedure (
                      Sender : TObject; FromIndex, ToIndex : Longint)
15644: Procedure ( Sender : TObject; FromSection, ToSection : THeaderSection; var AllowDrag : Boolean)
15645: Procedure ( Sender : TObject; Index : LongInt)
15646: Procedure ( Sender : TObject; Item : TListItem)
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15647: Procedure ( Sender : TObject; Item : TListItem; Change : TItemChange)
15648: Procedure (
                      Sender :
                                 TObject; Item : TListItem; Change : TItemChange; var AllowChange : Boolean)
                                 TObject; Item : TListItem; Selected : Boolean)
15649: Procedure
                      Sender :
15650: Procedure
                      Sender :
                                 TObject; Item : TListItem; var AllowEdit : Boolean)
15651: Procedure
                      Sender :
                                 TObject; Item : TListItem; var S : string)
                                 TObject; Item1, Item2: TListItem; Data: Integer; var Compare: Integer)
TObject; ModalResult: TModalResult; var CanClose: Boolean)
15652: Procedure
                      Sender :
15653: Procedure
                      Sender :
15654: Procedure
                                 TObject; Month : LongWord; var MonthBoldInfo : LongWord)
                      Sender :
15655: Procedure
                      Sender :
                                 TObject; NewTab : Integer; var AllowChange : Boolean)
15656: Procedure
                      Sender :
                                TObject: Node: TTreeNode)
15657: Procedure
                                 TObject; Node : TTreeNode; var AllowChange : Boolean)
                      Sender :
15658: Procedure
                      Sender :
                                 TObject; Node : TTreeNode; var AllowCollapse : Boolean)
15659: Procedure
                      Sender :
                                 TObject; Node : TTreeNode; var AllowEdit : Boolean)
15660: Procedure
                      Sender :
                                 TObject; Node : TTreeNode; var AllowExpansion : Boolean)
                                TObject; Node: TTreeNode; var S: string)
TObject; Nodel, Node2: TTreeNode; Data: Integer; var Compare: Integer)
TObject; NumObjects, NumChars: Integer; var SaveClipboard: Boolean)
15661: Procedure
                      Sender :
15662: Procedure
                      Sender :
15663: Procedure
                      Sender :
15664: Procedure
                      Sender :
                                TObject; Rect : TRect)
                      Sender : TObject; Request : TWebRequest; Response : TWebResponse; var Handled : Boolean)
15665: Procedure
15666: Procedure (Sender: Tobject; Shift: TShiftState; X, Y: Integer; Orient: TPageScrollerOrientation; var Delta: Int
15667: Procedure
                      Sender : TObject; Socket : TCustomWinSocket)
15668: Procedure
                     Sender:TObject; Socket:TCustomWinSocket;ErrorEvent: TErrorEvent; var ErrorCode: Integer)
                    ( Sender : TObject; Socket : TCustomWinSocket; SocketEvent : TSocketEvent)
( Sender : TObject; Socket : TSocket; var ClientSocket : TServerClientWinSocket)
15669: Procedure
15670: Procedure
15671: Procedure
                                 TOBJECT; SOURCE : TMENUITEM; REBUILD : BOOLEAN)
                      SENDER :
15672: Procedure
                      Sender :
                                 TObject; StartPos, EndPos : Integer; var AllowChange : Boolean)
15673: Procedure
                      Sender : TObject; TabCanvas : TCanvas; R : TRect; Index : Integer; Selected : Boolean)
Sender : TObject; TabIndex : Integer; var ImageIndex : Integer)
Sender : TObject; Thread : TServerClientThread)
15674: Procedure
15675: Procedure
15676: Procedure
                      Sender :
                                 TObject; TickCount : Cardinal; var Reset : Boolean)
15677: Procedure
                      Sender :
                                TObject; Username, Password : string)
                      Sender : TObject; var AllowChange : Boolean)
Sender : TObject; var AllowChange : Boolean; NewValue : SmallInt; Direction:TUpDownDirection)
15678: Procedure
15679: Procedure (
                                TObject; var Caption: string; var Alignment: THTMLCaptionAlignment)
TObject; var Continue: Boolean)
15680: Procedure
                      Sender :
15681: Procedure
                      Sender :
15682: Procedure (Sender:TObject; var dest: string; var NumRedirect:Int; var Handled:bool; var VMethod:TIdHTTPMethod)
15683: Procedure (
                     Sender : TObject; var Username : string)
Sender : TObject; Wnd : HWND)
15684: Procedure (
15685: Procedure
                      Sender :
                                 TToolbar; Button : TToolButton)
                      Sender: TToolBar; const ARect: TRect; Stage: TCustomDrawStage; var DefaultDraw: Boolean)
Sender: TToolBar; const ARect: TRect; var DefaultDraw: Boolean)
15686: Procedure
15687: Procedure (
                     Sender : TToolbar; Index : Integer; var Allow : Boolean)
Sender : TToolbar; Index : Integer; var Button : TToolButton)
15688: Procedure (
15689: Procedure (
15690: Procedure (
                      StatusBar : TCustomStatusBar; Panel : TStatusPanel; const Rect : TRect)
                    ( StatusBar : TStatusBar; Panel : TStatusPanel; const Rect : TRect)
15691: Procedure
15692: Procedure (var FieldNames:TWideStrings; SQL:WideString; var BindAllFields:Boolean; var TableName: WideString)
15693: Procedure ( var FieldNames : TWideStrings; SQL : WideString; var TableName : WideString)
15694: procedure (Sender: TObject)
15695: procedure (Sender: TObject; var Done: Boolean)
15696: procedure (Sender: TObject; var Key: Word; Shift: TShiftState);
15697: procedure T(Name: tbtString; v: Variant);
15698: Procedure AbandonSignalHandler( RtlSigNum : Integer)
15699: Procedure Abort
15700: Procedure About1Click( Sender : TObject)
15701: Procedure Accept( Socket : TSocket)
15702: Procedure AESSymetricExecute(const plaintext, ciphertext, password: string)
15703: Procedure AESEncryptFile(const plaintext, ciphertext, password: string)
15704: Procedure AESDecryptFile(const replaintext, ciphertext, password: string)
15705: Procedure AESDecryptString(const replaintext: string; var ciphertext: string; password: string)
15706: Procedure AESDecryptString(var plaintext: string; const ciphertext: string; password: string)
15707: Procedure Add( Addend1, Addend2 : TMyBigInt)
15708: Procedure ADD( const AKEY, AVALUE : VARIANT)
15709: Procedure Add( const Key : string; Value : Integer)
15710: Procedure ADD( const NAME, FIELDS : String; OPTIONS : TINDEXOPTIONS)
15711: Procedure ADD( FIELD : TFIELD)
15712: Procedure ADD( ITEM : TMENUITEM)
15713: Procedure ADD(
                         POPUP : TPOPUPMENU)
15714: Procedure AddCharacters ( xCharacters : TCharSet)
15715: Procedure AddDriver( const Name : string; List : TStrings)
15716: Procedure AddImages ( Value : TCustomImageList)
15717: Procedure AddLambdax( const Name, Fields: string; Options: TindexOptions; const DescFields: string)
15718: Procedure AddLambdaTransitionTo( oState: TniRegularExpressionState)
15719: Procedure AddLoader( Loader : TBitmapLoader)
15720: Procedure ADDPARAM( VALUE : TPARAM)
15721: Procedure AddPassword( const Password: string)
15722: Procedure AddStandardAlias( const Name, Path, DefaultDriver : string)
15723: Procedure AddState( oState : TniRegularExpressionState)
15724: Procedure AddStrings( Strings : TStrings);
15725: procedure AddStrings(Strings: TStrings);
15726: Procedure AddStrings1( Strings : TWideStrings);
15727: Procedure AddStringTerm( var sString: string; const sTerm: string; const sSeparator: string)
15728: Procedure AddToRecentDocs( const Filename : string)
15729: Procedure AddTransitionTo( oState : TniRegularExpressionState; xCharacters : TCharset)
15730: Procedure AllFunctionsList1Click( Sender : TObject)
15731: procedure AllObjectsList1Click(Sender: TObject);
15732: Procedure Allocate( AAllocateBytes : Integer)
15733: procedure AllResourceList1Click(Sender: TObject);
15734: Procedure AnsiAppend( var dst : AnsiString; const src : AnsiString)
15735: Procedure AnsiAssign( var dst : AnsiString; var src : AnsiString)
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15736: Procedure AnsiDelete( var dst : AnsiString; index, count : Integer)
15737: Procedure AnsiFree( var s : AnsiString)
15738: Procedure AnsiFromWide( var dst : AnsiString; const src : WideString)
15739: Procedure AnsiInsert( var dst : AnsiString; const src : AnsiString; index : Integer)
15740: Procedure AnsiSetLength( var dst : AnsiString; len : Integer)
15741: Procedure AnsiString_to_stream( const Value : ansistring; Destin : TStream)
15742: Procedure AntiFreeze;
15743: Procedure APPEND
15744: Procedure Append( const S : WideString)
15745: procedure Append(S: string);
15746: Procedure AppendByte( var VBytes : TIdBytes; AByte : byte)
15747: Procedure AppendBytes( var VBytes : TIdBytes; AAdd : TIdBytes)
15748: Procedure AppendChunk( Val : OleVariant)
15749: Procedure AppendData( const Data : OleVariant; HitEOF : Boolean)
15750: Procedure AppendStr( var Dest : string; S : string)
15751: Procedure AppendString( var VBytes : TIdBytes; const AStr : String; ALength : Integer)
15752: Procedure ApplyRange
15753: procedure Arc(X1, Y1, X2, Y2, X3, Y3, X4, Y4: Integer);
15754: Procedure Arrange( Code : TListArrangement)
15755: procedure Assert(expr : Boolean; const msg: string);
15756: procedure Assert2(expr : Boolean; const msg: string);
15757: Procedure Assign( AList : TCustomBucketList)
15758: Procedure Assign( Other : TObject)
15759: Procedure Assign (Source: TDragObject)
15760: Procedure Assign( Source : TPersistent)
15761: Procedure Assign(Source: TPersistent)
15762: procedure Assign2(mystring, mypath: string);
15763: Procedure AssignCurValues( Source : TDataSet);
15764: Procedure AssignCurValues1( const CurValues : Variant);
15765: Procedure ASSIGNFIELD( FIELD : TFIELD)
15766: Procedure ASSIGNFIELDVALUE( FIELD : TFIELD; const VALUE : VARIANT)
15767: Procedure AssignFile(var F: Text; FileName: string)
15768: procedure AssignFile(var F: TextFile; FileName: string)
15769: procedure AssignFileRead(var mystring, myfilename: string);
15770: procedure AssignFileWrite(mystring, myfilename: string)
15771: Procedure AssignTo( Other : TObject)
15772: Procedure AssignValues( Value : TParameters)
15773: Procedure ASSIGNVALUES( VALUE : TPARAMS)
15774: Procedure AssociateExtension( IconPath, ProgramName, Path, Extension: string)
15775: Procedure Base64_to_stream( const Base64 : ansistring; Destin : TStream)
15776: Procedure Base64ToVar( NatData : Pointer; const SoapData : WideString);
15777: Procedure Base64ToVarl( var V : Variant; const SoapData : WideString);
15778: Procedure BcdAdd( const bcdIn1, bcdIn2 : TBcd; var bcdOut : TBcd)
15779: Procedure BcdDivide( Dividend, Divisor : string; var bcdOut : TBcd);
15780: Procedure BcdDivide1( const Dividend, Divisor: TBcd; var bcdOut: TBcd);
15781: Procedure BcdDivide2( const Dividend: TBcd; const Divisor: Double; var bcdOut: TBcd);
15782: Procedure BcdDivide3( const Dividend: TBcd; const Divisor: string; var bcdOut: TBcd);
15783: Procedure BcdMultiply( const bcdIn1, bcdIn2 : TBcd; var bcdOut : TBcd);
15784: Procedure BcdMultiply( const bcdIn: TBcd; const DoubleIn: Double; var bcdOut: TBcd);
15785: Procedure BcdMultiply2( const bcdIn: TBcd; const DoubleIn: Double; var bcdOut: TBcd);
15786: Procedure BcdMultiply3( StringIn1, StringIn2: string; var bcdOut: TBcd);
15787: Procedure BcdSubtract( const bcdIn1, bcdIn2: TBcd; var bcdOut: TBcd);
15788: Procedure BcdToBytes( Value: TBcd; Bytes: array of byte)
15789: procedure Beep
15790: Procedure BeepOk
15791: Procedure BeepQuestion
15792: Procedure BeepHand
15793: Procedure BeepExclamation
15794: Procedure BeepAsterisk
15795: Procedure BeepInformation
15796: procedure BEGINDRAG(IMMEDIATE:BOOLEAN)
15797: Procedure BeginLayout
15798: Procedure BeginTimer( const Delay, Resolution : Cardinal)
15799: Procedure BeginUpdate
15800: procedure BeginUpdate;
15801: procedure BigScreen1Click(Sender: TObject);
15802: procedure BinToHex(Buffer: PChar; Text: PChar; BufSize: Integer);
15803: Procedure BitsToBooleans( const Bits : Byte; var B : TBooleanArray; AllBits : Boolean);
15804: Procedure BitsToBooleans1( const Bits : Word; var B : TBooleanArray; AllBits : Boolean);
15805: Procedure BitsToBooleans2( const Bits : Integer; var B : TBooleanArray; AllBits : Boolean);
15806: Procedure BitsToBooleans3( const Bits : Int64; var B : TBooleanArray; AllBits : Boolean);
15807: Procedure BoldDays(Days : array of LongWord; var MonthBoldInfo : LongWord)
15808: Procedure BooleansToBits( var Dest : Byte; const B : TBooleanArray); 15809: Procedure BooleansToBits1( var Dest : Word; const B : TBooleanArray);
15810: Procedure BooleansToBits2( var Dest : Integer; const B : TBooleanArray);
15811: Procedure BooleansToBits3( var Dest : Int64; const B : TBooleanArray)
15812: Procedure BreakPointMenuClick( Sender : TObject)
15813: procedure BRINGTOFRONT
15814: procedure BringToFront;
15815: Procedure btnBackClick( Sender : TObject)
15816: Procedure btnBrowseClick( Sender : TObject)
15817: Procedure BtnClick( Index : TNavigateBtn)
15818: Procedure btnLargeIconsClick( Sender : TObject)
15819: Procedure BuildAndSendRequest( AURI : TIdURI)
15820: Procedure BuildCache
15821: Procedure BurnMemory( var Buff, BuffLen : integer)
15822: Procedure BurnMemoryStream( Destructo : TMemoryStream)
15823: Procedure CalculateFirstSet
15824: Procedure Cancel
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15825: procedure CancelDrag;
15826: Procedure CancelEdit
15827: procedure CANCELHINT
15828: Procedure CancelRange
15829: Procedure CancelUpdates
15830: Procedure CancelWriteBuffer
15831: Procedure Capture1(ADest:TStream;out VLineCount:Integer;const ADelim:string;const AIsRFCMessage:Bool;
15832: Procedure Capture2( ADest : TStrings; const ADelim : string; const AIsRFCMessage : Boolean)
15833: Procedure Capture3(ADest:TStrings;out VLineCount:Integer;const ADelim:string;const AIsRFCMessage:Bool
15834: procedure CaptureScreenFormat(vname: string; vextension: string);
15835: procedure CaptureScreenPNG(vname: string);
15836: procedure CardinalsToI64(var I: Int64; const LowPart, HighPart: Cardinal);
15837: procedure CASCADE
15838: Procedure CastNativeToSoap(Info:PTypeInfo; var SoapData:WideString; NatData:Pointer; var IsNull: Boolean)
15839: Procedure CastSoapToVariant( SoapInfo : PTypeInfo; const SoapData : WideString; NatData : Pointer);
15840: Procedure cbPathClick( Sender : TObject)
15841: Procedure cbPathKeyDown( Sender : TObject; var Key : Word; Shift : TShiftState)
15842: Procedure cedebugAfterExecute( Sender : TPSScript)
15843: Procedure cedebugBreakpoint( Sender : TObject; const FileName : String; Position, Row, Col : Cardinal)
15844: Procedure cedebugCompile( Sender : TPSScript)
15845: Procedure cedebugExecute( Sender : TPSScript)
15846: Procedure cedebugIdle( Sender : TObject)
15847: Procedure cedebugLineInfo( Sender : TObject; const FileName : String; Position, Row, Col : Cardinal)
15848: Procedure CenterHeight (const pc, pcParent: TControl)
15849: Procedure CenterDlg(AForm: TForm; MForm: TForm); { Ze
                                                                { Zentriert Forms }
15850: Procedure CenterForm(AForm: TForm; MForm: TForm);
                                                                  { Zentriert Forms }
15851: Procedure Change
15852: procedure ChangeBiDiModeAlignment(var Alignment: TAlignment);
15853: Procedure Changed
15854: Procedure ChangeDir( const ADirName : string)
15855: Procedure ChangeDirUp
15856: Procedure ChangeEntryTransitions( oNewState : TniRegularExpressionState) 15857: Procedure ChangeLevelBy( Value : TChangeRange)
15858: Procedure ChDir(const s: string)
15859: Procedure Check(Status: Integer)
15860: Procedure CheckCommonControl( CC : Integer)
15861: Procedure CHECKFIELDNAME( const FIELDNAME: String)
15862: Procedure CHECKFIELDNAMES( const FIELDNAMES: String)
15863: Procedure CheckForDisconnect(const ARaiseExceptionIfDisconnected: boolean; const AlgnoreBuffer:bool)
15864: Procedure CheckForGracefulDisconnect( const ARaiseExceptionIfDisconnected : Boolean)
15865: Procedure CheckToken( T : Char)
15866: procedure CheckToken(t:char)
15867: Procedure CheckTokenSymbol( const S : string)
15868: procedure CheckTokenSymbol(s:string)
15869: Procedure CheckToolMenuDropdown( ToolButton : TToolButton)
15870: procedure Chord(X1, Y1, X2, Y2, X3, Y3, X4, Y4: Integer);
15871: Procedure CIED65ToCIED50( var X, Y, Z : Extended)
15872: Procedure CIELABToBGR( const Source, Target : Pointer; const Count : Cardinal);
15873: procedure CipherFile1Click(Sender: TObject);
15874: Procedure Clear;
15875: Procedure Clear1Click( Sender : TObject)
15876: Procedure ClearColor( Color : TColor)
15877: Procedure CLEARITEM( AITEM : TMENUITEM)
15878: Procedure ClearMapping
15879: Procedure ClearSelection( KeepPrimary : Boolean)
15880: Procedure ClearWriteBuffer
15881: Procedure Click
15882: Procedure Close
15883: Procedure Close1Click( Sender : TObject)
15884: Procedure CloseDatabase( Database: TDatabase)
15885: Procedure CloseDataSets
15886: Procedure CloseDialog
15887: Procedure CloseFile(var F: Text);
15888: Procedure Closure
15889: Procedure CMYKToBGR( const Source, Target : Pointer; const BitsPerSample : Byte; Count : Cardinal);
15890: Procedure CMYKToBGR1( const C, M, Y, K, Target : Pointer; const BitsPerSample : Byte; Count : Cardinal);
15891: Procedure CodeCompletionList1Click( Sender : TObject)
15892: Procedure ColEnter
15893: Procedure Collapse
15894: Procedure Collapse( Recurse : Boolean)
15895: Procedure ColorRGBToHLS( clrRGB : TColorRef; var Hue, Luminance, Saturation : Word)
15896: Procedure CommaSeparatedToStringList( AList : TStrings; const Value : string)
15897: Procedure CommitFreeAndNil( var Transaction : TDBXTransaction)
15898: Procedure CompilelClick( Sender : TObject)
15899: procedure ComponentCount1Click(Sender: TObject);
15900: Procedure Compress(azipfolder, azipfile: string)
15901: Procedure DeCompress(azipfolder, azipfile: string)
15902: Procedure XZip(azipfolder, azipfile: string)
15903: Procedure XUnZip(azipfolder, azipfile: string)
15904: Procedure Connect( const ATimeout : Integer)
15905: Procedure Connect( Socket : TSocket)
15906: procedure ConsolelClick(Sender: TObject);
15907: Procedure Continue
15908: Procedure ContinueCount( var Counter : TJclCounter)
15909: procedure CONTROLDESTROYED(CONTROL:TCONTROL)
15910: Procedure ConvertStreamFromAnsiToUTF8( Src, Dst : TStream; cp : integer) 15911: Procedure ConvertStreamFromUTF8ToAnsi( Src, Dst : TStream; cp : integer)
15912: Procedure ConvertImage(vsource, vdestination: string);
15913: // Ex. ConvertImage(Exepath+'my233_bmp.bmp', Exepath+'mypng111.png')
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15914: Procedure ConvertToGrav(Cnv: TCanvas);
15915: Procedure Copy( Buffer: TRecordBuffer; Dest: TBytes; Offset: Integer; Length: Integer)
15916: Procedure Copy( Buffer: TValueBuffer; Dest: TBytes; Offset: Integer; Count: Integer);
15917: Procedure Copy( Source: TBytes; Offset: Integer; Buffer: TValueBuffer; Count: Integer);
15918: Procedure CopyBytesToHostLongWord(const ASource:TIdBytes;const ASourceIndex:Integer;var VDest:LongWord)
15919: Procedure CopyBytesToHostWord( const ASource : TidBytes; const ASourceIndex : Integer; var VDest : Word)
15920: Procedure CopyFrom( mbCopy : TMyBigInt)
15921: Procedure CopyMemoryStream( Source, Destination : TMemoryStream)
15922: procedure CopyRect(const Dest: TRect; Canvas: TCanvas; const Source: TRect);
15923: Procedure CopyTldByteArray( const ASource: array of Byte; const ASourceIndex: Integer; var VDest: array of Byte; const ADestIndex: Integer; const ALength: Integer)
15924: Procedure CopyTidBytes(const ASrc:TidBytes;const ASrcidx:Int;var VDest:TidBytes;const ADestIdx:Int;const
        ALen:Int)
15925: Procedure CopyTIdCardinal( const ASource : Cardinal; var VDest : TIdBytes; const ADestIndex : Integer)
15926: Procedure CopyTldInt64( const ASource : Int64; var VDest : TldBytes; const ADestIndex : Integer)
15927: Procedure CopyTIdIPV6Address(const ASource:TIdIPv6Address; var VDest: TIdBytes; const ADestIndex:
                                                                                                                     Integer)
15928: Procedure CopyTldLongWord( const ASource : LongWord; var VDest : TldBytes; const ADestIndex : Integer)
15929: Procedure CopyTIdNetworkLongWord( const ASource : LongWord; var VDest : TIdBytes; const ADestIndex:Integer)
15930: Procedure CopyTIdNetworkWord( const ASource : Word; var VDest : TIdBytes; const ADestIndex : Integer)
15931: Procedure CopyTIdString(const ASource:String;var VDest:TIdBytes;const ADestIndex:Integer;ALength: Integer)
15932: Procedure CopyTldWord( const ASource : Word; var VDest : TldBytes; const ADestIndex : Integer)
15933: Procedure CopyToClipboard
15934: Procedure CountParts
15935: Procedure CreateDataSet
15936: Procedure CreateEmptyFile( const FileName : string)
15937: Procedure CreateFileFromString( const FileName, Data : string)
15938: Procedure CreateFromDelta( Source : TPacketDataSet)
15939: procedure CREATEHANDLE
15940: Procedure CreateProcAsUser( const UserDomain, UserName, PassWord, CommandLine : string)
15941: Procedure CreateProcAsUserEx(const UserDomain, UserName, Password, CommandLine: string; const Environment: PChar)
15942: Procedure CreateTable
15943: Procedure CreateUDLFile (const FileName, ProviderName, DataSourceName: WideString)
15944: procedure CSvntax1Click(Sender: TObject);
15945: Procedure CurrencyToComp( Value : Currency; var Result : Comp)
15946: Procedure CURSORPOSCHANGED
15947: procedure CutFirstDirectory(var S: String)
15948: Procedure DataBaseError(const Message: string)
15949: Procedure DateTimeToString( var Result : string; Format : string; DateTime : TDateTime);
15950: procedure DateTimeToString(var Result: string; const Format: string; DateTime: TDateTime)
15951: Procedure DateTimeToSystemTime( DateTime: TDateTime; var SystemTime: TSystemTime
15952: procedure DateTimeToSystemTime(const DateTime: TDateTime; var SystemTime: TSystemTime);
15953: Procedure DBIError(errorCode: Integer)
15954: Procedure DebugOutput( const AText : string)
15955: Procedure DebugRunlClick( Sender : TObject)
15956: procedure Dec;
15957: Procedure DecodeDate( DateTime: TDateTime; var Year, Month, Day: Word)
15958: procedure DecodeDate(const DateTime: TDateTime; var Year, Month, Day: Word);
15959: Procedure DecodeDateDay( const AValue : TDateTime; out AYear, ADayOfYear : Word)
15960: Procedure DecodeDateMonthWeek(const AValue:TDateTime;out AYear, AMonth,AWeekOfMonth,ADayOfWeek : Word)
15961: Procedure DecodeDateTime(const AValue:TDateTime;out AYear,AMonth,ADay,AHour,AMin,ASec,AMillSec:Word)
15962: Procedure DecodeDateWeek( const AValue : TDateTime; out AYear, AWeekOfYear, ADayOfWeek : Word)
15963: Procedure DecodeDayOfWeekInMonth(const AValue:TDateTime;out AYear,AMonth,ANthDayOfWeek,ADayOfWeek:Word)
15964: Procedure DecodeTime( DateTime: TDateTime; var Hour, Min, Sec, MSec: Word)
15965: procedure DecodeTime(const DateTime: TDateTime; var Hour, Min, Sec, MSec: Word);
15966: Procedure Decompile1Click( Sender : TObject)
15967: Procedure DefaultDrawColumnCell(const Rect : TRect; DataCol:Integer;Column:TColumn;State:TGridDrawState)
15968: Procedure DefaultDrawDataCell( const Rect : TRect; Field : TField; State : TGridDrawState)
15969: Procedure DeferLayout
15970: Procedure defFileread
15971: procedure DEFOCUSCONTROL(CONTROL): TWINCONTROL; REMOVING: BOOLEAN)
15972: Procedure DelayMicroseconds ( const MicroSeconds : Integer)
15973: Procedure Delete
15974: Procedure Delete( const AFilename : string)
15975: Procedure Delete( const Index : Integer)
15976: Procedure DELETE( INDEX : INTEGER)
15977: Procedure Delete( Index : LongInt)
15978: Procedure Delete( Node : TTreeNode)
15979: procedure Delete(var s: AnyString; ifrom, icount: Longint);
15980: Procedure DeleteAlias( const Name : string)
15981: Procedure DeleteDriver( const Name : string)
15982: Procedure DeleteIndex( const Name : string)
15983: Procedure DeleteKey( const Section, Ident
                                                      : String)
15984: Procedure DeleteRecords
15985: Procedure DeleteRecords ( AffectRecords : TAffectRecords)
15986: Procedure DeleteString( var pStr : String; const pDelStr : string)
15987: Procedure DeleteTable
15988: procedure DelphiSitelClick(Sender: TObject);
15989: Procedure Deselect
15990: Procedure Deselect( Node : TTreeNode)
15991: procedure DestroyComponents
15992: Procedure DestroyHandle
15993: Procedure Diff( var X : array of Double) 15994: procedure Diff(var X: array of Double);
15995: procedure DISABLEALIGN
15996: Procedure DisableConstraints
15997: Procedure Disconnect
15998: Procedure Disconnect( Socket : TSocket)
15999: Procedure Dispose
16000: procedure Dispose(P: PChar)
```

