```
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: 19483136 V3.9.9.91 March 2014 To EKON/BASTA/JAX 18 2014
               *****Now the Funclist**
10:
15: Constructlist Constructor Size is: 1219 //995 //777 (689 /513 /494)
16: def head:max: maXbox7: 10.03.2014 19:11:55
17: file E:\maxbox\maxbox3\docs\maxbox_extract_funclist399.txt
18: file: maxbox_extract_funclist399_.txt (sort function list)
19:
20: Funclist total Size all is: 20458! Constructor, Function and Procedure
   AExtraxt of EXE Functions of maxbox3.exe, locs of file = 19301
22: ASize of EXE: 19483136 (16586240) (13511680) (13023744)
23: SHA1 Hash of maXbox 3.9.9.91: 8099E25F2508B262E909B76EDF7BB301AFFA1864
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:Pointer):TComboExItem
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90: Function AddItem( Item : TheaderSection; Index : Integer) : TheaderSection
 91: Function AddItem( Item : TListItem; Index : Integer) : TListItem
 92: Function AddItem( Item: TStatusPanel; Index: Integer)
93: Function AddMapping( const FieldName: string) : Boolean
 94: Function AddMasked( Image : TBitmap; MaskColor : TColor) : Integer
 95: Function AddModuleClass( AClass : TComponentClass) : TComponent
 96: Function AddModuleName( const AClass : string) : TComponent
 97: Function AddNode(Node, Relative: TTreeNode; const S: string; Ptr: Pointer; Method: TNodeAttachMode): TTreeNode
 98: Function AddObject( const S : WideString; AObject : TObject) : Integer
99: Function AddObject( Index : LongInt; const Text : string; const Data : Pointer) : LongInt 100: Function AddObject( Sibling : TTreeNode; const S : string; Ptr : Pointer) : TTreeNode
101: function AddObject(S:String; AObject:TObject):integer
102: Function AddObjectFirst( Sibling : TTreeNode; const S : string; Ptr : Pointer) : TTreeNode
103: Function AddParameter : TParameter
104: Function AddParamSOLForDetail(Params:TParams;SOL:WideStr;Native:Bool;OuoteChar:WideString):WideString
      Function Addr64ToAddr32(const Value: TJclAddr64): TJclAddr32;
106: Function Addr32ToAddr64(const Value: TJclAddr32): TJclAddr64;
107: function AdjustLineBreaksS(const S: string): string)
108: TTextLineBreakStyle', '(tlbsLF, tlbsCRLF)
109: Function AdjustLineBreaks(const S: string; Style: TTextLineBreakStyle): string;
110: Function AllData : string
111: function AllocMemCount: integer;
112: function AllocMemSize: integer;
113: Function AllocPatternBitmap( BkColor, FgColor : TColor) : TBitmap
114: Function AllowRegKeyForEveryone( Key : HKEY; Path : string) : Boolean
115: Function AlphaComponent( const Color32 : TColor32) : Integer
116: Function AlphaSort : Boolean
117: Function AlphaSort( ARecurse : Boolean) : Boolean
118: Function AnsiCat( const x, y : AnsiString) : AnsiString
119: Function AnsiCompareFileName(S1, S2: string): Integer
120: function AnsiCompareFileName(const S1: string; const S2: string): Integer)
121: Function AnsiCompareStr(S1,S2:string): Integer 122: function AnsiCompareStr(const S1:string; const S2:string): Integer;)
123: Function AnsiCompareText(S1, S2: string): Integer
124: function AnsiCompareText(const S1: string; const S2: string): Integer;
125: Function AnsiContainsStr( const AText, ASubText : string) : Boolean
126: Function AnsiContainsText( const AText, ASubText : string) : Boolean
127: Function AnsiCopy( const src : AnsiString; index, count : Integer) : AnsiString
128: Function AnsiDequotedStr( S : string; AQuote : Char) : string
129: Function AnsiEndsStr( const ASubText, AText : string) : Boolean
130: Function AnsiEndsText( const ASubText, AText : string) : Boolean
131: Function AnsiExtractQuotedStr( var Src : PChar; Quote : Char) : string 132: function AnsiExtractQuotedStr(var Src: PChar; Quote: Char): string)
133: Function AnsiIndexStr( const AText : string; const AValues : array of string) : Integer
134: Function AnsiIndexText( const AText : string; const AValues : array of string) : Integer
135: Function AnsiLastChar(S: string): PChar
136: function AnsiLastChar(const S: string): PChar)
137: Function AnsiLeftStr( const AText : AnsiString; const ACount : Integer) : AnsiString
138: Function AnsiLowerCase( S : string) : string
139: Function AnsiLowercase(s: String): String;
140: Function AnsiLowerCaseFileName(S: string): string
141: Function AnsiMatchStr( const AText : string; const AValues : array of string) : Boolean
142: Function AnsiMatchText( const AText : string; const AValues : array of string) : Boolean
143: Function AnsiMidStr( const AText : AnsiString; const AStart, ACount : Integer) : AnsiString
144: Function AnsiPos( const src, sub : AnsiString) : Integer
145: Function AnsiPos( Substr, S : string) : Integer
146: function AnsiPos(const Substr: string; const S: string): Integer;)
147: Function AnsiQuotedStr( S : string; Quote : Char) : string
148: Function AnsiReplaceStr( const AText, AFromText, AToText: string): string
149: Function AnsiReplaceText( const AText, AFromText, AToText: string): string
150: Function AnsiResemblesText( const AText, AOther: string): Boolean
151: Function AnsiReverseString( const AText : AnsiString) : AnsiString
152: Function AnsiRightStr( const AText : AnsiString; const ACount : Integer) : AnsiString 153: function AnsiSameCaption(const Text1: string; const Text2: string): Boolean)
154: Function AnsiSameStr(S1, S2: string): Boolean
155: function AnsiSameStr(const S1: string; const S2: string): Boolean
156: Function AnsiSameText( const S1, S2: string): Boolean
157: Function AnsiSameText(S1, S2: string): Boolean
158: function AnsiSameText(const S1: string; const S2: string): Boolean)
159: Function AnsiStartsStr( const ASubText, AText : string) : Boolean 160: Function AnsiStartsText( const ASubText, AText : string) : Boolean
161: Function AnsiStrComp( S1, S2 : PChar) : Integer
162: function AnsiStrComp(S1: PChar; S2: PChar): Integer)
163: Function AnsiStrIComp( S1, S2 : PChar) : Integer
164: function AnsiStrIComp(S1: PChar; S2: PChar): Integer)
165: Function AnsiStrLastChar( P : PChar) : PChar
166: function AnsiStrLastChar(P: PChar): PChar)
167: Function AnsiStrLComp( S1, S2 : PChar; MaxLen : Cardinal) : Integer 168: Function AnsiStrLIComp( S1, S2 : PChar; MaxLen : Cardinal) : Integer 169: Function AnsiStrLower( Str : PChar) : PChar
170: Function AnsiStrPos( Str, SubStr : PChar) : PChar
171: function AnsiStrPos(Str: PChar; SubStr: PChar): PChar)
172: Function AnsiStrScan(Str: PChar; Chr: Char): PChar)
173: Function AnsiStrUpper( Str : PChar) : PChar