```
16001: Procedure DivMod( Dividend : Integer; Divisor : Word; var Result, Remainder : Word)
16002: Procedure DoKey( Key : TDBCtrlGridKey)
16003: Procedure DomToTree(anXmlNode: IXMLNode; aTreeNode: TTreeNode; aTreeView: TTreeView);
16004: Procedure DomToTreeJ(anXmlNode: TJvXMLNode; aTreeNode: TTreeNode; aTreeView: TTreeView);
16005: Procedure Dormant.
16006: Procedure DoubleToBcd1( const AValue : Double; var bcd : TBcd);
16007: Procedure DoubleToBytes( Value : Double; Bytes : array of byte)
16008: Procedure DoubleToComp( Value : Double; var Result : Comp)
16009: Procedure Draw( Canvas : TCanvas; X, Y, Index : Integer; Enabled : Boolean);
16010: procedure Draw(X, Y: Integer; Graphic: TGraphic);
16011: Procedure Drawl(Canvas: TCanvas; X,Y,
        Index:Int;ADrawingStyle:TDrawingStyle;AImageType:TImageType;Enabled:Bool);
16012: Procedure DrawArrow( ACanvas: TCanvas; Direction: TScrollDirection; Location: TPoint; Size: Integer)
16013: Procedure DrawCheck( ACanvas: TCanvas; Location: TPoint; Size: Integer; Shadow: Boolean)
16014: Procedure DrawChevron( ACanvas: TCanvas; Direction: TScrollDirection; Location: TPoint; Size: Integer)
16015: Procedure DrawColumnCell( const Rect : TRect; DataCol : Integer; Column : TColumn; State : TGridDrawState)
16016: procedure DrawFocusRect(const Rect: TRect);
16017: procedure DrawHolbToTBitmap( HDIB: THandle; Bitmap: TBitmap)
16018: procedure DRAWMENUITEM( MENUITEM: TMENUITEM; ACANVAS: TCANVAS; ARECT: TRECT; STATE: TOWNERDRAWSTATE)
16019: Procedure DrawOverlay(Canvas:TCanvas;X,Y:Integer;ImageIndex:Integer;Overlay:TOverlay;Enabled: Boolean);
16020: Procedure DrawOverlay1(Canvas:TCanvas; X,Y:Int; ImageIndex:Int; Overlay; Toverlay; ADrawingStyle
        TDrawingStyle; AImageType : TImageType; Enabled : Boolean);
16021: procedure drawPlot(vPoints: TPointArray; cFrm: TForm; vcolor: integer);
16022: Procedure DrawPolyLine( const Canvas: TCanvas; var Points: TPointArray; const ClipRect: TRect)
16023: Procedure DropConnections
16024: Procedure DropDown
16025: Procedure DumpDescription( oStrings : TStrings)
16026: Procedure DumpStateTable( oStrings : TStrings)
16027: Procedure EDIT
16028: Procedure EditButtonClick
16029: Procedure EditFontlClick( Sender : TObject)
16030: procedure Ellipse(X1, Y1, X2, Y2: Integer);
16031: Procedure Ellipsel( const Rect : TRect);
16032: Procedure EMMS
16033: Procedure Encode( ADest : TStream)
16034: procedure ENDDRAG(DROP:BOOLEAN)
16035: Procedure EndEdit( Cancel : Boolean)
16036: Procedure EndTimer
16037: Procedure EndUpdate
16038: Procedure EraseSection( const Section : string)
16039: Procedure Error( const Ident : string)
16040: procedure Error(Ident:Integer)
16041: Procedure ErrorFmt( const Ident : string; const Args : array of const)
16042: Procedure ErrorStr( const Message : string)
16043: procedure ErrorStr(Message:String)
16044: Procedure Exchange(Index1, Index2: Integer)
16045: procedure Exchange(Index1, Index2: Integer);
16046: Procedure Exec(FileName, Parameters, Directory: string)
16047: Procedure ExecProc
16048: Procedure ExecSOL( UpdateKind : TUpdateKind)
16049: Procedure Execute
16050: Procedure Execute( const CommandText : WideString; var Params, OwnerData : OleVariant)
16051: Procedure ExecuteAndWait( FileName : string; Visibility : Integer)
16052: Procedure ExecuteCommand(executeFile, paramstring: string)
16053: Procedure ExecuteShell(executeFile, paramstring: string)
16054: Procedure ExitThread(ExitCode: Integer); stdcall;
16055: Procedure ExitProcess(ExitCode: Integer); stdcall;
16056: Procedure Expand( AUserName : String; AResults : TStrings)
16057: Procedure Expand( Recurse : Boolean)
16058: Procedure ExportClipboardlClick(Sender: TObject)
16059: Procedure ExportDataSetToExcel(DataSet: TDataSet; OnExportProgress: TOnExportProgress)
16060: Procedure ExtractContentFields( Strings : TStrings)
16061: Procedure ExtractCookieFields( Strings: TStrings)
16062: Procedure ExtractFields( Separators, WhiteSpace : TSysCharSet; Content : PChar; Strings : TStrings)
16063: Procedure ExtractHeaderFields(Separ,
        WhiteSpace:TSysChSet;Cont:PChar;Strings:TStrings;Decode:Bool;StripQuots:Bool)
16064: Procedure ExtractHTTPFields(Separators, WhiteSpace:
        TSysCharSet;Content:PChar;Strings:TStrings;StripQuotes:Bool)
16065: Procedure ExtractQueryFields( Strings: TStrings)
16066: Procedure FastDegToGrad
16067: Procedure FastDegToRad
16068: Procedure FastGradToDeg
16069: Procedure FastGradToRad
16070: Procedure FastRadToDeg
16071: Procedure FastRadToGrad
16072: Procedure FileClose( Handle : Integer)
16073: Procedure FileClose(handle: integer)
16074: procedure FilesFromWildcard(Dir,Mask:string;var Files:TStringList;Subdirs,ShowDirs,Multitasking:Bool)
16075: Procedure FileStructure( AStructure: TIdFTPDataStructure)
16076: Procedure FillByte2(var X: Byte; count: integer; value: byte)
16077: Procedure FillBytes( var VBytes: TIdBytes; const ACount: Integer; const AValue: Byte)
16078: Procedure FillChar( Buffer : TRecordBuffer; Length : Integer; value : Byte) 16079: Procedure FillChar2(var X: PChar; count: integer; value: char) 16080: Procedure FillCharS(var p: string; count: integer; value: char); //fix3.8
16081: Procedure FillIPList
16082: procedure FillRect(const Rect: TRect);
16083: Procedure FillTStrings( AStrings : TStrings)
16084: Procedure FilterOnBookmarks( Bookmarks : array of const)
16085: procedure FinalizePackage(Module: HMODULE)
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16086: procedure FindClose;
16087: procedure FindClose2(var F: TSearchRec)
16088: Procedure FindMatches( const sString: string; xNotify: TniRegularExpressionMatchFoundEvent);
16089: Procedure FindMatches1(const sString:string; iStart:integer; xNotify: TniRegularExpressionMatchFoundEvent);
16090: Procedure FindNearest( const KeyValues : array of const)
16091: Procedure FinishContext
16092: Procedure FIRST
16093: Procedure FloatToDegMinSec( const X : Float; var Degs, Mins, Secs : Float)
16094: Procedure FloatToDecimal(var Result:TFloatRec;const Value:extend;ValueType:TFloatValue;Precis,Decs:Int);
16095: Procedure FloodFill( X, Y : Integer; Color : TColor; FillStyle : TFillStyle) 16096: Procedure FlushSchemaCache( const TableName : string)
16097: procedure FmtStr(var Result: string; const Format: string; const Args: array of const)
16098: procedure FOCUSCONTROL(CONTROL:TWINCONTROL)
16099: Procedure FormlClose( Sender : TObject; var Action : TCloseAction)
16100: Procedure FormActivate( Sender : TObject)
16101: procedure FormatLn(const format: String; const args: array of const); //alias
16102: Procedure FormClose( Sender : TObject; var Action : TCloseAction)
16103: Procedure FormCreate( Sender : TObject)
16104: Procedure FormDestroy( Sender : TObject)
16105: Procedure FormKeyPress( Sender : TObject; var Key : Char)
16106: procedure FormOutputlClick(Sender: TObject);
16107: Procedure FormToHtml( Form : TForm; Path : string)
16108: procedure FrameRect(const Rect: TRect);
16109: Procedure Frame3D(Canvas:TCanvas; var Rect:TRect; TopColor,BottomColor:TColor; Width: Integer)
16110: Procedure NotebookHandlesNeeded( Notebook : TNotebook)
16111: Procedure Free( Buffer : TRecordBuffer)
16112: Procedure Free( Buffer : TValueBuffer)
16113: Procedure Free;
16114: Procedure FreeAndNil(var Obj:TObject)
16115: Procedure FreeImage
16116: procedure FreeMem(P: PChar; Size: Integer)
16117: Procedure FreeTreeData( Tree : TUpdateTree)
16118: Procedure Frexp( const X : Extended; var Mantissa : Extended; var Exponent : Integer)
16119: Procedure FullCollapse
16120: Procedure FullExpand
16121: Procedure GenerateDPB(sl: TStrings; var DPB: string; var DPBLength: Short); //InterBase
16122: Procedure GenerateTPB(sl: TStrings; var TPB: string; var TPBLength: Short); 16123: Procedure OUTPUTXML( SQLOBJECT : TIBSQL; OUTPUTOBJECT : TIBOUTPUTXML)
16124: Procedure Get1( AURL : string; const AresponseContent : TStream);
16125: Procedure Get1( const ASourceFile : string; ADest : TStream; AResume : Boolean);
16126: Procedure Get2(const ASourceFile, ADestFile: string; const ACanOverwrite: boolean; AResume: Boolean);
16127: Procedure GetAliasNames( List : TStrings)
16128: Procedure GetAliasParams( const AliasName : string; List : TStrings)
16129: Procedure GetApplicationsRunning( Strings : TStrings)
16130: Procedure GetCommandTypes( List : TWideStrings)
16131: Procedure GetConfigParams( const Path, Section : string; List : TStrings)
16132: Procedure GetConnectionNames( List: TStrings; Driver: string; DesignMode: Boolean)
16133: Procedure GetConvFamilies( out AFamilies : TConvFamilyArray)
16134: Procedure GetConvTypes( const AFamily : TConvFamily; out ATypes : TConvTypeArray)
16135: Procedure GetDatabaseNames ( List : TStrings)
16136: Procedure GetDataPacket ( DataSet : TDataSet; var RecsOut : Integer; out Data : OleVariant)
16137: Procedure GetDIBSizes(Bitmap: HBITMAP; var InfoHeaderSize: longWORD; var ImageSize: longWORD)
16138: Procedure GetDir(d: byte; var s: string)
16139: Procedure GetDirList( const Search : string; List : TStrings; Recursive : Boolean)
16140: Procedure GetDriverNames( List : TStrings)
16141: Procedure GetDriverNames( List : TStrings; DesignMode : Boolean)
16142: Procedure GetDriverParams( const DriverName : string; List : TStrings)
16143: Procedure GetEMails1Click( Sender : TObject)
16144: Procedure getEnvironmentInfo;
16145: Function getEnvironmentString: string;
16146: Procedure GetFieldNames( const DatabaseName, TableName : string; List : TStrings)
16147: Procedure GetFieldNames( const TableName: string; List: TStrings); 16148: Procedure GetFieldNames( const TableName: string; List: TStrings);
16149: Procedure GetFieldNames( const TableName : WideString; List : TWideStrings);
16150: Procedure GETFIELDNAMES( LIST : TSTRINGS)
16151: Procedure GetFieldNames1( const TableName : string; List : TStrings);
16152: Procedure GetFieldNames1( const TableName : string; SchemaName : string; List : TStrings);
16153: Procedure GetFieldNames2( const TableName : WideString;SchemaName : WideString; List : TWideStrings);
16154: Procedure GetFieldNames3( const TableName : WideString; List : TWideStrings);
16155: Procedure GetFileAttributeList( const Items : TStrings; const Attr : Integer)
16156: Procedure GetFileAttributeListEx( const Items: TStrings; const Attr: Integer)
16157: Procedure GetFMTBcd( Buffer : TRecordBuffer; var value : TBcd)
16158: Procedure GetFormatSettings
16159: Procedure GetFromDIB( var DIB : TBitmapInfo)
16160: Procedure GetFromHDIB( HDIB : HBitmap)
16161: Procedure GetIcon( Index : Integer; Image : TIcon);
16162: Procedure GetIcon1(Index : Integer; Image:TIcon; ADrawingStyle:TDrawingStyle; AImageType:TImageType);
16163: Procedure GetIndexInfo( IndexName : string)
16164: Procedure GetIndexNames( const TableName, SchemaName : string; List : TStrings); 16165: Procedure GetIndexNames( List : TStrings)
16166: Procedure GetIndexNames1( const TableName : WideString; List : TWideStrings);
16167: Procedure GetIndexNames2( const TableName, SchemaName : WideString; List : TWideStrings);
16168: Procedure GetIndexNames4( const TableName : string; List : TStrings);
16169: Procedure GetInternalResponse
16170: Procedure GETITEMNAMES( LIST: TSTRINGS)
16171: procedure GetMem(P: PChar; Size: Integer)
16172: Procedure GETOLE2ACCELERATORTABLE(var ACCELTABLE: HACCEL; var ACCELCOUNT: INTEGER; GROUPS: array of INTEGER)
16173: procedure GetPackageDescription(ModuleName: PChar): string)
16174: Procedure GetPackageNames( List : TStrings);
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16175: Procedure GetPackageNames1( List : TWideStrings);
16176: Procedure GetParamList( List : TList; const ParamNames : WideString)
16177: Procedure GetProcedureNames( List : TStrings);
16178: Procedure GetProcedureNames( List : TWideStrings);
16179: Procedure GetProcedureNames1( const PackageName : string; List : TStrings);
16180: Procedure GetProcedureNames1( List : TStrings);
16181: Procedure GetProcedureNames2( const PackageName, SchemaName : string; List : TStrings);
16182: Procedure GetProcedureNames3( List : TWideStrings);
16183: Procedure GetProcedureNames4( const PackageName : Widestring; List : TWideStrings);
16184: Procedure GetProcedureNames5( const PackageName, SchemaName: WideString; List: TWideStrings);
16185: Procedure GetProcedureParams( ProcedureName : WideString; List : TList);
16186: Procedure GetProcedureParams1( ProcedureName, PackageName : WideString; List : TList);
16187: Procedure GetProcedureParams2( ProcedureName, PackageName, SchemaName : Widestring; List : TList);
16188: Procedure GetProviderNames( Names: TWideStrings);
16189: Procedure GetProviderNames( Proc: TGetStrProc)
16190: Procedure GetProviderNames1( Names : TStrings);
16191: procedure GetQrCode2(Width, Height: Word; Correct_Level: string; const Data: string; apath: string);
16192: procedure GetQrCode3(Width, Height: Word; Correct_Level: string; const Data: string; apath: string); //no autoopen
        image
16193: Function GetOrCode4(Width, Height: Word; Correct Level: string; const
        Data: string; aformat: string): TLinearBitmap;
16194: Procedure GetRGBValue( const Color: TColor; out Red, Green, Blue: Byte)
16195: Procedure GetSchemaNames( List : TStrings);
16196: Procedure GetSchemaNames1( List : TWideStrings);
16197: Procedure GetSessionNames( List : TStrings)
16198: Procedure GetStoredProcNames( const DatabaseName : string; List : TStrings)
16199: Procedure GetStrings( List : TStrings)
16200: Procedure GetSystemTime; stdcall;
16201: Procedure GetTableNames(const DatabaseName, Pattern: string; Extensions, SystemTables: Boolean; List: TStrings)
16202: Procedure GetTableNames(List: TStrings; SystemTables: Boolean)
16203: Procedure GetTableNames(List: TStrings; SystemTables: Boolean);
16204: Procedure GetTableNames( List : TWideStrings; SystemTables : Boolean);
16205: Procedure GetTableNames1( List : TStrings; SchemaName : WideString; SystemTables : Boolean);
16206: Procedure GetTableNames1( List : TStrings; SystemTables : Boolean);
16207: Procedure GetTableNames2( List : TWideStrings; SchemaName : WideString; SystemTables : Boolean);
16208: Procedure GetTransitionsOn( cChar : char; oStateList : TList) 16209: Procedure GetVisibleWindows( List : Tstrings)
16210: Procedure GoBegin
16211: Procedure GotoCurrent( DataSet : TCustomClientDataSet)
16212: Procedure GotoCurrent( Table : TTable)
16213: procedure GotoEndlClick(Sender: TObject);
16214: Procedure GotoNearest.
16215: Procedure GradientFillCanvas(const ACanvas:TCanvas;const AStartCol, AEndCol:TColor;const ARect:TRect;const
        Direction: TGradientDirection)
16216: Procedure HandleException( E : Exception; var Handled : Boolean)
16217: procedure HANDLEMESSAGE
16218: procedure HandleNeeded;
16219: Procedure Head( AURL : string)
16220: Procedure Help( var AHelpContents : TStringList; ACommand : String)
16221: Procedure HexToBinary( Stream : TStream)
16222: procedure HexToBinary(Stream:TStream)
16223: Procedure HideDragImage
16224: Procedure HideFormCaption( FormHandle : THandle; Hide : Boolean)
16225: Procedure HideTraybar
16226: Procedure HideWindowForSeconds(secs: integer); {//3 seconds}
16227: Procedure HideWindowForSeconds2(secs: integer; apphandle, aself: TForm); {//3 seconds}
16228: Procedure HookOSExceptions
16229: Procedure HookSignal( RtlSigNum : Integer)
16230: Procedure HSLTORGB( const H, S, L : Single; out R, G, B : Single); 16231: Procedure HTMLSyntaxlClick( Sender : TObject)
16232: Procedure IFPS3ClassesPluginlCompImport( Sender : TObject; x : TPSPascalCompiler)
16233: Procedure IFPS3ClassesPlugin1ExecImport( Sender : TObject; Exec : TPSExec; x : TPSRuntimeClassImporter)
16234: Procedure ImportfromClipboardlClick( Sender : Tobject)
16235: Procedure ImportfromClipboard2Click( Sender : Tobject)
16236: Procedure IncAMonth( var Year, Month, Day: Word; NumberOfMonths: Integer) 16237: procedure Incb(var x: byte);
16238: Procedure Include1Click( Sender : TObject)
16239: Procedure IncludeOFF; //preprocessing
16240: Procedure IncludeON;
16241: procedure InfolClick(Sender: TObject);
16242: Procedure InitAltRecBuffers( CheckModified : Boolean)
16243: Procedure InitContext( Request : TWebRequest; Response : TWebResponse)
16244: Procedure InitContext(WebModuleList:TAbstractWebModuleList;Request:TWebRequest;Response:TWebResponse)
16245: Procedure InitData( ASource : TDataSet)
16246: Procedure InitDelta( ADelta : TPacketDataSet);
16247: Procedure InitDeltal( const ADelta : OleVariant);
16248: Procedure InitErrorPacket( E : EUpdateError; Response : TResolverResponse)
16249: Procedure Initialize
16250: procedure InitializePackage(Module: HMODULE)
16251: Procedure INITIATEACTION
16252: Procedure initHexArray(var hexn: THexArray); //THexArray', 'array[0..15] of char;'
16253: Procedure InitKeyFields( Tree : TUpdateTree; ADelta : TPacketDataSet)
16254: Procedure InitModule( AModule : TComponent)
16255: Procedure InitStdConvs
16256: Procedure InitTreeData( Tree : TUpdateTree)
16257: Procedure INSERT
16259: Procedure Insert( Index : Integer; AClass : TClass)
16259: Procedure Insert( Index : Integer; AComponent : TComponent)
16260: Procedure Insert( Index : Integer; AObject : TObject)
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16261: Procedure Insert( Index : Integer; const S : WideString)
16262: Procedure Insert( Index : Integer; Image, Mask : TBitmap)
16263: Procedure Insert(Index: Integer; const S: string);
16264: procedure Insert(Index: Integer; S: string);
16265: procedure Insert(s: AnyString; var s2: AnyString; iPos: Longint);
16266: procedure InsertComponent(AComponent:TComponent)
16267: procedure InsertControl(AControl: TControl);
16268: Procedure InsertIcon( Index : Integer; Image : TIcon)
16269: Procedure InsertMasked( Index : Integer; Image : TBitmap; MaskColor : TColor)
16270: Procedure InsertObject( Index : Integer; const S : WideString; AObject : TObject)
16271: procedure InsertObject(Index:Integer;S:String;AObject:TObject)
16272: Procedure Int16ToBytes( Value : SmallInt; Bytes : array of byte)
16273: Procedure Int32ToBytes( Value : Integer; Bytes : array of byte)
16274: Procedure Int64ToBytes( Value : Int64; Bytes : array of byte)
16275: procedure I64ToCardinals(I: Int64; var LowPart, HighPart: Cardinal);
16276: Procedure InternalBeforeResolve( Tree : TUpdateTree)
16277: Procedure InvalidateModuleCache
16278: Procedure InvalidateTitles
16279: Procedure InvalidDateDayError( const AYear, ADayOfYear: Word)
16280: Procedure InvalidDateMonthWeekError( const AYear, AMonth, AWeekOfMonth, ADayOfWeek: Word)
16281: Procedure InvalidDateTimeError(const AYear,AMth,ADay,AHour,AMin,ASec,AMilSec:Word;const
        ABaseDate:TDateTime)
16282: Procedure InvalidDateWeekError(const AYear, AWeekOfYear, ADayOfWeek : Word)
16283: Procedure InvalidDayOfWeekInMonthBrror( const AYear, AMonth, ANthDayOfWeek, ADayOfWeek: Word) 16284: procedure JavaSyntaxlClick(Sender: TObject);
16285: Procedure JclLocalesInfoList( const Strings: TStrings; InfoType: Integer)
16286: Procedure KillDataChannel
16287: Procedure Largefont1Click( Sender : TObject)
16288: Procedure LAST
16289: Procedure LaunchCpl( FileName : string)
16290: Procedure Launch( const AFile : string
16291: Procedure LaunchFile( const AFile : string)
16292: Procedure LetFileList(FileList: TStringlist; apath: string);
16293: Procedure lineToNumber( xmemo : String; met : boolean)
16294: Procedure ListViewCustomDrawItem(Sender:TCustListView;Item:TListItem;State:TCustDrawState;var
       DefaultDraw:Bool)
16295: Procedure ListViewCustomDrawSubItem( Sender : TCustomListView; Item : TListItem; SubItem : Integer; State
        : TCustomDrawState; var DefaultDraw : Boolean)
16296: Procedure ListViewData( Sender : TObject; Item : TListItem)
16297: Procedure ListViewDataFind(Sender:TObject; Find: TItemFind; const FindString: String; const FindPosition
        : TPoint; FindData:Pointer; StartIndex:Integer;Direction:TSearchDirection;Wrap:Boolean; var Index: Integer)
16298: Procedure ListViewDataHint( Sender : Tobject; StartIndex, EndIndex : Integer) 16299: Procedure ListViewDblClick( Sender : Tobject)
16300: Procedure ListViewKeyDown( Sender : TObject; var Key : Word; Shift : TShiftState)
16301: Procedure ListDLLExports(const FileName: string; List: TStrings);
16302: Procedure Load (const WSDLFileName : WideString; Stream : TMemoryStream)
16303: procedure LoadBytecodelClick(Sender: TObject);
16304: procedure LoadFilefromResource(const FileName: string; ms: TMemoryStream);
16305: Procedure LoadFromClipboardFormat( AFormat : Word; AData : THandle; APalette : HP)
16306: Procedure LoadFromClipboardFormat( AFormat : Word; AData : THandle; APalette : HPALETTE)
16307: Procedure LoadFromFile( AFileName : string)
16308: Procedure LoadFromFile( const AFileName : string; const AHeadersOnly : Boolean)
16309: Procedure LoadFromFile( const FileName : string)
16310: Procedure LOADFROMFILE( const FILENAME : String; BLOBTYPE : TBLOBTYPE)
16311: Procedure LoadFromFile( const FileName : string; DataType : TDataType) 16312: Procedure LoadFromFile( const FileName : WideString)
16313: Procedure LoadFromFile( const FileName, FileType : string; Bitmap : TLinearBitmap)
16314: Procedure LoadFromFile(const AFileName: string)
16315: procedure LoadFromFile(FileName: string);
16316: procedure LoadFromFile(FileName:String)
16317: Procedure LoadFromResourceID( Instance : THandle; ResID : Integer)
16318: Procedure LoadFromResourceName( Instance : THandle; const ResName : String)
16319: Procedure LoadFromStream( AStream: TStream; const AHeadersOnly: Boolean)
16320: Procedure LoadFromStream( const Stream : TStream)
16321: Procedure LoadFromStream(S: TStream)
16322: Procedure LoadFromStream( Stream: TSeekableStream; const Ext: string; Bitmap: TLinarBitmap)
16323: Procedure LoadFromStream( Stream: TSeekableStream; const Ext: string; Bitmap: TLinearBitmap)
16324: Procedure LoadFromStream( Stream : TStream)
16325: Procedure LOADFROMSTREAM( STREAM: TSTREAM; BLOBTYPE: TBLOBTYPE)
16326: Procedure LoadFromStream( Stream: TStream; DataType: TDataType)
16327: procedure LoadFromStream(Stream: TStream);
16328: Procedure LoadFromStream1( Stream : TSeekableStream; const FormatExt : string);
16329: Procedure LoadFromStream2( Stream : TStream; const FormatExt : string);
16330: Procedure LoadFromStrings( AStrings: TStrings; const MimeSeparator: Char)
16331: Procedure LoadLastFile1Click( Sender : TObject)
16332: { LoadIcoToImage loads two icons from resource named NameRes,
16333:
          into two image lists ALarge and ASmall}
16334: Procedure LoadIcoToImage(ALarge, ASmall: ImgList.TCustomImageList; const NameRes: string);
16335: Procedure LoadMemo
16336: Procedure LoadParamsFromIniFile( FFileName : WideString)
16337: Procedure Lock
16338: Procedure Login
16339: Procedure MakeAlphaChannelFromAlphaPalette( Source : TLinearBitmap)
16340: Procedure MakeAlphaChannelFromColorKey( Source : TLinearBitmap; ColorKey : TColor)
16341: Procedure MakeCaseInsensitive
16342: Procedure MakeDeterministic( var bChanged : boolean)
16343: Procedure MakeGrayPal( var Palette, ColorCount : Integer)
16344: // type TVolumeLevel = 0..127; , savaFilePath as C:\MyFile.wav
16345: Procedure MakeSound(Frequency{Hz}, Duration{mSec}: Int; Volume: TVolumeLevel; savefilePath: string);
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16346: Procedure MakeComplexSound(N:integer;freqlist:TStrings;Duration{mSec}:Int:pinknoise:bool;Volume:Byte);
16347: Procedure SetComplexSoundElements(fregedt, Phaseedt, AmpEdt, WaveGrp:integer);
16348: Procedure SetRectComplexFormatStr( const S : string)
16349: Procedure SetPolarComplexFormatStr( const S : string)
16350: Procedure AddComplexSoundObjectToList(newf,newp,newa,news:integer; freqlist: TStrings);
16351: Procedure MakeVisible
16352: Procedure MakeVisible( PartialOK : Boolean)
16353: Procedure ManuallClick( Sender : TObject)
16354: Procedure MarkReachable
16355: Procedure maXbox; //shows the exe version data in a win box 16356: Procedure MeanAndStdDev( const Data : array of Double; var Mean, StdDev : Extended)
16357: Procedure MemolChange ( Sender : TObject)
16358: Procedure MemolReplaceText(Sender:TObject;const ASearch,AReplace:String;Line,Column:Int;var
        Action: TSynReplaceAction)
16359: Procedure MemolSpecialLineColors (Sender: Tobject; Line: Integer; var Special: Boolean; var FG, BG: TColor)
16360: Procedure MemolStatusChange( Sender : TObject; Changes : TSynStatusChanges)
16361: procedure MemorylClick(Sender: TObject);
16362: Procedure MERGE( MENU : TMAINMENU)
16363: Procedure MergeChangeLog
16364: procedure MINIMIZE
16365: Procedure MinimizeMaxbox;
16366: Procedure MkDir(const s: string)
16367: Procedure mnuPrintFont1Click( Sender : TObject)
16368: procedure ModalStarted
16369: Procedure Modified
16370: Procedure ModifyAlias( Name : string; List : TStrings)
16371: Procedure ModifyDriver( Name : string; List : TStrings)
16372: Procedure MomentSkewKurtosis(const Data:array of Double;var M1,M2,M3,M4, Skew,Kurtosis:Extended)
16373: Procedure MouseToCell( X, Y: Integer; var ACol, ARow: Longint)
16374: Procedure Move( CurIndex, NewIndex: Integer)
16375: procedure Move(CurIndex, NewIndex: Integer);
16376: procedure Move2(const Source: TByteArray; var Dest: TByteArray; Count: Integer)
16377: Procedure MoveChars(const ASource: String; ASourceStart:int; var ADest: String; ADestStart, ALen:integer)
16378: Procedure moveCube( o : TMyLabel)
16379: Procedure MoveTo( Destination : LongInt; AttachMode : TAttachMode)
16380: procedure MoveTo(X, Y: Integer);
16381: procedure MoveWindowOrg(DC: HDC; DX, DY: Integer);
16382: Procedure MovePoint(var x,y:Extended; const angle:Extended);
16383: Procedure Multiply( Multiplier1, Multiplier2 : TMyBigInt);
16384: Procedure Multiply1( Multiplier1 : TMyBigInt; Multiplier2 : Integer);
16385: Procedure MsgAbout(Handle:Int;const Msg,Caption:string;const IcoName:string = 'MAINICON';Flags:DWORD=MB_OK);
16386: Procedure mxButton(x,y,width,height,top,left,ahandle: integer);
16387: Procedure New( Width, Height : Integer; PixFormat : TPixelFormat)
16388: procedure New(P: PChar)
16389: procedure NewlClick(Sender: TObject);
16390: procedure NewInstancelClick(Sender: TObject);
16391: Procedure NEXT
16392: Procedure NextMonth
16393: Procedure Noop
16394: Procedure NormalizePath( var APath: string)
16395: procedure ObjectBinaryToText(Input, Output: TStream)
16396: procedure ObjectBinaryToTextl(Input, Output: TStream; var OriginalFormat: TStreamOriginalFormat)
16397: procedure ObjectResourceToText(Input, Output: TStream)
16398: procedure ObjectResourceToText1(Input, Output: TStream; var OriginalFormat: TStreamOriginalFormat)
16399: procedure ObjectTextToBinary(Input, Output: TStream)
16400: procedure ObjectTextToBinary1(Input, Output: TStream;var OriginalFormat: TStreamOriginalFormat)
16401: procedure ObjectTextToResource(Input, Output: TStream)
16402: procedure ObjectTextToResource1(Input, Output: TStream; var OriginalFormat: TStreamOriginalFormat)
16403: Procedure Open( const Name, Address, Service : string; Port : Word; Block : Boolean) 16404: Procedure Open( const UserID : WideString; const Password : WideString);
16405: Procedure Open;
16406: Procedure open1Click( Sender : TObject)
16407: Procedure OpenCdDrive
16408: Procedure OpenCloseCdDrive( OpenMode : Boolean; Drive : Char)
16409: Procedure OpenCurrent
16410: Procedure OpenFile(vfilenamepath: string)
16411: Procedure OpenDirectory1Click( Sender :
                                                      TObject)
16412: Procedure OpenIndexFile( const IndexName : string)
16413: Procedure OpenSchema(const Schema: TSchemaInf; const Restricts: OleVar; const
        SchemaID:OleVariant;DataSet:TADODataSet)
16414: Procedure OpenWriteBuffer( const AThreshhold : Integer)
16415: Procedure OptimizeMem
16416: Procedure Options1( AURL : string);
16417: Procedure OutputDebugString(lpOutputString: PChar)
16418: Procedure PackBuffer
16419: Procedure Paint
16420: Procedure PaintToCanvas( Canvas: TCanvas; const Dest: TRect; HalftoneStretch: Boolean)
16421: Procedure PaintToTBitmap( Target : TBitmap)
16422: Procedure PaletteChanged
16423: Procedure ParentBiDiModeChanged
16424: Procedure PARENTBIDIMODECHANGED( ACONTROL : TOBJECT)
16425: Procedure PasteFromClipboard;
16426: Procedure PasteImage( Source : TLinearBitmap; X, Y : Integer)
16427: Procedure PathExtractElements( const Source: string; var Drive, Path, FileName, Ext: string)
16428: Procedure PerformEraseBackground(Control: TControl; DC: HDC);
16429: Procedure PError( Text : string)
16430: procedure Pie(X1, Y1, X2, Y2, X3, Y3, X4, Y4: Integer);
16431: procedure Pie(X1:Integer;Y1:Integer;X2:Integer;X3:Int;Y3:Integer;X4:Integer;Y4:Integer);
16432: Procedure Play( FromFrame, ToFrame : Word; Count : Integer)
```

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16433: procedure playmp3(mpath: string);
16434: Procedure Playmp31Click( Sender: TObject)
16435: Procedure PointCopy( var Dest: TPoint; const Source: TPoint)
16436: Procedure PointMove( var P : TPoint; const DeltaX, DeltaY : Integer)
16437: procedure PolyBezier(const Points: array of TPoint);
16438: procedure PolyBezierTo(const Points: array of TPoint);
16439: procedure Polygon(const Points: array of TPoint);
16440: procedure Polyline(const Points: array of TPoint);
16441: Procedure Pop
16442: Procedure POPULATEOLE2MENU(SHAREDMENU: HMENU; GROUPS: array of INT; var WIDTHS: array of LONGINT)
16443: Procedure PopulationVarianceAndMean( const X : TDynFloatArray; var Variance, Mean : Float)
16444: Procedure POPUP( X, Y : INTEGER)
16445: Procedure PopupURL(URL : WideString);
16446: Procedure POST
16447: Procedure Post4( AURL : string; const ASource : TStrings; const AResponseContent : TStream);
16448: Procedure Post5( AURL : string; const ASource, AResponseContent : TStream);
16449: Procedure Post6( AURL : string; const ASource : TIdMultiPartFormDataStream; AResponseContent : TStream);
16450: Procedure PostUser( const Email, FirstName, LastName: WideString)
16451: Procedure PostKeyEx32(key: Word; const shift: TShiftState; specialkey: Boolean);
16452: procedure Pred(X: int64);
16453: Procedure Prepare
16454: Procedure PrepareStatement
16455: Procedure PreProcessXML( AList : TStrings)
16456: Procedure PreventDestruction
16457: Procedure Print( const Caption : string)
16458: procedure PrintBitmap(aGraphic: TGraphic; Title: string);
16459: procedure printf(const format: String; const args: array of const);
16460: Procedure PrintList(Value: TStringList);
16461: Procedure PrintImage(aValue:TBitmap;Style:TBitmapStyle);//TBitmapStyle=(bsNormal,bsCentered,bsStretched)
16462: Procedure PrintoutlClick( Sender : TObject)
16463: Procedure ProcessHeaders
16464: Procedure PROCESSMENUCHAR( var MESSAGE : TWMMENUCHAR)
16465: Procedure ProcessMessage( AMsg : TidMessage; AHeaderOnly : Boolean);
16466: Procedure ProcessMessage1( AMsg : TIdMessage; const AStream : TStream; AHeaderOnly : Boolean);
16467: Procedure ProcessMessage2 (AMsg : TIdMessage; const AFilename : string; AHeaderOnly : Boolean);
16468: Procedure ProcessMessagesOFF; //application.processmessages
16469: Procedure ProcessMessagesON;
16470: Procedure ProcessPath(const EditText:string; var Drive:Char; var DirPart:string; var FilePart : string)
16471: Procedure ProcessPath1(const EditText:string; var Drive:Char; var DirPart:string; var FilePart:string);
16472: Procedure Proclist Size is: 3797 /1415
16473: Procedure procMessClick( Sender : TObject)
16474: Procedure PSScriptCompile( Sender : TPSScript)
16475: Procedure PSScriptExecute( Sender : TPSScript)
16476: Procedure PSScriptLine( Sender : TObject)
16477: Procedure Push( ABoundary : string) 16478: procedure PushItem(AItem: Pointer)
16479: Procedure Put2( AURL : string; const ASource, AResponseContent : TStream);
16480: Procedure Put2( const ASourceFile : string; const ADestFile : string; const AAppend : boolean);
16481: procedure PutLinuxLines(const Value: string)
16482: Procedure Ouit
16483: Procedure RaiseConversionError( const AText : string);
16484: Procedure RaiseConversionError1( const AText : string; const AArgs : array of const);
16485: Procedure RaiseConversionRegError( AFamily : TConvFamily; const ADescription : string)
16486: procedure RaiseException(Ex: TIFException; Param: String);
16487: Procedure RaiseExceptionForLastCmdResult;
16488: procedure RaiseLastException;
16489: procedure RaiseException2;
16490: Procedure RaiseLastOSError
16491: Procedure RaiseLastWin32;
16492: procedure RaiseLastWin32Error)
16493: Procedure RaiseListError( const ATemplate : string; const AData : array of const)
16494: Procedure RandomFillStream( Stream: TMemoryStream)
16495: procedure randomize;
16496: Procedure Rasterize( Rasterizer: TRasterizer; Dst : TBitmap32; DstRect : TRect)
16497: Procedure RCS
16498: Procedure Read( Socket : TSocket)
16499: Procedure ReadBlobData
16500: procedure ReadBuffer(Buffer:String;Count:LongInt)
16501: procedure ReadOnlylClick(Sender: TObject);
16502: Procedure ReadSection( const Section: string; Strings: TStrings)
16503: Procedure ReadSections (Strings: TStrings)
16504: Procedure ReadSections( Strings : TStrings);
16505: Procedure ReadSections1( const Section : string; Strings : TStrings); 16506: Procedure ReadSectionValues( const Section : string; Strings : TStrings)
16507: Procedure ReadStream (AStream : TStream; AByteCount:LongInt; const AReadUntilDisconnect : boolean)
16508: Procedure ReadStrings (ADest : TStrings; AReadLinesCount : Integer)
16509: Procedure ReadVersion2(aFileName: STRING; aVersion : TStrings); 16510: Function ReadVersion(aFileName: STRING; aVersion : TStrings): boolean;
16511: Procedure Realign;
16512: procedure Rectangle(X1, Y1, X2, Y2: Integer);
16513: Procedure Rectangle1( const Rect : TRect);
16514: Procedure RectCopy( var Dest : TRect; const Source : TRect)
16515: Procedure RectFitToScreen( var R : TRect)
16516: Procedure RectGrow( var R : TRect; const Delta : Integer)
16517: Procedure RectGrowX( var R : TRect; const Delta : Integer)
16518: Procedure RectGrowY( var R : TRect; const Delta : Integer)
16519: Procedure RectMove( var R : TRect; const DeltaX, DeltaY : Integer) 16520: Procedure RectMoveTo( var R : TRect; const X, Y : Integer)
16521: Procedure RectNormalize( var R : TRect)
```

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16522: // TFileCallbackProcedure = procedure(filename:string);
16523: Procedure RecurseDirectory(Dir: String:IncludeSubs: boolean; callback: TFileCallbackProcedure);
16524: Procedure RecurseDirectory2(Dir: String; IncludeSubs : boolean);
16525: Procedure RedirectTransition(oOldState:TniRegularExpressionState; oNewState : TniRegularExpressionState)
16526: Procedure Refresh;
16527: Procedure RefreshData( Options : TFetchOptions)
16528: Procedure REFRESHLOOKUPLIST
16529: Procedure RegisterAuthenticationMethod( MethodName : String; AuthClass : TIdAuthenticationClass)
16530: Procedure RegisterChanges( Value : TChangeLink)
16531: Procedure RegisterConversionFormat( const AExtension : string; AConversionClass : TConversionClass)
16532: Procedure RegisterFileFormat( const AExtension, ADescription : string; AGraphicClass : TGraphicClass)
16533: Procedure RegisterFileFormat(Extension, AppID: string; Description: string; Executable: string; IconIndex: Int)
16534: Procedure ReInitialize( ADelay : Cardinal)
16535: procedure RELEASE
16536: Procedure Remove ( const AByteCount : integer)
16537: Procedure REMOVE( FIELD : TFIELD)
16538: Procedure REMOVE( ITEM : TMENUITEM)
16539: Procedure REMOVE( POPUP : TPOPUPMENU)
16540: Procedure RemoveAllPasswords
16541: procedure RemoveComponent(AComponent:TComponent)
16542: Procedure RemoveDir( const ADirName : string)
16543: Procedure RemoveLambdaTransitions( var bChanged : boolean)
16544: Procedure REMOVEPARAM( VALUE : TPARAM)
16545: Procedure RemoveTransitionTo( oState : TniRegularExpressionState; xCharacters : TCharset);
16546: Procedure RemoveTransitionTol( oState : TniRegularExpressionState);
16547: Procedure Rename ( const ASourceFile, ADestFile : string)
16548: Procedure Rename ( const FileName : string; Reload : Boolean)
16549: Procedure RenameTable( const NewTableName : string)
16550: Procedure Replace (Index : Integer; Image, Mask : TBitmap)
16551: Procedure ReplacelClick( Sender : TObject)
16552: Procedure ReplaceDate( var DateTime: TDateTime: NewDate: TDateTime)
16553: procedure ReplaceDate(var DateTime: TDateTime; const NewDate: TDateTime))
16554: Procedure ReplaceIcon( Index : Integer; Image : TIcon)
16555: Procedure ReplaceMasked( Index : Integer; NewImage : TBitmap; MaskColor : TColor)
16556: Procedure ReplaceTime (var DateTime: TDateTime; NewTime: TDateTime) 16557: procedure ReplaceTime (var DateTime: TDateTime; const NewTime: TDateTime);
16558: Procedure Requery( Options : TExecuteOptions)
16559: Procedure Reset
16560: Procedure Reset1Click( Sender :
                                             TObject)
16561: Procedure ResizeCanvas( XSiz, YSiz, XPos, YPos : Integer; Color : TColor)
16562: procedure ResourceExplore1Click(Sender: TObject);
16563: Procedure RestoreContents
16564: Procedure RestoreDefaults
16565: Procedure RestoreOtherInstance( MainFormClassName, MainFormCaption : string)
16566: Procedure RetrieveHeaders
16567: Procedure RevertRecord
16568: Procedure RGBATOBGRA( const Source, Target : Pointer; const BitsPerSample : Byte; Count : Cardinal)
16569: Procedure RGBToBGR( const Source, Target : Pointer; const BitsPerSample : Byte; Count : Cardinal);
16570: Procedure RGBToBGR1( const R, G, B, Target : Pointer; const BitsPerSample : Byte; Count : Cardinal);
16571: Procedure RGBTOHSL( const R, G, B : Single; out H, S, L : Single); 16572: Procedure RGBTOHSL1( const RGB : TColor32; out H, S, L : Single);
16573: Procedure RGBTOHSV( r, g, b : Integer; var h, s, v : Integer: 16574: Procedure RleCompress2( Stream : TStream)
16575: Procedure RleDecompress2( Stream : TStream)
16576: Procedure RmDir(const S: string)
16577: Procedure Rollback
16578: Procedure Rollback( TransDesc : TTransactionDesc)
16579: Procedure RollbackFreeAndNil( var Transaction : TDBXTransaction)
16580: Procedure RollbackIncompleteFreeAndNil( var Transaction : TDBXTransaction)
16581: Procedure RollbackTrans
16582: procedure RoundRect(X1, Y1, X2, Y2, X3, Y3: Integer);
16583: Procedure RoundToAllocGranularity64( var Value : Int64; Up : Boolean)
16584: Procedure RoundToAllocGranularityPtr( var Value : Pointer; Up : Boolean)
16585: Procedure RunDll32Internal( Wnd : HWnd; const DLLName, FuncName, CmdLine : string; CmdShow : Integer) 16586: Procedure S_AddMessageToStrings( AMessages : TStrings; AMsg : string)
16587: Procedure S_EBox( const AText : string)
16588: Procedure S_GetEncryptionKeys(DateTime1,DateTime2:TDateTime;var StartKey:int;var MultKey:integer;var
        AddKey:int
16589: Procedure S_IBox( const AText : string)
16590: Procedure S_ReplaceChar( var cStr : string; cOldChr, cNewChr : char)
16591: Procedure S_ReplaceStringInFile( AFileName : string; ASearchString, AReplaceString : string)
16592: Procedure S_TokenInit( cBuffer : PChar; const cDelimiters : string)
16593: Procedure SampleVarianceAndMean
16594: ( const X : TDvnFloatArray; var Variance, Mean : Float)
16595: Procedure Save2Click( Sender : TObject)
16596: Procedure Saveas3Click( Sender : TObject)
16597: Procedure SavebeforelClick( Sender : TObject)
16598: Procedure SaveBytesToFile(const Data: TBytes; const FileName: string);
16599: procedure SaveCanvas2(vCanvas: TCanvas; FileName: string);
16600: Procedure SaveConfigFile
16601: Procedure SaveOutputlClick( Sender : TObject)
16602: procedure SaveScreenshotClick(Sender: TObject);
16603: Procedure SaveLn(pathname, content: string); //Saveln(exepath+'mysavelntest.txt', memo2.text); 16604: Procedure SaveToClipboardFormat( var AFormat : Word; var AData : THandle; var APalette : HPALETTE)
16605: Procedure SaveToClipboardFormat( var Format : Word; var Data : THandle; var APalette : HPALETTE)
16606: Procedure SaveToFile( AFileName : string)
16607: Procedure SAVETOFILE( const FILENAME : String)
16608: Procedure SaveToFile( const FileName : WideString)
16609: Procedure SaveToFile( const FileName : WideString; Format : TPersistFormat)
```

```
16610: Procedure SaveToFile( const FileName, FileType : string; Bitmap : TLinearBitmap)
16611: procedure SaveToFile(FileName: string);
16612: procedure SaveToFile(FileName:String)
16613: Procedure SaveToStream( AStream: TStream; const AHeadersOnly: Boolean)
16614: Procedure SaveToStream( OutStream: TSeekableStream; const Ext: string; Bitmap: TLinarBitmap)
16615: Procedure SaveToStream( S : TStream)
16616: Procedure SaveToStream( Stream: TSeekableStream; const Ext: string; Bitmap: TLinearBitmap)
16617: Procedure SaveToStream( Stream : TStream)
16618: Procedure SaveToStream(Stream: TStream; Format: TDataPacketFormat)
16619: procedure SaveToStream(Stream: TStream);
16620: procedure SaveToStream(Stream:TStream)
16621: Procedure SaveToStream1( Stream : TSeekableStream; const FormatExt : string);
16622: Procedure SaveToStream2( Stream : TStream; const FormatExt : string)
16623: Procedure SaveToStrings ( AStrings : TStrings; const MimeSeparator : Char)
16624: procedure Say(const sText: string)
16625: Procedure SBytecodelClick( Sender : TObject)
16626: Procedure ScaleImage( const SourceBitmap, ResizedBitmap: TBitmap; const ScaleAmount: Double)
16627: procedure ScriptExplorer1Click(Sender: TObject);
16628: Procedure Scroll( Distance : Integer)
16629: Procedure Scroll( DX, DY : Integer)
16630: procedure ScrollBy(DeltaX, DeltaY: Integer);
16631: procedure SCROLLINVIEW(ACONTROL:TCONTROL)
16632: Procedure ScrollTabs( Delta : Integer)
16633: Procedure Search1Click( Sender : TObject)
16634: procedure SearchAndOpenDoc(vfilenamepath: string)
16635: procedure SearchAndOpenFile(vfilenamepath: string)
16636: procedure SearchAndReplace(aStrList: TStrings; aSearchStr, aNewStr: string)
16637: procedure SearchAndCopy(aStrList: TStrings; aSearchStr, aNewStr: string; offset: integer); 16638: procedure SearchNext1Click( Sender : TObject)
16639: Procedure Select( Node : TTreeNode; ShiftState : TShiftState);
16640: Procedure Select1( const Nodes : array of TTreeNode);
16641: Procedure Select2( Nodes : TList);
16642: Procedure SelectNext( Direction : Boolean)
16643: Procedure SelectNextPage( GoForward : Boolean; CheckTabVisible : Boolean)
16644: Procedure SelfTestPEM //unit uPSI_oPEM
16645: Procedure Send( AMsg : TidMessage)
16646: //config forst in const MAILINIFILE = 'maildef.ini';
16647: //ex.: SendEmail('max@kleiner.ch', 'max@kleiner.com', 'this test7', 'maxbox the SSL fox','
16648: Procedure SendEmail(mFrom, mTo, mSubject, mBody, mAttachment: variant);
16649: Procedure SendMail(mFrom, mTo, mSubject, mBody, mAttachment: variant);
16650: Procedure SendMsg(AMsg: TIdMessage; const AHeadersOnly: Boolean)
16651: Procedure SendMsg(AMsg: TIdMessage; const AHeadersOnly: Boolean = False)
16652: Procedure SendResponse
16653: Procedure SendStream( AStream: TStream)
16654: Procedure Set8087CW( NewCW : Word)
16655: Procedure SetAll( One, Two, Three, Four : Byte)
16656: Procedure SetAltRecBuffers (Old, New, Cur: PChar)
16657: Procedure SetAppDispatcher( const ADispatcher: TComponent)
16658: procedure SetArrayLength;
16659: procedure SetArrayLength2String(arr: T2StringArray; asize1, asize2: integer); //2 dimension
16660: procedure SetArrayLength2Integer(arr: T2IntegerArray; asize1, asize2: integer);
16661: Procedure SetAsHandle( Format : Word; Value : THandle)
16662: procedure SetBounds(ALeft, ATop, AWidth, AHeight: Integer
16663: procedure SetCaptureControl(Control: TControl);
16664: Procedure SetColumnAttributes
16665: Procedure SetCookieField(Values:TStrings;const ADomain,APath:string;AExpires:TDateTime;ASecure:Boolean)
16666: Procedure SetCustomHeader( const Name, Value : string)
16667: Procedure SetExprParams(const Text:Widestring;Opts:TFilterOpts;ParserOpts:TParserOpts;const
       FieldName:Widestring)
16668: Procedure SetFMTBcd( Buffer : TRecordBuffer; value : TBcd)
16669: Procedure SetFocus
16670: procedure SetFocus; virtual;
16671: Procedure SetInitialState
16672: Procedure SetKey
16673: procedure SetLastError(ErrorCode: Integer)
16674: procedure SetLength;
16675: Procedure SetLineBreakStyle( var T : Text; Style : TTextLineBreakStyle)
16676: Procedure SETOLE2MENUHANDLE ( HANDLE : HMENU)
16677: Procedure SetParams ( ADataset : TDataset; UpdateKind : TUpdateKind);
16678: procedure SETPARAMS(APOSITION, AMIN, AMAX:INTEGER)
16679: Procedure SetParams1( UpdateKind : TUpdateKind)
16680: Procedure SetPassword( const Password: string)
16681: Procedure SetPointer( Ptr : Pointer; Size : Longint)
16682: Procedure SetPrimalityTest( const Method : TPrimalityTestMethod)
16683: Procedure SetPrinter( ADevice, ADriver, APort : PChar; ADeviceMode : THandle)
16684: Procedure SetProvider ( Provider : TComponent)
16685: Procedure SetProxy( const Proxy : string)
16686: Procedure SetPSResult( var PSResult: TPSResult; Value: TObject) 16687: Procedure SetRange( const StartValues, EndValues: array of const)
16688: Procedure SetRangeEnd
16689: Procedure SetRate( const aPercent, aYear : integer)
16690: procedure SetRate(const aPercent, aYear: integer)
16691: Procedure Set ReportMemoryLeaksOnShutdown(abo: boolean)
16692: Procedure SetSafeCallExceptionMsg( Msg : String)
16693: procedure SETSELTEXTBUF(BUFFER: PCHAR)
16694: Procedure SetSize( AWidth, AHeight : Integer)
16695: procedure SetSize(NewSize:LongInt)
16696: procedure SetString(var s: string; buffer: PChar; len: Integer)
16697: Procedure SetStrings( List : TStrings)
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16698: Procedure SetText( Text : PwideChar)
16699: procedure SetText(Text: PChar);
16700: Procedure SetTextBuf( Buffer
16701: procedure SETTEXTBUF(BUFFER:PCHAR)
16702: Procedure SetTick( Value : Integer)
16703: Procedure SetTimeout ( ATimeOut : Integer)
16704: Procedure SetTraceEvent ( Event : TDBXTraceEvent)
16705: Procedure SetUserName( const UserName : string)
16706: Procedure SetWallpaper( Path : string);
16707: procedure ShellStyle1Click(Sender: TObject);
16708: Procedure SHORTCUTTOKEY( SHORTCUT : TSHORTCUT; var KEY : WORD; var SHIFT : TSHIFTSTATE)
16709: Procedure ShowFileProperties( const FileName : string)
16710: Procedure ShowIncludelClick( Sender : TObject)
16711: Procedure ShowInterfaces1Click( Sender : TObject)
16712: Procedure ShowLastException1Click( Sender : TObject)
16713: Procedure ShowMessage(const Msg : string)
16714: Procedure ShowMessageBig(const aText : string);
16715: Procedure ShowMessageBig2(const aText : string; aautosize: boolean);
16716: Procedure ShowMessageBig3(const aText : string; fsize: byte; aautosize: boolean);
16717: Procedure MsgBig(const aText : string);
16718: procedure showmessage(mytext: string);
                                                                  //alias
16719: Procedure ShowMessageFmt( const Msg: string; Params: array of const)
16720: procedure ShowMessageFmt(const Msg: string; Params: array of const))
16721: Procedure ShowMessagePos( const Msg : string; X, Y : Integer)
16722: procedure ShowMessagePos(const Msg: string; X: Integer; Y: Integer))
16723: Procedure ShowSearchDialog( const Directory : string)
16724: Procedure ShowSpecChars1Click( Sender : TObject)
16725: Procedure ShowBitmap(bmap: TBitmap); //draw in a form!
16726: Procedure ShredFile( const FileName : string; Times : Integer)
16727: procedure Shuffle(vQ: TStringList);
16728: Procedure ShuffleList( var List : array of Integer; Count : Integer)
16729: Procedure SimulateKeystroke( Key : byte; Shift : TShiftState)
16730: Procedure SinCos( const Theta : Extended; var Sin, Cos : Extended)
16731: Procedure SinCosE( X : Extended; out Sin, Cos : Extended)
16732: Procedure Site( const ACommand : string)
16733: Procedure SkipEOL
16734: Procedure Sleep( ATime : cardinal)
16735: Procedure Sleep( milliseconds : Cardinal)
16736: Function SleepEx( dwMilliseconds : DWORD; bAlertable : BOOL) : DWORD
16737: Procedure Slinenumbers1Click( Sender : TObject)
16738: Procedure Sort
16739: Procedure SortColorArray(ColorArray:TColorArray;L,R:Int;SortType:TColorArraySortType;Reverse:Bool)
16740: procedure Speak(const sText: string) //async like voice
16741: procedure Speak2(const sText: string) //sync
16742: procedure Split(Str: string; SubStr: string; List: TStrings);
16743: Procedure SplitNameValue( const Line : string; var Name, Value : string)
16744: Procedure SplitColumns( const AData : String; AStrings : TStrings; const ADelim : String)
16745: Procedure SplitColumnsNoTrim( const AData : String; AStrings : TStrings; const ADelim : String)
16746: Procedure SplitLines( AData: PChar; ADataSize: Integer; AStrings: TStrings) 16747: Procedure SplitString( const AStr, AToken: String; var VLeft, VRight: String) 16748: procedure SQLSyntaxlClick(Sender: TObject);
16749: Procedure SRand( Seed : RNG_IntType)
16750: Procedure Start
16751: Procedure StartCount( var Counter : TJclCounter; const Compensate : Boolean)
16752: procedure StartFileFinder3(spath,aext,searchstr: string; arecursiv: boolean; reslist: TStringlist);
16753: Procedure StartTransaction( TransDesc : TTransactionDesc)
16754: Procedure Status( var AStatusList : TStringList)
16755: Procedure StatusBarlDblClick( Sender : TObject)
16756: Procedure StepIntolClick( Sender : TObject)
16757: Procedure StepIt.
16758: Procedure StepOutlClick( Sender : TObject)
16759: Procedure Stop
16760: procedure stopmp3;
16761: procedure StartWeb(aurl: string);
16762: Procedure Str(aint: integer; astr: string); //of system 16763: Procedure StrDispose( Str : PChar)
16764: procedure StrDispose(Str: PChar)
16765: Procedure StrReplace(var Str: String; Old, New: String);
16766: Procedure StretchDIBits( DC : THandle; const Dest : TRect; HalftoneStretch : Boolean)
16767: procedure StretchDraw(const Rect: TRect; Graphic: TGraphic);
16768: Procedure StringToBytes( Value : String; Bytes : array of byte)
16769: procedure StrSet(c : Char; I : Integer; var s : String);
16770: Procedure StrSplitP(const Delimiter: Char; Input: string; const Strings: TStrings);
16771: Procedure StructureMount ( APath : String)
16772: procedure STYLECHANGED (SENDER: TOBJECT)
16773: Procedure Subselect( Node : TTreeNode; Validate : Boolean)
16774: procedure Succ(X: int64);
16775: Procedure SumsAndSquares( const Data: array of Double; var Sum, SumOfSquares: Extended) 16776: procedure SwapChar(var X,Y: char); //swapX follows
16777: Procedure SwapFloats( var X,
                                            Y : Float)
16778: procedure SwapGrid(grd: TStringGrid);
16779: Procedure SwapOrd( var I, J : Byte);
16780: Procedure SwapOrd( var X, Y : Integer)
16781: Procedure SwapOrd1( var I, J : Shortint);
16782: Procedure SwapOrd2( var I, J : Smallint);
16783: Procedure SwapOrd3( var I, J : Word);
16784: Procedure SwapOrd4( var I, J : Integer);
16785: Procedure SwapOrd5( var I, J : Cardinal);
16786: Procedure SwapOrd6( var I, J : Int64);
```

```
16787: Procedure SymetricCompareFiles(const plaintext, replaintext: string)
16788: Procedure Synchronizel ( Method : TMethod);
16789: procedure SyntaxCheck1Click(Sender: TObject);
16790: Procedure SysFreeString(const S: WideString); stdcall;
16791: Procedure TakeOver( Other : TLinearBitmap)
16792: Procedure Talkln(const sText: string) //async voice 16793: procedure tbtn6resClick(Sender: TObject);
16794: Procedure tbtnUseCaseClick( Sender : TObject)
16795: procedure TerminalStyle1Click(Sender: TObject);
16796: Procedure Terminate
16797: Procedure texSyntax1Click( Sender : TObject)
16798: procedure TextOut(X, Y: Integer; Text: string);
16799: Procedure TextRect( Rect : TRect; X, Y : Integer; const Text : string);
16800: procedure TextRect(Rect: TRect; X: Integer; Y: Integer; const Text: string);
16801: Procedure TextRect1( var Rect : TRect; var Text : string; TextFormat : TTextFormat);
16802: Procedure TextStart
16803: procedure TILE
16804: Procedure TimeStampToBytes( Value : TBcd; Bytes : array of byte)
16805: Procedure TitleClick( Column : TColumn)
16806: Procedure ToDo
16807: procedure toolbtnTutorialClick(Sender: TObject);
16808: Procedure Tracel( AURL : string; const AResponseContent : TStream);
16809: Procedure TransferMode ( ATransferMode : TIdFTPTransferMode)
16810: Procedure Truncate
16811: procedure Tutorial101Click(Sender: TObject);
16812: procedure Tutorial10Statistics1Click(Sender: TObject);
16813: procedure Tutoriall1Forms1Click(Sender: TObject);
16814: procedure Tutorial12SOL1Click(Sender: TObject);
16815: Procedure tutorial1Click( Sender: TObject)
16816: Procedure tutorial21Click( Sender: TObject)
16817: Procedure tutorial31Click( Sender : TObject)
16818: Procedure tutorial4Click( Sender : TObject)
16819: Procedure Tutorial5Click( Sender : TObject)
16820: procedure Tutorial6Click(Sender: TObject);
16821: procedure Tutorial91Click(Sender: TObject);
16822: Procedure UnhookSignal( RtlSigNum : Integer; OnlyIfHooked : Boolean)
16823: procedure UniqueString(var str: AnsiString)
16824: procedure UnloadLoadPackage(Module: HMODULE)
16825: Procedure Unlock
16826: Procedure UNMERGE( MENU : TMAINMENU)
16827: Procedure UnRegisterChanges( Value : TChangeLink)
16828: Procedure UnregisterConversionFamily( const AFamily : TConvFamily)
16829: Procedure UnregisterConversionType( const AType: TConvType)
16830: Procedure UnRegisterProvider( Prov : TCustomProvider)
16831: Procedure UPDATE
16832: Procedure UpdateBatch( AffectRecords : TAffectRecords)
16833: Procedure UPDATECURSORPOS
16834: Procedure UpdateFile
16835: Procedure UpdateItems( FirstIndex, LastIndex : Integer)
16836: Procedure UpdateResponse ( AResponse : TWebResponse)
16837: Procedure UpdateScrollBar
16838: Procedure UpdateView1Click( Sender : TObject)
16839: procedure Val(const s: string; var n, z: Integer)
16840: procedure VarFmraySet(c : Variant; I : Integer; var s : Variant);
16841: Procedure VarFMTBcdCreate( var ADest : Variant; const ABcd : TBcd);
16842: Procedure VariantAdd( const src : Variant; var dst : Variant)
16843: Procedure VariantAnd( const src : Variant; var dst : Variant)
16844: Procedure VariantArrayRedim( var V : Variant; High : Integer
16845: Procedure VariantCast( const src : Variant; var dst : Variant; vt : Integer) 16846: Procedure VariantClear( var V : Variant)
16847: Procedure VariantCpy( const src : Variant; var dst : Variant)
16848: Procedure VariantDiv( const src : Variant; var dst : Variant)
16849: Procedure VariantMod( const src : Variant; var dst : Variant)
16850: Procedure VariantMul( const src : Variant; var dst : Variant)
16851: Procedure VariantOr( const src : Variant; var dst : Variant)
16852: Procedure VariantPutElement( var V : Variant; const data : Variant; i1 : integer);
16853: Procedure VariantPutElement1( var V : Variant; const data : Variant; i1, i2 : integer);
16854: Procedure VariantPutElement2( var V : Variant; const data : Variant; i1, i2, i3 : integer);
16855: \textbf{Procedure} \ \texttt{VariantPutElement3}( \ \textbf{var} \ \texttt{V} \ : \ \texttt{Variant}; \ \textbf{const} \ \texttt{data} \ : \ \texttt{Variant}; \ \textbf{i1}, \ \textbf{i2}, \ \textbf{i3}, \ \textbf{i4} \ : \ \textbf{integer});
16856: Procedure VariantPutElement4( var V : Variant; const data : Variant; i1, i2, i3, i4, i5 : integer);
16857: Procedure VariantShl( const src : Variant; var dst : Variant)
16858: Procedure VariantShr( const src : Variant; var dst : Variant)
16859: Procedure VariantSub( const src : Variant; var dst : Variant)
16860: Procedure VariantXor( const src : Variant; var dst : Variant)
16861: Procedure VarCastError;
16862: Procedure VarCastError1( const ASourceType, ADestType: TVarType);
16863: Procedure VarInvalidOp
16864: Procedure VarInvalidNullOp
16865: Procedure VarOverflowError( const ASourceType, ADestType : TVarType)
16866: Procedure VarRangeCheckError( const ASourceType, ADestType : TVarType)
16867: Procedure VarArrayCreateError
16868: Procedure VarResultCheck( AResult : HRESULT);
16869: Procedure VarResultCheck1( AResult : HRESULT; ASourceType, ADestType : TVarType);
16870: Procedure HandleConversionException( const ASourceType, ADestType: TVarType)
16871: Function VarTypeAsText( const AType : TVarType) : string
16872: procedure Voice(const sText: string) //async
16873: procedure Voice2(const sText: string) //sync
16874: Procedure WaitMiliSeconds( AMSec : word)
16875: Procedure WideAppend( var dst : WideString; const src : WideString)
```

```
16876: Procedure WideAssign( var dst : WideString; var src : WideString) 16877: Procedure WideDelete( var dst : WideString; index, count : Integer)
16878: Procedure WideFree( var s : WideString)
16879: Procedure WideFromAnsi( var dst : WideString; const src : AnsiString)
16880: Procedure WideFromPChar( var dst : WideString; src : PChar)
16881: Procedure WideInsert( var dst : WideString; const src : WideString; index : Integer)
16882: Procedure WideSetLength( var dst : WideString; len : Integer)
16883: Procedure WideString2Stream( aWideString: WideString; oStream: TStream)
16884: Procedure WideStringToBytes( Value : WideString; Bytes : array of byte)
16885: Procedure WinColorToOpenGLColor( const Color: TColor; out Red, Green, Blue: Float)
16886: Procedure WinInet_HttpGet(const Url: string; Stream:TStream);
16887: Procedure HttpGet(const Url: string; Stream:TStream);
16888: Procedure WordToTwoBytes( AWord: Word; ByteArray: TIdBytes; Index: integer) 16889: Procedure WordWrap1Click( Sender: TObject)
16890: Procedure Write( const AOut : string)
16891: Procedure Write( Socket : TSocket)
16892: procedure Write(S: string);
16893: Procedure WriteBinaryStream( const Section, Name : string; Value : TStream)
16894: Procedure WriteBool( const Section, Ident : string; Value : Boolean)
16895: Procedure WriteBuffer( const ABuffer, AByteCount : Longint; const AWriteNow : Boolean)
16896: procedure WriteBuffer(Buffer:String;Count:LongInt)
16897: Procedure WriteCardinal( AValue : Cardinal; const AConvert : Boolean)
16898: Procedure WriteChar( AValue : Char)
16899: Procedure WriteDate( const Section, Name : string; Value : TDateTime)
16900: Procedure WriteDateTime( const Section, Name : string; Value : TDateTime)
16901: Procedure WriteFloat( const Section, Name : string; Value : Double)
16902: Procedure WriteHeader( AHeader: TStrings)
16903: Procedure WriteInteger( AValue: Integer; const AConvert: Boolean)
16904: Procedure WriteInteger( const Section, Ident: string; Value: Longint)
16905: Procedure WriteLn( const AOut : string)
16906: procedure Writeln(s: string);
16907: Procedure WriteLog( const FileName, LogLine : string)
16908: Procedure WriteRFCReply( AReply : TIdRFCReply)
16909: Procedure WriteRFCStrings( AStrings: TStrings)
16910: Procedure WriteSmallInt( AValue : SmallInt; const AConvert : Boolean)
16911: Procedure WriteStream(AStream:TStream;const AAll:Bool;const AWriteByteCount:Bool;const ASize:Int)
16912: Procedure WriteString( const Section, Ident, Value : String)
16913: Procedure WriteStrings( AValue : TStrings; const AWriteLinesCount : Boolean)
16914: Procedure WriteTime( const Section, Name : string; Value : TDateTime)
16915: Procedure WriteObjectResourceHeader( ObjStream, Output : TStream)
16916: Procedure Write16bitResourceHeader( const AName : TBytes; DataSize : Integer; Output : TStream)
16917: Procedure Write32bitResourceHeader( const AName : TBytes; DataSize : Integer; Output : TStream)
16918: procedure WStrSet(c : AnyString; I : Integer; var s : AnyString);
16919: procedure XMLSyntax1Click(Sender: TObject);
16920: Procedure XOR_Streams2( Dest, Srce : TMemoryStream)
16921: Procedure XOR_Streams3( Dest, SrceA, SrceB : TMemoryStream)
16922: Procedure ZeroFillStream( Stream : TMemoryStream)
16923: procedure XMLSyntax1Click(Sender: TObject);
16924: Procedure ZeroMemory( Ptr : Pointer; Length : Longint)
16925: procedure(Control: TWinControl; Index: Integer; Rect: TRect; State: Byte)
16926: procedure(Control: TWinControl; Index: Integer; var Height: Integer)
16927: procedure (Sender, Source: TObject; X, Y: Integer; State: TDragState; var Accept: Boolean)
16928: procedure (Sender, Source: TObject; X, Y: Integer)
16929: procedure(Sender, Target: TObject; X, Y: Integer)
16930: procedure(Sender: TObject; ASection, AWidth: Integer)
16931: procedure(Sender: TObject; ScrollCode: TScrollCode; var ScrollPos: Integer)
16932: procedure (Sender: TObject; Shift: TShiftState; X, Y: Integer);
16933: procedure (Sender: TObject; var Action: TCloseAction)
16934: procedure(Sender: TObject; var CanClose: Boolean)
16935: procedure(Sender: TObject; var Key: Char);
16936: ProcedureName ProcedureNames ProcedureParametersCursor @
16938: ***********Now Constructors constructor **********
16939: Size is: 1231 1115 996 628 550 544 501 459 (381)
16940: Attach( VersionInfoData : Pointer; Size : Integer)
         constructor Create( ABuckets : TBucketListSizes)
          Create( ACallBackWnd : HWND)
16942:
         Create( AClient : TCustomTaskDialog)
Create( AClient : TIdTelnet)
16943:
16944:
         Create( ACollection : TCollection)
Create( ACollection : TFavoriteLinkItems)
16945:
16946:
16947:
         Create( ACollection : TTaskDialogButtons)
16948:
         Create( AConnection : TIdCustomHTTP)
16949:
         Create( ACreateSuspended : Boolean)
         Create( ADataSet : TCustomSQLDataSet)
CREATE( ADATASET : TDATASET)
16950:
16951:
16952:
         Create( Aggregates : TAggregates; ADataSet : TCustomClientDataSet);
         Create( AGrid : TCustomDBGrid)
Create( AGrid : TStringGrid; AIndex : Longint)
16953:
16954:
         Create( AHTTP : TIdCustomHTTP)
16956:
         Create( AListItems : TListItems)
         Create( AOnBytesRemoved : TIdBufferBytesRemoved)
Create( AOnBytesRemoved : TIdBufferBytesRemoved)
16957:
16958:
16959:
         Create( AOwner : TCommonCalendar)
         Create( AOwner : TComponent)
16960:
16961:
         CREATE ( AOWNER : TCOMPONENT)
16962: Create( AOwner : TCustomListView)
16963: Create( AOwner : TCustomOutline)
16964: Create( AOwner : TCustomRichEdit)
```

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16965: Create( AOwner : TCustomRichEdit; AttributeType : TAttributeType)
16966:
        Create( AOwner : TCustomTreeView)
        Create( AOwner : TIdUserManager)
16968:
        Create( AOwner : TListItems)
16969:
        Create(
       AOwner:TObject;Handle:hDBICur;CBType:CBType;CBBuf:Ptr;CBBufSize:Int;CallbackEvent:TBDECallbackEvent;
       Chain: Bool
16970:
        CREATE( AOWNER : TPERSISTENT)
16971:
        Create( AOwner : TPersistent)
16972:
        Create( AOwner : TTable)
16973:
        Create( AOwner : TTreeNodes)
        Create( AOwner : TWinControl; const ClassName : string)
16974:
16975:
        Create( AParent : TIdCustomHTTP)
        Create( AParent : TUpdateTree; AResolver : TCustomResolver)
16976:
16977:
        Create( AProvider : TBaseProvider)
16978:
        Create( AProvider : TCustomProvider)
        Create( AProvider : TDataSetProvider)
16979:
        Create( ASocket : TCustomWinSocket; TimeOut : Longint)
Create( ASocket : TSocket)
16980:
16981:
16982:
        Create( AStrings : TWideStrings)
        Create( AToolBar : TToolBar)
16983:
16984:
        Create( ATreeNodes : TTreeNodes)
16985:
        Create( Autofill : boolean)
        Create( AWebPageInfo : TAbstractWebPageInfo)
Create( AWebRequest : TWebRequest)
16986:
16987:
16988:
        Create( Collection : TCollection)
16989:
        Create( Collection : TIdMessageParts; ABody : TStrings)
16990:
        Create( Collection : TIdMessageParts; const AFileName : TFileName)
16991:
        Create( Column : TColumn)
        Create( const AConvFamily : TConvFamily; const ADescription : string)
16992:
16993:
        Create( const AConvFamily : TConvFamily; const ADescription : string; const AFactor : Double)
16994: Create( const AConvFamily: TConvFamily: const ADescription: string: const AToCommonProc,
       AFromCommonProc : TConversionProc
16995:
        Create( const AInitialState : Boolean; const AManualReset : Boolean)
                 const ATabSet : TTabSet)
16996:
         Create(
16997:
        Create( const Compensate : Boolean)
16998:
        Create( const FileMap : TJclCustomFileMapping; Access, Size : Cardinal; ViewOffset : Int64)
        Create( const FileName : string)
16999:
17000:
        Create( const FileName : string; FileMode: Cardinal; const Name: string; Protect: Cardinal; const MaximumSize
         Int64; const SecAttr : PSecurityAttributes);
17001: Create( const FileName : string; FileMode : WordfmShareDenyWrite)
17002:
        Create( const MaskValue : string)
        Create(const Name:string; Protect:Cardinal;const MaximumSize:Int64;const SecAttr:PSecurityAttributes)
17003:
17004:
         Create( const Prefix : string)
17005:
        \texttt{Create(} \textbf{ const} \texttt{ sRegularExpression} : \textbf{ string:} \texttt{ xFlags:} \texttt{ TniRegularExpressionMatchFlags)}
        Create( const sRule: string; xFlags: ThiRegularExpressionMatchFlags)
Create( const sRule: string; xFlags: ThiRegularExpressionMatchFlags)
17006:
17007:
        Create( CoolBar : TCoolBar)
        Create( CreateSuspended : Boolean; ASocket : TServerClientWinSocket)
Create( CreateSuspended : Boolean; ASocket : TServerWinSocket)
17009:
17010:
17011: Create( DataSet : TDataSet; const
       Text:Widestring;Options:TFilterOptions;ParserOptions:TParserOptions;const FieldName : Widestring;
       DepFields : TBits; FieldMap : TFieldMap)
17012:
       Create( DBCtrlGrid : TDBCtrlGrid)
17013:
        Create( DSTableProducer : TDSTableProducer)
Create( DSTableProducer : TDSTableProducer; ColumnClass : THTMLTableColumnClass)
17014:
17015:
        Create( ErrorCode : DBIResult)
17016:
        Create( Field : TBlobField; Mode : TBlobStreamMode)
17017:
        Create( Grid : TCustomDBGrid; ColumnClass : TColumnClass)
        Create( HeaderControl : TCustomHeaderControl)
17018:
        Create( HTTPRequest : TWebRequest)
17019:
17020:
        Create( iStart : integer; sText : string)
17021:
        Create( iValue : Integer)
17022:
        Create( Kind : TMmTimerKind; Notification : TMmNotificationKind)
        Create( MciErrNo : MCIERROR; const Msg : string)
17023:
        Create(MemoryStream:TCustomMemStream;FreeStream:Boolean;const AIndexOption:TJclMappedTextReaderIndex);
17024:
17025:
        Create( Message : string; ErrorCode : DBResult)
17026:
        Create( Msg : string)
17027:
        Create( NativeError, Context : string; ErrCode, PrevError : Integer; E : Exception)
        Create( NativeError, Context: string; ErrorCode, PreviousError: DBResult)
Create( oExpression: TniRegularExpression; eType: TniRegularExpressionStateType)
17028:
17029:
17030:
        Create( oOwner : TniRegularExpression; xFlags : TniRegularExpressionMatchFlags)
17031:
        {\tt Create(oSource:TniRegularExpressState;oDestination:TniRegularExprState;xCharacts:TCharSet;bLambda:bool)}
17032:
        Create( Owner : EDBEngineError; ErrorCode : DBTResult; NativeError : Longint; Message : PChar)
        Create( Owner :
17033:
                          TCustomComboBoxEx)
17034:
        CREATE( OWNER : TINDEXDEFS; const NAME, FIELDS: String; OPTIONS: TINDEXOPTIONS)
17035:
        Create( Owner : TPersistent)
17036:
        Create( Params : TStrings)
17037:
        Create( Size : Cardinal)
        Create( Socket : TSocket; ServerWinSocket : TServerWinSocket)
17038:
17039:
        Create( StatusBar : TCustomStatusBar)
        Create( WebDispatcher: TCustomWebDispatcher; ItemClass: TCollectionItemClass)
Create( WebResponse: TWebResponse; ItemClass: TCollectionItemClass)
17040:
17041:
17042:
        Create(AHandle:Integer)
17043:
         Create(AOwner: TComponent); virtual;
        Create(const AURI : string)
17044:
17045:
        Create(FileName:String; Mode:Word)
17046:
        Create(Instance:THandle;ResName:String;ResType:PChar)
17047: Create(Stream : TStream)
```

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17048:
         Createl( ADataset : TDataset);
          Createl(const FileHandle:THandle;const Name:string;Protect:Cardinal;const MaximumSize:Int64;const
17049:
        SecAttr:PSecurityAttributes);
17050:
          Create1( const FileName : string; const AIndexOption : TJclMappedTextReaderIndex);
17051:
          Create2( Other : TObject);
17052:
          CreateAt(FileMap: TJclCustomFileMapping; Access.Size:Cardinal;ViewOffset:Int64;Address: Pointer)
          CreateError(const anErrCode: Integer;const asReplyMessage: string; const asErrorMessage: string)
17053:
          CreateFmt( MciErrNo : MCIERROR; const Msg : string; const Args : array of const)
17054:
17055:
          CreateFromId(Instance:THandle;ResId:Integer;ResType:PChar)
          CreateLinked( DBCtrlGrid : TDBCtrlGrid)
17056:
          CREATENEW(AOWNER:TCOMPONENT; Dummy: Integer
17057:
          CreateRes( Ident : Integer);
17059:
          CreateRes( MciErrNo : MCIERROR; Ident : Integer)
          CreateRes( ResStringRec : PResStringRec);
CreateResHelp( Ident : Integer; AHelpContext : Integer);
17060:
17061:
17062:
          CreateResHelp( ResStringRec : PResStringRec; AHelpContext : Integer);
          CreateShadow( AOwner : TComponent; ControlSide : TControlSide)
17063:
17064:
          CreateSize( AWidth, AHeight : Integer)
          Open( const Name : string; const InheritHandle : Boolean; const DesiredAccess : Cardinal)
17065:
17066:
17067:
17068: unit uPSI_MathMax;
17069:
17070:
          CONSTS
           Bernstein: Float = 0.2801694990238691330364364912307; // Bernstein constant Cbrt2: Float = 1.2599210498948731647672106072782; // CubeRoot(2)
17071:
17072:
17073:
           Cbrt3: Float
                                 = 1.4422495703074083823216383107801; // CubeRoot(3)
= 2.1544346900318837217592935665194; // CubeRoot(10)
           Cbrt10: Float
Cbrt100: Float
17074:
           17075:
17076:
17077:
17078:
17079:
                               = 1.5707963267948966192313216916398;
= 1.0471975511965977461542144610932;
17080:
           PiOn2: Float
           PiOn3: Float
17081:
                                = 0.78539816339744830961566084581988; // PI / 4
= 1.4142135623730950488016887242097; // Sqrt(2)
= 1.7320508075688772935274463415059; // Sqrt(3)
17082:
           PiOn4: Float
17083:
           Sgrt2: Float
17084:
           Sgrt3: Float
                                 17085:
           Sqrt5: Float
17086:
           Sqrt10: Float
           SqrtPi: Float
17087:
17088:
           Sgrt.2Pi: Float
17089:
           TwoPi: Float
                                = 9.4247779607693797153879301498385; // 3 * PI
= 0.69314718055994530941723212145818; // Ln(2)
           ThreePi: Float
17090:
17091:
           Ln2: Float
17092:
           In10: Float
                                 = 2.3025850929940456840179914546844; // Ln(10)
           LnPi: Float
                                 = 1.1447298858494001741434273513531; // Ln(PI)
17093:
           Log2J: Float
                                    0.30102999566398119521373889472449; // Log10(2)
           Log3: Float
LogPi: Float
17095:
                                 = 0.47712125471966243729502790325512; // Log10(3)
                                 = 0.4971498726941338543512682882909; // Log10(PI)
= 0.43429448190325182765112891891661; // Log10(E)
17096:
           LogE: Float
17097:
                                 = 0.91893853320467274178032973640562; // Ln(2*PI)/2
17098:
           E: Float
           hLn2Pi: Float
17099:
17100:
           inv2Pi: Float
                                 = 0.15915494309189533576888376337251436203445964574046; // 0.5/Pi
           Inv2F1. Float = 0.159154943091695353768863763572514362034459647740467 // 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}
17101:
17102:
17103:
17104:
                             : Extended = 0.00001; {delta for difference equations}

: Extended = 0.00001; {epsilon for difference equations}

as : Integer = 100; {max attempts for convergence}
17105:
           StDelta
17106:
           StEpsilon
           StMaxIterations : Integer = 100;
17107:
17108:
17109: procedure SIRegister_StdConvs(CL: TPSPascalCompiler);
17110: begin
           MetersPerInch = 0.0254; // [1]
17111:
           MetersPerFoot = MetersPerInch * 12;
17113:
           MetersPerYard = MetersPerFoot * 3;
           MetersPerMile = MetersPerFoot * 5280;
17114:
17115:
           MetersPerNauticalMiles = 1852;
           MetersPerNauticalMiles = 1852;
MetersPerAstronomicalUnit = 1.49598E11; // [4]
MetersPerLightSecond = 2.99792458E8; // [5]
MetersPerLightYear = MetersPerLightSecond * 31556925.9747; // [7]
MetersPerParsec = MetersPerAstronomicalUnit * 206264.806247096; // 60 * 60 * (180 / Pi)
MetersPerCubit = 0.4572; // [6][7]
17116:
17117:
17118:
17119:
17120:
           MetersPerFathom = MetersPerFoot
17121:
           MetersPerFurlong = MetersPerYard * 220;
17122:
           MetersPerHand = MetersPerInch * 4;
MetersPerPace = MetersPerInch * 30;
17123:
17124:
           MetersPerRod = MetersPerFoot * 16.5;
17125:
           MetersPerChain = MetersPerRod * 4;
17126:
           MetersPerLink = MetersPerChain / 100;
MetersPerPoint = MetersPerInch * 0.013837; // [7]
17127:
17128:
           MetersPerPica = MetersPerPoint * 12;
17129:
17130:
17131:
           SquareMetersPerSquareInch = MetersPerInch * MetersPerInch;
           SquareMetersPerSquareFoot = MetersPerFoot * MetersPerFoot;
SquareMetersPerSquareYard = MetersPerYard * MetersPerYard;
17132:
17133:
           SquareMetersPerSquareMile = MetersPerMile * MetersPerMile;
17134:
17135:
           SquareMetersPerAcre = SquareMetersPerSquareYard * 4840;
```