174: Function AnsiToUtf8( const S : string) : UTF8String
175: Function AnsiToUtf8Ex( const S : string; const cp : integer) : UTF8String
176: Function AnsiUpperCase(S:string): string 177: Function AnsiUppercase(S:String): String; 178: Function AnsiUpperCaseFileName(S:string): string
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179: Function ApplyUpdates(const Delta: OleVariant; MaxErrors:Integer; out ErrorCount: Integer): OleVariant
180: Function ApplyUpdates(const Delta:OleVariant; MaxErrors: Integer; out ErrorCount: Integer): OleVariant;
181: Function ApplyUpdates( MaxErrors : Integer) : Integer
182: Function ApplyUpdates1(const Delta:OleVar; MaxErrs:Int; out ErrCount:Int; var OwnerData:OleVar):OleVariant;
183: Function ArcCos( const X : Extended) : Extended
184: Function ArcCosh( const X : Extended) : Extended
185: Function ArcCot( const X : Extended) : Extended
186: Function ArcCotH( const X : Extended) :
187: Function ArcCsc( const X : Extended) : Extended
188: Function ArcCscH( const X : Extended) : Extended
189: Function ArcSec( const X : Extended) : Extended
190: Function ArcSecH( const X : Extended) : Extended
191: Function ArcSin( const X : Extended) : Extended
192: Function ArcSinh( const X : Extended) : Extended
193: Function ArcTan(const X : Extended) : Extended
194: Function ArcTan2( const Y, X : Extended) : Extended
195: Function ArithmeticMean( const X : TDynDoubleArray) : Float
196: function ArrayLength: integer;
197: Function AsHex( const AValue : T4x4LongWordRecord) : string
198: Function AsHex( const AValue : T5x4LongWordRecord) : string
199: Function ASNDecLen( var Start : Integer; const Buffer : string) : Integer
200: Function ASNDecOIDItem( var Start : Integer; const Buffer : string) : Integer
201: Function ASNEncInt( Value : Integer) : string 202: Function ASNEncLen( Len : Integer) : string
203: Function ASNEncOIDItem( Value : Integer) : string
204: Function ASNEncUInt( Value : Integer) : string
205: Function ASNItem( var Start : Integer; const Buffer : string; var ValueType : Integer) : string
206: Function ASNObject( const Data : string; ASNType : Integer) : string 207: Function Assigned(I: Longint): Boolean;
208: Function AspectRatio(aWidth, aHeight: Integer): String
209: Function AsWideString( Field : TField) : WideString
210: Function AtLeast( ACount : Integer) : Boolean
211: Function AttemptToUseSharedMemoryManager : Boolean
212: Function Authenticate : Boolean
213: Function AuthenticateUser( const AUsername, APassword : String) : Boolean
214: Function Authentication : String
215: Function BatchMove( ASource : TBDEDataSet; AMode : TBatchMode) : Longint 216: Function BcdCompare( const bcdl, bcd2 : TBcd) : Integer
217: Function BcdFromBytes( const AValue : TBytes)
                                                           : TBcd
218: Function BcdPrecision( const Bcd : TBcd) : Word
219: Function BcdScale( const Bcd : TBcd) : Word
220: Function BcdToBytes( const Value : TBcd) : TBytes
221: Function BCDToCurr( const BCD : TBcd; var Curr : Currency) : Boolean
222: Function BcdToDouble( const Bcd : TBcd) : Double
223: Function BcdToInteger( const Bcd : TBcd; Truncate : Boolean) : Integer
224: Function BcdToStr( const Bcd : TBcd) : string;
225: Function BcdToStrF(const Bcd : TBcd; Format: TFloatFormat; const Precision, Digits:Integer):string
226: function beep2(dwFreq, dwDuration: integer): boolean;
227: Function BeginPeriod( const Period : Cardinal) : Boolean
228: Function BeginTrans : Integer
229: Function BeginTransaction : TDBXTransaction;
230: Function BeginTransaction1( Isolation : TDBXIsolation) : TDBXTransaction;
231: function BigMulu(aone, atwo: string): string;
232: function BigNumber(aone, atwo: string): string;
233: function BigExp(aone, atwo: string): string; 234: function BigMul(aone, atwo: string): string;
235: function BigAdd(aone, atwo: string): string;
236: function BigSub(aone, atwo: string): string
237: function BigFactorial(aone: string): string;
238: Function BinaryToDouble(ABinary: string; DefValue: Double): Double 239: Function BinomialCoeff(N, R: Cardinal): Float
240: function BinominalCoefficient(n, k: Integer): string;
241: Function BinStrToInt( const ABinary : String) : Integer 242: Function BinToByte(Binary: String): Byte; 243: function BinToHex2(Binary: String): string;
244: function BinToInt(Binary: String): Integer;
245: Function BinToChar(St: String): Char;
246: Function BinToStr(ans: string): string;
247: Function BitBlt(hdcDest:HDC;nXDest,nYDest,nWidth,nHeigh:Int;hdcSrc:HDC;nXSrc,nYSrc:Int;dwRop:DWORD):Bool;
248: Function BitmapsAreIdentical(ABitmap1, ABitmap2: TBitmap): Boolean
249: Function BitsHighest( X : Byte) : Integer;
250: Function BitsHighestl( X : ShortInt) : Integer; 251: Function BitsHighest2( X : SmallInt) : Integer;
252: Function BitsHighest3( X : Word) : Integer;
253: Function BitsHighest4( X : Integer) : Integer;
254: Function BitsHighest5( X : Cardinal) : Integer;
255: Function BitsHighest6( X : Int64) : Integer;
256: Function BitsLowest( X : Byte) : Integer;
257: Function BitsLowest1( X : Shortint) : Integer;
                                               : Integer;
258: Function BitsLowest2( X : Smallint)
259: Function BitsLowest3( X : Word) : Integer;
260: Function BitsLowest4( X : Cardinal) : Integer;
261: Function BitsLowest5( X : Integer) : Integer; 262: Function BitsLowest6( X : Int64) : Integer;
263: Function BitsNeeded( const X : Byte) : Integer;
264: Function BitsNeeded1( const X : Word) : Integer;
265: Function BitsNeeded2( const X : Integer) : Integer;
266: Function BitsNeeded3( const X : Int64) : Integer;
267: Function BlueComponent( const Color32 : TColor32) : Integer
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268: Function BooleanToInteger( const Pb : Boolean) : Integer
269: Function BoolToStr(B: Boolean; UseBoolStrs: Boolean): string)
270: Function BoolToStrl(value : boolean) : string; 271: Function booltoint( aBool : Boolean) : LongInt
272: Function inttobool( aInt : LongInt) : Boolean
273: Function Bounds( ALeft, ATop, AWidth, AHeight: Integer): TRect 274: function Bounds(ALeft, ATop, AWidth, AHeight: Integer): TRect)
275: Function BreakApart( BaseString, BreakString : string; StringList : TStrings) : TStrings
276: Function BrightColor( const Color: TColor; const Pct: Single): TColor
277: Function BrightColorChannel( const Channel: Byte; const Pct: Single): Byte
278: Function BufferRequest( Length: Integer): TStream
279: Function BuildFileList( const Path : string; const Attr : Integer; const List : TStrings) : Boolean