```
17136:
                SquareMetersPerSquareRod = MetersPerRod * MetersPerRod;
17137:
                CubicMetersPerCubicInch = MetersPerInch * MetersPerInch * MetersPerInch;
CubicMetersPerCubicFoot = MetersPerFoot * MetersPerFoot * MetersPerFoot;
17138:
17139:
                CubicMetersPerCubicYard = MetersPerYard * Mete
17140:
                 CubicMetersPerCubicMile = MetersPerMile * MetersPerMile * MetersPerMile;
17141:
17142:
                 CubicMetersPerAcreFoot = SquareMetersPerAcre * MetersPerFoot;
                CubicMetersPerCord = CubicMetersPerCubicFoot * 128;
17143:
17144:
                CubicMetersPerCordFoot = CubicMetersPerCubicFoot * 16;
17145:
17146:
17147:
                 CubicMetersPerUSFluidGallon = CubicMetersPerCubicInch * 231; // [2][3][7]
                CubicMetersPerUSFluidQuart = CubicMetersPerUSFluidGallon / 4;
CubicMetersPerUSFluidPint = CubicMetersPerUSFluidQuart / 2;
17148:
17149:
                 CubicMetersPerUSFluidCup = CubicMetersPerUSFluidPint /
17150:
17151:
                 CubicMetersPerUSFluidGill = CubicMetersPerUSFluidCup / 2;
                 CubicMetersPerUSFluidOunce = CubicMetersPerUSFluidCup / 8;
17152:
                CubicMetersPerUSFluidTablespoon = CubicMetersPerUSFluidOunce / 2;
CubicMetersPerUSFluidTeaspoon = CubicMetersPerUSFluidOunce / 6;
17153:
17154:
17155:
17156:
                 CubicMetersPerUSDryGallon = CubicMetersPerCubicInch * 268.8025; // [7]
17157:
                 CubicMetersPerUSDryQuart = CubicMetersPerUSDryGallon / 4;
                CubicMetersPerUSDryPint = CubicMetersPerUSDryQuart / 2;
CubicMetersPerUSDryPeck = CubicMetersPerUSDryGallon * 2
17158:
17159:
                CubicMetersPerUSDryBucket = CubicMetersPerUSDryBucket * 2;
CubicMetersPerUSDryBucket * 2;
17160:
17161:
17162:
                CubicMetersPerUKGallon = 0.00454609; // [2][7]
CubicMetersPerUKPottle = CubicMetersPerUKGallon / 2;
17163:
17164:
                 CubicMetersPerUKQuart = CubicMetersPerUKPottle /
17165:
17166:
                 CubicMetersPerUKPint = CubicMetersPerUKQuart / 2;
                 CubicMetersPerUKGill = CubicMetersPerUKPint / 4;
17167:
                 CubicMetersPerUKOunce = CubicMetersPerUKPint / 20;
17168:
                CubicMetersPerUKPeck = CubicMetersPerUKGallon * 2;
CubicMetersPerUKBucket = CubicMetersPerUKPeck * 2;
CubicMetersPerUKBushel = CubicMetersPerUKBucket * 2;
17169:
17170:
17171:
17172:
17173:
                GramsPerPound = 453.59237; // [1][7]
17174:
                 GramsPerDrams = GramsPerPound / 256;
17175:
                 GramsPerGrains = GramsPerPound / 7000;
17176:
                GramsPerTons = GramsPerPound * 2000;
                GramsPerLongTons = GramsPerPound * 2240;
17177:
                GramsPerOunces = GramsPerPound / 16;
17178:
17179:
                GramsPerStones = GramsPerPound * 14;
17180:
                 MaxAngle',( 9223372036854775808.0);
17181:
                 MaxTanH', (5678.2617031470719747459655389854);
17182:
                 MaxFactorial','LongInt').SetInt( 1754);
17183:
17184:
                 MaxFloatingPoint',(1.189731495357231765085759326628E+4932);
17185:
                 MinFloatingPoint',(3.3621031431120935062626778173218E-4932);
                MaxTanH',( 354.89135644669199842162284618659);
17186:
17187:
                 MaxFactorial', 'LongInt').SetInt( 170);
                 MaxFloatingPointD',(1.797693134862315907729305190789E+308);
17188:
17189:
                MinFloatingPointD',(2.2250738585072013830902327173324E-308);
                MaxTanH',( 44.361419555836499802702855773323);
MaxFactorial','LongInt').SetInt( 33);
17190:
17191:
                MaxFloatingPoints',( 3.4028236692093846346337460743177E+38);
MinFloatingPoints',( 1.1754943508222875079687365372222E-38);
17192:
17193:
                PiExt',( 3.1415926535897932384626433832795);
RatioDegToRad',( PiExt / 180.0);
RatioGradToRad',( PiExt / 200.0);
17194:
17195:
17196:
              RatioGradToRad', (PiExt / 200.0);
RatioDegToGrad', (200.0 / 180.0);
RatioGradToDeg', (180.0 / 200.0);
Crc16FolynomCCITT', 'LongWord').SetUInt($1021);
Crc16FolynomIBM', 'LongWord').SetUInt($8005);
Crc16Bits', 'LongInt').SetInt(16);
Crc16Bytes', 'LongInt').SetInt(2);
Crc16HighBit', 'LongWord').SetUInt($8000);
17197:
17198:
17199:
17200:
17201:
17202:
17203:
              NotCrc16HighBit','LongWord').SetUInt( $7FFF);
Crc32PolynomIEEE','LongWord').SetUInt( $04C11DB7);
17204:
17205:
              Crc32PolynomCastagnoli','LongWord').SetUInt( $1EDC6F41);
17206:
17207:
              Crc32Koopman','LongWord').SetUInt( $741B8CD7);
              Crc32Bits','LongInt').SetInt( 32);
Crc32Bytes','LongInt').SetInt( 4);
Crc32HighBit','LongWord').SetUInt( $80000000);
17208:
17209:
17210:
17211:
              NotCrc32HighBit', 'LongWord').SetUInt( $7FFFFFFF);
17212:
17213:
                                          = Low(Byte);
                MinByte
                                          = High(Byte);
17214:
                MaxByte
17215:
                 MinWord
                                          = Low(Word);
17216:
                MaxWord
                                          = High(Word);
17217:
                MinShortInt
                                          = Low(ShortInt);
17218:
                MaxShortInt
                                          = High(ShortInt);
17219:
                 MinSmallInt
                                           = Low(SmallInt);
17220:
                 MaxSmallInt
                                           = High(SmallInt);
17221:
                MinLongWord
                                          = LongWord(Low(LongWord));
17222:
                MaxLongWord
                                          = LongWord(High(LongWord));
17223:
                MinLongInt
                                          = LongInt(Low(LongInt));
17224:
                MaxLongInt
                                           = LongInt(High(LongInt));
```

```
17225:
               MinInt64
                                      = Int64(Low(Int64));
17226:
               MaxInt64
                                      = Int64(High(Int64));
17227:
               MinInteger
                                      = Integer(Low(Integer));
17228:
               MaxInteger
                                       = Integer(High(Integer));
17229:
               MinCardinal
                                      = Cardinal(Low(Cardinal));
               MaxCardinal
                                      = Cardinal(High(Cardinal));
17230:
17231:
               MinNativeUInt = NativeUInt(Low(NativeUInt));
17232:
                MaxNativeUInt = NativeUInt(High(NativeUInt));
17233:
               MinNativeInt = NativeInt(Low(NativeInt));
               MaxNativeInt = NativeInt(High(NativeInt));
17234:
             Function CosH( const Z : Float) : Float;
Function SinH( const Z : Float) : Float;
17235:
17236:
17237:
             Function TanH( const Z : Float) : Float;
17238:
17239:
17240:
                //******from DMath.Dll Lib of types.inc in source\dmath_dll
                              = 1.44269504088896340736; { 1/Ln(2) }
= 0.43429448190325182765; { 1/Ln(10)
17241:
               InvLn2
17242:
               InvLn10
                                                                                    1/Ln(10) }
               TwoPi
PiDiv2
                                                                                 { 2*Pi }
{ Pi/2 }
{ Sqrt(P
{ Sqrt(2
{ 1/Sqrt
17243:
                                  = 6.28318530717958647693;
                                                                                    2*Pi }
17244:
                                  = 1.57079632679489661923;
17245:
                                  = 1.77245385090551602730;
                SqrtPi
                                                                                    Sqrt(Pi)
17246:
               Sqrt2Pi
                                 = 2.50662827463100050242;
                                                                                    Sqrt(2*Pi)
17247:
              INVSQLCZF1 = 0.59894228040143267794; { 1/Sqrt(2*Pi) }
InSqrt2Pi = 0.91893853320467274178; { Ln(Sqrt(2*Pi)) }
Ln2PiDiv2 = 0.91893853320467274178; { Ln(2*Pi)/2 }
Sqrt2 = 1.41421356237309504880; { Sqrt(2) }
Sqrt2Div2 = 0.70710678118654752440; { Sqrt(2)/2 }
Gold = 1.61803398874989484821; { Golden Mean = (1 + Sqrt(5))/2 }
CGold = 0.38196601125010515179; { 2 - GOLD }
MacNEp = 2.220446049250313E-16; { 2^(-52) }
MaxNum = 1.797693134862315E+308; { 2^1024 }
MinNum = 2.225073858507202E-308; { 2^(-1022) }
MaxLog = 709.7827128933840;
               InvSqrt2Pi = 0.39894228040143267794;
                                                                                   1/Sqrt(2*Pi) }
17248:
17249:
17250:
17251:
17252:
17253:
17254:
17255:
17256:
               MaxLog = 709.7827128933840;
17257:
               MinLog = -708.3964185322641;
17258:
                MaxFac = 170;
17259:
               MaxGam = 171.624376956302;
MaxLgm = 2.556348E+305;
17260:
17261:
               SingleCompareDelta = 1.0E-34;
DoubleCompareDelta = 1.0E-280;
17262:
17263:
17264:
17265:
                ExtendedCompareDelta = DoubleCompareDelta;
17266:
                {SELSE}
17267:
                ExtendedCompareDelta = 1.0E-4400;
17268:
               Bytes1KB = 1024;
Bytes1MB = 1024 * Bytes1KB;
Bytes1GB = 1024 * Bytes1MB;
17269:
17270:
17271:
               Bytes1GB = 1024 * Bytes1MB;
Bytes64KB = 64 * Bytes1KB;
Bytes64MB = 64 * Bytes1MB;
Bytes2GB = 2 * LongWord(Bytes1GB);
clBlack32', $FF000000 ));
17272:
17273:
17274:
17275:
17276:
                   clDimGray32', $FF3F3F3F ));
17277:
                   clGray32', $FF7F7F7F ));
17278:
                   clLightGray32', $FFBFBFBF ));
                  clWhite32', $FFFFFFFF ));
clMaroon32', $FF7F0000 ));
clGreen32', $FF007F00 ));
17279:
17280:
17281:
17282:
                   clOlive32', $FF7F7F00 ));
                  cloive32', $FFFFFF00 ));
clNavy32', $FF00007F ));
clPurple32', $FF7F007F ));
clTeal32', $FF907F7F ));
clRed32', $FFF0000 ));
clLime32', $FF000FF0 ));
clYellow32', $FFFFFF00 ));
clBlue32', $FF0000FF ));
17283:
17284:
17285:
17286:
17287:
17288:
17289:
                   clFuchsia32', $FFFF00FF ));
17290:
17291:
                   clAqua32', $FF00FFFF ));
                  claqua32', $FF00FFFF ));
claliceBlue32', $FFF0F8FF ));
clantiqueWhite32', $FFFAEBD7 ));
claquamarine32', $FFFFFFD4 ));
clazure32', $FFF0FFFF ));
clBeige32', $FFF5F5DC ));
clBisque32', $FFFFFE4C4 ));
clBlanchDalmod32', $FFFFFE4C4 );
17292:
17293:
17294:
17295:
17296:
17297:
                   clBlancheDalmond32', $FFFFEBCD ));
17298:
                   clBlueViolet32', $FF8A2BE2 ));
clBrown32', $FFA52A2A ));
17299:
17300:
                  clBurlyWood32', $FFDEB887 ));
clCadetblue32', $FF5F9EA0 ));
clChartReuse32', $FF7FFF00 ));
clChocolate32', $FFD2691E ));
clCoral32', $FFFF7F50 ));
17301:
17302:
17303:
17304:
17305:
                  clCornFlowerBlue32', $FF6495ED ));
clCornSilk32', $FFFF8DC ));
clCrimson32', $FFDC143C ));
clDarkBlue32', $FF00008B ));
clDarkCyan32', $FF008B8B ));
17306:
17307:
17308:
17309:
17310:
                   clDarkGoldenRod32', $FFB8860B ));
17311:
                   clDarkGray32', $FFA9A9A9 ));
clDarkGreen32', $FF006400 ));
17312:
```

```
clDarkGrey32', $FFA9A9A9 ));
clDarkKhaki32', $FFBDB76B ));
clDarkMagenta32', $FF8B008B ));
17314:
17315:
17316:
17317:
                      clDarkOliveGreen32', $FF556B2F ));
                      clDarkOrange32', $FFFF8C00 ));
clDarkOrchid32', $FF9932CC ));
17318:
17319:
                      clDarkRed32', $FF8B0000 ));
17320:
                      clDarkRed32', $FFE9967A ));
clDarkSeaGreen32', $FFE9967A ));
clDarkSlateBlue32', $FF483D8B ));
clDarkSlateGray32', $FF2F4F4F ));
17321:
17322:
17323:
17324:
                      clDarkSlateGrey32', $FF2F4F4F ));
17325:
17326:
                      clDarkTurquoise32', $FF00CED1 ));
                      clDarkViolet32', $FF9400D3 ));
clDeepPink32', $FFFF1493 ));
17327:
17328:
                      clDeepFink32 , $FFFFFFF ));
clDeepSkyBlue32', $FF00BFFF ));
clDodgerBlue32', $FF1E90FF ));
17329:
17330:
                     clbingelBite32', $FFB22222 ));
clFloralWhite32', $FFFB2222 ));
clGainsBoro32', $FFFDCDCDC ));
clGhostWhite32', $FFF8F8FF ));
17331:
17332:
17333:
17334:
17335:
                      clGold32', $FFFFD700 ));
                      clGoldenRod32', $FFDAA520 ));
clGreenYellow32', $FFADFF2F ));
17336:
17337:
                      clGrey32', $FF808080 ));
17338:
17339:
                      clHoneyDew32', $FFF0FFF0 ));
17340:
                      clHotPink32', $FFFF69B4 ));
clIndianRed32', $FFCD5C5C ));
17341:
                      clindianed32', $FFCDSCSc
clindigo32', $FF4B0082 ));
clivory32', $FFFFFFF ));
clKhaki32', $FFF0E68C ));
17342:
17343:
17344:
                      clLavender32', $FFE6E6FA ));
17345:
                      clLavenderBlush32', $FFFFF0F5 ));
17346:
                      cllawnGreen32', $FF7CFC00 ));
clLemonChiffon32', $FFFFFACD ));
17347:
17348:
                      clLightBlue32', $FFADD8E6 ));
clLightCoral32', $FFF08080 ));
clLightCyan32', $FFF0FFFF ));
clLightGoldenRodYellow32', $FFFAFAD2 ));
17349:
17350:
17351:
17352:
                      clLightGoldenRodYellow32', $FFFAF.
clLightGreen32', $FF90EE90 ));
clLightGrey32', $FF90B0B03 ));
clLightPink32', $FFFFB6C1 ));
clLightSalmon32', $FFFFBA07A ));
clLightSeagreen32', $FF20B2AA ));
17353:
17354:
17355:
17356:
17357:
                      cllightSkyblue32', $FF87CEFA ));
clLightSlategray32', $FF778899 ));
clLightSlategrey32', $FF778899 ));
clLightSteelblue32', $FF80C4DE ));
17358:
17359:
17360:
17361:
                      clLightYellow32', $FFFFFFE0 ));
clLtGray32', $FFF0C0C0 ));
clMedGray32', $FFA0A0A4 ));
clDkGray32', $FF808080 ));
17362:
17363:
17364:
17365:
17366:
                      clMoneyGreen32', $FFC0DCC0 ));
17367:
                      clLegacySkyBlue32', $FFA6CAF0 ));
clCream32', $FFFFBF0 ));
clLimeGreen32', $FFF32CD32 ));
17368:
17369:
                      clLinen32', $FFFAF0E6 ));
17370:
17371:
                      clMediumAquamarine32', $FF66CDAA ));
                     clMediumAquamarine32', $FF66CDAA ));
clMediumBlue32', $FF0000CD ));
clMediumOrchid32', $FF805D3 ));
clMediumPurple32', $FF9370DB ));
clMediumSeaGreen32', $FF33CB371 ));
clMediumSlateBlue32', $FF7868EE ));
clMediumSpringGreen32', $FF00FA9A ));
clMediumTurquoise32', $FF00FA9A ));
clMediumVioletRed32', $FF71585 ));
clMediumVioletRed32', $FF771585 ));
17372:
17373:
17374:
17375:
17376:
17377:
17378:
17379:
                      clMedrumivoletkeds2 , $FFC71868
clMidnightBlue32', $FF191970 ));
clMintCream32', $FFF5FFFA ));
clMistyRose32', $FFFFFE4E1 ));
clMoccasin32', $FFFFE4B5 ));
clNavajoWhite32', $FFFFDEAD ));
17380:
17381:
17382:
17383:
17384:
                      clOldLace32', $FFFDF5E6 ));
clOliveDrab32', $FF6B8E23 ));
clOrange32', $FFFFA500 ));
17385:
17386:
17387:
                      clOrangeRed32', $FFFF4500 ));
17388:
17389:
                      clOrchid32', $FFDA70D6 ));
                      clPaleGoldenRod32', $FFEEE8AA ));
clPaleGreen32', $FF98FB98 ));
clPaleTurquoise32', $FFAFEEEE ));
clPaleVioletred32', $FFDB7093 ));
17390:
17391:
17392:
17393:
17394:
                      clPapayaWhip32', $FFFFEFD5 ));
                      clPeachPuff32', $FFFFDAB9 ));
17395:
                      clPeru32', $FFCD853F ));
clPlum32', $FFDDA0DD ));
17396:
17397:
17398:
                      clPowderBlue32', $FFB0E0E6 ));
                      clRosyBrown32', $FFBC8F8F ));
clRoyalBlue32', $FF4169E1 ));
clSaddleBrown32', $FF8B4513 ));
17399:
17400:
17401:
                      clSalmon32', $FFFA8072 ));
17402:
```

```
clSandyBrown32', $FFF4A460 ));
17403:
               clSeaGreen32', $FF74A400');
clSeaShell32', $FFFFF5EE ));
17404:
17405:
               clseasnel132', $FFFFFBEE ));
clsilver32', $FF60522D ));
clsilver32', $FF60C0C0 ));
clskyblue32', $FF87CEEB ));
clslateBlue32', $FF6A5ACD ));
clslateGray32', $FF708090 ));
17406:
17407:
17408:
17409:
17410:
                clSlateGrey32', $FF708090 ));
17411:
               clSnow32', $FFFFFAFA ));
17412:
               17413:
17414:
               clTan32', $FFD2B48C ));
clThistle32', $FFD8BFD8 ));
clTomato32', $FFFF6347 ));
17415:
17416:
17417:
17418:
               clTurquoise32', $FF40E0D0 ));
               clViolet32', $FFEE82EE ));
clWheat32', $FFF5DEB3 ));
17419:
17420:
               clWhitesmoke32', $FFF5F5F5 ));
clYellowgreen32', $FF9ACD32 ));
17421:
17422:
               clTrWhite32', $7FFFFFFF ));
clTrBlack32', $7F000000 ));
17423:
17424:
               clTrRed32', $7FFF0000 ));
clTrGreen32', $7F00FF00 ));
clTrBlue32', $7F000FF ));
17425:
17426:
17427:
17428:
             // Fixed point math constants
17429:
            FixedOne = $10000; FixedHalf = $7FFF;
FixedPI = Round(PI * FixedOne);
17430:
17431:
             FixedToFloat = 1/FixedOne;
17432:
           17433:
17434: **
            type Complex = record
17435:
              X, Y : Float;
17436:
17437:
             type TVector
17438:
                                    = array of Float;
            TIntVector = array of Integer;
TCompVector = array of Complex;
17439:
17440:
17441:
             TBoolVector = array of Boolean;
17442:
             TStrVector = array of String;
17443:
            TMatrix
                             = array of TVector;
            TIntMatrix = array of TIntVector;
TCompMatrix = array of TCompVector;
17444:
17445:
             TBoolMatrix = array of TBoolVector;
17446:
17447:
             TStrMatrix = array of TStrVector;
            TByteArray = array[0..32767] of byte; !
THexArray = array [0..15] of Char; // = '0123456789ABCDEF';
17448:
17449:
             TBitmapStyle = (bsNormal, bsCentered, bsStretched);
17450:
17451:
             T2StringArray = array of array of string;
17452:
             T2IntegerArray = array of array of integer;
            AddTypeS('INT_PTR', 'Integer
AddTypeS('LONG_PTR', 'Integer
17453:
17454:
17455:
             AddTypeS('UINT_PTR', 'Cardinal
            AddTypeS('ULONG_PTR', 'Cardinal AddTypeS('UMORD_PTR', 'ULONG_PTR TIntegerDynArray', 'array of Integer TCardinalDynArray', 'array of Cardinal
17456:
17457:
17458:
17459:
17460:
             TWordDynArray', 'array of Word
            TwordbynArray', 'array of word
TSmallIntDynArray', 'array of SmallInt
TByteDynArray', 'array of Byte
TShortIntDynArray', 'array of ShortInt
TInt64DynArray', 'array of Int64
TLongWordDynArray', 'array of LongWord
TSingleDynArray', 'array of Single
TDoubleDynArray', 'array of Double
TDoubleDynArray', 'array of Double
TDoubleDynArray', 'array of Double
17461:
17462:
17463:
17464:
17465:
17466:
17467:
            TBooleanDynArray', 'array of Boolean
TStringDynArray', 'array of string
17468:
17469:
17470:
             TWideStringDynArray', 'array of WideString
17471:
             TDynByteArray = array of Byte;
             TDynShortintArray = array of Shortint;
17472:
17473:
             TDynSmallintArray = array of Smallint;
                                     = array of Word;
17474:
             TDynWordArray
             TDynIntegerArray = array of Integer;
17475:
17476:
             TDvnLongintArray = array of Longint
17477:
             TDynCardinalArray = array of Cardinal;
17478:
             TDynInt64Array
                                     = array of Int64;
17479:
             TDynExtendedArray = array of Extended;
                                    = array of Double;
17480:
             TDynDoubleArray
             TDynSingleArray
                                     = array of Single;
17481:
            TDynFloatArray = array of Float;
TDynPointerArray = array of Pointer;
17482:
17483:
17484:
            TDynStringArray
                                     = array of string;
            TsynSearchOption = (ssoMatchCase, ssoWholeWord, ssoBackwards, ssoEntireScope, ssoSelectedOnly, ssoReplace, ssoReplaceAll, ssoPrompt);
17485:
17486:
17487:
            TSynSearchOptions = set of TSynSearchOption;
17488:
17489:
17490:
17491: //* Project : Base Include RunTime Lib for maXbox *Name: pas includebox.inc
```

```
17492: -----
17493: procedure drawPolygon(vPoints: TXYVector; cFrm: TForm);
17494: procedure drawPlot(vPoints: TXYVector; cFrm: TForm; vcolor: integer);
17495: procedure SaveCanvas(vCanvas: TCanvas; FileName: string);
17496: procedure SaveCanvas2(vCanvas: TCanvas; FileName: string);
17497: function CheckStringSum(vstring: string): integer;
17498: function HexToInt(HexNum: string): LongInt;
17499: function IntToBin(Int: Integer): String;
17500: function BinToInt(Binary: String): Integer;
17501: function HexToBin(HexNum: string): string; external2
17502: function BinToHex(Binary: String): string;
17503: function IntToFloat(i: Integer): double;
17504: function AddThousandSeparator(S: string; myChr: Char): string;
17505: function Max3(const X,Y,Z: Integer): Integer;
17506: procedure Swap(var X,Y: char); // faster without inline
17507: procedure ReverseString(var S: String);
17508: function CharToHexStr(Value: Char): string;
17509: function CharToUniCode(Value: Char): string;
17510: function Hex2Dec(Value: Str002): Byte;
17511: function HexStrCodeToStr(Value: string): string;
17512: function HexToStr(i: integer; value: string): string;
17513: function UniCodeToStr(Value: string): string;
17514: function CRC16(statement: string): string;
17515: function SearchForSubstrings(aStrList: TStrings; aSearchStr1, aSearchStr2: string): string;
17516: procedure SearchAndReplace(aStrList: TStrings; aSearchStr, aNewStr: string);
17517: procedure ShowInterfaces(myFile: string);
17518: function Fact2(av: integer): extended;
17519: Function BoolToStr(B: Boolean): string; 17520: Function GCD(x, y : LongInt): LongInt; 17521: function LCM(m,n: longint): longint;
17522: function GetASCII: string;
17523: function GetItemHeight(Font: TFont): Integer;
17524: function myPlaySound(s: pchar; flag,syncflag: integer): boolean;
17525: function myGetWindowsDirectory(lpBuffer: PChar; uSize: longword): longword;
17526: function getHINSTANCE: longword
17527: function getHMODULE: longword;
17528: function GetASCII: string;
17529: function ByteIsOk(const AByte: string; var VB: Byte): boolean; 17530: function WordIsOk(const AWord: string; var VW: Word): boolean;
17531: function TwentyFourBitValueIsOk(const AValue: string; var VI: Integer): boolean;
17532: function LongIsOk(const ALong: string; var VC: Cardinal): boolean;
17533: function SafeStr(const s: string): string;
17534: function ExtractUrlPath(const FileName: string): string;
17535: function ExtractUrlName(const FileName: string): string;
17536: function IsInternet: boolean;
17537: function RotateLeft1Rit u32( Value: uint32): uint32;
17538: procedure LinearRegression(const KnownY:array of Double; const KnownX: array of Double; NData:Int; var
       LF:TStLinEst; ErrorStats : Boolean);
17539: procedure getEnvironmentInfo;
17540: procedure AntiFreeze;
17541: function GetCPUSpeed: Double;
17542: function IsVirtualPcGuest : Boolean;
17543: function IsVmWareGuest : Boolean;
17544: procedure StartSerialDialog;
17545: function IsWoW64: boolean;
17546: function IsWow64String(var s: string): Boolean;
17547: procedure StartThreadDemo;
17548: Function RGB(R,G,B: Byte): TColor;
17549: Function Sendln(amess: string): boolean;
17550: Procedure maXbox;
17551: Function AspectRatio(aWidth, aHeight: Integer): String;
17552: function wget(aURL, afile: string): boolean;
17553: procedure PrintList(Value: TStringList);
17554: procedure PrintImage(aValue: TBitmap; Style: TBitmapStyle);
17555: procedure getEnvironmentInfo;
17556: procedure AntiFreeze;
17557: function getBitmap(apath: string): TBitmap;
17558: procedure ShowMessageBig(const aText : string);
17559: function YesNoDialog(const ACaption, AMsg: string): boolean;
17560: procedure SetArrayLength2String(arr: T2StringArray; asize1, asize2: integer);
17561: procedure SetArrayLength2Integer(arr: T2IntegerArray; asize1, asize2: integer);
17562: //function myStrToBytes(const Value: String): TBytes;
17563: //function myBytesToStr(const Value: TBytes): String;
17564: function SaveAsExcelFile(AGrid: TStringGrid; ASheetName, AFileName: string; open: boolean): Boolean;
17565: function getBitmap(apath: string): TBitmap;
17566: procedure ShowMessageBig(const aText : string);
17567: Function StrToBytes(const Value: String): TBytes; 17568: Function BytesToStr(const Value: TBytes): String;
17569: function SaveAsExcelFile(AGrid: TStringGrid; ASheetName, AFileName: string; open: boolean): Boolean;
17570: function ReverseDNSLookup(const IPAdrs:String;const DNSServer:String;Timeout,Retries:Int;var
       HostName:String):Bool;
17571: function FindInPaths(const fileName, paths : String) : String;
17572: procedure initHexArray(var hexn: THexArray);
17573: function josephusG(n,k: integer; var graphout: string): integer;
17574: function isPowerof2(num: int64): boolean;
17575: function powerOf2(exponent: integer): int64;
17576: function getBigPI: string;
17577: procedure MakeSound(Frequency{Hz}, Duration{mSec}: Integer; Volume: TVolumeLevel; savefilePath: string); 17578: function GetASCIILine: string;
```