280: Function Buttons : PTaskDialogButton
281: Function BytesPerScanline( PixelsPerScanline, BitsPerPixel, Alignment : Longint) : Longint
282: Function BytesToCardinal( const AValue : TIdBytes; const AIndex : Integer) : Cardinal
283: Function BytesToChar( const AValue : TIdBytes; const AIndex : Integer) : Char
284: Function BytesToInt64( const AValue : TIdBytes; const AIndex : Integer) : Int64
285: Function BytesToInteger( const AValue : TIdBytes; const AIndex : Integer) : Integer 286: Function BytesToIPv6( const AValue : TIdBytes; const AIndex : Integer) : TIdIPv6Address 287: Function BytesToShort( const AValue : TIdBytes; const AIndex : Integer) : Short
288: Function BytesToString(ABytes:TIdBytes; AStartIndex:Integer; AMaxCount:Integer): string;
289: Function BytesToStr(const Value: TBytes): String;
290: Function BytesToWord( const AValue : TIdBytes; const AIndex : Integer) : Word
291: Function ByteToBin(Int: Byte): String;
292: Function ByteToCharIndex( S : string; Index : Integer) : Integer
293: function ByteToCharIndex(const S: string; Index: Integer): Integer)
294: Function ByteToCharLen( S : string; MaxLen : Integer) : Integer
295: function ByteToCharLen(const S: string; MaxLen: Integer): Integer)
296: Function ByteToHex( const AByte : Byte) : string
297: Function ByteToOctal( const AByte : Byte) : string
298: Function ByteType( S : string; Index : Integer) : TMbcsByteType
299: function ByteType(S: String; Index: Integer): TMbcsByteType)
300: Function CalcTitleRect(Col: TColumn; ARow: Integer; var MasterCol: TColumn): TRect
301: Function CalculateDFAFingerprint( oStates : TList) : integer
302: function CallTerminateProcs: Boolean)
303: function CANFOCUS: BOOLEAN
304: Function CanLoad( const Ext : string) : Boolean
305: Function CanParse( AWebRequest : TWebRequest) : Boolean
306: Function CanSave( const Ext: string): Boolean 307: Function CanStart( cChar: char): boolean
308: Function CaptureScreen : TBitmap;
309: Function CaptureScreen1( Rec : TRect) : TBitmap;
310: Function CardinalToFourChar( ACardinal : LongWord) : string
311: Function CastSoapToNative(Info:PTypeInfo;const SoapData:WideString;NatData:Pointer;IsNull:Boolean): Boolean
312: Function CastSoapToVariant1( SoapInfo : PTypeInfo; const SoapData : WideString) : Variant;
313: Function Ceil( const X : Extended) : Integer
314: Function Ceill6( X : Integer) : Integer 315: Function Ceil4( X : Integer) : Integer
316: Function Ceil8( X : Integer) : Integer
317: Function Ceiling( const X : Extended) : Integer 318: Function CellRect( ACol, ARow : Longint) : TRect
319: Function CelsiusToFahrenheit( const AValue : Double) : Double
320: Function CenterPoint( const Rect : TRect) : TPoint
321: function CenterPoint(const Rect: TRect): TPoint)
322: Function ChangeFileExt( FileName, Extension : string) : string
323: function ChangeFileExt(const FileName: string; const Extension: string): string)
324: Function CharInSet2( const Ch : Char; const SetOfChar : TSetOfChar) :
325: Function CharInSet( const Ch : Char; const testSet: TSysCharSet): Boolean
326: Function CharlsInEOF( const AString : string; ACharPos : Integer) : Boolean
327: Function CharlsInSet( const AString : string; const ACharPos : Integer; const ASet : String) : Boolean
328: Function CharLength( S : String; Index : Integer) : Integer
329: Function CharRange( const AMin, AMax : Char) : String
330: function CharsetToIdent(Charset: Longint; var Ident: string): Boolean)
331: Function CharToBin(vChr: Char): String;
332: Function Charlest(lpsz: PChar): PChar; stdcall;
333: Function Charlest(lpsz: PChar): PChar; stdcall;
333: Function CharloByteIndex( S : string; Index : Integer) : Integer
334: function CharToByteIndex(const S: string; Index: Integer): Integer)
335: Function ChartoByteLen( S : string; MaxLen : Integer) : Integer
336: function CharToByteLen(const S: string; MaxLen: Integer): Integer)
337: Function CharToHex(const APrefix : String; const cc : Char) : shortstring; 338: function CharToHexStr(Value: char): string);
339: function CharToOem(ins, outs: PChar):boolean;
340: function CharToUniCode(Value: Char): string;
341: Function CheckMenuDropdown : Boolean
342: Function CheckMessages : longint
343: Function CheckOpen( Status : DBIResult) : Boolean
344: Function CheckPassword( const APassword : String) : Boolean
345: Function CheckResponse(const AResponse:SmallInt;const AAllowedResponses:array of SmallInt): SmallInt
346: Function CheckCrc32( var X : array of Byte; N : Integer; Crc : Cardinal) : Integer;
347: function CheckSynchronize(Timeout: Integer): Boolean
348: Function CheckWin32Version( AMajor : Integer; AMinor : Integer) : Boolean
349: function ChrA(const a: byte): char;
350: Function ClassIDToProgID(const ClassID: TGUID): string;
351: Function ClassNameIs(const Name: string): Boolean
352: Function ClearBit( const Value : Byte; const Bit : TBitRange) : Byte;
353: Function ClearBit1( const Value : Shortint; const Bit : TBitRange) : Shortint; 354: Function ClearBit2( const Value : Smallint; const Bit : TBitRange) : Smallint;
355: Function ClearBit3( const Value : Word; const Bit : TBitRange) : Word;
356: Function ClearBit4( const Value : Integer; const Bit : TBitRange) : Integer;
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357: Function ClearBit5( const Value : Cardinal; const Bit : TBitRange) : Cardinal;
358: Function ClearBit6( const Value : Int64; const Bit : TBitRange) : Int64;
359: function CLIENTTOSCREEN(POINT:TPOINT):TPOINT
360: Function Clipboard : TClipboard
361: Function ClipCodes( const X, Y, MinX, MinY, MaxX, MaxY : Float) : TClipCodes;
362: Function ClipCodes( const X, Y : Float; const ClipRect : TRect) : TClipCodes;
363: Function ClipLine( var X1, Y1, X2, Y2 : Integer; const ClipRect : TRect) : Boolean;
364: Function ClipLineToRect( var P1, P2 : TFloatPoint; const Rect : TFloatRect) : Boolean
365: Function Clone( out stm : IStream) : HResult
366: Function CloneConnection : TSQLConnection
367: Function CloneMemoryStream( Original : TMemoryStream) : TMemoryStream
368: function CLOSEQUERY: BOOLEAN
369: Function CloseVolume( var Volume : THandle) : Boolean
370: Function CloseHandle(Handle: Integer): Integer; stdcall;
371: Function CPlApplet(hwndCPl: THandle; uMsg: DWORD; lParaml, lParam2: Longint): Longint
372: Function CmdLine: PChar;
373: function CmdShow: Integer;
374: Function Color32( const R, G, B : Byte; const A : Byte) : TColor32; 375: Function Color32( WinColor : TColor) : TColor32;
376: Function Color321( const Index : Byte; const Palette : TPalette32) : TColor32;
377: Function ColorAdjustLuma( clrRGB: TColor; n: Integer; fScale: BOOLean): TColor
378: Function ColorHLSToRGB( Hue, Luminance, Saturation : Word) : TColorRef
379: Function ColorToHTML( const Color : TColor) : String
380: function ColorToIdent(Color: Longint; var Ident: string): Boolean)
381: Function ColorToRGB(color: TColor): Longint
382: function ColorToString(Color: TColor): string)
383: Function ColorToWebColorName( Color : TColor) : string
384: Function ColorToWebColorStr( Color : TColor) : string
385: Function ColumnAtDepth( Col : TColumn; ADepth : Integer) : TColumn
386: Function Combination(npr, ncr: integer): extended;
387: Function CombinationInt(npr, ncr: integer): Int64;
388: Function CombineInfo( Bitmap : TCustomBitmap32) : TCombineInfo 389: Function CommaAdd( const AStrl, AStr2 : String) : string 390: Function CommercialRound( const X : Extended) : Int64
391: Function Commit( grfCommitFlags : Longint) : HResult
392: Function Compare( const NameExt : string) : Boolean
393: function CompareDate(const A, B: TDateTime): TValueRelationship;
394: Function CompareDateTime( const ADateTime1, ADateTime2 : TDateTime) : Integer
395: Function CompareFiles(const FN1,FN2 :string; Breathe:TNotifyEvent;BreathingSender:TObject): boolean
396: Function CompareMemoryStreams(S1, S2: TMemoryStream): boolean 397: Function CompareStr(S1, S2: string): Integer
398: function CompareStr(const S1: string; const S2: string): Integer)
399: function CompareString(const S1: string; const S2: string): Integer)
400: Function CompareText( S1, S2 : string) : Integer
401: function CompareText(const S1: string; const S2: string): Integer)
402: Function CompareTextLike(cWildStr,cStr:string;const cWildChar:char;lCaseSensitive:boolean): boolean
403: function CompareTime(const A, B: TDateTime): TValueRelationship;
404: Function CompatibleConversionType( const AType: TConvType; const AFamily: TConvFamily): Boolean
405: Function CompatibleConversionTypes( const AFrom, ATo : TConvType) : Boolean
406: Function ComponentTypeToString( const ComponentType : DWORD) : string
407: Function CompToCurrency( Value : Comp) : Currency
408: Function CompToDouble( Value : Comp) : Double
409: function ComputeFileCRC32(const FileName : String) : Integer;
410: function ComputeSHA256(astr: string; amode: char): string) //mode F:File, S:String 411: function ComputeSHA512(astr: string; amode: char): string) //mode F:File, S:String
412: Function Concat(s: string): string
413: Function ConnectAndGetAll: string
414: Function Connected : Boolean
415: function constrain(x, a, b: integer): integer;  
416: Function ConstraintCallBack( Req : DsInfoReq; var ADataSources : DataSources) : DBIResult  
417: Function ConstraintsDisabled : Boolean
418: function CONTAINSCONTROL(CONTROL:TCONTROL):BOOLEAN
419: Function ContainsState( oState : TniRegularExpressionState) : boolean
420: Function ContainsStr( const AText, ASubText: string) : Boolean
421: Function ContainsText( const AText, ASubText: string) : Boolean
422: Function ContainsTransition( oTransition : TniRegularExpressionTransition) : boolean
423: Function Content : string
424: Function ContentFromStream( Stream : TStream) : string 425: Function ContentFromString( const S : string) : string
426: Function CONTROLSDISABLED : BOOLEAN
427: Function Convert( const AValue : Double; const AFrom, ATo : TConvType) : Double;
428: Function Convert1( const AValue : Double; const AFrom1, AFrom2, ATo1, ATo2 : TConvType) : Double;
429: Function ConvertFrom( const AFrom: TConvType; const AValue: Double): Double
430: Function ConvertReadStream( Stream: TStream; Buffer: PChar; BufSize: Integer): Integer
431: Function ConvertTo( const AValue : Double; const ATo : TConvType) : Double
432: Function ConvertWriteStream( Stream: TStream; Buffer: PChar; BufSize: Integer): Integer
433: Function ConvFamilyToDescription( const AFamily : TConvFamily) : string
434: Function ConvTypeToDescription( const AType : TConvType) : string
435: Function ConvTypeToFamily( const AFrom, ATo : TConvType) : TConvFamily;
436: Function ConvTypeToFamily( const AType : TConvType) : TConvFamily;
437: Function ConvAdd(const AVal:Double;const AType1:TConvType;const AVal2:Double;const AType2,
      AResultType:TConvType): Double
438: Function ConvCompareValue(const AValue1:Double;const AType1:TConvType;const AValue2:Double;const
      AType2:TConvType): TValueRelationship
439: Function ConvDec( const AValue : Double; const AType, AAmountType : TConvType) : Double;
440: Function ConvDecl(const AValue:Double; const AType: TConvType; const AAmount:Double; const
      AAmountType: TConvType): Double;
441: Function ConvDiff(const AVall:Double;const AType1:TConvType;const AVal2:Double;const AType2,
      AResuType:TConvType):Double
```

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442: Function ConvInc( const AValue : Double; const AType, AAmountType : TConvType) : Double;
443: Function ConvIncl(const AValue:Double;const AType:TConvType;const AAmount:Double;const
         AAmountType:TConvType): Double;
444: Function ConvSameValue(const AValue1:Double;const AType1:TConvType;const AValue2:Double;const
         AType2:TConvType):Boolean
445: Function ConvToStr( const AValue : Double; const AType : TConvType) : string
446: Function ConvWithinNext( const AValue, ATest : Double; const AType : TConvType; const AAmount : Double;
         const AAmountType : TConvType) : Boolean
447: Function ConvWithinPrevious(const AValue, ATest: Double; const AType: TConvType; const AAmount: Double; const
         AAmountType: TConvType) : Boolean
448: function Copy(s: AnyString; iFrom, iCount: Longint): AnyString;
449: Function CopyFile (Source, Dest: string; CanOverwrite: Boolean): Boolean
450: Function CopyFileEx( Source, Dest : string; Flags : FILEOP_FLAGS) : Boolean
451: Function CopyFileTo( const Source, Destination: string): Boolean 452: function CopyFrom(Source:TStream;Count:Int64):LongInt
453: Function CopyPalette( Palette : HPALETTE) : HPALETTE
454: Function CopyTo( Length : Integer) : string
455: Function CopyTo(stm: IStream; cb: Largeint; out cbRead: Largeint; out cbWritten:Largeint): HResult 456: Function CopyToEOF: string 457: Function CopyToEOL: string 458: Function Cos(e: Extended): Extended;
459: Function Cosecant( const X : Extended) : Extended
460: Function Cot( const X : Extended) : Extended 461: Function Cotan( const X : Extended) : Extended