```
17579: procedure MakeComplexSound(N:integer\{stream \ \# \ to \ use\}; freqlist:TStrings; Duration\{mSec\}: Integer; 17580: pinknoise: boolean; shape: integer; Volume: TVolumeLevel);
17581: procedure SetComplexSoundElements(freqedt,Phaseedt,AmpEdt,WaveGrp:integer)
17582:
        procedure AddComplexSoundObjectToList(newf,newp,newa,news:integer; freqlist: TStrings);
17583: function mapfunc(ax, in_min, in_max, out_min, out_max: integer): integer;
17584: function mapmax(ax, in_min, in_max, out_min, out_max: integer): integer; 17585: function isKeypressed: boolean;
17586: function Keypress: boolean;
17587: procedure StrSplitP(const Delimiter: Char; Input: string; const Strings: TStrings);
17588: function ReadReg(Base: HKEY; KeyName, ValueName: string): string;
17589: function ReadRegistry(Base: HKEY; KeyName, ValueName: string): string;
17590: function GetOSName: string;
17591: function GetOSVersion: string;
17592: function GetOSNumber: string;
17593: function getEnvironmentString: string;
17594: procedure StrReplace(var Str: String; Old, New: String);
17595: procedure SendEmail(mFrom, mTo, mSubject, mBody, mAttachment: variant);
17596: function getTeamViewerID: string;
17597: Procedure RecurseDirectory(Dir:String; IncludeSubs:boolean; callback:TFileCallbackProcedure);
17598: Procedure RecurseDirectory2(Dir: String; IncludeSubs: boolean);
17599: procedure WinInet_HttpGet(const Url: string; Stream:TStream);
17600: procedure GetQrCode2(Width, Height: Word; Correct_Level: string; const Data: string; apath: string);
17601: function StartSocketService: Boolean;
17602: procedure StartSocketServiceForm;
17603: function GetFileList(FileList: TStringlist; apath: string): TStringlist;
17604: function GetFileList1(apath: string): TStringlist;
17605: procedure LetFileList(FileList: TStringlist; apath: string);
17606: procedure StartWeb(aurl: string);
17607: function GetTodayFiles(startdir, amask: string): TStringlist;
17608: function PortTCPIsOpen(dwPort : Word; ipAddressStr: String): boolean;
17609: function JavahashCode(val: string): Integer;
17610: procedure PostKeyEx32(key: Word; const shift: TShiftState; specialkey: Boolean); 17611: procedure SaveBytesToFile2(const Data: Sysutils.TBytes; const FileName: string);
17612: Procedure HideWindowForSeconds(secs: integer; apphandle, aself: TForm); {//3 seconds}
17613: Procedure HideWindowForSeconds2(secs: integer; apphandle, aself: TForm); {//3 seconds}
17614: Procedure ConvertToGray(Cnv: TCanvas);
17615: function GetFileDate(aFile:string; aWithTime:Boolean):string;
17616: procedure ShowMemory;
17617: function ShowMemory2: string;
17618: function getHostIP: string;
17619: procedure ShowBitmap(bmap: TBitmap);
17620: function GetOsVersionInfo: TOSVersionInfo;
                                                                 //thx to wischnewski
17621:
17622:
17623: // News of 3.9.8 up
17624: Halt-Stop Program in Menu, WebServer2, Stop Event Recompile,
17625: Conversion Routines, Prebuild Forms, more RCData, DebugOutString
17626: CodeSearchEngine to search code patterns in /examples <Ctrl F3>
17627: JyChart - TJyChart Component - 2009 Public
17628: MemoryLeakReport in ini-file (MEMORYREPORT=Y)
17629: PerlRegEx PCRE obj lib included, Perl & Python Syntax Editor, bitbox3 logic example 17630: TAdoQuery.SQL.Add() fixed, ShLwAPI extensions, Indy HTTPHeader Extensions
17631: DMath DLL included incl. Demos
17632: Interface Navigator menu/View/Intf Navigator
17633: Unit Explorer menu/Debug/Units Explorer 17634: EKON 16 Slides ..\maxbox3\docs\utils Excel Export maXcel
17635: Tutorial 19 WinCOM with Arduino Tutorial 20 RegEx Coding
17636: Script History to 9 Files WebServer light /Options/Addons/WebServer
17637: Full Text Finder, JVSimLogic Simulator Package
17638: Halt-Stop Program in Menu, WebServer2, Stop Event 17639: Conversion Routines, Prebuild Forms, CodeSearch
17640: Halt-Stop Program in Menu, WebServer2, Stop Event Recompile,
17641: Conversion Routines, Prebuild Forms, more RCData, DebugOutString
17642: CodeSearchEngine to search code patterns in /examples <Ctrl F3>
17643: JvChart - TJvChart Component - 2009 Public, mXGames, JvgXMLSerializer, TJvPaintFX
17644: Compress-Decompress Zip, Services Tutorial22, Synopse framework, PFDLib
17645: SynEdit API, Macro, Macro Recorder, DLL Spy, Configuration Tutorial
17646: IDE Reflection API, Session Service Shell S3
17647: additional SynEdit API, isKeyPressed Routine, Bookmarks, OpenToolsAPI Catalog (OTAC)
17648: Class TMonitor, Configuration Tutorial maxbox starter25.pdf, Chess.dll Game
17649: arduino map() function, PMRandom Generator
17650: StBarCode Lib, StreamReaderClass, BarCode Package, Astro Package
17651: more ShellaPI, add 32 more units, Simulated Annealing, GenAlgo 17652: REST Test Lib, Multilang Component, Forth Interpreter
17653: New Macros, Sendmail (instant email), DevCUnits, Tetris Addon
17654: DCOM, MDAC, MIDI, TLS support, Posmarks, Utils Addon
17655: Routines for LaTeX/PS, Utils Addon, Indy Package3, TAR Archive, @Callbacks
17656: Routines for LaTeX/PS, Utils Addon, Indy Package3, TAR Archive, @Callbacks 17657: First LCL of Lazarus, CmdLine API, ToDo List, 36 more Units preCompiled
17658: QRCode Service, add more CFunctions like CDateTime of Synapse
17659: Gamma Functions, IndyPackage4, HotLog Threadable, FormTemplateLibrary FTL
17660: Nonlinear regression, ADO Workbench Addon, Assign fixing, IntfNavigator fixing, Applet
17661: 30 more Units preCompiled, QRCode Indy Service, more CFunctions like CFill or SRand 17662: RestartDialog, RTF, SQL Scanner, RichEdit, 15 more Units
17663: Tool Section, SOAP Tester, Hot Log Logger2, TCPPortScan, 28 more Units
17664: BOLD Package, Indy Package5, maTRIx. MATHEMAX
17665: SPS Utils WDOS, Plc BitBus (PetriNet), 40 more units
17666: emax layers: system-package-component-unit-class-function-block
17667: HighPrecision Timers, Indy Package6, AutoDetect, UltraForms
```

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17668: Reversi, GOL, bugfixing, 8 more units, Tutorial 24 Clean Code 17669: Tutorial 18_3 RGB LED, OpenGL Geometry, maxpix, statictext
17670: OpenGL Game Demo: ..Options/Add Ons/Reversi
17671: IBUtils Refactor, InterBase Package, DotNet Routines (JvExControls)
17672: add 31 units, mX4 Introduction Paper, more Socket&Streams, ShortString Routines
17673: 7% performance gain (hot spot profiling)
17674: PEP -Pascal Education Program , GSM Module, CGI, PHP Runner
17675: add 42 + 22 (64 units), memcached database, autobookmark, Alcinoe PAC, IPC Lib 17676: Orpheus PAC, AsyncFree Library advapi32 samples, FirebirdExp+MySQL units
17677: FBX Lib, psAPI, SMS Cell Module, OpenGL, Borland Tools
17678:
17679: add routines in 3.9.7.5
17680: 097: procedure RIRegister_BarCodeScaner_Routines(S: TPSExec);
17681: 996: procedure RIRegister_DBCtrls_Routines(S: TPSExec);
17682: 069: procedure RIRegister_IdStrings_Routines(S: TPSExec);
17683: 516: procedure RIRegister_JclMultimedia_Routines(S: TPSExec);
17684: 215: procedure RIRegister_PNGLoader_Routines(S: TPSExec);
17685: 374: procedure RIRegister_SerDlgs_Routines(S: TPSExec);
17686: 777: procedure RIRegister_LinarBitmap_Routines(S: TPSExec);
17687:
17689:
         SelftestPEM;
17690:
         SelfTestCFundamentUtils;
17691:
         SelfTestCFileUtils;
17692:
         SelfTestCDateTime;
17693:
          SelfTestCTimer;
17694:
         SelfTestCRandom
         17695:
17696:
17697:
17698:
          // Note: There's no need for installing a client certificate in the
         11
                   webbrowser. The server asks the webbrowser to send a certificate but if nothing is installed the software will work because the server
17699:
17700:
17701:
         11
                   doesn't check to see if a client certificate was supplied. If you want you can install:
17702:
         11
17703:
                   file: c_cacert.p12
17704:
          11
                   password: c_cakey
17705:
17706:
         TGraphicControl = class(TControl)
17707:
         private
17708:
           FCanvas: TCanvas;
17709:
           procedure WMPaint(var Message: TWMPaint); message WM PAINT;
17710:
         protected
17711:
           procedure Paint; virtual;
            property Canvas: TCanvas read FCanvas;
17712:
17713:
         public
            constructor Create(AOwner: TComponent); override;
17714:
            destructor Destroy; override;
17715:
17716:
17717:
17718:
         TCustomControl = class(TWinControl)
17719:
         private
17720:
            FCanvas: TCanvas;
17721:
            procedure WMPaint(var Message: TWMPaint); message WM_PAINT;
17722:
         protected
17723:
           procedure Paint; virtual;
            procedure PaintWindow(DC: HDC); override;
17724:
17725:
            property Canvas: TCanvas read FCanvas
17726:
         public
            constructor Create(AOwner: TComponent); override;
17727:
17728:
            destructor Destroy; override;
17729:
          end;
17730:
           RegisterPublishedProperties;
            ('ONCHANGE', 'TNotifyEvent', iptrw);
('ONCLICK', 'TNotifyEvent', iptrw);
17731:
17732:
            ('ONDBLCLICK', 'TNotifyEvent', iptrw);
17733:
         ('ONDBLCLICK', 'TNotifyEvent', iptrw);
('ONENTER', 'TNotifyEvent', iptrw);
('ONEXIT', 'TNotifyEvent', iptrw);
('ONKEYDOWN', 'TKeyEvent', iptrw);
('ONKEYPRESS', 'TKeyPressEvent', iptrw);
('ONMOUSEDOWN', 'TMouseEvent', iptrw);
('ONMOUSEMOVE', 'TMouseMoveEvent', iptrw);
('ONMOUSEUP', 'TMouseMoveEvent', iptrw);
('ONMOUSEUP', 'TMouseEvent', iptrw);
17734:
17735:
17736:
17737:
17738:
17739:
17740:
17741: /
17742:
          // To stop the while loop, click on Options/Show Include (boolean switch)!
17743:
          Control a loop in a script with a form event:
         IncludeON; //control the while loop
while maxform1.ShowInclude1.checked do begin //menu event Options/Show Include
17744:
17745:
17746:
17747: //
17749: //----
17750:
         using config file maxboxdef.ini
                                                   menu/Help/Config File
17751:
17752: //*** Definitions for maXbox mX3 ***
17753: [FORM]
17755: FONTSIZE=14
17756: EXTENSION=txt
```

```
17757: SCREENX=1386
17758: SCREENY=1077
17759: MEMHEIGHT=350
17760: PRINTFONT=Courier New //GUI Settings
17761: LINENUMBERS=Y
                      //line numbers at gutter in editor at left side
17762: EXCEPTIONLOG=Y
17762: EXCEPTIONLOG=Y //store excepts and success in 2 log files see below! - menu Debug/Show Last Exceptions
17763: EXECUTESHELL=Y //prevents execution of ExecuteShell() or ExecuteCommand()
17764: BOOTSCRIPT=Y
                       //enabling load a boot script
17765: MEMORYREPORT=Y //shows memory report on closing maxbox
17766: MACRO=Y
                     //expand macros (see below) in code e.g. #path:E:\maxbox\maxbox3\docs\
17767: NAVIGATOR=N
                       //shows function list at the right side of editor
                       //width of the right side interface list <CTRL L>
17768: NAVWIDTH=350
17769: AUTOBOOKMARK=Y //sets on all functions a bookmark to jump
17771: IPPORT=8080 //for internal webserver - menu /Options/Add Ons/WebServer 17772: IPHOST=192.168.1.53
17773: ROOTCERT=filepathY
17774: SCERT=filepathY
17775: RSAKEY=filepathY
17776: VERSIONCHECK=Y
17777:
17778: using Logfile: maxboxlog.log , Exceptionlogfile: maxboxerrorlog.txt
17779:
17780: Also possible to set report memory in script to override ini setting
17781: procedure Set_ReportMemoryLeaksOnShutdown(abo: boolean)
17782:
17783:
17784: After Change the ini file you can reload the file with ../Help/Config Update
17785:
17786: //-----
17788: //-----
17789: //*** Definitions for maXMail ***
17790: //sendemail, HOST=mail.hover.com, PORT=465 (SSL)
17791: [MAXMAIL]
17792: HOST=getmail.softwareschule.ch
17793: USER=mailusername
17794: PASS=password
17795: PORT=110
17796: SSL=Y
17797: BODY=Y
17798: LAST=5
17799:
17800: ADO Connection String:
17801: Provider=MSDASQL;DSN=mx3base;Uid=sa;Pwd=admin
17802:
17803: OpenSSL Lib: unit ssl openssl lib;
17804: { $ IFDEF CIL }
17805: const
         17806:
17807:
17808:
         DLLUtilName = 'libcrypto.so';
17809:
        DLLSSLName = 'ssleay32.dll';
DLLUtilName = 'libeay32.dll';
17810:
17811:
17812:
         \{$ENDIF\}
17813: {$ELSE}
17814: var
        {$IFNDEF MSWINDOWS}
{$IFDEF DARWIN}
17815:
17816:
           DLLSSLName: string = 'libssl.dylib';
17817:
           DLLUtilName: string = 'libcrypto.dylib';
17818:
17819:
           DLLSSLName: string = 'libssl.so';
17820:
           DLLUtilName: string = 'libcrypto.so';
17821:
17822:
           {$ENDIF}
17823:
           SELSE }
         DLLSSLName: string = 'ssleay32.dll';
DLLSSLName2: string = 'libssl32.dll';
DLLUtilName: string = 'libeay32.dll';
17824:
17825:
17826:
17827:
         { $ENDIF }
17828: { $ENDIF }
17829:
17830:
17831:
17832: /
17834: //-----
17835:
         asm #name #hostmAPSN2APSN211le, #head, max: APSN21: 04.01.2014 19:05:50
17836:
       E:\maxbox\maxbox3\docs\maxbox_extract_funclist399.txt end
17837:
17838: //Tag Macros
17839:
         asm #name, #date, #host, #path, #file, #head, #sign #tech #net end
17840:
17841:
17842: //Tag Macros
17843: 10188: SearchAndCopy(memol.lines, '#name', getUserNameWin, 11); 17844: 10189: SearchAndCopy(memol.lines, '#date', datetimetoStr(now), 11);
```

```
17845: 10190: SearchAndCopy(memol.lines, '#host', getComputernameWin, 11);
17846: 10191: SearchAndCopy(memol.lines, '#path', fpath, 11);
17847: 10192: SearchAndCopy(memol.lines, '#file', fname, 11);
17848: 10199: SearchAndCopy(memol.lines, '#fils', fname +' '+SHAl(Act_Filename), 11);
17849: 10193: SearchAndCopy(memol.lines, '#locs', intToStr(getCodeEnd), 11);
17850: 10194: SearchAndCopy(memol.lines, '#perf', perftime, 11);
17851: 10195: SearchAndCopy(memol.lines, '#sign', Format('%s: %s: %s',
                                             [getUserNameWin, getComputernameWin, datetimetoStr(now)
 17853: 10196: SearchAndCopy(memo1.lines, '#head',Format('%s: %s: %s %s '
 17854: \  \  \, 10197: \  \, [\texttt{getUserNameWin}, \ \texttt{getComputernameWin}, \ \texttt{datetimetoStr(now)}, \ \texttt{Act\_Filename]}), \\ 11) \  \, inspection \  \, 11) \  \, inspecification \  \, 11) \  \, inspecification
 17855: [getUserNameWin, getComputernameWin, datetimetoStr(now), Act_Filename]),11);
17856: 10198: SearchAndCopy(memol.lines, '#tech',Format('perf: %s threads: %d %s %s',
 17857: [perftime, numprocessthreads, getIPAddress(getComputerNameWin), timetoStr(time), mbversion]), 11);
17858: 10298: SearchAndCopy(memo1.lines, '#net',Format('DNS: %s; local IPs: %s; local IP: %s',
17859: [getDNS, GetLocalIPs, getIPAddress(getComputerNameWin)]), 10);
 17860:
 17861: //#tech!perf: 0:0:29.297 threads: 3 192.168.174.1 19:26:30
 17862
 17863: //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);
 17864:
 17865:
 17866:
 17867:
 17868:
 17869:
 17870:
 17871: 10198: SearchAndCopy(memol.lines, '#tech'perf: threads: 2 192.168.1.53 19:05:50 3.9.9.84
 17872:
                                            [perftime, numprocess threads, getIPAddress (getComputerNameWin), time to Str(time), mbversion]), \\ 11); in the structure of the structure o
 17873: //#tech184perf: threads: 2 192.168.1.53 19:05:50 3.9.9.84 17874: SearchAndCopy(memol.lines, 'maxbox_extract_funclist399.txt
 17875:
 17876: /
 17878: //----
                                   while I < sl.Count do begin</pre>
 17880:
                                         \label{eq:condition} \begin{tabular}{ll} if $MatchesMask(s1[I], '*/? TODO ([a-z0-9_]*#[1-9]#)*:*') $ then \\ \textbf{if} $MatchesMask(s1[I], '*/? TODO (?*#?#)*:*') $ then \\ \end{tabular}
 17881: //
 17882:
                                          BreakupToDo(Filename, sl, I, 'ToDo', True, True) // full info TODO else if MatchesMask(sl[I], '*/? DONE (?*#?#)*:*') then
 17883:
 17884:
                                        else if matchesmask(sl[i], '*/? DONE (?*#?#)*:*') then
BreakupToDo(Filename, sl, I, 'DONE', True, True) // full info DONE
else if MatchesMask(sl[i], '*/? TODO (#?#)*:*') then
BreakupToDo(Filename, sl, I, 'TODO', False, True) // only priority info TODO
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
 17885:
 17886:
 17887:
 17888:
 17889:
 17890:
                                         BreakupToDo(Filename, sl, I, 'TODO', False, False) // custom TODO else if MatchesMask(sl[I], '*/?*DONE*:*') then
 17891:
 17893:
                                              BreakupToDo(Filename, sl, I, 'DONE', False, False); // custom DONE
 17894:
                                         Inc(I);
 17895:
                                   end;
 17896:
 17897:
 17898: //----
 17900: //----
                            file : unit uPSI_fMain.pas;
                                                                                                                                                                 {$OTAP} Open Tools API Catalog
 17902:
                          // Those functions concern the editor and preprocessor, all of the IDE
 17903:
                          Example: Call it with maxform1.InfolClick(self)
                         Note: Call all Methods with maxForm1., e.g.:
maxForm1.ShellStylelClick(self);
 17904:
 17905:
 17906:
 17907:
                      procedure SIRegister_fMain(CL: TPSPascalCompiler);
 17908: begin
 17909:
                         Const('BYTECODE','String').SetString( 'bytecode.txt
                        Const('BYTECODE', String').SetString('PS tring').SetString('PS Scriptfiles (*.txt)|*.TXT Const('PSTEXT', 'String').SetString('PS Modelfiles (*.uc)|*.UC Const('PSPASCAL', 'String').SetString('PS Pascalfiles (*.pas)|*.PAS Const('PSINC', 'String').SetString('PS Includes (*.inc)|*.INC
 17910:
 17911:
 17912:
 17913:
                         Const('DEFFILENAME', 'String').SetString('firstdemo.txt
Const('DEFINIFILE', 'String').SetString('maxboxdef.ini
 17914:
 17915:
 17916:
                          Const('EXCEPTLOGFILE','String').SetString( 'maxboxerrorlog.txt
 17917:
                         Const('ALLFUNCTIONSLIST','String').SetString( 'upsi_allfunctionslist.txt
Const('ALLFUNCTIONSLISTPDF','String').SetString( 'maxbox_functions_all.pdf
 17918:
                         Const ('ALLOBJECTSLIST', 'String').SetString( 'docs\VCL.pdf
Const('ALLOBJECTSLIST', 'String').SetString( 'docs\VCL.pdf
Const('ALLRESOURCELIST', 'String').SetString( 'docs\upsi_allresourcelist.txt
 17919:
 17920:
                         Const('ALLUNITLIST', String').SetString( 'docs\maxbox3_9.xml');
Const('INCLUDEBOX', 'String').SetString( 'pas_includebox.inc
Const('BOOTSCRIPT', 'String').SetString( 'maxbootscript.txt
 17921:
 17922:
 17923:
                        Const('MBVERSION','String').SetString('Maxion
Const('MBVERSION','String').SetString('3.9.9
Const('WERSION','String').SetString('3.9.9.94
Const('MBVER','String').SetString('399
Const('MBVERI','Integer').SetInt(399);
                                                                                                                                                     '3.9.9.94
 17924:
 17925:
 17926:
 17927:
 17928:
                                               'MBVERIALL','Integer').SetInt(39994);
                         Const (
                        Const('MBVERTABLE,'Integer').SetInt(39994),
Const('EXENAME','String').SetString( 'maxbox3.exe
Const('MXSITE','String').SetString( 'http://www.softwareschule.ch/maxbox.htm
Const('MXVERSIONFILE','String').SetString( 'http://www.softwareschule.ch/maxvfile.txt
Const('MXINTERNETCHECK','String').SetString( 'www.ask.com
 17929:
 17930:
 17931:
 17932:
 17933: Const('MXMAIL','String').SetString('max@kleiner.com
```

```
Const('TAB','Char').SetString( #$09);
Const('CODECOMPLETION','String').SetString( 'bds_delphi.dci
17934:
17935:
                                   SIRegister_TMaxForm1(CL);
17936:
17937:
17938:
17939:
                                       with FindClass('TForm'), 'TMaxForm1') do begin
                                              memo2', 'TMemo', iptrw);
memo1', 'TSynMemo', iptrw);
17940:
17941:
                                                 CB1SCList', 'TComboBox', iptrw);
mxNavigator', 'TComboBox', iptrw);
17942:
17943:
                                                 INTRO IN THE STRING TO THE STRING THE S
17944:
17945:
17946:
                                                                                                                                                                                                        //3.9.6.4
17947:
17948:
                                               PSScript', 'TPSScript', iptrw);
PS3DllPlugin', 'TPSDllPlugin', iptrw);
MainMenul', 'TMainMenu', iptrw);
Programl', 'TMenuItem', iptrw);
Compilel', 'TMenuItem', iptrw);
Filesl', 'TMenuItem', iptrw);
openl', 'TMenuItem', iptrw);
Save2', 'TMenuItem', iptrw);
Obtional', 'TMenuItem', iptrw);
17949:
17950:
17951 .
17952:
17953:
17954:
17955:
                                                Options1', 'TMenuItem', iptrw);
Savebefore1', 'TMenuItem', iptrw);
Largefont1', 'TMenuItem', iptrw);
sBytecode1', 'TMenuItem', iptrw);
17956:
17957:
17958:
17959:
                                                 Saveas3', 'TMenuItem', iptrw);
Clear1', 'TMenuItem', iptrw);
Slinenumbers1', 'TMenuItem', iptrw);
17960:
17961:
17962:
                                                 About1', 'TMenuItem', iptrw);
Search1', 'TMenuItem', iptrw);
17963:
17964:
                                                 SynPasSyn1', 'TSynPasSyn', iptrw);
17965:
                                                synrassyn1 , isynrassyn , iptrw)/
memol', 'TSynMemo', iptrw);
SynEditSearchl', 'TSynEditSearch', iptrw);
17966:
17967:
                                                SynEditSearch:, 'ISynEditSearch, I
WordWrapl', 'TMenuItem', iptrw);
XPManifestl', 'TXPManifest', iptrw);
SearchNextl', 'TMenuItem', iptrw);
Replacel', 'TMenuItem', iptrw);
17968:
17969:
17970:
17971:
                                                 PSImport_Controls1', 'TPSImport_Controls', iptrw);
PSImport_Classes1', 'TPSImport_Classes', iptrw);
17972:
17973:
17974:
                                                 ShowInclude1', 'TMenuItem', iptrw);
SynEditPrint1', 'TSynEditPrint', iptrw);
17975:
                                                  Printoutl', 'TMenuItem', iptrw);
                                               Printoutl', 'TMenuItem', iptrw);
mmPrintColorsl', 'TMenuItem', iptrw);
dlgFilePrint', 'TFrintDialog', iptrw);
dlgPrintFontl', 'TFontDialog', iptrw);
mnuPrintFontl', 'TMenuItem', iptrw);
Includel', 'TMenuItem', iptrw);
CodeCompletionListl', 'TMenuItem', iptrw);
IncludeListl', 'TMenuItem', iptrw);
ImageListl', 'TImageList', iptrw);
ImageList2', 'TImageList', iptrw);
CoolBarl', 'TCoolBar', iptrw);
ToolBarl', 'TToolButton', iptrw);
ToolButton2', 'TToolButton', iptrw);
17977:
17978:
17979:
17980:
17982:
17983:
17984:
17985:
17986:
17987:
17988:
                                                  ToolButton2', 'TToolButton', iptrw);
17989:
                                                  tbtnFind', 'TToolButton', iptrw);
17990:
                                                 tbtnfind', 'TroolButton', iptrw);
tbtnCompile', 'TroolButton', iptrw);
tbtnTrans', 'TroolButton', iptrw);
tbtnUseCase', 'TroolButton', iptrw);
toolbtnTutorial', 'TroolButton', iptrw);
17991:
17992:
17993:
                                                                                                                                                                                                                                 //3.8
17994:
                                                 totheristics and total t
17995:
17996:
17997:
17998:
                                                 statusBarl', 'TStatusBar', iptrw);
SaveOutputl', 'TMenuItem', iptrw);
17999:
18000:
                                                Saveutputl', 'Imenuitem', iptrw);
ExportClipboardl', 'TMenuItem', iptrw);
Closel', 'TMenuItem', iptrw);
Manuall', 'TMenuItem', iptrw);
About2', 'TMenuItem', iptrw);
18001:
18002:
18003:
18004:
18005:
                                                  loadLastfile1', 'TMenuItem', iptrw);
                                                 imglogo', 'TImage', iptrw);
cedebug', 'TPSScriptDebugger', iptrw);
18006:
18007:
                                                 debugPopupMenul', 'TPopupMenu', iptrw);
BreakPointMenu', 'TMenuItem', iptrw);
18008:
18009:
                                                Decompile1', 'TMenuItem', iptrw);
StepIntol', 'TMenuItem', iptrw);
StepOut1', 'TMenuItem', iptrw);
Reset1', 'TMenuItem', iptrw);
18010:
18011:
18012:
                                                 Resetl', 'TMenuItem', iptrw);
DebugRunl', 'TMenuItem', iptrw);
18013:
18014:
                                                 PSImport_ComObj1', 'TPSImport_ComObj', iptrw);
PSImport_StdCtrls1', 'TPSImport_StdCtrls', iptrw);
PSImport_Forms1', 'TPSImport_Forms', iptrw);
18015:
18016:
18017:
                                                 PSImport_Forms1', 'IPSImport_Forms', Iptrw);
PSImport_DateUtils1', 'IPSImport_DateUtils', iptrw);
tutorial4', 'TMenuItem', iptrw);
ExporttoClipboard1', 'TMenuItem', iptrw);
ImportfromClipboard1', 'TMenuItem', iptrw);
18018:
18019:
18020:
18021:
                                                 N4', 'TMenuItem', iptrw);
```

```
N5', 'TMenuItem', iptrw);
N6', 'TMenuItem', iptrw);
18023:
18024:
                              ImportfromClipboard2', 'TMenuItem', iptrw);
tutoriall', 'TMenuItem', iptrw);
18026
                              N7', 'TMenuItem', iptrw);
ShowSpecChars1', 'TMenuItem', iptrw);
OpenDirectory1', 'TMenuItem', iptrw);
18027:
18028:
18029:
                             OpenIrectory1', 'TMenuItem', iptrw);
procMess', 'TMenuItem', iptrw);
tbtnUseCase', 'TToolButton', iptrw);
ToolButton7', 'TToolButton', iptrw);
EditFont1', 'TMenuItem', iptrw);
UseCase1', 'TMenuItem', iptrw);
18030:
18031:
18032:
18033:
                             UseCasel', 'TMenuItem', iptrw);
tutorial21', 'TMenuItem', iptrw);
OpenUseCasel', 'TMenuItem', iptrw);
PSImport_DB1', 'TPSImport_DB', iptrw);
tutorial31', 'TMenuItem', iptrw);
SynHTMLSyn1', 'TSynHTMLSyn', iptrw);
HTMLSyntax1', 'TMenuItem', iptrw);
ShowInterfaces1', 'TMenuItem', iptrw);
Tutorial5', 'TMenuItem', iptrw);
18035:
18036:
18037:
18038:
18039:
18040:
18041:
18042:
                              AllFunctionsList1', 'TMenuItem', iptrw);
ShowLastException1', 'TMenuItem', iptrw);
18043:
18044:
                              PlayMP31', 'TMenuItem', iptrw);
SynTeXSyn1', 'TSynTeXSyn', iptrw);
texSyntax1', 'TMenuItem', iptrw);
18045:
18046:
18047:
18048:
                                           'TMenuItem', iptrw);
                             GetEMails1', 'TMenuItem', iptrw);
SynCppSyn1', 'TSynCppSyn', iptrw);
CSyntax1', 'TMenuItem', iptrw);
Tutorial6', 'TMenuItem', iptrw);
18049:
18050:
18051:
18052:
                              Newl', 'TMenuItem', iptrw);
AllObjectsListl', 'TMenuItem', iptrw);
LoadBytecodel', 'TMenuItem', iptrw);
CipherFilel', 'TMenuItem', iptrw);
18053:
18054:
18055:
18056:
                             N9', 'TMenuItem', iptrw);
N10', 'TMenuItem', iptrw);
18058:
                              Tutorial11', 'TMenuItem', iptrw);
Tutorial71', 'TMenuItem', iptrw);
18059:
18060:
                             Tutorial/1', 'TmenuItem', iptrw);
UpdateServicel', 'TMenuItem', iptrw);
PascalSchooll', 'TMenuItem', iptrw);
Tutorial81', 'TMenuItem', iptrw);
DelphiSitel', 'TMenuItem', iptrw);
Outputl', 'TMenuItem', iptrw);
18061:
18062:
18063:
18064:
                            Outputl', 'TMenuItem', iptrw);
TerminalStylel', 'TMenuItem', iptrw);
ReadOnlyl', 'TMenuItem', iptrw);
ShellStylel', 'TMenuItem', iptrw);
BigScreenl', 'TMenuItem', iptrw);
Tutorial9l', 'TMenuItem', iptrw);
SaveOutput2', 'TMenuItem', iptrw);
SaveScreenshot', 'TMenuItem', iptrw);
Tutorial10l', 'TMenuItem', iptrw);
SQLSyntaxl', 'TMenuItem', iptrw);
SynSQLSynl', 'TSynSQLSyn', iptrw);
Consolel', 'TMenuItem', iptrw);
SynXMLSynl', 'TSynXMLSyn', iptrw);
XMLSyntaxl', 'TMenuItem', iptrw);
ComponentCountl', 'TMenuItem', iptrw);
18065:
18066:
18067:
18068:
18069:
18071:
18072:
18073:
18074:
18075:
18076:
18077:
18078:
18079:
18080:
                              ComponentCount1', 'TMenuItem', iptrw);
                              NewInstancel', 'TMenuItem', iptrw);
toolbtnTutorial', 'TToolButton', iptrw);
Memoryl', 'TMenuItem', iptrw);
18081:
18082:
18083:
18084:
                              SynJavaSyn1', 'TSynJavaSyn', iptrw);
                              SyntaxOntax1', 'TMenuItem', iptrw);
SyntaxCheck1', 'TMenuItem', iptrw);
Tutorial10Statistics1', 'TMenuItem', iptrw);
ScriptExplorer1', 'TMenuItem', iptrw);
18085:
18086:
18087:
18088:
                             FormOutputl', 'TMenuItem', iptrw);
ArduinoDumpl', 'TMenuItem', iptrw);
AndroidDumpl', 'TMenuItem', iptrw);
GotoEndl', 'TMenuItem', iptrw);
AllResourceListl', 'TMenuItem', iptrw);
18089:
18090:
18091:
18092:
18093:
                             AllResourceList!', 'TMenuItem', iptrw);
ToolButton4', 'TToolButton', iptrw);
tbtn6res', 'TToolButton', iptrw);
Tutoriall1Forms1', 'TMenuItem', iptrw);
Tutoriall2SQL1', 'TMenuItem', iptrw);
ResourceExplore1', 'TMenuItem', iptrw);
Infol', 'TMenuItem', iptrw);
N12', 'TMenuItem', iptrw);
CryptoBox1', 'TMenuItem', iptrw);
Tutoriall3Ciptering1', 'TMenuItem', iptrw);
18094:
18095:
18096:
18097:
18098:
18099:
18100:
18101:
                               Tutorial13Ciphering1', 'TMenuItem', iptrw);
                              CipherFile2', 'TMenuItem', iptrw);
N13', 'TMenuItem', iptrw);
ModulesCount1', 'TMenuItem', iptrw);
18103:
18104:
18105:
                              AddOns2', 'TMenuItem', iptrw);
18106:
                             Addons2', 'Menditem', iptrw);
N4GewinntGame1', 'TMenuItem', iptrw);
DocuforAddons1', 'TMenuItem', iptrw);
Tutorial14Async1', 'TMenuItem', iptrw);
Lessons15Review1', 'TMenuItem', iptrw);
18107:
18108:
18109:
18110:
18111:
                              SynPHPSyn1', 'TSynPHPSyn', iptrw);
```

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PHPSyntax1', 'TMenuItem', iptrw);
Breakpoint1', 'TMenuItem', iptrw);
SerialRS2321', 'TMenuItem', iptrw);
18112:
18113:
18115 .
                          N14', 'TMenuItem', iptrw);
                          SynCSSyn1', 'TSynCSSyn', iptrw);
CSyntax2', 'TMenuItem', iptrw);
18116:
18117:
                         CSyntax2', 'TMenuItem', iptrw);
Calculator1', 'TMenuItem', iptrw);
tbtnSerial', 'TToolButton', iptrw);
ToolButton8', 'TToolButton', iptrw);
Tutorial151', 'TMenuItem', iptrw);
N15', 'TMenuItem', iptrw);
N16', 'TMenuItem', iptrw);
18118:
18119:
18120:
18121:
18122:
                         N16', 'TMenuItem', iptrw);
ControlBarl', 'TControlBar', iptrw);
ToolBar2', 'TToolBar', iptrw);
BtnOpen', 'TToolButton', iptrw);
BtnSave', 'TToolButton', iptrw);
BtnPrint', 'TToolButton', iptrw);
BtnColors', 'TToolButton', iptrw);
18124:
18125:
18126:
18127:
18128:
18129 .
                          btnClassReport', 'TToolButton', iptrw);
btnRotateRight', 'TToolButton', iptrw);
btnFullSize', 'TToolButton', iptrw);
18130:
18131:
18133:
                          BtnFitToWindowSize', 'TToolButton', iptrw);
                          BtnZoomMinus', 'TToolButton', iptrw);
BtnZoomPlus', 'TToolButton', iptrw);
18134:
18135:
                          Panell', 'TPanel', iptrw);
LabelBrettgroesse', 'TLabel', iptrw);
18136:
18137:
18138:
                          CB1SCList', 'TComboBox', iptrw);
                          ImageListNormal', 'TImageList', iptrw);
spbtnexplore', 'TSpeedButton', iptrw);
spbtnexample', 'TSpeedButton', iptrw);
18139:
18140:
                          spbsaveas', 'TSpeedButton', iptrw);
imglogobox', 'TImage', iptrw);
EnlargeFont1', 'TMenuItem', iptrw);
EnlargeFont2', 'TMenuItem', iptrw);
18142:
18143:
18144:
                         EnlargeFont1', 'TMenuItem', iptrw)
EnlargeFont2', 'TMenuItem', iptrw)
ShrinkFont1', 'TMenuItem', iptrw);
ThreadDemo1', 'TMenuItem', iptrw);
HEXEditor1', 'TMenuItem', iptrw);
HEXView1', 'TMenuItem', iptrw);
HEXInspect1', 'TMenuItem', iptrw);
18145:
18147:
18148:
18149:
18150:
                         HEXInspect1', 'TMenuItem', iptrw);
SynExporterHTML1', 'TSynExporterHTML', iptrw);
ExporttoHTML1', 'TMenuItem', iptrw);
ClassCount1', 'TMenuItem', iptrw);
HTMLOutput1', 'TMenuItem', iptrw);
HEXEditor2', 'TMenuItem', iptrw);
Minesweeper1', 'TMenuItem', iptrw);
M17' 'TMenuItem', iptrw);
18151:
18152:
18153:
18154:
18155:
18156:
                          N17', 'TMenuItem', iptrw);
PicturePuzzle1', 'TMenuItem', iptrw);
18157:
18158:
                          sbvclhelp', 'TSpeedButton', iptrw);
18160:
                          DependencyWalker1', 'TMenuItem',
                          WebScanner1', 'TMenuItem', iptrw);
View1', 'TMenuItem', iptrw);
18161:
18162:
                         View1', 'TMenuItem', iptrw);
mnToolbar1', 'TMenuItem', iptrw);
mnStatusbar2', 'TMenuItem', iptrw);
mnConsole2', 'TMenuItem', iptrw);
mnCoolbar2', 'TMenuItem', iptrw);
mnSplitter2', 'TMenuItem', iptrw);
WebServer1', 'TMenuItem', iptrw);
18163:
18165:
18166:
18167:
18168:
                          Tutorial17Server1', 'TMenuItem', iptrw);
Tutorial18Arduino1', 'TMenuItem', iptrw);
18169:
18170:
                          SynPerlSyn1', 'TSynPerlSyn', iptrw);
PerlSyntax1', 'TMenuItem', iptrw);
18171:
18172:
                         SynPythonSyn1', 'TSynPythonSyn', iptrw);
PythonSyntaxl', 'TMenuItem', iptrw);
DMathLibraryl', 'TMenuItem', iptrw);
IntfNavigatorl', 'TMenuItem', iptrw);
18173:
18174:
18175:
18176:
                          EnlargeFontConsole1', 'TMenuItem', iptrw);
ShrinkFontConsole1', 'TMenuItem', iptrw);
SetInterfaceList1', 'TMenuItem', iptrw);
18178:
18179:
                         popintfList', 'TPopupMenu', iptrw);
intfAddl', 'TMenuItem', iptrw);
intfDeletel', 'TMenuItem', iptrw);
intfRefactorl', 'TMenuItem', iptrw);
Defactorl', 'TMenuItem', iptrw);
Tutoriall9COMArduinol', 'TMenuItem', iptrw);
18180:
18181:
18182:
18183:
18184:
18185:
                          Tutorial20Regex', 'TMenuItem', iptrw);
N18', 'TMenuItem', iptrw);
18186:
18187:
18188:
                          ManualE1', 'TMenuItem', iptrw);
                          FullTextFinder1', 'TMenuItem', iptrw);
Move1', 'TMenuItem', iptrw);
18189:
18190:
                          Tutorial21Android1', 'TMenuItem', iptrw);
Tutorial21Android1', 'TMenuItem', iptrw);
Tutorial0Function1', 'TMenuItem', iptrw);
18192:
18193:
                          SimuLogBox1', 'TMenuItem', iptrw);
OpenExamples1', 'TMenuItem', iptrw);
SynJScriptSyn1', 'TSynJScriptSyn', iptrw);
18194:
18195:
18196:
                          JavaScriptSyntax1', 'TMenuItem', iptrw);
Halt1', 'TMenuItem', iptrw);
18197:
18198:
                          CodeSearchl', 'TMenuItem', iptrw);
SynRubySyn1', 'TSynRubySyn', iptrw);
18199:
```

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18201:
               RubySyntax1', 'TMenuItem', iptrw);
18202:
               Undol', 'TMenuItem', iptrw);
               SynUNIXShellScriptSyn1', 'TSynUNIXShellScriptSyn', iptrw);
18203:
               LinuxShellScript1', 'TMenuItem', iptrw);
18204 .
18205:
               Rename1', 'TMenuItem', iptrw);
               remailer , 'Menutem , iptrw);
spdcodesearch', 'TSpeedButton', iptrw);
Preview1', 'TMenuItem', iptrw);
Tutorial22Services1', 'TMenuItem', iptrw);
Tutorial23RealTime1', 'TMenuItem', iptrw);
18206:
18207:
18208:
18209:
               Configuration1', 'TMenuItem', iptrw);
MP3Player1', 'TMenuItem', iptrw);
DLLSpy1', 'TMenuItem', iptrw);
18210:
18211:
18212:
               SynURIOpener', 'TSynURIOpener', iptrw);
SynURISynl', 'TSynURISyn', iptrw);
URILinksClicksl', 'TMenuItem', iptrw);
EditReplacel', 'TMenuItem', iptrw);
GotoLinel', 'TMenuItem', iptrw);
18213:
18214:
18215:
18216:
18217:
               ActiveLineColor1', 'TMenuItem', iptrw);
ConfigFile1', 'TMenuItem', iptrw);
SortIIntflist', 'TMenuItem', iptrw);
Redo1', 'TMenuItem', iptrw);
Tutorial24CleanCode1', 'TMenuItem', iptrw);
18218 .
18219:
18220:
18221:
18222:
               Tutorial25Configuration1', 'TMenuItem', iptrw);
18223:
               IndentSelection1', 'TMenuItem', iptrw);
UnindentSection1', 'TMenuItem', iptrw);
18224:
18225:
18226:
               SkyStyle1', 'TMenuItem', iptrw);
18227:
               N19', 'TMenuItem', iptrw);
CountWords1', 'TMenuItem', iptrw);
imbookmarkimages', 'TImageList', iptrw);
18228:
18229:
               Bookmark11', 'TMenuItem', iptrw);
18230:
18231:
               N20', 'TMenuItem', iptrw);
               Bookmark21', 'TMenuItem', iptrw);
Bookmark31', 'TMenuItem', iptrw);
Bookmark41', 'TMenuItem', iptrw);
SynMultiSyn1', 'TSynMultiSyn', iptrw);
18232:
18233:
18234:
18236:
                \begin{array}{lll} \textbf{Procedure} & \texttt{IFPS3ClassesPluginlCompImport( Sender : TObject; } x : \texttt{TPSPascalCompiler)} \\ \textbf{Procedure} & \texttt{IFPS3ClassesPluginlExecImport(Sender: TObject; Exec: TPSExec; } x : \texttt{TPSRuntimeClassImporter)}; \end{array} 
18237:
18238:
18239:
               Procedure PSScriptCompile( Sender :
                                                                   TPSScript)
               Procedure Compile1Click( Sender : TObject)
18240:
18241:
               Procedure PSScriptExecute( Sender : TPSScript)
               Procedure open1Click( Sender : TObject)
Procedure Save2Click( Sender : TObject)
18242:
18243:
               Procedure SavebeforelClick( Sender : TObject)
Procedure LargefontlClick( Sender : TObject)
18244:
18245:
               Procedure FormActivate( Sender : TObject)
18246:
               Procedure SBytecodelClick( Sender : TObject)
18247:
               Procedure FormKeyPress( Sender : TObject; var Key : Char)
18249:
               Procedure Saveas3Click( Sender : TObject)
               Procedure Clear1Click( Sender : TObject)
Procedure Slinenumbers1Click( Sender : TObject)
18250:
18251:
               Procedure About1Click( Sender : TObject)
18252:
               Procedure Search1Click( Sender : TObject)
18253:
18254:
               Procedure FormCreate( Sender : TObject)
18255:
               Procedure MemolReplaceText(Sender:TObject;const ASearch,AReplace:String;Line,Column:Integer;
18256:
                                                                                    var Action : TSvnReplaceAction)
               Procedure MemolStatusChange (Sender: TObject; Changes: TSynStatusChanges)
18257:
               Procedure WordWrap1Click( Sender : TObject)
18258:
               Procedure SearchNext1Click( Sender : TObject)
Procedure Replace1Click( Sender : TObject)
Function PSScriptNeedFile(Sender:TObject;const OrginFileName:String;var FName,Output:String):Bool;
18259:
18260:
18261:
18262:
               Procedure ShowInclude1Click( Sender : TObject)
18263:
               Procedure Printout1Click( Sender : TObject)
18264:
               Procedure mnuPrintFont1Click( Sender : TObject)
               Procedure IncludelClick(Sender: TObject)

Procedure FormDestroy(Sender: TObject)

Procedure FormClose(Sender: TObject; var Action: TCloseAction)
18265:
18267:
18268:
               Procedure UpdateView1Click( Sender : TObject)
               Procedure CodeCompletionList1Click( Sender : TObject)
18269:
               Procedure SaveOutputlClick( Sender : TObject)
Procedure ExportClipboardlClick( Sender : TObject)
18270:
18271:
18272:
               Procedure CloselClick( Sender : TObject)
18273:
               Procedure ManuallClick( Sender : TObject)
18274:
               Procedure LoadLastFile1Click( Sender : TObject)
18275:
               Procedure MemolChange( Sender : TObject)
18276:
               Procedure Decompile1Click( Sender : TObject)
               Procedure StepIntolClick( Sender : TObject)
Procedure StepOutlClick( Sender : TObject)
Procedure ResetlClick( Sender : TObject)
18277:
18278:
18279:
               Procedure cedebugAfterExecute( Sender : TPSScript)
18280:
18281:
               Procedure cedebugBreakpoint(Sender:TObject; const FileName:String; Position,Row, Col: Cardinal)
18282:
               Procedure cedebugCompile( Sender : TPSScript)
               Procedure cedebugExecute( Sender : TPSScript)
18283:
18284:
               Procedure cedebugIdle( Sender : TObject)
               Procedure cedebugLineInfo( Sender:TObject;const FileName:String; Position, Row, Col : Cardinal)
18285:
18286:
               Procedure MemolSpecialLineColors(Sender: TObject; Line:Int; var Special:Boolean; var FG,BG:TColor);
               Procedure BreakPointMenuClick( Sender : TObject)
18287:
               Procedure DebugRunlClick( Sender : TObject)
Procedure tutorial4Click( Sender : TObject)
18288:
18289:
```