462: Function CotH( const X : Extended) : Extended
463: Function Count : Integer
464: Function CountBitsCleared( X : Byte) : Integer;
465: Function CountBitsCleared1( X : Shortint) : Integer; 466: Function CountBitsCleared2( X : Smallint) : Integer;
467: Function CountBitsCleared3( X : Word) : Integer;
468: Function CountBitsCleared4( X : Integer) : Integer;
469: Function CountBitsCleared5( X : Cardinal) : Integer;
470: Function CountBitsCleared6(X: Int64): Integer;
471: Function CountBitsSet( X : Byte) : Integer; 472: Function CountBitsSet( X : Word) : Integer;
473: Function CountBitsSet2( X : Smallint) : Integer;
474: Function CountBitsSet3( X : ShortInt) : Integer;
475: Function CountBitsSet4( X : Integer) : Integer;
476: Function CountBitsSet5( X : Cardinal) : Integer;
477: Function CountBitsSet6( X : Int64) : Integer
478: function CountGenerations(Ancestor, Descendent: TClass): Integer
479: Function Coversine( X : Float) : Float
480: function CRC32(const fileName: string): LongWord;
481: Function CREATEBLOBSTREAM( FIELD : TFIELD; MODE : TBLOBSTREAMMODE) : TSTREAM
482: Function CreateColumns : TDBGridColumns
483: Function CreateDataLink : TGridDataLink
484: Function CreateDir( Dir : string) : Boolean
485: function CreateDir(const Dir: string): Boolean)
486: Function CreateDOSProcessRedirected (const CommandLine, InputFile, OutputFile: string): Boolean
487: Function CreateEnvironmentBlock(const Options:TEnvironmentOptions;const AdditionalVars:TStrings): PChar 488: Function CREATEFIELD(OWNER:TCOMPONENT;PARENTFIELD:TOBJECTFIELD; const
         FIELDNAME: String; CREATECHILDREN: BOOLEAN): TFIELD
489: Function CreateGlobber( sFilespec : string) : TniRegularExpression
490: Function CreateGrayMappedBmp( Handle : HBITMAP) : HBITMAP
491: Function CreateGrayMappedRes( Instance : THandle; ResName : PChar) : HBITMAP 492: function CreateGUID(out Guid: TGUID): HResult)
493: Function CreateInstance( const unkOuter : IUnknown; const iid : TGUID; out obj) : HResult
494: Function CreateMappedBmp( Handle : HBITMAP; const OldColors, NewColors : array of TColor) : HBITMAP
495: Function CreateMappedRes(Instance:THandle;ResName:PChar;const OldColors,NewColors:array of TColor):HBITMAP
496: Function CreateMessageDialog(const Msg:string; DlgType:TMsgDlgType; Buttons: TMsgDlgButtons) : TForm;
497: Function CreateMessageDialog1(const
         \texttt{Msg:string:} \texttt{DlgType:} \texttt{TMsgDlgType:} \texttt{Btns:} \texttt{TMsgDlgBtns:} \texttt{DefaultBtn:} \texttt{TMsgDlgBtn):} \texttt{TForm:} \texttt{TMsgDlgBtn} \texttt{T
498: function CreateOleObject(const ClassName: String): IDispatch;
499: Function CREATEPARAM( FLDTYPE : TFIELDTYPE; const PARAMNAME : String; PARAMTYPE : TPARAMTYPE) : TPARAM
500: Function CreateParameter(const
         Name:WideString;DataType:TDataType;Direction:TParameterDirection;Size:Integer;Value: OleVariant):TParameter
501: Function CreateLocate( DataSet : TDataSet) : TJvLocateObject
502: Function CreateMappedBmp( Handle : HBITMAP; const OldColors, NewColors : array of TColor) : HBITMAP
503: Function CreateMappedRes(Instance:THandle;ResName:PChar;const OldColors,NewColors:array of TColor):HBITMAP
504: Function CreateRecordBuffer( Length: Integer): TRecordBuffer 505: Function CreateValueBuffer( Length: Integer): TValueBuffer
506: Function CreatePopupCalculator( AOwner : TComponent; ABiDiMode : TBiDiMode) : TWinControl
507: Function CreateRecordBuffer( Length : Integer) : TRecordBuffer 508: Function CreateRotatedFont( Font : TFont; Angle : Integer) : HFONT
509: Function CreateTwoColorsBrushPattern( Color1, Color2 : TColor) : TBitmap 510: Function CreateValueBuffer( Length : Integer) : TValueBuffer
511: Function CreateHexDump( AOwner : TWinControl) : THexDump
512: Function Csc( const X : Extended) : Extended
513: Function CscH( const X : Extended) : Extended
514: function currencyDecimals: Byte
515: function currencyFormat: Byte
516: function currencyString: String
517: Function CurrentProcessId : TIdPID 518: Function CurrentReadBuffer : string
519: Function CurrentThreadId : TIdPID
520: Function CurrentYear : Word
521: Function CurrToBCD(const Curr: Currency; var BCD: TBcd; Precision: Integer; Decimals: Integer): Boolean 522: Function CurrToStr( Value : Currency) : string; 523: Function CurrToStr( Value : Currency; FormatSettings : TFormatSettings; Digits: Integer) : string;
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524: Function CurrToStrFS(Value:Currency;Format:TFloatFormat;Digits:Integer;const
      FormatSettings: TFormatSettings): string;
     function CursorToIdent(cursor: Longint; var Ident: string): Boolean;
526: function CursorToString(cursor: TCursor): string;
527: Function CustomSort( SortProc : TLVCompare; lParam : Longint) : Boolean
528: Function CustomSort( SortProc : TTVCompare; Data : Longint; ARecurse : Boolean) : Boolean
529: Function CycleToDeg( const Cycles : Extended) : Extended
530: Function CycleToGrad( const Cycles : Extended) : Extended
531: Function CycleToRad( const Cycles : Extended) : Extended
532: Function D2H( N : Longint; A : Byte) : string
533: Function DarkColor( const Color: TColor; const Pct : Single) : TColor
534: Function DarkColorChannel( const Channel: Byte; const Pct: Single): Byte
535: Function DataLinkDir: string
536: Function DataRequest( Data: OleVariant): OleVariant
537: Function DataRequest( Input: OleVariant): OleVariant
538: Function DataToRawColumn( ACol : Integer) : Integer
539: Function Date : TDateTime
540: function Date: TDateTime;
541: Function DateIsNull( const pdtValue : TDateTime; const pdtKind : TdtKind) : Boolean
542: Function DateOf( const AValue : TDateTime) : TDateTime
543: function DateSeparator: char;
544: Function DateTimeGMTTOHttpStr( const GMTValue : TDateTime) : String
545: Function DateTimeToFileDate( DateTime : TDateTime) : Integer
546: function DateTimeToFileDate(DateTime: TDateTime): Integer;
547: Function DateTimeToGmtOffSetStr( ADateTime: TDateTime; SubGMT : Boolean) : string
548: Function DateTimeToInternetStr( const Value : TDateTime; const AIsGMT : Boolean)
549: Function DateTimeToJulianDate( const AValue : TDateTime) : Double
550: Function DateTimeToModifiedJulianDate( const AValue : TDateTime) : Double
551: Function DateTimeToStr( DateTime : TDateTime) : string;
552: Function DateTimeToStr2( DateTime: TDateTime; FormatSettings: TFormatSettings): string;
553: function DateTimeToTimeStamp(DateTime: TDateTime): TTimeStamp
554: Function DateTimeToUnix( const AValue : TDateTime) : Int64
555: function DateTimeToUnix(D: TDateTime): Int64;
556: Function DateToStr( DateTime : TDateTime) : string;
557: function DateToStr(const DateTime: TDateTime): string;
558: function DateToStr(D: TDateTime): string;
559: Function DateToStr2( DateTime : TDateTime; FormatSettings : TFormatSettings) : string;
560: Function DayOf( const AValue : TDateTime) : Word
561: Function DayOfTheMonth( const AValue : TDateTime)
562: function DayOfTheMonth(const AValue: TDateTime): Word;
563: Function DayOfTheWeek( const AValue : TDateTime) : Word
564: Function DayOfTheYear( const AValue : TDateTime) : Word
565: function DayOfTheYear(const AValue: TDateTime): Word;
566: Function DayOfWeek( DateTime : TDateTime) : Word
567: function DayOfWeek(const DateTime: TDateTime): Word; 568: Function DayOfWeekStr( DateTime : TDateTime) : string
569: Function DaysBetween( const ANow, AThen : TDateTime) : Integer
570: Function DaysInAMonth( const AYear, AMonth: Word) : Word
571: Function DaysInAYear( const AYear : Word) : Word
572: Function DaysInMonth( const AValue : TDateTime) : Word 573: Function DaysInYear( const AValue : TDateTime) : Word
574: Function DaySpan( const ANow, AThen : TDateTime) : Double
575: Function DBUseRightToLeftAlignment( AControl : TControl; AField : TField) : Boolean
576: function DecimalSeparator: char;
577: Function DecLimit( var B : Byte; const Limit : Byte; const Decr : Byte) : Byte;
578: Function DecLimit1( var B : Shortint; const Limit : Shortint; const Decr : Shortint) : Shortint;
579: Function DecLimit2( var B : Smallint; const Limit : Smallint; const Decr : Smallint) : Smallint;
580: Function DecLimit3( var B : Word; const Limit : Word; const Decr : Word) : Word;
581: Function DecLimit4( var B : Integer; const Limit : Integer; const Decr : Integer) : Integer; 582: Function DecLimit5( var B : Cardinal; const Limit : Cardinal; const Decr : Cardinal) : Cardinal; 583: Function DecLimit6( var B : Int64; const Limit : Int64; const Decr : Int64) : Int64;
584: Function DecLimitClamp( var B : Byte; const Limit : Byte; const Decr : Byte) : Byte;
585: Function DecLimitClamp1( var B : Shortint; const Limit : Shortint; const Decr : Shortint) : Shortint; 586: Function DecLimitClamp2( var B : Smallint; const Limit : Smallint; const Decr : Smallint) : Smallint;
587: Function DecLimitClamp3( var B : Word; const Limit : Word; const Decr : Word) : Word;
588: Function DecLimitClamp4( var B : Integer; const Limit : Integer; const Decr : Integer) : Integer
589: Function DecLimitClamp5( var B : Cardinal; const Limit : Cardinal; const Decr : Cardinal) : Cardinal;
590: Function DecLimitClamp6( var B : Int64; const Limit : Int64; const Decr : Int64) : Int64;
591: Function DecodeDateFully( DateTime: TDateTime; var Year, Month, Day, DOW: Word): Boolean 592: Function DecodeSoundexInt( AValue: Integer): string
593: Function DecodeSoundexWord( AValue : Word) : string
594: Function DefaultAlignment : TAlignment
595: Function DefaultCaption : string
596: Function DefaultColor : TColor
597: Function DefaultFont : TFont
598: Function DefaultImeMode : TImeMode
599: Function DefaultImeName : TImeName
600: Function DefaultReadOnly : Boolean
601: Function DefaultWidth : Integer
602: Function DegMinSecToFloat( const Degs, Mins, Secs : Float) : Float
603: Function DegToCycle( const Degrees : Extended) : Extended 604: Function DegToGrad( const Degrees : Extended) : Extended
605: Function DegToGrad( const Value : Extended) : Extended;
606: Function DegToGrad1( const Value : Double) : Double;
607: Function DegToGrad2( const Value : Single) : Single;
608: Function DegToRad( const Degrees : Extended) : Extended
609: Function DegToRad( const Value : Extended) : Extended; 610: Function DegToRad1( const Value : Double) : Double;
611: Function DegToRad2( const Value : Single) : Single;
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612: Function DelChar( const pStr : string; const pChar : Char) : string
613: Function DelEnvironmentVar( const Name : string) : Boolean
614: Function Delete( const MsgNum : Integer) : Boolean
615: Function DeleteDirectory( const DirectoryName : string; MoveToRecycleBin : Boolean) : Boolean
616: Function DeleteFile(const FileName: string): boolean)
617: Function DeleteFileEx( FileName : string; Flags : FILEOP_FLAGS) : Boolean
618: Function DelimiterPosn( const sString: string; const sDelimiters: string): integer;
619: Function DelimiterPosn1(const sString:string;const sDelimiters:string;out cDelimiter: char) : integer;
620: Function DelSpace( const pStr : string) : string
621: Function DelString( const pStr, pDelStr : string)
622: Function DelTree( const Path : string) : Boolean
623: Function Depth : Integer
                                                                     : string
624: Function Description : string
625: Function DescriptionsAvailable : Boolean
626: Function DescriptionToConvFamily( const ADescription : string; out AFamily : TConvFamily) : Boolean 627: Function DescriptionToConvType( const ADescription : string; out AType : TConvType) : Boolean;
628: Function DescriptionToConvType1(const AFamil:TConvFamily;const ADescr:string;out AType:TConvType):Boolean;
629: Function DetectUTF8Encoding( const s : UTF8String) : TEncodeType
630: Function DialogsToPixelsX( const Dialogs : Word) : Word
631: Function DialogsToPixelsY( const Dialogs : Word) : Word
632: Function Digits (const X : Cardinal) : Integer
633: Function DirectoryExists (const Name : string) : Boolean
634: Function DirectoryExists( Directory: string) : Boolean 635: Function DiskFree( Drive : Byte) : Int64
636: function DiskFree(Drive: Byte): Int64)
637: Function DiskInDrive( Drive : Char) : Boolean
638: Function DiskSize( Drive : Byte) : Int64
639: function DiskSize(Drive: Byte): Int64)
640: Function DISPATCHCOMMAND( ACOMMAND: WORD): BOOLEAN
641: Function DispatchEnabled : Boolean
642: Function DispatchMask : TMask
643: Function DispatchMethodType : TMethodType
644: Function DISPATCHPOPUP( AHANDLE : HMENU) : BOOLEAN
645: Function DispatchRequest( Sender : TObject; Request : TWebRequest; Response : TWebResponse) : Boolean
646: Function DisplayCase( const S : String) : String
647: Function DisplayRect( Code : TDisplayCode) : TRect
648: Function DisplayRect( TextOnly : Boolean) : TRect
649: Function DisplayStream( Stream : TStream) : string
650: TBufferCoord', 'record Char: integer; Line: integer; end
651: TDisplayCoord', 'record Column: integer; Row: integer; end