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18290:
            Procedure ImportfromClipboard1Click( Sender : TObject)
18291:
            Procedure ImportfromClipboard2Click( Sender : TObject)
18292:
            Procedure tutorial1Click( Sender : TObject)
            Procedure ShowSpecChars1Click( Sender : TObject)
18293:
            Procedure StatusBarlDblClick( Sender : TObject)
18294:
18295:
            Procedure PSScriptLine( Sender : TObject)
            Procedure OpenDirectory1Click( Sender : TObject)
18296:
18297:
            Procedure procMessClick( Sender : TObject)
            Procedure tbtnUseCaseClick( Sender : TObject)
18298:
            Procedure EditFontlClick( Sender : TObject)
Procedure tutorial21Click( Sender : TObject)
18299:
18300:
            Procedure tutorial31Click( Sender : TObject)
18301:
18302:
            Procedure HTMLSyntax1Click( Sender : TObject
            Procedure ShowInterfaces1Click( Sender : TObject)
18303:
            Procedure Tutorial5Click( Sender : TObject)
18304:
18305:
            Procedure ShowLastException1Click( Sender : TObject)
18306:
            Procedure PlayMP31Click( Sender : TObject)
18307:
            Procedure AllFunctionsList1Click( Sender : TObject)
18308:
           Procedure texSyntaxlClick( Sender : TObject)
Procedure GetEMailslClick( Sender : TObject)
18309:
            procedure DelphiSitelClick(Sender: TObject)
18310:
18311:
            procedure TerminalStyle1Click(Sender: TObject);
18312:
            procedure ReadOnly1Click(Sender: TObject);
            procedure ShellStyle1Click(Sender: TObject);
18313:
18314:
            procedure ConsolelClick(Sender: TObject);
                                                               1/3 2
18315:
            procedure BigScreen1Click(Sender: TObject);
18316:
            procedure Tutorial91Click(Sender: TObject);
            procedure SaveScreenshotClick(Sender: TObject);
18317:
18318:
            procedure Tutorial101Click(Sender: TObject);
            procedure SQLSyntax1Click(Sender: TObject);
18319:
18320:
            procedure XMLSyntax1Click(Sender: TObject);
18321:
            procedure ComponentCount1Click(Sender: TObject);
            procedure NewInstancelClick(Sender: TObject);
18322:
           procedure CSyntaxlClick(Sender: TObject);
procedure Tutorial6Click(Sender: TObject);
18323:
            procedure NewlClick(Sender: TObject);
18325:
18326:
            procedure AllObjectsList1Click(Sender: TObject);
            procedure LoadBytecode1Click(Sender: TObject);
18327:
18328:
            procedure CipherFile1Click(Sender: TObject);
18329:
            procedure NewInstancelClick(Sender: TObject);
18330:
            procedure toolbtnTutorialClick(Sender: TObject);
           procedure MemorylClick(Sender: TObject);
procedure JavaSyntaxlClick(Sender: TObject);
18331:
18332:
            procedure SyntaxCheck1Click(Sender: TObject);
18333:
18334:
            procedure ScriptExplorer1Click(Sender: TObject);
18335:
            procedure FormOutput1Click(Sender: TObject); //V3.6
            procedure GotoEnd1Click(Sender: TObject);
18336:
            procedure AllResourceList1Click(Sender: TObject);
18337:
18338:
            procedure tbtn6resClick(Sender: TObject);
            procedure InfolClick(Sender: Tobject);
procedure Tutorial10StatisticslClick(Sender: Tobject);
18339:
18340:
            procedure Tutorial11Forms1Click(Sender: TObject);
18341:
            procedure Tutorial12SQL1Click(Sender: TObject);
18342:
18343:
            procedure ResourceExplore1Click(Sender: TObject);
            procedure InfolClick(Sender: TObject);
procedure CryptoBoxlClick(Sender: TObject);
18344:
18345:
18346:
            procedure ModulesCount1Click(Sender: TObject);
            procedure N4GewinntGame1Click(Sender: TObject);
18347:
18348:
            procedure PHPSyntax1Click(Sender: TObject);
            procedure SerialRS2321Click(Sender: TObject);
18349:
            procedure CSyntax2Click(Sender: TObject);
18350:
18351:
            procedure Calculator1Click(Sender: TObject);
18352:
            procedure Tutorial13Ciphering1Click(Sender: TObject);
18353:
            procedure Tutorial14Async1Click(Sender: TObject);
           procedure PHPSyntaxlClick(Sender: Tobject);
procedure BtnZoomPlusClick(Sender: Tobject);
18354:
18355:
18356:
            procedure BtnZoomMinusClick(Sender: TObject);
18357:
            procedure btnClassReportClick(Sender: TObject);
18358:
            procedure ThreadDemo1Click(Sender: TObject);
            procedure HEXView1Click(Sender: TObject);
18359:
            procedure ExporttoHTML1Click(Sender: TObject);
18360:
18361:
            procedure Minesweeper1Click(Sender: TObject);
18362:
            procedure PicturePuzzle1Click(Sender: TObject); //V3.9
18363:
            procedure sbyclhelpClick(Sender: TObject);
18364:
            procedure DependencyWalker1Click(Sender: TObject);
18365:
            procedure CBlSCListDrawItem(Control:TWinControl;Index:Int;aRect:TRect;State:TOwnerDrawState);
            procedure WebScannerlClick(Sender: TObject);
procedure mnToolbarlClick(Sender: TObject);
18366:
18367:
            procedure mnStatusbar2Click(Sender: TObject);
18368:
18369:
            procedure mnConsole2Click(Sender: TObject);
            procedure mnCoolbar2Click(Sender: TObject);
18370:
            procedure mnSplitter2Click(Sender: TObject);
18371:
18372:
            procedure WebServer1Click(Sender: TObject);
            procedure PerlSyntax1Click(Sender: TObject);
18373:
18374:
            procedure PythonSyntax1Click(Sender: TObject);
18375:
            procedure DMathLibrary1Click(Sender: TObject);
18376:
            procedure IntfNavigator1Click(Sender: TObject);
18377:
            procedure FullTextFinder1Click(Sender: TObject);
            function AppName: string;
```

```
18379:
                 function ScriptName: string;
18380:
                 function LastName: string;
18381:
                 procedure FractalDemolClick(Sender: TObject);
18382:
                 procedure SimuLogBox1Click(Sender: TObject);
18383:
                 procedure OpenExamples1Click(Sender: TObject);
                 procedure Halt1Click(Sender: TObject);
18384:
18385:
                 procedure Stop;
18386:
                 procedure CodeSearch1Click(Sender: TObject);
18387:
                 procedure RubySyntax1Click(Sender: TObject);
18388:
                 procedure UndolClick(Sender: TObject);
                 procedure LinuxShellScript1Click(Sender: TObject);
18389:
18390:
                 procedure WebScannerDirect(urls: string);
18391:
                 procedure WebScanner(urls: string);
                  procedure LoadInterfaceList2;
18392:
18393:
                 procedure DLLSpy1Click(Sender: TObject);
18394:
                 procedure MemolDblClick(Sender: TObject);
                 procedure URILinksClicks1Click(Sender: TObject);
18395:
18396:
                 procedure GotoLinelClick(Sender: TObject);
                 procedure ConfigFile1Click(Sender: TObject);
18397:
                 Procedure SortlIntflistClick( Sender : TObject)
Procedure RedolClick( Sender : TObject)
18398:
18399:
18400:
                 Procedure Tutorial24CleanCode1Click( Sender : TObject)
                 Procedure IndentSelection1Click( Sender : Tobject)
Procedure UnindentSection1Click( Sender : Tobject)
18401:
18402:
18403:
                 Procedure SkyStyle1Click( Sender : TObject)
18404:
                  Procedure CountWords1Click( Sender : TObject)
18405:
                  Procedure MemolPlaceBookmark( Sender : TObject; var Mark : TSynEditMark)
18406:
                 \textbf{Procedure MemolGutterClick} (Sender: TObject; Button: TMouseButton; X, Y, Line: Integer; Mark: TSynEditMark); \\
18407:
                  Procedure Bookmark11Click( Sender : TObject)
                 Procedure Bookmark21Click( Sender :
18408:
                                                                             TObject)
18409:
                  Procedure Bookmark31Click( Sender : TObject)
18410:
                  Procedure Bookmark41Click( Sender : TObject)
                 \textbf{Procedure} \  \, \texttt{SynMultiSyn1CustomRange} \\ (\texttt{Sender:TSynMultiSyn:Operation:TRangeOperation:war} \  \, \texttt{Range:Pointer:TSynMultiSyn:Operation:TRangeOperation:war} \\ (\texttt{Range:Pointer:TSynMultiSyn:Operation:TRangeOperation:war}) \\ (\texttt{Range:Pointer:TSynMultiSyn:Operation:TRangeOperation:TRangeOperation:TrangeOperation:TrangeOperation:TrangeOperation:TrangeOperation:TrangeOperation:TrangeOperation:TrangeOperation:TrangeOperation:TrangeOperation:TrangeOperation:TrangeOperation:TrangeOperation:TrangeOperation:TrangeOperation:TrangeOperation:TrangeOperation:TrangeOperation:TrangeOperation:TrangeOperation:TrangeOperation:TrangeOperation:TrangeOperation:TrangeOperation:TrangeOperation:TrangeOperation:TrangeOperation:TrangeOperation:TrangeOperation:TrangeOperation:TrangeOperation:TrangeOperation:TrangeOperation:TrangeOperation:TrangeOperation:TrangeOperation:TrangeOperation:TrangeOperation:TrangeOperation:TrangeOperation:TrangeOperation:TrangeOperation:TrangeOperation:TrangeOperation:TrangeOperation:TrangeOperation:TrangeOperation:TrangeOperation:TrangeOperation:TrangeOperation:TrangeOperation:TrangeOperation:TrangeOperation:TrangeOperation:TrangeOperation:TrangeOperation:TrangeOperation:TrangeOperation:TrangeOperation:TrangeOperation:TrangeOperation:TrangeOperation:TrangeOperation:TrangeOperation:TrangeOperation:TrangeOperation:TrangeOperation:TrangeOperation:TrangeOperation:TrangeOperation:TrangeOperation:TrangeOperation:TrangeOperation:TrangeOperat
18411:
                  'STATMemoryReport', 'boolean', iptrw);
'IPPort', 'integer', iptrw);
'COMPort', 'integer', iptrw);
18412:
18414:
                 'lbintflist', 'TListBox', iptrw);
Function GetStatChange : boolean
18415:
18416:
18417:
                  Procedure SetStatChange( vstat : boolean)
18418:
                  Function GetActFileName : string
                 Procedure SetActFileName( vname : string)
18419:
                 Function GetLastFileName : string
18420:
                 Procedure SetLastFileName( vname : string)
18421:
18422:
                  Procedure WebScannerDirect( urls : string)
18423:
                  Procedure LoadInterfaceList2
                 Function GetStatExecuteShell : boolean
18424:
18425:
                 Procedure DoEditorExecuteCommand( EditorCommand: word)
                 function GetActiveLineColor: TColor
18427:
                 procedure SetActiveLineColor(acolor: TColor)
18428:
                 procedure ScriptListbox1Click(Sender: TObject);
18429:
                 procedure Memo2KeyPress(Sender: TObject; var Key: Char);
                 procedure EnlargeGutter1Click(Sender: TObject);
18430:
                 procedure TetrislClick(Sender: TObject);
18431:
18432:
                 procedure ToDoList1Click(Sender: TObject);
                 procedure ProcessList1Click(Sender: TObject);
procedure MetricReport1Click(Sender: TObject);
18433:
18434:
18435:
                 procedure ProcessList1Click(Sender: TObject);
                 procedure TCPSockets1Click(Sender: TObject);
18436:
18437:
                  procedure ConfigUpdate1Click(Sender: TObject);
                 procedure ADOWorkbench1Click(Sender: TObject);
18438:
                 procedure SocketServerlClick(Sender: TObject);
18439:
18440:
                 procedure FormDemolClick(Sender: TObject);
18441:
                 procedure Richedit1Click(Sender: TObject);
18442:
                 procedure SimpleBrowser1Click(Sender: TObject);
                 procedure DOSShelllClick(Sender: TObject);
procedure SynExportlClick(Sender: TObject);
18443:
18445:
                 procedure ExporttoRTF1Click(Sender: TObject);
18446:
                  procedure FormCloseQuery(Sender: TObject; var CanClose: Boolean);
18447:
                 procedure SOAPTester1Click(Sender: TObject);
18448:
                 procedure Sniffer1Click(Sender: TObject)
                 procedure AutoDetectSyntax1Click(Sender: TObject);
18449:
18450:
                  procedure FPlot1Click(Sender: TObject);
                 procedure PasStyle1Click(Sender: TObject);
procedure Tutorial183RGBLED1Click(Sender: TObject);
18451:
18452:
18453:
                 procedure ReversilClick(Sender: TObject);
18454:
                 procedure ManualmaXbox1Click(Sender: TObject);
18455:
                  procedure BlaisePascalMagazine1Click(Sender: TObject);
18456:
                 procedure AddToDolClick(Sender: TObject);
                 procedure CreateGUID1Click(Sender: TObject);
18457:
                 procedure Tutorial27XML1Click(Sender: TObject);
procedure CreateDLLStub1Click(Sender: TObject);
18459:
18460:
                  procedure Tutorial28DLL1Click(Sender: TObject);');
18461:
                 procedure ResetKevPressed;');
                 procedure FileChanges1Click(Sender: TObject);');
18462:
                 procedure OpenGLTry1Click(Sender: TObject);');
18463:
18464:
                  procedure AllUnitList1Click(Sender: TObject);');
18465:
18466:
```

```
18469: //-----
18471:
       procedure SIRegister_TCustomSynEdit(CL: TPSPascalCompiler);
18472: begin
18473:
          //with RegClassS(CL.'TCustomControl'. 'TCustomSvnEdit') do
         with FindClass ('TCustomControl'), 'TCustomSynEdit') do begin
Constructor Create( AOwner : TComponent)
18474:
18475:
           SelStart', 'Integer', iptrw);
SelEnd', 'Integer', iptrw); AlwaysShowCaret', 'Boolean', iptrw);
18476:
18477:
18478:
           Procedure UpdateCaret
           Procedure AddKey(Command: TSynEditorCommand;Key1:word;SS1:TShiftState; Key2:word;SS2:TShiftState);
18479:
18480:
           Procedure AddKey(Command: TSynEditorCommand;Key1:word;SS1:TShiftState; Key2: word;SS2:TShiftState);
18481:
           Procedure BeginUndoBlock
18482:
           Procedure BeginUpdate
18483:
           Function CaretInView : Boolean
           Function CharIndexToRowCol( Index : integer) : TBufferCoord
18484:
18485:
           Procedure Clear
           Procedure ClearAll
18486:
18487:
           Procedure ClearBookMark( BookMark : Integer)
18488:
           Procedure ClearSelection
18489:
           Procedure CommandProcessor( Command : TSynEditorCommand; AChar : char; Data : pointer)
18490:
           Procedure ClearUndo
18491:
           Procedure CopyToClipboard
18492:
           Procedure CutToClipboard
            Procedure DoCopyToClipboard( const SText : string)
18493:
18494:
           Procedure EndUndoBlock
18495:
           Procedure EndUpdate
18496:
           Procedure EnsureCursorPosVisible
18497:
           Procedure EnsureCursorPosVisibleEx( ForceToMiddle : Boolean)
18498:
           Procedure FindMatchingBracket
18499:
           Function GetMatchingBracket : TBufferCoord
           Function GetMatchingBracketEx( const APoint : TBufferCoord) : TBufferCoord
18500:
           Procedure ExecuteCommand( Command: TSynEditorCommand; AChar: char; Data: pointer)
Function GetBookMark( BookMark: integer; var X, Y: integer): boolean
18501:
18502:
18503:
           Function GetHighlighterAttriAtRowCol( const XY: TBufferCoord; var Token : string; var Attri
18504:
           : TSynHighlighterAttributes) : boolean
Function GetHighlighterAttriAtRowColEx( const XY : TBufferCoord; var Token : string;
18505:
18506:
                      var TokenType, Start : Integer; var Attri:TSynHighlighterAttributes):boolean
18507:
           Function GetPositionOfMouse( out aPos : TBufferCoord) : Boolean
18508:
           Function GetWordAtRowCol( const XY : TBufferCoord) : string
18509:
           Procedure GotoBookMark( BookMark : Integer)
           Procedure GotoLineAndCenter( ALine : Integer)
18510:
            Function IdentChars : TSynIdentChars
18511:
18512:
            Procedure InvalidateGutter
           Procedure InvalidateGutterLine( aLine : integer)
18513:
           Procedure InvalidateGutterLine( aline : integer)
Procedure InvalidateGutterLines( FirstLine, LastLine : integer)
Procedure InvalidateLine( Line : integer)
18514:
18515:
            Procedure InvalidateLines( FirstLine, LastLine : integer)
18516:
18517:
           Procedure InvalidateSelection
           Function IsBookmark( BookMark : integer) : boolean
18518:
           Function IsPointInSelection( const Value : TBufferCoord) : boolean
18519:
18520:
            Procedure LockUndo
18521:
           Function BufferToDisplayPos( const p : TBufferCoord) : TDisplayCoord
           Function DisplayToBufferPos( const p : TDisplayCoord) : TBufferCoord
Function LineToRow( aLine : integer) : integer
Function RowToLine( aRow : integer) : integer
18522:
18523:
18524:
18525:
            Function NextWordPos : TBufferCoord
18526:
           Function NextWordPosEx( const XY : TBufferCoord) : TBufferCoord
18527:
           Procedure PasteFromClipboard
           Function WordStart : TBufferCoord
18528:
            Function WordStartEx( const XY : TBufferCoord) : TBufferCoord
18529:
18530:
           Function WordEnd : TBufferCoord
           Function WordEndEx( const XY : TBufferCoord) : TBufferCoord
18531:
           Function PrevWordPos: TBufferCoord
Function PrevWordPos: TBufferCoord
Function PrevWordPosEx( const XY: TBufferCoord): TBufferCoord
18532:
18534:
            Function PixelsToRowColumn( aX, aY : integer) : TDisplayCoord
18535:
           \textbf{Function} \  \, \texttt{PixelsToNearestRowColumn(aX, aY: integer): TDisplayCoord}
18536:
           Procedure Redo
18537:
           Procedure RegisterCommandHandler(const AHandlerProc:ThookedCommandEvent;AHandlerData:pointer));
           Function RowColumnToPixels( const RowCol : TDisplayCoord) : TPoint
18538:
18539:
           Function RowColToCharIndex( RowCol : TBufferCoord) : integer
18540:
           Function SearchReplace( const ASearch, AReplace:string; AOptions:TSynSearchOptions): integer
18541:
           Procedure SelectAll
18542:
           Procedure SetBookMark( BookMark : Integer; X : Integer; Y : Integer)
18543:
            Procedure SetCaretAndSelection( const ptCaret, ptBefore, ptAfter: TBufferCoord)
18544:
           Procedure SetDefaultKeystrokes
18545:
           Procedure SetSelWord
           Procedure SetWordBlock( Value : TBufferCoord)
18546:
18547:
            Procedure Undo
            Procedure UnlockUndo
18548:
18549:
           Procedure UnregisterCommandHandler( AHandlerProc : THookedCommandEvent)
           Procedure AddKeyUpHandler( aHandler : TKeyEvent)
Procedure RemoveKeyUpHandler( aHandler : TKeyEvent)
18550:
18551:
            Procedure AddKeyDownHandler( aHandler : TKeyEvent)
18552:
           Procedure RemoveKeyDownHandler( aHandler : TKeyEvent)
18553:
           Procedure AddKeyPressHandler( aHandler : TKeyPressEvent)
18554:
18555:
           Procedure RemoveKeyPressHandler( aHandler : TKeyPressEvent)
18556:
           Procedure AddFocusControl( aControl: TWinControl)
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18557:
                     Procedure RemoveFocusControl( aControl: TWinControl)
                     Procedure AddMouseDownHandler( aHandler: TMouseEvent)
18558:
                     Procedure RemoveMouseDownHandler( aHandler: TMouseEvent)
18560:
                     Procedure AddMouseUpHandler( aHandler : TMouseEvent)
                     Procedure RemoveMouseUpHandler( aHandler : TMouseEvent)
Procedure AddMouseCursorHandler( aHandler : TMouseCursorEvent)
18561:
18562:
                     Procedure RemoveMouseCursorHandler( aHandler : TMouseCursorEvent)
18563:
                     Procedure SetLinesPointer( ASynEdit : TCustomSynEdit)
18564:
18565:
                     Procedure RemoveLinesPointer
18566:
                     Procedure HookTextBuffer( aBuffer: TSynEditStringList; aUndo, aRedo: TSynEditUndoList)
18567:
                     Procedure UnHookTextBuffer
                     BlockBegin', 'TBufferCoord', iptrw);
                    BlockBegin', 'TBufferCoord', iptrw)
BlockEnd', 'TBufferCoord', iptrw);
CanPaste', 'Boolean', iptr);
CanRedo', 'boolean', iptr);
CanUndo', 'boolean', iptr);
CaretX', 'Integer', iptrw);
CaretY', 'Integer', iptrw);
CaretXY', 'TBufferCoord', iptrw);
ActiveLineColor', 'TColor', iptrw);
pisplayX', 'Integer', iptry;
18569:
18570:
18571:
18572:
18573:
18574 .
18575:
18576:
                     DisplayX', 'Integer', iptr);
DisplayY', 'Integer', iptr);
18577:
18578:
                     DisplayXY', 'TDisplayCoord', iptr);
DisplayLineCount', 'integer', iptr);
CharsInWindow', 'Integer', iptr);
18579:
18580:
18581:
18582:
                     CharWidth', 'integer', iptr);
                    CharWidth', 'integer', iptr);
Font', 'TFont', iptrw);
GutterWidth', 'Integer', iptr);
Highlighter', 'TSynCustomHighlighter', iptrw);
LeftChar', 'Integer', iptrw);
LineHeight', 'integer', iptr);
LineSInWindow', 'Integer', iptr);
LineText', 'string', iptrw);
Lines', 'TStrings', iptrw);
Marks', 'TSynEditMarkList', iptr);
MaxScrollWidth', 'integer', iptrw);
18583:
18584:
18585:
18586:
18587:
18588:
18589:
18590:
18592:
                     MaxScrollWidth', 'integer', iptrw);
                     Modified', 'Boolean', iptrw);
PaintLock', 'Integer', iptr);
ReadOnly', 'Boolean', iptrw);
18593:
18594:
18595:
18596:
                     SearchEngine', 'TSynEditSearchCustom', iptrw);
                     SelAvail', 'Boolean', iptr); SelLength', 'integer', iptrw);
SelTabBlock', 'Boolean', iptr);
SelTabLine', 'Boolean', iptr);
18597:
18598:
                     SelTabLine', 'Boolean', iptr);
SelText', 'string', iptrw);
StateFlags', 'TSynStateFlags', iptr);
18599:
18600:
18601:
                     Text', 'string', iptrw);
TopLine', 'Integer', iptrw);
18602:
18603:
                     WordAtCursor', 'string', iptr);
WordAtMouse', 'string', iptr);
                     WordAtMouse', 'string', iptr);
UndoList', 'TSynEditUndoList', iptr);
RedoList', 'TSynEditUndoList', iptr);
18605:
18606:
18607:
                     OnProcessCommand', 'TProcessCommandEvent', iptrw);
BookMarkOptions', 'TSynBookMarkOpt', iptrw);
18608:
18609:
                     BorderStyle', 'TSynBorderStyle', iptrw);
ExtraLineSpacing', 'integer', iptrw);
Gutter', 'TSynGutter', iptrw);
18610:
18611:
18612:
                     Gutter', 'TsynGutter', iptrw);
HideSelection', 'boolean', iptrw);
InsertCaret', 'TSynEditCaretType', iptrw);
InsertMode', 'boolean', iptrw);
IsScrolling', 'Boolean', iptr);
Keystrokes', 'TSynEditKeyStrokes', iptrw);
18613:
18614:
18615:
18616:
18617:
                     MaxUndo', 'Integer', iptrw);
Options', 'TSynEditorOptions', iptrw);
18618:
18619:
                    OverwriteCaret', 'TSynEditCaretType', iptrw);
RightEdge', 'Integer', iptrw);
ScrollHintColor', 'TColor', iptrw);
ScrollHintFormat', 'TScrollHintFormat', iptrw);
18620:
18621:
18623:
                     ScrollBars', 'TScrollStyle', iptrw);
SelectedColor', 'TSynSelectedColor', iptrw);
SelectionMode', 'TSynSelectionMode', iptrw);
18624:
18625:
18626:
                     SelectionMode', 'TsynselectionMode', iptrw);
ActiveSelectionMode', 'TSynselectionMode', iptrw);
TabWidth', 'integer', iptrw); WantReturns', 'boolean', iptrw);
WantTabs', 'boolean', iptrw); WordWrap', 'boolean', iptrw);
WordWrapGlyph', 'TSynGlyph', iptrw);
OnChange', 'TNotifyEvent', iptrw);
18627:
18628:
18629:
18630:
18631:
                     OnClearBookmark', 'TPlaceMarkEvent', iptrw);
18632:
                     OnCommandProcessed', 'TProcessCommandEvent', iptrw);
18633:
                    OnCommandProcessed', 'TProcessCommandEvent', ipt:
OnContextHelp', 'TContextHelpEvent', iptrw);
OnDropFiles', 'TDropFilesEvent', iptrw);
OnGutterClick', 'TGutterClickEvent', iptrw);
OnGutterGetText', 'TGutterGetTextEvent', iptrw);
OnGutterPaint', 'TGutterPaintEvent', iptrw);
OnMouseCursor', 'TMouseCursorEvent', iptrw);
18634:
18635:
18637:
18638:
18639:
18640:
                     OnPaint', 'TPaintEvent', iptrw);
                     OnPlaceBookmark', 'TPlaceMarkEvent', iptrw);
18641:
                     OnProcessUserCommand', 'TProcessCommandEvent', iptrw);
OnReplaceText', 'TReplaceTextEvent', iptrw);
18642:
18643:
                     OnSpecialLineColors', 'TSpecialLineColorsEvent', iptrw);
18644:
                     OnStatusChange', 'TStatusChangeEvent', iptrw);
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OnPaintTransient', 'TPaintTransient', iptrw);
18646:
18647:
            OnScroll', 'TScrollEvent', iptrw);
18648:
18649:
         Procedure RegisterPlaceableHighlighter(highlighter : TSynCustomHighlighterClass)
        Function GetPlaceableHighlighters: TSynHighlighterList
Function EditorCommandToDescrString(Cmd: TSynEditorCommand): string
Function EditorCommandToCodeString(Cmd: TSynEditorCommand): string
18650:
18651:
18652:
         Procedure GetEditorCommandValues( Proc : TGetStrProc)
18653:
18654:
         \textbf{Procedure} \ \ \texttt{GetEditorCommandExtended(Proc: TGetStrProc)}
        Function IdentToEditorCommand( const Ident : string; var Cmd : longint) : boolean
Function EditorCommandToIdent( Cmd : longint; var Ident : string) : boolean
18655:
18656:
         Function ConvertCodeStringToExtended( AString : String) :
18658:
         Function ConvertExtendedToCodeString( AString : String)
                                                                         : String
         \textbf{Function} \ \ \texttt{ConvertExtendedToCommand} \ ( \ \ \texttt{AString} \ : \ \ \textbf{String}) \ : \ \ \texttt{TSynEditorCommand}
18659:
        Function ConvertCodeStringToCommand( AString : String) : TSynEditorCommand Function IndexToEditorCommand( const AIndex : Integer) : Integer
18660:
18661:
18662:
18663:
          TSynEditorOption = (
                                            //Holding down the Alt Key will put the selection mode into columnar format //Will indent caret on newlines with same amount of leading whitespace as \frac{1}{2}
            eoAltSetsColumnMode,
18664:
18665:
            eoAutoIndent,
18666:
                                            // preceding line
18667:
            eoAutoSizeMaxScrollWidth,
                                            //Automatically resizes the MaxScrollWidth property when inserting text
18668:
            eoDisableScrollArrows.
                                            //Disables the scroll bar arrow buttons when you can't scroll in that
18669:
                                            //direction any more
18670:
            eoDragDropEditing,
                                            //Allows to select a block of text and drag it within document to another
18671:
                                            // location
18672:
            eoDropFiles,
                                            //Allows the editor accept OLE file drops
18673:
            eoEnhanceHomeKev,
                                            //enhances home key positioning, similar to visual studio
18674:
            eoEnhanceEndKey,
                                            //enhances End key positioning, similar to JDeveloper
//When undoing/redoing actions, handle all continous changes the same kind
18675:
            eoGroupUndo,
18676:
                                            // in one call
                                            //instead undoing/redoing each command separately
18677:
18678:
            eoHalfPageScroll,
                                            //When scrolling with page-up and page-down commands, only scroll a half
18679:
                                            //page at a time
18680:
            eoHideShowScrollbars,
                                             //if enabled, then scrollbars will only show if necessary
18681:
            If you have ScrollPastEOL, then it the horizontal bar will always be there (it uses MaxLength instead)
18682:
            eoKeepCaretX.
                                            //When moving through lines w/o cursor Past EOL, keeps X position of cursor
18683:
            eoNoCaret,
                                            //Makes it so the caret is never visible
18684:
            eoNoSelection,
                                            //Disables selecting text
18685:
            eoRightMouseMovesCursor,
                                            //When clicking with right mouse for popup menu, moves cursor to location
18686:
            eoScrollBvOneLess.
                                            //Forces scrolling to be one less
18687:
            eoScrollHintFollows.
                                            //The scroll hint follows the mouse when scrolling vertically //Allows the cursor to go past the end of file marker \,
18688:
            eoScrollPastEof,
            eoScrollPastEol,
                                            //Allows cursor to go past last character into white space at end of a line
18689:
18690:
            eoShowScrollHint,
                                            //Shows a hint of the visible line numbers when scrolling vertically
18691:
            eoShowSpecialChars.
                                            //Shows the special Characters
                                            //similar to Smart Tabs, but when you delete characters
//When tabbing, cursor will go to non-white space character of previous line
            eoSmartTabDelete,
18692:
18693:
            eoSmartTabs.
18694:
            eoSpecialLineDefaultFg,
                                            //disables the foreground text color override using OnSpecialLineColor event
            eoTabIndent,
18695:
                                            //If active <Tab>and<Shift><Tab> act block indent,unindent when text select
18696:
            eoTabsToSpaces.
                                            // {\tt Converts} \ {\tt a} \ {\tt tab} \ {\tt character} \ {\tt to} \ {\tt a} \ {\tt specified} \ {\tt number} \ {\tt of} \ {\tt space} \ {\tt characters}
18697:
            eoTrimTrailingSpaces
                                            //Spaces at the end of lines will be trimmed and not saved
18698:
             18699:
            Double click to select a word and count words with highlightning.
18700:
18701:
            Triple click to select a line.
18702:
            CTRL+SHIFT+click to extend a selection.
18703:
            Drag with the ALT key down to select columns of text !!!
18704:
            Drag and drop is supported.
            Type CTRL+Z to undo and SHIFT+CTRL+Z to redo.
18705:
            Type CTRL+A to select all.
18706:
18707:
            Type CTRL+N to set a new line.
18708:
            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.
18709:
18710:
            Type CTRL+Shift+[0..9] to set bookmarks.
18711:
                                                              //Bookmark
18712:
             Type CTRL[0..9] to jump or get to bookmarks.
18713:
            Type Home to position cursor at beginning of current line and End to position it at end of line.
18714:
            Type CTRL+Home to position cursor at start of doc and CTRL+End to position it at end of document.
18715:
            Page Up and Page Down work as expected.
18716:
            CTRL+Page Up sends cursor to top of viewed portion and CTRL+Page Down sends it to bottom.
18717:
            using http://pp4s.co.uk/main/tu-form2-help-demo-laz.html
18718:
18719:
        {$ Short Key Positions Ctrl<A-Z>: }
18720: def
18721:
           <A> Select All
18722:
           <B> Count Words
           <C> Copy
18723:
18724:
           <D> Internet Start
18725:
           <E> Script List
18726:
           <F> Find
18727:
           <G> Goto
18728:
           <H> Mark Line
18729:
           <I> Interface List
18730:
           <J> Code Completion
18731:
           <K> Console
18732:
           <L> Interface List Box
18733:
           <M> Font Larger -
           <N> New Line
```

```
18735:
            <O> Open File
18736:
            <P> Font Smaller +
            <Q> Quit
18738:
            <R> Replace
18739:
            <S> Save!
18740:
            <T> Delete Line
18741:
            <U>> Use Case Editor
18742:
             <V> Paste
18743:
            <W> URI Links
            <X> Reserved for coding use internal
18744:
18745:
            <Y> Delete Line
18746:
            <Z> Undo
18747:
18748: ref
18749:
           F1 Help
18750:
            F2 Syntax Check
18751:
            F3 Search Next
18752 .
            F4 New Instance
18753:
            F5 Line Mark /Breakpoint
18754:
            F6 Goto End
18755:
            F7 Debug Step Into
18756:
            F8 Debug Step Out
18757:
            F9 Compile
18758:
            F10 Menu
18759:
            F11 Word Count Highlight
18760:
            F12 Reserved for coding use internal
18761:
          def 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';
AllowedChars: array[0..5] of string = ('(',',')', '[', ']', ', 't,tl,t2,t3: boolean;
18762:
          def ReservedWords: array[0..82] of string =
18763:
18765:
18766:
18767:
18768:
18770:
18771:
18772:
18773:
18774:
18775:
18776: /
18778: //----
18779:
18780: Amount of Functions: 12130
18781: Amount of Procedures: 7566
18782: Amount of Constructors: 1240
18783: Totals of Calls: 20936
18784: SHA1: Win 3.9.9.94 780F1F749EFEFB5C0FAA09C51B6AB048C6A00CC6
18785:
18787: Doc Short Manual with 50 Tips!
18789: - Install: just save your maxboxdef.ini before and then extract the zip file!
           Toolbar: Click on the red maxbox Sign (right on top) opens your work directory or jump to <Help>
18790: -
           Menu: With <F2> you check syntax with <F8> you debug and <F9> you compile!
18792: - Menu: With <Crtl><F3> you can search for code on examples
18793: - Menu: Open in menu Output a new instance <F4> of the box to compare or prepare your scripts
18794: - Menu: Set Interface Naviagator in menu /View/Intf Navigator
18795: - Menu: Switch or toogle between the last 2 scripts in menu File/LoadLast (History is set to 9 files)
18796:
18797: - Inifile: Set memory report in ini: MEMORYREPORT=Y :report on memory leaks on shutdown by dialog
18798: - Inifile: Refresh (reload) the inifile after edit with ../Help/Config Update
18799: - Context Menu: You can printout your scripts as a pdf-file or html-export 18800: - Context: You do have a context menu with the right mouse click
18801:
18802: -
           Menu: With the UseCase Editor you can convert graphic formats too.
18803: - Menu: \mathbf{On} menu Options you find Addons \mathbf{as} compiled scripts
18804: -
           IDE: You don't need a mouse to handle maxbox, use shortcuts
           Menu: Check Options/ProcessMessages! if something is wrong or you can't see graphics in a time
18806: - IDE: Dragndrop your scripts in box or the model in use case editor (Cut,Copy,Paste always available)
18807: - Editor: You can get templates as code completion with <ctrl j> in editor like classp or iinterface
18808:
                    or ttimer (you type classp and then CTRL J), or you type tstringlist and <Ctrl><J>
18809:
18810: -
           Menu: In menu output (console) you can set output menu in edit mode by unchecking <read only output>
18811: - Editor: After the end. you can write or copy notes or descriptions concerning the app or code
18812: -
           {\tt Code:} \ \textbf{If} \ {\tt you} \ {\tt code} \ {\tt a} \ {\tt loop} \ {\tt till} \ {\tt key-pressed} \ {\tt use} \ \textbf{function:} \ {\tt isKeyPressed};
18813: - Code: Macro set the macros <u>#</u>name, <u>#da</u>te, <u>#</u>host, <u>#</u>path, <u>#f</u>ile, <u>#</u>head <u>#</u>sign, Tutorial maxbox_starter25.pdf
           Code: change Syntax in autoboot macro 'maxbootscript.txt
18815: - Editor: - <F11> Click on Word in Editor search amount of words with highlighting, Dbl Click on Bookmarks
18816:
                   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
18817: -
18818: - IDE: A file info with system and script information you find in menu Program/Information
18819: -
           IDE: After change the config file in help you can update changes in menu Help/Config Update
18820: - IDE: Make a screenshot of the content and environment in menu Output/Save Screenshot
18821: - IDE: Use a boot loader script 'maxbootscript.txt' (as auto start) to change box each time you start it.
18822: - IDE: With escape or <Ctrl> Q you can also leave the box or stop a script in menu program - stop program
18823: - Editor: Set Bookmarks to check your work in app or code
```

```
18824: - Editor: With <Ctrl H> you set (Sactive Line Color) and F11 you get Word Count Statistic on Output too 18825: - Editor: With {//TODO: some description} or DONE you set code entries for ToDo List in ../Help/ToDo List
          Editor: With <Ctrl W> you set active URL links in your code to test availability in Context Menu
18827 .
18828: -
          {\tt IDE} \ \ \textbf{with} \quad {\tt menu} \ \ {\tt /Options/ADO} \ \ {\tt SQL} \ \ {\tt Workbench} \ \ {\tt you} \ \ {\tt can} \ \ {\tt manage} \ \ {\tt your} \ \ {\tt Database}
         Context Menu: You can write your docus with RichEdit RTF printout /Editor Form Options/Richedit Menu: Set Interface Naviagator also with toogle <Ctrl L> or /View/Intf Navigator
18829: -
18830: -
          Toolbar: In menu /View switch Off Toolbar and Coolbar to get more coding space
18831: -
18832: -
          Code: Put some resources in your code /Help/Resource Explorer like bitbin, forms, dialogs;
18833:
         Code Editor: Compile with <F9> but also Alt C in case <F9> isnt available; IDE set bookmarks with <Ctrl Shift> (0..9) and jump with <Ctrl> (0..9)
18834:
18835: - IDE menu /Help/Tools/ write with RTF Editor or open a DOS Shell or browse
18836:
18837: - Add on write your Requirements in RTF Docu with <CTRL ALT R> in context menu
18838: - Add on when no browser is available start /Options/Add ons/Easy Browser
       - Add on SOAP Tester with SOP POST File
         Add on IP Protocol Sniffer with List View
18840: -
18841: - Add on OpenGL mX Robot Demo for android
18842:
18843: -
          Menu: Help/Tools as a Tool Section with DOS Opener
          Menu Editor: export the code as RTF File
18844: -
18845: -
          Menu: Help/Tools/Syn Export your code as available in HTML or RTF
18846: -
         \label{eq:menu: Help/Tools/ with <Alt H-S-D> you start the DOS Shell} \\
18847: -
          Context: Auto Detect of Syntax depending on file extension
          Code: some Windows API function start with w in the name like wGetAtomName();
18849: - IDE Close - if you cant close the box then reset it <Ctrl F2> in menu /Debug
18850: - IDE File Check with menu ..View/File Changes/...
18851:
Function GetProcessMemoryInfo(Process: THandle; var MemoryCounters: TProcessMemoryCounters;
18853:
18854:
                                                        cb: DWORD): BOOL; //stdcall;;
           External 'GetProcessMemoryInfo@psapi.dll stdcall';

Function OpenProcess(dwDesiredAccess:DWORD; bInheritHandle:BOOL; dwProcessId: DWORD):THandle;
18855:
18856:
18857:
             External
                         'OpenProcess@kernel32.dll stdcall';
18859: PCT Precompile Technology , mX4 ScriptStudio
18860: Indy, JCL, Jedi, VCL, Systools, TurboPower, Fundamentals, ExtendedRTL, Synedit 18861: DMath, devC, Graphics32, ExtPascal, mX4, LCL, CLX, FCL, CPort and more 18862: emax layers: system-package-component-unit-class-function-block
18863: new keywords def ref using maxCalcF
18864: UML: use case act class state seq pac comp dep - lib lab
18865: FBX Lib, psAPI, SMS Cell Module, OpenGL, Borland Tools
18866: Tutorials, 30 Units add, VCL constructors, controls plus, unit list
18867: 2 Tutorials, 36 Units add, Synapse V40, LDAP, OpenSSL, AVScan
18868: 1 Report, 15 Units add, DBCtrls, Stream+, IRadio, Wininet
18869: 1 DLL Report, 19 Units add, DRTable, Remote+, Cindy functions!
18870: https://unibe-ch.academia.edu/MaxKleiner
18871: www.slideshare.net/maxkleiner1
18872: http://www.scribd.com/max_kleiner
18873:
18874:
18875:
18876:
18877:
18879: unit List asm internal end
18881: 01 unit RIRegister_StrUtils_Routines(exec); //Delphi
18882: 02 unit SIRegister_IdStrings
18883: 03 unit RIRegister_niSTRING_Routines(Exec);
18884: 04 unit uPSI_fMain Functions;
                                                             //Indy Sockets
                                                             //from ReaEx
                                                             //maXbox Open Tools API
18885: 05 unit IFSI_WinFormlpuzzle;
                                                             //maXbox
18886: 06 unit RIRegister_LinarBitmap_Routines(Exec); //ImageFileLibBCB
18887: 07 unit RegisterDateTimeLibrary R(exec);
                                                             //Delphi
18888: 08 unit RIRegister_MathMax_Routines(exec);
                                                             //Jedi & Delphi
18889: 09 unit RIRegister_IdGlobal_Routines(exec);
                                                             //Indy Sockets
18890: 10 unit RIRegister_SysUtils_Routines(Exec);
                                                             //Delphi
18891: 11 unit uPSI_IdTCPConnection;
                                                             //Indy some functions
18892: 12 unit uPSCompiler.pas;
                                                             //PS kernel functions
18893: 13 unit uPSI_DBCommon;
                                                             //DB Common_Routines and Types
18894: 14 unit uPSI_Printers.pas
                                                             //Delphi VCL
18895: 15 unit uPSI_MPlayer.pas
                                                             //Delphi VCL
18896: 16 unit uPSC_comobj;
                                                             //COM Functions
18897: 17 unit uPST Clipbrd;
                                                             //Delphi VCL
18898: 18 unit Filectrl in IFSI_SysUtils_max;
                                                             //VCL Runtime
18899: 19 unit uPSI_SqlExpr;
                                                             //DBX3
                                                             //ADODB
18900: 20 unit uPSI_ADODB;
18901: 21 unit uPSI_StrHlpr;
                                                             //String Helper Routines
18902: 22 unit uPSI_DateUtils;
                                                             //Expansion to DateTimeLib
18903: 23 unit uPSI_FileUtils;
                                                             //Expansion to Sys/File Utils
18904: 24 unit JUtils / gsUtils;
                                                             //Jedi / Metabase
18905: 25 unit JvFunctions_max;
                                                             //Jedi Functions
18906: 26 unit HTTPParser;
                                                             //Delphi VCL
//Delphi VCL
18907: 27 unit HTTPUtil;
18908: 28 unit uPSI_XMLUtil;
                                                             //Delphi VCL
18909: 29 unit uPSI_SOAPHTTPClient;
                                                             //Delphi VCL SOAP WebService V3.5
18910: 30 unit uPSI_Contnrs;
18911: 31 unit uPSI_MaskUtils;
                                                             //Delphi RTL Container of Classes
                                                             //RTL Edit and Mask functions
18912: 32 unit uPSI_MyBigInt;
                                                             //big integer class with Math
```

```
18913: 33 unit uPSI ConvUtils;
                                                        //Delphi VCL Conversions engine
                                                        //Delphi\Win32\rt1\sys
18914: 34 unit Types_Variants;
18915: 35 unit uPSI_IdHashSHA1;
                                                        //Indy Crypto Lib
                                                        //Indy Crypto;
18916: 36 unit uPSI_IdHashMessageDigest
                                                        //Indy ASN1Utility Routines;
//Indy Logger from LogBase
18917: 37 unit uPSI IdASN1Util;
18918: 38 unit uPSI IdLogFile;
18919: 39 unit uPSI_IdIcmpClient;
                                                        //Indy Ping ICMP
18920: 40 unit uPSI_IdHashMessageDigest_max
                                                        //Indy Crypto &OpenSSL;
18921: 41 unit uPSI_FileCtrl;
                                                        //Delphi RTL
18922: 42 unit uPST Outline;
                                                        //Delphi VCL
18923: 43 unit uPSI_ScktComp;
                                                        //Delphi RTL
18924: 44 unit uPSI_Calendar;
                                                        //Delphi VCL
18925: 45 unit uPSI_VListView
                                                        //VListView;
18926: 46 unit uPSI DBGrids;
                                                        //Delphi VCL
18927: 47 unit uPSI DBCtrls;
                                                        //Delphi VCL
18928: 48 unit ide_debugoutput;
                                                        //maXbox
18929: 49 unit uPSI_ComCtrls;
                                                        //Delphi VCL
18930: 50 unit uPSC_stdctrls+;
                                                        //Delphi VCL
18931: 51 unit uPSI_Dialogs;
                                                        //Delphi VCL
18932: 52 unit uPSI_StdConvs;
                                                        //Delphi RTL
18933: 53 unit uPSI_DBClient;
                                                        //Delphi RTL
18934: 54 unit uPSI_DBPlatform;
                                                        //Delphi RTL
18935: 55 unit uPSI Provider;
                                                        //Delphi RTL
18936: 56 unit uPSI_FMTBcd;
                                                        //Delphi RTL
18937: 57 unit uPSI_DBCGrids;
                                                        //Delphi VCL
18938: 58 unit uPSI_CDSUtil;
                                                        //MIDAS
18939: 59 unit uPSI_VarHlpr;
                                                        //Delphi RTL
                                                        //Delphi VCL
18940: 60 unit uPSI ExtDlgs;
18941: 61 unit sdpStopwatch;
                                                        //maXbox
18942: 62 unit uPSI_JclStatistics;
                                                        //JCL
18943: 63 unit uPSI_JclLogic;
                                                        //JCL
18944: 64 unit uPSI_JclMiscel;
                                                        //JCL
18945: 65 unit uPSI_JclMath_max;
                                                        //JCL RTL
18946: 66 unit uPSI_uTPLb_StreamUtils;
                                                        //LockBox 3
                                                        //BCB
18947: 67 unit uPSI_MathUtils;
18948: 68 unit uPSI_JclMultimedia;
                                                        //JCL
18949: 69 unit uPSI WideStrUtils;
                                                        //Delphi API/RTL
18950: 70 unit uPSI_GraphUtil;
                                                        //Delphi RTL
18951: 71 unit uPSI_TypeTrans;
                                                        //Delphi RTL
18952: 72 unit uPSI_HTTPApp;
                                                        //Delphi VCL
18953: 73 unit uPSI DBWeb;
                                                        //Delphi VCL
18954: 74 unit uPSI DBBdeWeb;
                                                        //Delphi VCL
18955: 75 unit uPSI_DBXpressWeb;
                                                        //Delphi VCL
18956: 76 unit uPSI_ShadowWnd;
                                                        //Delphi VCL
18957: 77 unit uPSI_ToolWin;
                                                        //Delphi VCL
18958: 78 unit uPST Tabs:
                                                        //Delphi VCL
18959: 79 unit uPSI_JclGraphUtils;
                                                        //JCL
18960: 80 unit uPSI_JclCounter;
                                                        //JCL
18961: 81 unit uPSI_JclSysInfo;
                                                        //JCL
18962: 82 unit uPSI JclSecurity;
                                                        //JCL
18963: 83 unit uPSI JclFileUtils;
                                                        //JCTi
18964: 84 unit uPSI_IdUserAccounts;
                                                        //Indv
18965: 85 unit uPSI_IdAuthentication;
                                                        //Indv
18966: 86 unit uPSI_uTPLb_AES;
                                                        //LockBox 3
18967: 87 unit uPSI_IdHashSHA1;
                                                        //LockBox 3
18968: 88 unit uTPLb_BlockCipher;
                                                        //LockBox 3
18969: 89 unit uPSI_ValEdit.pas;
                                                        //Delphi VCL
18970: 90 unit uPSI_JvVCLUtils;
                                                        //JCL
18971: 91 unit uPSI_JvDBUtil;
                                                        //JCL
18972: 92 unit uPSI_JvDBUtils;
                                                        //JTCT
18973: 93 unit uPSI_JvAppUtils;
                                                        //JCL
18974: 94 unit uPSI_JvCtrlUtils;
                                                        //JCL
18975: 95 unit uPSI_JvFormToHtml;
                                                        //JCL
18976: 96 unit uPSI JvParsing;
                                                        //JCL
18977: 97 unit uPSI_SerDlgs;
                                                        //Toolbox
18978: 98 unit uPSI_Serial;
                                                        //Toolbox
18979: 99 unit uPSI_JvComponent;
18980: 100 unit uPSI_JvCalc;
                                                        //JCL
18981: 101 unit uPSI JvBdeUtils;
                                                        //JCL
18982: 102 unit uPSI_JvDateUtil;
                                                        //JCL
18983: 103 unit uPSI_JvGenetic;
                                                        //JCL
18984: 104 unit uPSI_JclBase;
                                                        //JCL
18985: 105 unit uPSI_JvUtils;
                                                        //JCL
18986: 106 unit uPSI JvStrUtil;
                                                        //JCL
18987: 107 unit uPSI_JvStrUtils;
                                                        //JCL
18988: 108 unit uPSI_JvFileUtil;
                                                        //JCL
18989: 109 unit uPSI_JvMemoryInfos;
                                                        //JCL
18990: 110 unit uPSI_JvComputerInfo;
                                                        //JCL
18991:
       111 unit uPSI_JvgCommClasses;
                                                        //JCL
       112 unit uPSI_JvgLogics;
18992:
                                                        //JCL
18993: 113 unit uPSI_JvLED;
                                                        //JCL
18994: 114 unit uPSI_JvTurtle;
                                                        //JCL
18995: 115 unit uPSI_SortThds; unit uPSI_ThSort;
                                                        //maXbox
       116 unit uPSI_JvgUtils;
                                                        //JCL
18997: 117 unit uPSI_JvExprParser;
                                                        //JCL
18998: 118 unit uPSI_HexDump;
                                                        //Borland
18999: 119 unit uPSI DBLogDlg;
                                                        //VCL
19000: 120 unit uPSI_SqlTimSt;
                                                        //RTT
19001: 121 unit uPSI_JvHtmlParser;
                                                        //JCL
```

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19002: 122 unit uPSI_JvgXMLSerializer;
                                                        //JCTi
19003: 123 unit uPSI_JvJCLUtils;
                                                        //JCL
19004: 124 unit uPSI_JvStrings;
                                                        //JCL
19005: 125 unit uPSI_uTPLb_IntegerUtils;
                                                        //TurboPower
19006: 126 unit uPSI uTPLb HugeCardinal;
                                                        //TurboPower
19007: 127 unit uPSI_uTPLb_HugeCardinalUtils;
                                                        //TurboPower
19008: 128 unit uPSI_SynRegExpr;
                                                        //SynEdit
19009: 129 unit uPSI_StUtils;
                                                        //SysTools4
19010: 130 unit uPSI_StToHTML;
                                                         //SysTools4
19011: 131 unit uPSI StStrms;
                                                         //SvsTools4
19012: 132 unit uPSI_StFIN;
                                                         //SvsTools4
19013: 133 unit uPSI_StAstroP;
                                                        //SysTools4
19014: 134 unit uPSI_StStat;
                                                        //SysTools4
19015: 135 unit uPSI_StNetCon;
                                                         //SysTools4
19016: 136 unit uPSI StDecMth;
                                                        //SvsTools4
19017: 137 unit uPSI_StOStr;
                                                         //SysTools4
19018: 138 unit uPSI_StPtrns;
                                                         //SysTools4
19019: 139 unit uPSI_StNetMsg;
                                                         //SysTools4
19020: 140 unit uPSI_StMath;
                                                         //SysTools4
19021: 141 unit uPSI_StExpEng;
                                                        //SvsTools4
19022: 142 unit uPSI_StCRC;
                                                        //SysTools4
19023: 143 unit uPSI_StExport,
                                                        //SysTools4
19024: 144 unit uPSI_StExpLog,
                                                        //SysTools4
19025: 145 unit uPSI_ActnList;
                                                        //Delphi VCL
       146 unit uPSI_jpeg;
                                                        //Borland
19027: 147 unit uPSI_StRandom;
                                                        //SysTools4
19028: 148 unit uPSI_StDict;
                                                         //SysTools4
19029: 149 unit uPSI StBCD;
                                                        //SvsTools4
19030: 150 unit uPSI_StTxtDat;
                                                        //SysTools4
19031: 151 unit uPSI_StRegEx;
                                                        //SysTools4
19032: 152 unit uPSI_IMouse;
19033: 153 unit uPSI_SyncObjs;
                                                         //VCL
19034: 154 unit uPSI_AsyncCalls;
                                                        //Hausladen
19035: 155 unit uPSI_ParallelJobs;
                                                        //Saraiva
       156 unit uPSI_Variants;
19037: 157 unit uPSI_VarCmplx;
                                                         //VCL Wolfram
                                                        //VCI
19038: 158 unit uPSI_DTDSchema;
19039: 159 unit uPSI_ShLwApi;
                                                        //Brakel
19040:
       160 unit uPSI_IBUtils;
                                                         //VCL
19041: 161 unit uPSI_CheckLst;
                                                        //VCL
19042: 162 unit uPSI_JvSimpleXml;
                                                         //JCL
19043: 163 unit uPSI_JclSimpleXml;
                                                        //JTCT
19044: 164 unit uPSI_JvXmlDatabase;
                                                        //JCL
19045: 165 unit uPSI_JvMaxPixel;
                                                        //JCL
19046: 166 unit uPSI_JvItemsSearchs;
                                                        //JCL
19047: 167 unit uPSI_StExpEng2;
                                                        //SysTools4
19048: 168 unit uPSI_StGenLog;
                                                        //SvsTools4
19049: 169 unit uPSI_JvLogFile;
                                                        //Jcl
19050: 170 unit uPSI_CPort;
19051: 171 unit uPSI_CPortCtl;
                                                         //ComPort Lib v4.11
                                                        //ComPort
       172 unit uPSI_CPortEsc;
19052:
                                                        //ComPort
19053:
       173 unit BarCodeScaner;
                                                         //ComPort
19054: 174 unit uPSI_JvGraph;
                                                         //JCL
19055: 175 unit uPSI_JvComCtrls;
                                                         //JCL
19056: 176 unit uPSI_GUITesting;
                                                         //D Unit
19057:
       177 unit uPSI_JvFindFiles;
                                                        //JCL
19058: 178 unit uPSI_StSystem;
                                                         //SysTools4
19059: 179 unit uPSI_JvKeyboardStates;
                                                        //JCL
19060: 180 unit uPSI_JvMail;
                                                         //JCL
19061: 181 unit uPSI JclConsole;
                                                        //JTCT
19062: 182 unit uPSI_JclLANMan;
                                                        //JCL
19063: 183 unit uPSI_IdCustomHTTPServer;
                                                        //Indv
19064: 184 unit IdHTTPServer
                                                        //Indy
19065: 185 unit uPSI IdTCPServer;
                                                        //Indy
19066: 186 unit uPSI_IdSocketHandle;
19067: 187 unit uPSI_IdIOHandlerSocket;
                                                        //Indv
                                                        //Indy
19068: 188 unit IdIOHandler;
                                                         //Indv
19069: 189 unit uPSI_cutils;
                                                         //Bloodshed
19070: 190 unit uPSI BoldUtils;
                                                        //boldsoft
19071: 191 unit uPSI_IdSimpleServer;
                                                        //Indy
19072: 192 unit uPSI_IdSSLOpenSSL;
                                                        //Indy
19073: 193 unit uPSI_IdMultipartFormData;
                                                        //Indy
19074: 194 unit uPSI_SynURIOpener;
                                                         //SynEdit
19075: 195 unit uPSI PerlRegEx;
                                                        //PCRE
19076: 196 unit uPSI_IdHeaderList;
                                                        //Indy
19077: 197 unit uPSI_StFirst;
                                                        //SysTools4
19078: 198 unit uPSI_JvCtrls;
                                                        //JCL
19079: 199 unit uPSI_IdTrivialFTPBase;
                                                        //Indy
19080: 200 unit uPSI_IdTrivialFTP;
                                                        //Indy
19081: 201 unit uPSI_IdUDPBase;
                                                        //Indv
19082: 202 unit uPSI_IdUDPClient;
                                                        //Indy
                                                        //for DMath.DLL
19083: 203 unit uPSI_utypes;
19084: 204 unit uPSI_ShellAPI;
                                                        //Borland
19085: 205 unit uPSI_IdRemoteCMDClient;
                                                        //Indy
19086: 206 unit uPSI_IdRemoteCMDServer;
                                                         //Indy
19087: 207 unit IdRexecServer;
                                                         //Indy
19088: 208 unit IdRexec; (unit uPSI_IdRexec;)
                                                        //Indv
19089: 209 unit IdUDPServer;
                                                        //Tndv
19090: 210 unit IdTimeUDPServer;
                                                        //Indy
```

```
19091: 211 unit IdTimeServer;
                                                          //Tndv
19092: 212 unit IdTimeUDP; (unit uPSI_IdUDPServer;)
                                                         //Indy
19093: 213 unit uPSI_IdIPWatch;
                                                         //Indv
19094: 214 unit uPSI_IdIrcServer;
                                                         //Indy
19095: 215 unit uPSI_IdMessageCollection;
                                                         //Indy
19096: 216 unit uPSI_cPEM;
                                                         //Fundamentals 4
19097:
       217 unit uPSI_cFundamentUtils;
                                                         //Fundamentals 4
19098: 218 unit uPSI_uwinplot;
                                                         //DMath
19099: 219 unit uPSI_xrtl_util_CPUUtils;
                                                          //ExtentedRTL
19100: 220 unit uPSI GR32 System;
                                                         //Graphics32
19101: 221 unit uPSI_cFileUtils;
                                                         //Fundamentals 4
19102: 222 unit uPSI_cDateTime; (timemachine)
                                                         //Fundamentals 4
19103: 223 unit uPSI_cTimers; (high precision timer)
                                                         //Fundamentals 4
19104: 224 unit uPSI_cRandom;
                                                          //Fundamentals 4
19105:
       225 unit uPSI ueval;
                                                         //DMath
19106: 226 unit uPSI_xrtl_net_URIUtils;
                                                         //ExtendedRTL
19107: 227 unit xrtl_net_URIUtils;
                                                         //ExtendedRTL
19108: 228 unit uPSI_ufft; (FFT)
                                                         //DMath
19109: 229 unit uPSI_DBXChannel;
                                                         //Delphi
19110: 230 unit uPSI_DBXIndyChannel;
                                                         //Delphi Indv
19111: 231 unit uPSI_xrtl_util_COMCat;
                                                         //ExtendedRTL
19112: 232 unit uPSI_xrtl_util_StrUtils;
                                                         //ExtendedRTL
19113: 233 unit uPST_xrtl_util_VariantUtils;
19114: 234 unit uPST_xrtl_util_FileUtils;
19115: 235 unit xrtl_util_Compat;
                                                         //ExtendedRTL
                                                         //ExtendedRTL
                                                         //ExtendedRTL
19116: 236 unit uPSI_OleAuto;
                                                         //Borland
19117: 237 unit uPSI_xrtl_util_COMUtils;
                                                         //ExtendedRTL
19118: 238 unit uPSI CmAdmCtl;
                                                         //Borland
19119: 239 unit uPSI_ValEdit2;
                                                         //VCL
19120: 240 unit uPSI_GR32; //Graphics32
                                                         //Graphics32
19121: 241 unit uPSI_GR32_Image;
                                                         //Graphics32
19122: 242 unit uPSI_xrtl_util_TimeUtils;
                                                         //ExtendedRTL
19123: 243 unit uPSI_xrtl_util_TimeZone;
                                                         //ExtendedRTL
19124: 244 unit uPSI_xrtl_util_TimeStamp;
                                                         //ExtendedRTL
       245 unit uPSI_xrtl_util_Map;
                                                         //ExtendedRTL
19126: 246 unit uPSI_xrtl_util_Set;
                                                          //ExtendedRTL
19127: 247 unit uPSI CPortMonitor;
                                                         //ComPort
19128: 248 unit uPSI_StIniStm;
                                                         //SysTools4
19129:
       249 unit uPSI_GR32_ExtImage;
                                                         //Graphics32
19130: 250 unit uPSI_GR32_OrdinalMaps;
                                                         //Graphics32
19131: 251 unit uPSI GR32 Rasterizers;
                                                         //Graphics32
19132: 252 unit uPSI_xrtl_util_Exception;
19133: 253 unit uPSI_xrtl_util_Value;
                                                         //ExtendedRTL
                                                         //ExtendedRTL
19134: 254 unit uPSI_xrtl_util_Compare;
                                                         //ExtendedRTL
                                                         //VCT
19135: 255 unit uPSI_FlatSB;
19136: 256 unit uPSI_JvAnalogClock;
                                                          //JCL
19137: 257 unit uPSI_JvAlarms;
                                                         //JCL
19138: 258 unit uPSI_JvSQLS;
                                                          //JCL
19139: 259 unit uPSI_JvDBSecur;
                                                          //JCL
19140: 260 unit uPSI_JvDBQBE;
                                                          //JCL
19141: 261 unit uPSI JvStarfield;
                                                          //JCL
19142: 262 unit uPSI_JVCLMiscal;
                                                          //JCL
19143: 263 unit uPSI_JvProfiler32;
19144: 264 unit uPSI_JvDirectories,
                                                          //JCL
19145: 265 unit uPSI_JclSchedule,
                                                          //JCL
19146: 266 unit uPSI_JclSvcCtrl,
                                                          //JCL
19147: 267 unit uPSI_JvSoundControl,
                                                          //JCL
19148: 268 unit uPSI_JvBDESQLScript,
                                                          //JCL
19149: 269 unit uPSI_JvgDigits,
                                                          //JCL>
19150: 270 unit uPSI_ImgList;
                                                          //TCustomTmageList
19151: 271 unit uPSI_JclMIDI;
                                                         //JCL>
19152: 272 unit uPSI_JclWinMidi;
                                                         //JCL>
19153: 273 unit uPSI_JclNTFS;
                                                          //JCL>
19154: 274 unit uPSI JclAppInst;
                                                          //JCL>
19155: 275 unit uPSI_JvRle;
                                                         //JCL>
       276 unit uPSI_JvRas32;
                                                          //JCL>
19157: 277 unit uPSI_JvImageDrawThread,
19158: 278 unit uPSI_JvImageWindow,
                                                         //JCL>
19159: 279 unit uPSI JvTransparentForm;
                                                          //JCT.>
19160: 280 unit uPSI_JvWinDialogs;
                                                          //JCL>
19161: 281 unit uPSI_JvSimLogic,
                                                         //JCL>
19162: 282 unit uPSI_JvSimIndicator,
                                                          //JCL>
19163: 283 unit uPSI_JvSimPID,
19164: 284 unit uPSI JvSimPIDLinker,
                                                          //JCL>
                                                          //JCT.>
19165: 285 unit uPSI_IdRFCReply;
                                                         //Indy
19166: 286 unit uPSI_IdIdent;
                                                          //Indy
19167: 287 unit uPSI_IdIdentServer;
                                                          //Indy
19168: 288 unit uPSI_JvPatchFile;
                                                          //JCL
19169: 289 unit uPSI_StNetPfm;
                                                         //SysTools4
19170: 290 unit uPSI_StNet;
                                                          //SysTools4
19171: 291 unit uPSI_JclPeImage;
                                                          //JCL
19172: 292 unit uPSI JclPrint;
                                                          //JCL
19173: 293 unit uPSI JclMime;
                                                          //JCL
19174: 294 unit uPSI_JvRichEdit;
                                                          //JCL
19175: 295 unit uPSI_JvDBRichEd;
                                                          //JCL
19176: 296 unit uPSI_JvDice;
                                                          //JCL
19177: 297 unit uPSI_JvFloatEdit;
                                                          //JCL 3.9.8
19178: 298 unit uPSI_JvDirFrm;
                                                          //JCL
19179: 299 unit uPSI_JvDualList;
                                                         //JCL
```

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19180: 300 unit uPSI_JvSwitch;
                                                        ////JCL
////JCL
19181: 301 unit uPSI_JvTimerLst;
19182: 302 unit uPSI_JvMemTable;
                                                        //JCL
19183: 303 unit uPSI_JvObjStr;
                                                         //JCL
19184: 304 unit uPSI StLArr;
                                                        //SysTools4
19185: 305 unit uPSI_StWmDCpy;
                                                        //SysTools4
19186: 306 unit uPSI_StText;
                                                        //SysTools4
19187: 307 unit uPSI_StNTLog;
                                                         //SvsTools4
19188: 308 unit uPSI_xrtl_math_Integer;
                                                         //ExtendedRTL
19189: 309 unit uPSI_JvImagPrvw;
                                                         //JTCT.
19190: 310 unit uPSI_JvFormPatch;
                                                         //JCL
19191: 311 unit uPSI_JvPicClip;
                                                         //JCL
19192: 312 unit uPSI_JvDataConv;
                                                         //JCL
19193: 313 unit uPSI_JvCpuUsage;
                                                         //JCL
19194: 314 unit uPSI_JclUnitConv_mX2;
                                                         //JTCT.
19195: 315 unit JvDualListForm;
                                                         //JCL
19196: 316 unit uPSI_JvCpuUsage2;
                                                         //JCL
19197: 317 unit uPSI_JvParserForm;
                                                         //JCL
19198: 318 unit uPSI_JvJanTreeView;
                                                         //JCL
19199: 319 unit uPSI_JvTransLED;
                                                         //JCL
19200: 320 unit uPSI_JvPlaylist;
                                                         //JCL
19201: 321 unit uPSI_JvFormAutoSize;
                                                         //JCL
19202: 322 unit uPSI_JvYearGridEditForm;
                                                         //JCL
19203: 323 unit uPSI_JvMarkupCommon;
                                                         //JCL
19204: 324 unit uPSI_JvChart;
                                                        //JCL
19205: 325 unit uPSI_JvXPCore;
                                                        //JCL
19206: 326 unit uPSI_JvXPCoreUtils;
                                                         //JCL
19207: 327 unit uPSI_StatsClasses;
                                                         //mX4
19208: 328 unit uPSI_ExtCtrls2;
                                                         //VCL
19209: 329 unit uPSI_JvUrlGrabbers;
                                                        //JCL
19210: 330 unit uPSI_JvXmlTree;
                                                         //JCL
19211: 331 unit uPSI_JvWavePlayer;
                                                         //JCL
19212: 332 unit uPSI JvUnicodeCanvas;
                                                         //JCL
19213: 333 unit uPSI_JvTFUtils;
                                                         //JCL
       334 unit uPSI_IdServerIOHandler;
                                                        //Indy
19215: 335 unit uPSI_IdServerIOHandlerSocket;
                                                        //Indy
19216: 336 unit uPSI IdMessageCoder;
                                                         //Indv
19217: 337 unit uPSI_IdMessageCoderMIME;
                                                        //Indv
19218: 338 unit uPSI_IdMIMETypes;
                                                        //Indy
19219: 339 unit uPSI_JvConverter;
19220: 340 unit uPSI_JvCsvParse;
                                                         //JCL
19221: 341 unit uPSI_umath; unit uPSI_ugamma; //DMa
19222: 342 unit uPSI_ExcelExport;(Nat:TJsExcelExport) //JCL
                                                         //DMath
19223: 343 unit uPSI_JvDBGridExport;
                                                        //JCL
19224: 344 unit uPSI_JvgExport;
                                                        //JCL
19225: 345 unit uPSI_JvSerialMaker;
                                                        //JCL
19226: 346 unit uPSI_JvWin32;
                                                        //JCL
19227: 347 unit uPSI_JvPaintFX;
                                                        //JCL
19228: 348 unit uPSI_JvOracleDataSet; (beta)
                                                         //JCL
19229: 349 unit uPSI_JvValidators; (preview)
                                                         //JCL
19230: 350 unit uPSI JvNTEventLog;
                                                         //JCL
       351 unit uPSI_ShellZipTool;
19231:
                                                         //mX4
19232: 352 unit uPSI_JvJoystick;
                                                         //JCL
19233: 353 unit uPSI_JvMailSlots;
                                                         //JCL
19234: 354 unit uPSI_JclComplex;
                                                         //JCL
19235: 355 unit uPSI_SynPdf;
                                                        //Synopse
19236: 356 unit uPSI_Registry;
                                                         //VCL
19237: 357 unit uPSI_TlHelp32;
                                                         //VCL
19238: 358 unit uPSI_JclRegistry;
                                                         //JCL
19239: 359 unit uPST JvAirBrush;
                                                        //JTCT
19240: 360 unit uPSI_mORMotReport;
                                                        //Synopse
19241: 361 unit uPSI_JclLocales;
                                                         //JCL
19242: 362 unit uPSI_SynEdit;
                                                         //SynEdit
19243: 363 unit uPSI SynEditTypes;
                                                        //SynEdit
19244: 364 unit uPSI_SynMacroRecorder;
                                                        //SvnEdit
19245: 365 unit uPSI_LongIntList;
                                                        //SynEdit
19246: 366 unit uPSI_devcutils;
                                                         //DevC
19247: 367 unit uPSI_SynEditMiscClasses;
                                                        //SynEdit
19248: 368 unit uPSI_SynEditRegexSearch;
                                                        //SynEdit
19249: 369 unit uPSI_SynEditHighlighter;
                                                        //SvnEdit
19250: 370 unit uPSI_SynHighlighterPas;
                                                        //SynEdit
19251: 371 unit uPSI_JvSearchFiles;
                                                         //JCL
19252: 372 unit uPSI_SynHighlighterAny;
                                                         //Lazarus
19253: 373 unit uPST SynEditKeyCmds;
                                                        //SynEdit
19254: 374 unit uPSI_SynEditMiscProcs,
                                                        //SynEdit
19255: 375 unit uPSI_SynEditKbdHandler
                                                         //SynEdit
19256: 376 unit uPSI_JvAppInst,
                                                         //JCL
19257: 377 unit uPSI_JvAppEvent;
                                                         //JCL
19258: 378 unit uPSI_JvAppCommand;
                                                        //JCL
19259: 379 unit uPSI_JvAnimTitle;
                                                        //JCL
19260: 380 unit uPSI_JvAnimatedImage;
                                                        //JCL
19261: 381 unit uPSI_SynEditExport;
                                                         //SynEdit
19262: 382 unit uPSI SynExportHTML;
                                                        //SynEdit
19263: 383 unit uPSI_SynExportRTF;
                                                         //SynEdit
19264: 384 unit uPSI_SynEditSearch;
                                                         //SynEdit
                                                         //maXbox;
19265: 385 unit uPSI_fMain_back
19266: 386 unit uPSI JvZoom;
                                                         //JCL
19267: 387 unit uPSI_PMrand;
                                                         //PM
19268: 388 unit uPSI_JvSticker;
                                                         //JCL
```

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19269: 389 unit uPSI_XmlVerySimple;
19270: 390 unit uPSI_Services;
                                                          //mX4
                                                          //ExtPascal
19271: 391 unit uPSI_ExtPascalUtils;
                                                          //ExtPascal
19272: 392 unit uPSI_SocketsDelphi;
                                                           //ExtPascal
19273: 393 unit uPST StBarC;
                                                          //SysTools
19274: 394 unit uPSI StDbBarC;
                                                          //SysTools
19275: 395 unit uPSI_StBarPN;
                                                          //SysTools
19276: 396 unit uPSI_StDbPNBC;
                                                           //SvsTools
19277: 397 unit uPSI_StDb2DBC;
                                                           //SysTools
19278: 398 unit uPSI StMoney;
                                                          //SvsTools
19279: 399 unit uPSI_JvForth;
                                                           //JCL
19280: 400 unit uPSI_RestRequest;
19281: 401 unit uPSI_HttpRESTConnectionIndy;
                                                           //mX4
19282: 402 unit uPSI_JvXmlDatabase; //update
                                                           //JCL
19283: 403 unit uPSI StAstro;
                                                          //SysTools
19284: 404 unit uPSI_StSort;
                                                           //SysTools
19285: 405 unit uPSI_StDate;
                                                           //SysTools
19286: 406 unit uPSI_StDateSt;
                                                           //SysTools
19287: 407 unit uPSI_StBase;
                                                           //SysTools
19288: 408 unit uPSI_StVInfo;
                                                          //SvsTools
19289: 409 unit uPSI_JvBrowseFolder;
                                                           //JCL
19290: 410 unit uPSI_JvBoxProcs;
                                                           //JCL
19291: 411 unit uPSI_urandom; (unit uranuvag;)
19292: 412 unit uPSI_usimann; (unit ugenalg;)
                                                           //DMath
                                                           //DMath
19293: 413 unit uPSI_JvHighlighter;
                                                          //JCL
19294: 414 unit uPSI_Diff;
                                                          //mX4
19295: 415 unit uPSI_SpringWinAPI;
                                                           //DSpring
19296: 416 unit uPSI_StBits;
19297: 417 unit uPSI_TomDBQue;
                                                           //SvsTools
                                                          //mX4
19298: 418 unit uPSI_MultilangTranslator;
                                                          //mX4
19299: 419 unit uPSI_HyperLabel;
                                                           //mX4
                                                          //mX4
19300: 420 unit uPSI Starter;
19301: 421 unit uPSI FileAssocs;
                                                          //devC
19302: 422 unit uPSI_devFileMonitorX;
                                                           //devC
19303: 423 unit uPSI_devrun;
19304: 424 unit uPSI_devExec;
                                                           //devC
19305: 425 unit uPSI ovsUtils;
                                                           //devC
19306: 426 unit uPSI_DosCommand;
                                                          //devC
19307: 427 unit uPSI_CppTokenizer;
                                                           //devC
19308: 428 unit uPSI_JvHLParser;
                                                          //devC
19309: 429 unit uPSI_JclMapi;
                                                           //JCL
19310: 430 unit uPSI_JclShell;
                                                           //JTCT.
19311: 431 unit uPSI_JclCOM;
                                                          //JCL
19312: 432 unit uPSI_GR32_Math;
                                                          //Graphics32
19313: 433 unit uPSI_GR32_LowLevel;
                                                          //Graphics32
19314: 434 unit uPSI_SimpleHl;
                                                          //mX4
19315: 435 unit uPSI_GR32_Filters,
                                                          //Graphics32
19316: 436 unit uPSI_GR32_VectorMaps;
                                                          //Graphics32
19317: 437 unit uPSI_cXMLFunctions;
                                                           //Fundamentals 4
19318: 438 unit uPSI JvTimer;
                                                           //JCL
19319: 439 unit uPSI cHTTPUtils;
                                                          //Fundamentals 4
19320: 440 unit uPSI_cTLSUtils;
                                                           //Fundamentals 4
19321: 441 unit uPSI_JclGraphics;
                                                          //JCL
19322: 442 unit uPSI_JclSynch;
                                                           //JCL
19323: 443 unit uPSI_IdTelnet;
19324: 444 unit uPSI_IdTelnetServer,
                                                           //Indv
                                                          //Tndv
19325: 445 unit uPSI_IdEcho,
                                                          //Indy
19326: 446 unit uPSI_IdEchoServer,
                                                           //Indy
19327: 447 unit uPSI_IdEchoUDP,
19328: 448 unit uPSI IdEchoUDPServer,
                                                           //Indy
                                                          //Tndv
19329: 449 unit uPSI_IdSocks,
                                                          //Indy
19330: 450 unit uPSI_IdAntiFreezeBase;
                                                           //Indv
19331: 451 unit uPSI_IdHostnameServer;
                                                           //Indy
19332: 452 unit uPSI IdTunnelCommon,
                                                          //Tndv
19333: 453 unit uPSI_IdTunnelMaster,
                                                          //Indv
19334: 454 unit uPSI_IdTunnelSlave,
                                                          //Indy
19335: 455 unit uPSI_IdRSH,
19336: 456 unit uPSI_IdRSHServer,
                                                          //Indy
19337: 457 unit uPSI_Spring_Cryptography_Utils;
                                                          //Spring4Delphi
19338: 458 unit uPSI_MapReader,
                                                          //devC
19339: 459 unit uPSI_LibTar,
19340: 460 unit uPSI_IdStack;
                                                          //Indy
19341: 461 unit uPSI_IdBlockCipherIntercept;
                                                           //Indy
19342: 462 unit uPST IdChargenServer;
                                                          //Tndv
19343: 463 unit uPSI_IdFTPServer,
                                                           //Indy
19344: 464 unit uPSI_IdException,
                                                          //Indy
19345: 465 unit uPSI_utexplot;
                                                           //DMath
19346: 466 unit uPSI_uwinstr;
                                                           //DMath
19347: 467 unit uPSI_VarRecUtils;
                                                          //devC
19348: 468 unit uPSI_JvStringListToHtml,
                                                          //JCL
19349: 469 unit uPSI_JvStringHolder,
                                                          //JCL
19350: 470 unit uPSI IdCoder;
                                                          //Indy
19351: 471 unit uPSI_SynHighlighterDfm;
                                                          //Synedit
19352: 472 unit uHighlighterProcs; in 471
                                                          //Synedit
19353: 473 unit uPSI_LazFileUtils,
                                                           //LCL
19354: 474 unit uPSI_IDECmdLine;
                                                           //LCL
19355: 475 unit uPSI lazMasks;
                                                          //LCL
19356: 476 unit uPSI_ip_misc;
                                                           //mX4
19357: 477 unit uPSI_Barcode;
                                                          //LCL
```

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19358: 478 unit uPSI_SimpleXML;
19359: 479 unit uPSI_JclIniFiles;
                                                           //LCL
                                                           //JCL
19360: 480 unit uPSI_D2XXUnit; {$X-}
                                                           //FTDI
19361: 481 unit uPSI_JclDateTime;
                                                           //JCL
19362: 482 unit uPSI_JclEDI;
                                                           //JCL
19363: 483 unit uPSI_JclMiscel2;
                                                           //JCL
19364: 484 unit uPSI_JclValidation;
                                                           //JCL
19365: 485 unit uPSI_JclAnsiStrings; {-PString}
                                                           //JCL
19366: 486 unit uPSI_SynEditMiscProcs2;
                                                           //Synedit
19367: 487 unit uPSI_JclStreams;
19368: 488 unit uPSI_QRCode;
                                                           //JCL
                                                           //mX4
19369: 489 unit uPSI_BlockSocket;
                                                           //ExtPascal
19370: 490 unit uPSI_Masks,Utils
                                                           //VCL
19371: 491 unit uPSI_synautil;
19372: 492 unit uPSI JclMath Class;
                                                           //Synapse!
                                                           //JCT, RTT.
19373: 493 unit ugamdist; //Gamma function
                                                           //DMath
19374: 494 unit uibeta, ucorrel; //IBeta
                                                           //DMath
19375: 495 unit uPSI_SRMgr;
                                                           //mX4
19376: 496 unit uPSI_HotLog;
                                                           //mX4
19377: 497 unit uPSI_DebugBox;
                                                           //mX4
19378: 498 unit uPSI_ustrings;
                                                           //DMath
                                                           //DMath
19379: 499 unit uPSI_uregtest;
19380: 500 unit uPSI_usimplex;
                                                           //DMath
19381: 501 unit uPSI_uhyper;
                                                           //DMath
19382: 502 unit uPSI_IdHL7;
                                                           //Indv
19383: 503 unit uPSI_IdIPMCastBase,
                                                           //Indy
19384: 504 unit uPSI_IdIPMCastServer;
19385: 505 unit uPSI_IdIPMCastClient;
                                                           //Tndv
19386: 506 unit uPSI_unlfit; //nlregression
                                                           //DMath
19387: 507 unit uPSI_IdRawHeaders;
                                                           //Indy
19388: 508 unit uPSI_IdRawClient;
19389: 509 unit uPSI_IdRawFunctions;
                                                           //Indy
//Indy
19390: 510 unit uPSI IdTCPStream;
19391: 511 unit uPSI_IdSNPP;
                                                           //Indy
19392: 512 unit uPSI_St2DBarC;
                                                           //SysTools
19393: 513 unit uPSI_ImageWin; //FTL
                                                           //VCL
19394: 514 unit uPSI_CustomDrawTreeView; //FTL
                                                           //VCL
//VCL
19395: 515 unit uPSI_GraphWin; //FTL
19396:
       516 unit uPSI_actionMain; //FTL
                                                           //VCL
19397:
       517 unit uPSI_StSpawn;
                                                           //SysTools
19398: 518 unit uPSI_CtlPanel;
                                                           //VCL
19399: 519 unit uPSI_IdLPR;
19400: 520 unit uPSI_SockRequestInterpreter;
                                                           //Tndv
                                                           //Indy
19401: 521 unit uPSI_ulambert;
                                                           //DMath
19402: 522 unit uPSI_ucholesk;
19403: 523 unit uPSI_SimpleDS;
                                                           //VCT.
19404: 524 unit uPSI_DBXSqlScanner;
                                                           //VCL
19405: 525 unit uPSI_DBXMetaDataUtil;
                                                           //VCL
19406: 526 unit uPSI_Chart;
                                                           //TEE
19407: 527 unit uPSI TeeProcs;
                                                           //TEE
19408: 528 unit mXBDEUtils;
                                                           //mX4
19409:
       529 unit uPSI_MDIEdit;
                                                           //VCL
19410: 530 unit uPSI_CopyPrsr;
19411: 531 unit uPSI_SockApp;
                                                           //VCL
19412: 532 unit uPSI AppEvnts;
                                                           //VCL
19413:
       533 unit uPSI_ExtActns;
                                                           //VCL
19414: 534 unit uPSI_TeEngine;
                                                           //TEE
19415: 535 unit uPSI_CoolMain; //browser
                                                           //VCL
19416: 536 unit uPSI_StCRC;
                                                           //SysTools
19417: 537 unit uPSI StDecMth2;
                                                           //SvsTools
19418: 538 unit uPSI_frmExportMain;
                                                           //Synedit
19419:
       539 unit uPSI_SynDBEdit;
                                                           //Synedit
19420: 540 unit uPSI_SynEditWildcardSearch;
19421: 541 unit uPSI BoldComUtils;
                                                           //BOLD
19422: 542 unit uPSI_BoldIsoDateTime;
                                                           //BOLD
19423: 543 unit uPSI_BoldGUIDUtils; //inCOMUtils
                                                           //BOLD
19424: 544 unit uPSI_BoldXMLRequests;
                                                           //BOLD
                                                           //BOLD
19425: 545 unit uPSI_BoldStringList;
19426: 546 unit uPSI_BoldFileHandler;
                                                           //BOTID
19427: 547 unit uPSI_BoldContainers;
                                                           //BOLD
19428: 548 unit uPSI_BoldQueryUserDlg;
                                                           //BOLD
19429: 549 unit uPSI_BoldWinINet;
                                                           //BOLD
19430: 550 unit uPSI_BoldQueue;
                                                           //BOLD
19431: 551 unit uPSI_JvPcx;
                                                           //JCL
19432: 552 unit uPSI_IdWhois;
                                                           //Indy
19433: 553 unit uPSI_IdWhoIsServer;
                                                           //Indy
19434: 554 unit uPSI_IdGopher;
                                                           //Indv
19435: 555 unit uPSI_IdDateTimeStamp;
19436: 556 unit uPSI_IdDayTimeServer;
                                                           //Indy
                                                           //Indy
19437: 557 unit uPSI_IdDayTimeUDP;
                                                           //Indv
19438: 558 unit uPSI_IdDayTimeUDPServer;
19439: 559 unit uPSI_IdDICTServer;
                                                           //Indv
19440: 560 unit uPSI_IdDiscardServer;
                                                           //Tndv
19441: 561 unit uPSI_IdDiscardUDPServer;
                                                           //Indy
19442: 562 unit uPSI_IdMappedFTP;
19443: 563 unit uPSI_IdMappedPortTCP;
                                                           //Indy
19444: 564 unit uPSI_IdGopherServer;
19445: 565 unit uPSI_IdQotdServer;
19446: 566 unit uPSI_JvRgbToHtml;
                                                           //Indv
                                                           //Tndv
                                                           //JCL
```

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19447: 567 unit uPSI_JvRemLog,
                                                          //JCTi
19448: 568 unit uPSI_JvSysComp;
                                                          //JCL
19449: 569 unit uPSI_JvTMTL;
                                                          //JCL
19450: 570 unit uPSI_JvWinampAPI;
                                                          //JCL
19451: 571 unit uPSI MSysUtils;
                                                          //mX4
19452: 572 unit uPSI ESBMaths;
                                                          //ESB
19453:
       573 unit uPSI_ESBMaths2;
                                                          //ESB
19454: 574 unit uPSI_uLkJSON;
19455: 575 unit uPSI_ZURL; //Zeos
                                                          //Zeos
19456: 576 unit uPSI_ZSysUtils;
                                                          //Zeos
19457: 577 unit unaUtils internals
                                                          //IJNA
19458: 578 unit uPSI_ZMatchPattern;
                                                          //Zeos
19459: 579 unit uPSI_ZClasses;
19460: 580 unit uPSI_ZCollections;
                                                          //Zeos
19461: 581 unit uPST ZEncoding;
                                                          //Zeos
19462: 582 unit uPSI_IdRawBase;
                                                          //Indy
19463: 583 unit uPSI_IdNTLM;
                                                          //Indy
                                                          //Indy
19464: 584 unit uPSI_IdNNTP;
19465: 585 unit uPSI_usniffer; //PortScanForm
19466: 586 unit uPSI_IdCoderMIME;
                                                          //mX4
                                                          //Indv
19467: 587 unit uPSI_IdCoderUUE;
                                                          //Indy
19468: 588 unit uPSI_IdCoderXXE;
19469: 589 unit uPSI_IdCoder3to4;
                                                          //Indv
19470: 590 unit uPSI_IdCookie;
                                                          //Tndv
19471: 591 unit uPSI_IdCookieManager;
                                                          //Indv
19472: 592 unit uPSI_WDosSocketUtils;
                                                          //WDos
19473: 593 unit uPSI_WDosPlcUtils;
                                                          //WDos
19474: 594 unit uPSI_WDosPorts;
19475: 595 unit uPSI_WDosResolvers;
                                                          //WDos
                                                          //WDos
19476: 596 unit uPSI_WDosTimers;
                                                          //WDos
19477: 597 unit uPSI_WDosPlcs;
                                                          //WDos
19478: 598 unit uPSI_WDosPneumatics;
                                                          //WDos
19479: 599 unit uPSI_IdFingerServer;
                                                          //Indv
19480: 600 unit uPSI_IdDNSResolver;
                                                          //Indy
19481: 601 unit uPSI_IdHTTPWebBrokerBridge;
                                                          //Indy
19482: 602 unit uPSI_IdIntercept;
                                                          //Indy
19483: 603 unit uPSI_IdIPMCastBase;
                                                          //Indv
19484: 604 unit uPSI IdLogBase;
                                                          //Indv
19485: 605 unit uPSI_IdIOHandlerStream;
                                                          //Indy
19486: 606 unit uPSI_IdMappedPortUDP;
19487: 607 unit uPSI_IdQOTDUDPServer;
                                                          //Indy
19488: 608 unit uPSI_IdQOTDUDP;
19489: 609 unit uPSI_IdSysLog;
                                                          //Tndv
                                                          //Indy
19490: 610 unit uPSI_IdSysLogServer;
                                                          //Indy
19491: 611 unit uPSI_IdSysLogMessage;
                                                          //Indy
19492: 612 unit uPSI_IdTimeServer;
                                                          //Tndv
19493: 613 unit uPSI_IdTimeUDP;
                                                          //Indv
19494: 614 unit uPSI_IdTimeUDPServer;
                                                          //Indy
19495: 615 unit uPSI_IdUserAccounts;
19496: 616 unit uPSI TextUtils;
                                                          //mX4
19497: 617 unit uPSI MandelbrotEngine;
                                                          //mX4
19498: 618 unit uPSI_delphi_arduino_Unit1;
                                                          //mX4
19499: 619 unit uPSI_DTDSchema2;
19500: 620 unit uPSI_fplotMain;
                                                          //DMath
19501: 621 unit uPSI_FindFileIter;
                                                          //mX4
19502: 622 unit uPSI_PppState; (JclStrHashMap)
19503: 623 unit uPSI_PppParser;
                                                          //PPP
                                                          //PPP
19504: 624 unit uPSI_PppLexer;
                                                          //PPP
19505: 625 unit uPSI_PCharUtils;
                                                          //PPP
19506: 626 unit uPSI uJSON;
                                                          //WIT
19507: 627 unit uPSI_JclStrHashMap;
                                                          //JCL
19508: 628 unit uPSI_JclHookExcept;
                                                          //JCL
19509: 629 unit uPSI_EncdDecd;
                                                          //VCL
19510: 630 unit uPSI SockAppReg;
                                                          //VCL
19511: 631 unit uPSI_PJFileHandle;
                                                          //PJ
19512: 632 unit uPSI_PJEnvVars;
                                                          //PJ
19513: 633 unit uPSI_PJPipe;
19514: 634 unit uPSI_PJPipeFilters;
                                                          //PJ
19515: 635 unit uPSI_PJConsoleApp;
                                                          //PJ
19516: 636 unit uPSI_UConsoleAppEx;
                                                          //PJ
19517: 637 unit uPSI_DbxSocketChannelNative,
                                                          //VCL
19518: 638 unit uPSI_DbxDataGenerator,
                                                          //VCL
19519: 639 unit uPSI_DBXClient;
                                                          //VCL
19520: 640 unit uPST IdLogEvent;
                                                          //Tndv
19521: 641 unit uPSI_Reversi;
                                                          //mX4
19522: 642 unit uPSI_Geometry;
19523: 643 unit uPSI_IdSMTPServer;
                                                          //Indy
19524: 644 unit uPSI_Textures;
                                                          //mX4
19525: 645 unit uPSI_IBX;
                                                          //VCL
19526: 646 unit uPSI_IWDBCommon;
                                                          //VCL
19527: 647 unit uPSI_SortGrid;
                                                          //mX4
19528: 648 unit uPSI IB;
                                                          //VCL
19529: 649 unit uPSI_IBScript;
                                                          //VCL
19530: 650 unit uPSI_JvCSVBaseControls;
                                                          //JCL
19531: 651 unit uPSI_Jvg3DColors;
                                                          //JCL
19532: 652 unit uPSI_JvHLEditor; //beat
                                                          //JCL
19533: 653 unit uPSI_JvShellHook;
                                                          //JCL
19534: 654 unit uPSI_DBCommon2
                                                          //VCL
19535: 655 unit uPSI_JvSHFileOperation;
                                                          //JCL
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19536: 656 unit uPSI_uFilexport;
19537: 657 unit uPSI_JvDialogs;
                                                          //mX4
                                                          //JCL
19538: 658 unit uPSI_JvDBTreeView;
                                                          //JCL
19539: 659 unit uPSI_JvDBUltimGrid;
                                                          //JCL
19540: 660 unit uPSI_JvDBQueryParamsForm;
                                                          //JCL
19541: 661 unit uPSI JvExControls;
                                                          //JCL
19542: 662 unit uPSI_JvBDEMemTable;
                                                          //JCL
19543: 663 unit uPSI_JvCommStatus;
                                                          //JCL
19544: 664 unit uPSI_JvMailSlots2;
                                                          //JCL
19545: 665 unit uPSI_JvgWinMask;
                                                          //JTCT
19546: 666 unit uPSI_StEclpse;
                                                          //SvsTools
19547: 667 unit uPSI_StMime;
                                                          //SysTools
19548: 668 unit uPSI_StList;
                                                          //SysTools
19549: 669 unit uPSI_StMerge;
                                                          //SysTools
19550: 670 unit uPSI StStrS;
                                                          //SysTools
19551: 671 unit uPSI_StTree,
                                                          //SysTools
19552: 672 unit uPSI_StVArr;
                                                          //SysTools
19553: 673 unit uPSI_StRegIni;
                                                          //SysTools
19554: 674 unit uPSI_urkf;
                                                          //DMath
19555: 675 unit uPSI_usvd;
                                                          //DMath
19556: 676 unit uPSI_DepWalkUtils;
                                                          //JCL
19557:
       677 unit uPSI_OptionsFrm;
                                                          //JCL
19558: 678 unit yuvconverts;
                                                          //mX4
19559: 679 uPSI JvPropAutoSave;
                                                          //JCL
19560: 680 uPSI_AclAPI;
                                                          //alcinoe
19561: 681 uPSI_AviCap;
                                                          //alcinoe
19562: 682 uPSI_ALAVLBinaryTree;
                                                          //alcinoe
19563: 683 uPSI_ALFcnMisc;
19564: 684 uPSI_ALStringList;
                                                          //alcinoe
                                                          //alcinoe
19565: 685 uPSI_ALQuickSortList;
                                                          //alcinoe
19566: 686 uPSI_ALStaticText;
                                                          //alcinoe
19567: 687 uPSI_ALJSONDoc;
                                                          //alcinoe
19568: 688 uPSI ALGSMComm;
                                                          //alcinoe
19569: 689 uPSI_ALWindows;
                                                          //alcinoe
19570: 690 uPSI_ALMultiPartFormDataParser;
                                                          //alcinoe
19571: 691 uPSI_ALHttpCommon;
19572: 692 uPSI_ALWebSpider,
                                                          //alcinoe
19573: 693 uPSI_ALHttpClient;
                                                          //alcinoe
19574: 694 uPSI_ALFcnHTML;
                                                          //alcinoe
19575: 695 uPSI_ALFTPClient;
                                                          //alcinoe
19576: 696 uPSI_ALInternetMessageCommon;
                                                          //alcinoe
19577: 697 uPSI ALWininetHttpClient;
                                                          //alcinoe
19578: 698 uPSI_ALWinInetFTPClient;
                                                          //alcinoe
19579: 699 uPSI_ALWinHttpWrapper;
                                                          //alcinoe
19580: 700 uPSI_ALWinHttpClient;
                                                          //alcinoe
19581: 701 uPSI_ALFcnWinSock;
                                                          //alcinoe
19582: 702 uPSI_ALFcnSQL;
                                                          //alcinoe
19583: 703 uPSI_ALFcnCGI;
                                                          //alcinoe
19584: 704 uPSI_ALFcnExecute;
                                                          //alcinoe
19585: 705 uPSI ALFcnFile;
                                                          //alcinoe
19586: 706 uPSI ALFcnMime;
                                                          //alcinoe
19587:
       707 uPSI_ALPhpRunner;
                                                          //alcinoe
19588: 708 uPSI_ALGraphic;
19589: 709 uPSI_ALIniFiles;
                                                          //alcinoe
19590:
       710 uPSI ALMemCachedClient;
                                                          //alcinoe
19591:
       711 unit uPSI_MyGrids;
                                                          //mX4
19592:
       712 uPSI_ALMultiPartMixedParser
                                                          //alcinoe
19593: 713 uPSI_ALSMTPClient
                                                          //alcinoe
19594: 714 uPSI_ALNNTPClient;
                                                          //alcinoe
19595:
       715 uPSI ALHintBalloon;
                                                          //alcinoe
19596:
       716 unit uPSI_ALXmlDoc;
                                                          //alcinoe
       717 unit uPSI_IPCThrd;
19597:
                                                          //VCL
19598: 718 unit uPSI_MonForm;
                                                          //VCL
19599:
       719 unit uPSI TeCanvas;
                                                          //Orpheus
19600:
       720 unit uPSI_Ovcmisc;
                                                          //Orpheus
19601:
       721 unit uPSI_ovcfiler;
                                                          //Orpheus
       722 unit uPSI_ovcstate;
19602:
                                                          //Orpheus
19603: 723 unit uPSI_ovccoco;
                                                          //Orpheus
19604:
       724 unit uPSI_ovcrvexp;
                                                          //Orpheus
19605:
       725 unit uPSI_OvcFormatSettings;
                                                          //Orpheus
19606: 726 unit uPSI_OvcUtils;
                                                          //Orpheus
19607: 727 unit uPSI_ovcstore;
                                                          //Orpheus
19608: 728 unit uPSI_ovcstr;
                                                          //Orpheus
19609:
       729 unit uPST ovemru;
                                                          //Orpheus
19610:
       730 unit uPSI_ovccmd;
                                                          //Orpheus
19611: 731 unit uPSI_ovctimer;
                                                          //Orpheus
19612:
       732 unit uPSI_ovcintl;
                                                          //Orpheus
19613: 733 uPSI_AfCircularBuffer;
                                                          //AsyncFree
       734 uPSI_AfUtils;
19614:
                                                          //AsyncFree
       735 uPSI_AfSafeSync;
                                                          //AsyncFree
19616: 736 uPSI_AfComPortCore;
                                                          //AsyncFree
19617: 737 uPSI AfComPort;
                                                          //AsyncFree
19618: 738 uPSI AfPortControls;
                                                          //AsyncFree
19619: 739 uPSI_AfDataDispatcher;
                                                          //AsyncFree
19620: 740 uPSI_AfViewers;
                                                          //AsyncFree
19621: 741 uPSI_AfDataTerminal;
                                                          //AsyncFree
19622: 742 uPSI_SimplePortMain;
                                                          //AsyncFree
19623: 743 unit uPSI_ovcclock;
19624: 744 unit uPSI_o32intlst;
                                                          //Orpheus
                                                          //Orpheus
```

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19625: 745 unit uPSI_o32ledlabel;
19626: 746 unit uPSI_AlMySqlClient;
                                                            //Orpheus
                                                            //alcinoe
19627: 747 unit uPSI_ALFBXClient;
                                                            //alcinoe
19628: 748 unit uPSI_ALFcnSQL;
                                                            //alcinoe
19629: 749 unit uPSI_AsyncTimer;
                                                            //mX4
19630: 750 unit uPSI_ApplicationFileIO;
19631: 751 unit uPSI_PsAPI;
                                                            //mX4
                                                            //VCLé
19632:
       752 uPSI_ovcuser;
                                                            //Orpheus
19633: 753 uPSI_ovcurl;
                                                            //Orpheus
19634:
       754 uPSI_ovcvlb;
                                                            //Orpheus
19635: 755 uPSI_ovccolor;
                                                            //Orpheus
19636: 756 uPSI_ALFBXLib,
                                                            //alcinoe
19637: 757 uPSI_ovcmeter;
                                                            //Orpheus
19638: 758 uPSI_ovcpeakm;
                                                            //Orpheus
19639:
       759 uPSI 032BGSty;
                                                            //Orpheus
19640: 760 uPSI_ovcBidi;
                                                            //Orpheus
19641: 761 uPSI_ovctcary;
                                                            //Orpheus
19642: 762 uPSI_DXPUtils;
                                                            //mX4
19643: 763 uPSI_ALMultiPartBaseParser;
19644: 764 uPSI_ALMultiPartAlternativeParser;
                                                            //alcinoe
                                                            //alcinoe
19645: 765 uPSI_ALPOP3Client;
                                                            //alcinoe
19646: 766 uPSI_SmallUtils;
                                                            //mX4
19647: 767 uPSI_MakeApp;
19648: 768 uPSI_O32MouseMon;
                                                            //mX4
                                                            //Orpheus
19649: 769 uPSI_OvcCache;
                                                            //Orpheus
19650: 770 uPSI_ovccalc;
                                                            //Orpheus
19651: 771 uPSI_Joystick
                                                            //OpenGL
19652:
       772 uPSI ScreenSaver;
                                                            //OpenGL
19653: 773 uPSI_XCollection,
                                                            //OpenGL
19654: 774 uPSI_Polynomials,
                                                            //OpenGL
19655: 775 uPSI_PersistentClasses, //9.86
                                                            //OpenGL
19656: 776 uPSI_VectorLists;
                                                            //OpenGL
19657: 777 uPSI_XOpenGL,
                                                            //OpenGL
19658: 778 uPSI_MeshUtils;
                                                            //OpenGL
                                                            //JCL
19659: 779 unit uPSI_JclSysUtils;
19660: 780 unit uPSI_JclBorlandTools;
                                                            //JCL
19661: 781 unit JclFileUtils_max;
                                                            //JCL
19662: 782 uPSI_AfDataControls,
                                                            //AsvncFree
19663: 783 uPSI_GLSilhouette;
                                                            //OpenGL
19664: 784 uPSI_JclSysUtils_class;
                                                            //JCL
19665: 785 uPSI_JclFileUtils_class;
                                                            //JCL
19666: 786 uPSI_FileUtil;
                                                            //JTCT.
19667: 787 uPSI_changefind;
                                                            //mX4
19668: 788 uPSI_cmdIntf;
                                                            //mX4
                                                            //mX4
19669: 789 uPSI_fservice;
19670: 790 uPSI_Keyboard;
                                                            //OpenGL
19671: 791 uPSI_VRMLParser,
                                                            //OpenGL
19672: 792 uPSI_GLFileVRML,
                                                            //OpenGL
19673: 793 uPSI_Octree;
                                                            //OpenGL
19674: 794 uPSI_GLPolyhedron,
                                                            //OpenGL
19675: 795 uPSI_GLCrossPlatform;
                                                            //OpenGL
19676: 796 uPSI_GLParticles;
                                                            //OpenGL
19677: 797 uPSI_GLNavigator;
                                                            //OpenGL
19678: 798 uPSI_GLStarRecord;
19679: 799 uPSI_GLTextureCombiners;
                                                            //OpenGL
                                                            //OpenGL
19680: 800 uPSI_GLCanvas;
                                                            //OpenGL
19681: 801 uPSI_GeometryBB;
                                                            //OpenGL
19682: 802 uPSI_GeometryCoordinates;
                                                            //OpenGL
19683: 803 uPSI_VectorGeometry;
                                                            //OpenGL
19684: 804 uPSI_BumpMapping;
                                                            //OpenGL
19685: 805 uPSI_TGA;
                                                            //OpenGL
19686: 806 uPSI_GLVectorFileObjects;
                                                            //OpenGL
19687: 807 uPSI_IMM;
19688: 808 uPSI_CategoryButtons;
19689: 809 uPSI_ButtonGroup;
                                                            //VCL
                                                            //VCL
19690: 810 uPSI_DbExcept;
                                                            //VCL
19691: 811 uPSI_AxCtrls;
                                                            //VCL
19692: 812 uPSI_GL_actorUnit1;
                                                            //OpenGL
19693: 813 uPSI_StdVCL;
                                                            //VCL
19694: 814 unit CurvesAndSurfaces;
                                                            //OpenGL
19695: 815 uPSI_DataAwareMain;
                                                            //AsyncFree
19696: 816 uPSI_TabNotBk;
                                                            //VCL
19697: 817 uPSI_udwsfiler;
                                                            //mX4
19698: 818 uPSI synaip;
                                                            //Synapse!
19699: 819 uPSI_synacode;
                                                            //Synapse
19700: 820 uPSI_synachar;
                                                             /Synapse
19701: 821 uPSI_synamisc;
                                                            //Synapse
19702: 822 uPSI_synaser;
                                                            //Synapse
19703: 823 uPSI_synaicnv;
                                                            //Synapse
19704: 824 uPSI_tlntsend;
                                                            //Synapse
19705: 825 uPSI_pingsend;
                                                            //Synapse
19706: 826 uPSI blcksock;
                                                            //Synapse
19707: 827 uPSI_asn1util;
                                                            //Synapse
19708: 828 uPSI_dnssend;
                                                            //Synapse
19709: 829 uPSI_clamsend;
                                                            //Synapse
19710: 830 uPSI_ldapsend;
                                                            //Synapse
19711: 831 uPSI mimemess;
                                                            //Synapse
19712: 832 uPSI_slogsend;
                                                            //Synapse
19713: 833 uPSI_mimepart;
                                                            //Synapse
```

```
19714: 834 uPSI_mimeinln;
                                                        //Synapse
19715: 835 uPSI_ftpsend,
                                                        //Synapse
19716: 836 uPSI_ftptsend;
                                                        //Synapse
19717: 837 uPSI_httpsend;
                                                        //Synapse
19718: 838 uPSI_sntpsend;
                                                        //Synapse
19719: 839 uPSI_smtpsend;
                                                        //Synapse
19720: 840 uPSI_snmpsend;
                                                        //Synapse
19721: 841 uPSI_imapsend;
                                                        //Svnapse
19722: 842 uPSI_pop3send;
                                                        //Synapse
19723: 843 uPSI_nntpsend;
                                                        //Synapse
19724: 844 uPSI_ssl_cryptlib;
                                                        //Synapse
19725: 845 uPSI_ssl_openssl;
                                                        //Synapse
19726: 846 uPSI_synhttp_daemon;
                                                        //Synapse
19727: 847 uPSI NetWork;
                                                        //mX4
19728: 848 uPSI PingThread;
                                                        //Synapse
19729: 849 uPSI_JvThreadTimer;
                                                        //JCL
19730: 850 unit uPSI_wwSystem;
                                                        //InfoPower
19731: 851 unit uPSI_IdComponent;
                                                        //Indv
19732: 852 unit uPSI_tdIOHandlerThrottle;
19733: 853 unit uPSI_Themes;
                                                        //Tndv
                                                        //VCL
19734: 854 unit uPSI_StdStyleActnCtrls;
                                                        //VCL
19735: 855 unit uPSI_UDDIHelper;
                                                        //VCL
19736: 856 unit uPSI_IdIMAP4Server;
                                                        //Indy
19737: 857 uPSI_VariantSymbolTable,
                                                        //VCI //3.9.9.92
19738: 858 uPSI_udf_glob,
                                                        //mX4
19739: 859 uPSI_TabGrid,
                                                        //VCL
19740: 860 uPSI_JsDBTreeView,
                                                        //mX4
19741: 861 uPSI_JsSendMail,
19742: 862 uPSI_dbTvRecordList,
                                                        //mX4
                                                        //mX4
19743: 863 uPSI_TreeVwEx,
                                                        //mX4
19744: 864 uPSI_ECDataLink
                                                        //mX4
19745: 865 uPSI_dbTree,
                                                        //mX4
19746: 866 uPSI_dbTreeCBox,
                                                        //mX4
19747: 867 unit uPSI_Debug; //TfrmDebug
                                                        //mX4
19748: 868 uPSI_TimeFncs;
19749: 869 uPSI FileIntf.
                                                        //VCL
19750: 870 uPSI_SockTransport,
                                                        //RTL
//RTL
19751: 871 unit uPSI_WinInet;
19752: 872 unit uPSI_Wwstr;
                                                        //mX4
19753: 873 uPSI_DBLookup,
                                                        //VCL
19754: 874 uPSI_Hotspot,
                                                        //mX4
19755: 875 uPSI_HList; //History List
19756: 876 unit uPSI_DrTable;
                                                        //mX4
                                                        //VCL
19757: 877 uPSI_TConnect,
                                                        //VCL
19758: 978 uPSI_DataBkr,
                                                        //VCL
19759: 979 uPSI_HTTPIntr
                                                        //WCT
19760: 980 unit uPSI_Mathbox;
                                                        //mX4
19761: 881 uPSI_cyIndy,
                                                        //cY
19762: 882 uPSI_cySysUtils,
                                                        //cY
19763: 883 uPSI_cyWinUtils,
                                                        //cY
19764: 884 uPSI_cyStrUtils,
                                                        //cY
19765: 885 uPSI_cyObjUtils,
                                                        //cY
19766: 886 uPSI_cyDateUtils,
                                                        //cY
19767: 887 uPSI_cyBDE,
                                                        //cY
19768: 888 uPSI_cyClasses,
                                                        //cY
19769: 889 uPSI_cyGraphics,
                             //3.9.9.94 2
                                                        //cY
19770: 890 unit uPSI_cyTypes;
                                                        //cY
19771:
19772:
19773:
19774:
19775:
19779:
19780: 26 FTL For Form Building out of the Script, eg. 399_form_templates.txt
19781:
19782: 045 unit uPSI VListView
                                                       TFormListView;
19783: 263 unit uPSI_JvProfiler32;
                                                        TProfReport
19784: 270 unit uPSI_ImgList;
                                                        TCustomImageList
19785: 278 unit uPSI_JvImageWindow;
                                                        TJvImageWindow
19786: 317 unit uPSI_JvParserForm;
                                                        TJVHTMLParserForm
19787: 497 unit uPSI DebugBox;
                                                        TDebugBox
19788: 513 unit uPSI_ImageWin;
                                                        TImageForm, TImageForm2
19789: 514 unit uPSI_CustomDrawTreeView;
                                                        TCustomDrawForm
19790: 515 unit uPSI_GraphWin;
                                                        TGraphWinForm
19791: 516 unit uPSI_actionMain;
19792: 518 unit uPSI_CtlPanel;
                                                        TActionForm
                                                       TAppletApplication
                                                        TEditForm
19793:
       529 unit uPSI_MDIEdit;
19794: 535 unit uPSI_CoolMain; {browser}
                                                       TWebMainForm
19795: 538 unit uPSI_frmExportMain;
                                                       TSynexportForm
19796: 585 unit uPSI_usniffer; {//PortScanForm}
19797: 600 unit uPSI_ThreadForm;
                                                       TSniffForm
                                                       TThreadSortForm;
19798: 618 unit uPSI_delphi_arduino_Unit1;
                                                        TLEDForm
19799: 620 unit uPSI_fplotMain;
                                                       TfplotForm1
19800: 660 unit uPSI_JvDBQueryParamsForm;
                                                       TJvQueryParamsDialog
19801: 677 unit uPSI_OptionsFrm;
                                                        TfrmOptions;
19802: 718 unit uPSI_MonForm;
                                                       TMonitorForm
```

```
19803: 742 unit uPSI_SimplePortMain;
                                                         TPortForm1
19804: 770 unit uPSI_ovccalc;
                                                         TOvcCalculator
                                                                          //widget
19805: 810 unit uPSI_DbExcept;
                                                         TDbEngineErrorDlg
                                                         TglActorForm1 //OpenGL Robot
TTCPHttpDaemon, TTCPHttpThrd, TPingThread
19806: 812 unit uPSI_GL_actorUnit1;
19807: 846 unit uPSI_synhttp_daemon;
19808: 867 unit uPSI Debug;
                                                         TfrmDebug
19809:
19810:
19811: ex.:with TEditForm.create(self) do begin
19812:
             caption:= 'Template Form Tester';
FormStyle:= fsStayOnTop;
19813:
             with editor do begin
19814:
19815:
               Lines.LoadFromFile(Exepath+'\docs\Readme_rus_mX2.rtf
19816:
               SelStart:= 0;
               Modified:= False;
19817:
19818:
             end;
19819:
           end;
19820 .
         with TWebMainForm.create(self) do begin
19821:
           URLs.Text:= 'http://www.kleiner.ch'
URLsClick(self); Show;
19822:
19823:
19824:
         with TSynexportForm.create(self) do begin
19825:
           Caption:= 'Synexport HTML RTF tester'
19826:
           Show;
19827:
19828:
         with TThreadSortForm.create(self) do begin
19829:
            showmodal; free;
19830:
         end;
19831:
19832:
         with TCustomDrawForm.create(self) do begin
19833:
               width:=820; height:=820;
19834:
               image1.height:= 600; //add properties
19835:
              image1.picture.bitmap:= image2.picture.bitmap;
               //SelectionBackground1Click(self) CustomDraw1Click(self);
19836:
               Background1.click;
19838:
              bitmap1.click;
19839:
              Tile1.click;
19840:
              Showmodal;
19841:
              Free;
19842:
            end;
19843:
19844:
          with TfplotForm1.Create(self) do begin
19845:
            BtnPlotClick(self);
19846:
            Showmodal; Free;
19847:
          end;
19848:
19849:
        with TOvcCalculator.create(self) do begin
19850:
           parent:= aForm;
19851:
         //free;
           setbounds(550,510,200,150);
displaystr:= 'maxcalc';
19852:
19853:
19854:
         end;
19855:
19856:
19860:
           Tutorial 00 Function-Coding (Blix the Programmer)
           Tutorial 01 Procedural-Coding
Tutorial 02 00-Programming
19861:
19862:
           Tutorial 03 Modular Coding
19863:
19864:
           Tutorial 04 UML Use Case Coding
19865:
           Tutorial 05 Internet Coding
           Tutorial 06 Network Coding
Tutorial 07 Game Graphics Coding
19866:
19867:
           Tutorial 08 Operating System Coding
19868:
19869:
           Tutorial 09 Database Coding
19870:
           Tutorial 10 Statistic Coding
19871:
           Tutorial 11 Forms Coding
           Tutorial 12 SQL DB Coding
19872:
19873:
           Tutorial 13 Crypto Coding
19874:
           Tutorial 14 Parallel Coding
19875:
           Tutorial 15 Serial RS232 Coding
19876:
           Tutorial 16 Event Driven Coding
           Tutorial 17 Web Server Coding
19877:
19878:
           Tutorial 18 Arduino System Coding
           Tutorial 18_3 RGB LED System Coding
Tutorial 19 WinCOM /Arduino Coding
Tutorial 20 Regular Expressions RegEx
19879:
19880:
19881:
           Tutorial 21 Android Coding (coming 2013)
19882:
19883:
           Tutorial 22 Services Programming
19884:
           Tutorial 23 Real Time Systems
19885:
           Tutorial 24 Clean Code
           Tutorial 25 maXbox Configuration I+II
19886:
19887:
           Tutorial 26 Socket Programming with TCP
19888:
           Tutorial 27 XML & TreeView
19889:
           Tutorial 28 DLL Coding (available)
           Tutorial 29 UML Scripting (coming 2014)
Tutorial 30 Web of Things (coming 2014)
19890:
```

```
19892: Tutorial 31 Closures (coming 2014)
19893: Tutorial 32 SQL Firebird (coming 2014)
19894:
19895:
19896: Doc ref Docu for all Type Class and Const in maXbox_types.pdf
19897: using Docu for this file is maxbox_functions_all.pdf
19898: PEP - Pascal Education Program Lib Lab
19899:
19900: http://stackoverflow.com/tags/pascalscript/hot
19901: http://sww.jrsoftware.org/ishelp/index.php?topic=scriptfunctions
19902: http://sourceforge.net/projects/maXbox #locs:15162
19903: http://sourceforge.net/apps/mediawiki/maXbox
19904: http://www.blaisepascal.eu/
19905: https://github.com/maxkleiner/maXbox3.git
19906: http://www.heise.de/download/maxbox-1176464.html
19907: http://www.softpedia.com/get/Programming/Other-Programming-Files/maXbox.shtml
19908: https://www.facebook.com/pages/Programming-maXbox/166844836691703
19909: ----- bigbitbox code_cleared_checked----
```