652: Function DisplayCoord( AColumn, ARow: Integer): TDisplayCoord
653: Function BufferCoord( AChar, ALine: Integer): TBufferCoord
654: Function DomainName( const AHost: String): String
655: Function DosPathToUnixPath( const Path: string): string
656: Function DottedLineTo( const Canvas: TCanvas; const X, Y : Integer) : Boolean;
657: Function DoubleDecliningBalance( const Cost, Salvage : Extended; Life, Period : Integer) : Extended 658: Function DoubleToBcd( const AValue : Double) : TBcd;
659: Function DoubleToHex( const D : Double) : string
660: Function DoUpdates : Boolean
661: function Dragging: Boolean;
662: Function DrawCaption(p1: HWND; p2: HDC; const p3: TRect; p4: UINT): BOOL 663: Function DrawAnimatedRects(hwnd: HWND; idAni: Integer; const lprcFrom, lprcTo
                                                                                                           : TRect) : BOOL
664: Function DrawEdge( hdc : HDC; var qrc : TRect; edge : UINT; grfFlags : UINT) : BOOL
665: Function DrawFrameControl( DC : HDC; const Rect : TRect; uType, uState : UINT) : BOOL
666: {Works like InputQuery but displays 2edits. If PasswordChar <> #0, the second edit's PasswordChar is set} 667: Function DualInputQuery(const ACaption, Prompt1, Prompt2:string; var AValue1,
AValue2:string:PasswordChar:Char= #0):Boolean;
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
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700: Function EndsText( const ASubText, AText : string) : Boolean
701: Function EnsureMsgIDBrackets( const AMsgID : 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;
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:TCommandType;const ExecuteOptions:TExecuteOptions):
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): 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
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788: Function FIELDBYNAME( const FIELDNAME: WIDESTRING): TFIELD
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
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;
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)
864: 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);
871:
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
```

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876: Function FindFirstOf( AFind, AText : String) : Integer
877: Function FindImmediateTransitionOn( cChar : char) : ThiRegularExpressionState 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 FloatRect1( 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)
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;
952: Function FormatFloat( Format : string; Value : Extended) : string;
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
```

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961: Function FormatMaskText( const EditMask : string; const Value : string) : string
 962: Function FormatValue( AValue : Cardinal) : string
 963: Function FormatVersionString( const HiV, LoV : Word) : string;
 964: Function FormatVersionString1( const Major, Minor, Build, Revision : Word) : string;
 965: function Frac(X: Extended): Extended);
 966: Function FreeResource (ResData : HGLOBAL) : LongBool
 967: Function FromCommon( const AValue : Double) : Double
 968: function FromCommon(const AValue: Double): Double;
 969: Function FTPGMTDateTimeToMLS( const ATimeStamp : TDateTime; const AIncludeMSecs : Boolean) : String
970: Function FTPLocalDateTimeToMLS( const ATimeStamp : TDateTime; const AIncludeMSecs : Boolean) : String 971: Function FTPMLSToGMTDateTime( const ATimeStamp : String) : TDateTime
 972: Function FTPMLSToLocalDateTime( const ATimeStamp : String) : TDateTime
 973: Function FuncIn(AValue: Variant; ASet: Variant): Boolean;
 974: //Function Funclist Size is: 6444 of mX3.9.8.9
975: Function FutureValue(const Rate:Extended; NPeriods:Integer; const Payment.PresentValue:Extended; PaymentTime:
      TPaymentTime):Extended
 976: Function Gauss ( const x, Spread : Double) : Double
977: function Gauss(const x,Spread: Double): Double;
978: Function GCD(x, y : LongInt) : LongInt;
979: Function GCDJ( X, Y : Cardinal) : Cardinal
 980: Function GDAL: LongWord
 981: Function GdiFlush : BOOL
 982: Function GdiSetBatchLimit( Limit : DWORD) : DWORD
983: Function GdiGetBatchLimit : DWORD 984: Function GenerateHeader : TIdHeaderList
 985: Function GeometricMean( const X : TDynFloatArray) : Float
 986: Function Get( AURL : string) : string;
 987: Function Get2( AURL : string) : string;
 988: Function Get8087CW : 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: Function GetClientThread( ClientSocket : TServerClientWinSocket) : 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) : Bvte
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
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1049: function GetCurrentDir: string)
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 getEnvironmentString: string:
1088: Function GetExceptionHandler: 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 GetFileList1(apath: string): TStringlist;
1100: Function GetFileMIMEType( const AFileName : 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;
{\tt 1116:} \  \, \textbf{Function} \  \, \texttt{GetFreeSystemResources1} \  \, : \  \, \texttt{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
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1138: Function GetIncome( const aNetto : Currency) : Currency
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 GetInstResl(Instance:THandle;ResType:TResType;ResID:DWORD;Width:Integer;LoadFlags:TLoadResources;MaskColor:ResType;ResID:DWORD;Width:Teger;LoadFlags:TLoadResources;MaskColor:ResType;ResID:DWORD;Width:Teger;LoadFlags:TLoadResources;MaskColor:ResType;ResID:DWORD;Width:Teger;LoadFlags:TLoadResources;MaskColor:ResType;ResID:DWORD;Width:Teger;ResID:DWORD;Width:Teger;ResID:DWORD;Width:Teger;ResID:DWORD;Width:Teger;ResID:DWORD;Width:Teger;ResID:DWORD;Width:Teger;ResID:DWORD;Width:Teger;ResID:DWORD;Width:Teger;ResID:DWORD;Width:Teger;ResID:DWORD;Width:Teger;ResID:DWORD;Width:Teger;ResID:DWORD;Width:Teger;ResID:DWORD;Width:Teger;ResID:DWORD;Width:Teger;ResID:DWORD;Width:Teger;ResID:DWORD;Width:Teger;ResID:DWORD;Width:Teger;ResID:DWORD;Width:Teger;ResID:DWORD;Width:Teger;ResID:DWORD;Width:Teger;ResID:DWORD;Width:Teger;ResID:DWORD;Width:Teger;ResID:DWORD;Width:Teger;ResID:DWORD;Width:Teger;ResID:DWORD;Width:Teger;ResID:DWORD;Width:Teger;ResID:DWORD;Width:Teger;ResID:DWORD;Width:Teger;ResID:DWORD;Width:Teger;ResID:DWORD;Width:Teger;ResID:DWORD;Width:Teger;ResID:DWORD;Width:Teger;ResID:DWORD;Width:Teger;ResID:DWORD;Width:Teger;ResID:DWORD;Width:Teger;ResID:DWORD;Width:Teger;ResID:DWORD;Width:Teger;ResID:DWORD;Width:Teger;ResID:DWORD;Width:Teger;ResID:DWORD;Width:Teger;ResID:DWORD;Width:Teger;ResID:DWORD;Width:Teger;ResID:DWORD;Width:Teger;ResID:DWORD;Width:Teger;ResID:DWORD;Width:Teger;ResID:DWORD;Width:Teger;ResID:DWORD;Width:Teger;ResID:DWORD;Width:Teger;ResID:Dword;Width:Teger;ResID:Dword;Width:Teger;ResID:Dword;Width:Teger;ResID:Dword;Width:Teger;ResID:Dword;Width:Teger;ResID:Dword;Width:Teger;ResID:Dword;Width:Teger;ResID:Dword;Width:Teger;ResID:Dword;Width:Teger;ResID:Dword;Width:Teger;ResID:Dword;Width:Teger;ResID:Dword;Width:Teger;ResID:Dword;Width:Teger;ResID:Dword;Width:Teger;ResID:Dword;Width:Teger;ResID:Dword;Width:Teger;ResID:Dword;Width:Teger;ResID:Dword;Width:Teger;ResID:Dword;Width:Teger;ResID:Dword;Width:Teger;ResID:Dword;Width:Teger;ResID:Dword;Width:Teger;ResID:Dword;Width:Teger;ResID:Dword;Width:Teg
         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
1213: Function GetNumbockReystate : Bostean

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
```

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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: \textbf{ Function } \texttt{getProcessMemoryInfo2}(\texttt{ProcessID} : \texttt{DWORD}) \colon \texttt{TProcessMemoryCounters};
1247: Function GetProgramFilesFolder : string
1248: Function GetProgramsFolder : string
1249: Function GetProxy : string
1250: Function GetQuoteChar : WideString
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
       Name: string; 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 GetResponse1( 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
1296: Function GetShortHint(Const film: 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
```

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1309: Function GetSystemPathSH(Folder: Integer): TFilename ;
1310: Function GetTableNameFromQuery( const SQL: 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 HashValue1( AStream : TStream; const ABeginPos, AEndPos : Int64) : T5x4LongWordRecord;
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1398: Function HashValue1(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) : Word
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 \mathtt{HTMLEscape}( const \mathtt{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
1449: Function IBRandomString( Ibengui - 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
1453: Function IBExtractIdentifier( Dialect : Integer; Value : String) : String
1455: Function IBQuoteIdentifier( Dialect : Integer; Value : String) : String
1456: \textbf{Function} \ \ \texttt{IBAddIBParamSQLForDetail}(Params: \texttt{TParams}; \texttt{SQL}: \textbf{string}; \texttt{Native}: \texttt{Boolean}; \texttt{Dialect}: \texttt{Integer}): \textbf{string}; \texttt{Native}: \texttt{Na
1457: Procedure IBDecomposeDatabaseName(DatabaseName:String;var ServerName, Protocol, DatabasePath:String)
1458: Function IconToBitmap( Ico : HICON) : TBitmap
1459: Function IconToBitmap2( Ico: HICON; Size: Integer; TransparentColor: TColor): TBitmap 1460: Function IconToBitmap3( Ico: HICON; Size: Integer; TransparentColor: TColor): TBitmap
1461: function IdentToCharset(const Ident: string; var Charset: Longint): Boolean)
1462: function IdentToColor(const Ident: string; var Color: Longint): Boolean; 1463: function IdentToCursor(const Ident: string; var cursor: Longint): Boolean;
1464: Function IdGetDefaultCharSet : TIdCharSet
1465: \textbf{ function } IDispatchInvoke(Self:IDispatch;ProperSet:Boolean; \textbf{const } Name: \textbf{String}; Par: \textbf{array of } variant): variant is a substitution of the propersion of the properties of 
1466: Function IdPorts2 : TStringList
1467: Function IdToMib( const Id : string) : string
1468: Function IdSHAlHash(apath: string): string;
1469: Function IdHashSHAl(apath: string): string;
1470: Function IfStr( const bCondition : boolean; const sTrue : string; const sFalse : string) : string
1471: Function IfThen( AValue : Boolean; const ATrue : string; AFalse : string) : string;
1472: Function iif1( ATest : Boolean; const ATrue : Integer; const AFalse : Integer) : Integer; 1473: Function iif2( ATest : Boolean; const ATrue : string; const AFalse : string) : string;
1474: Function iif3( ATest : Boolean; const ATrue : Boolean; const AFalse : Boolean) : Boolean;
1475: function ImportTest(SI: string;s2:longint; s3:Byte; s4:word; var s5:string): string; 1476: Function IncDay( const AValue : TDateTime; const ANumberOfDays : Integer) : TDateTime
1477: Function IncHour( const AValue : TDateTime; const ANumberOfHours : Int64) : TDateTime
1478: Function IncLimit( var B : Byte; const Limit : Byte; const Incr : Byte) : Byte;
1479: Function IncLimit1( var B : Shortint; const Limit : Shortint; const Incr : Shortint) : Shortint; 1480: Function IncLimit2( var B : Smallint; const Limit : Smallint; const Incr : Smallint) : Smallint;
1481: Function IncLimit3( var B : Word; const Limit : Word; const Incr : Word) : Word;
1482: Function IncLimit4( var B : Integer; const Limit : Integer; const Incr : Integer) : Integer;
1483: Function IncLimit5( var B : Cardinal; const Limit : Cardinal; const Incr : Cardinal) : Cardinal; 1484: Function IncLimit6( var B : Int64; const Limit : Int64; const Incr : Int64) : Int64; 1485: Function IncLimitClamp( var B : Byte; const Limit : Byte; const Incr : Byte) : Byte; 1486: Function IncLimitClamp1( var B : Shortint; const Limit : Shortint; const Incr : Shortint) : Shortint;
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1487: Function IncLimitClamp2( var B : Smallint; const Limit : Smallint; const Incr : Smallint) : Smallint;
1488: Function IncLimitClamp3( var B : Word; const Limit : Word; const Incr : Word) : Word;
1489: Function IncLimitClamp4 (var B : Integer; const Limit : Integer; const Incr : Integer) : Integer;
1490: Function IncLimitClamp5( var B : Cardinal; const Limit : Cardinal; const Incr : Cardinal) : Cardinal;
1491: Function IncLimitClamp6( var B : Int64; const Limit : Int64; const Incr : Int64) : Int64;
1492: Function IncludeTrailingBackslash( S : string) : string
1493: function IncludeTrailingBackslash(const S: string): string)
1494: Function IncludeTrailingPathDelimiter( const APath : string) : string
1495: Function IncludeTrailingPathDelimiter( S : string) : string
1496: function IncludeTrailingPathDelimiter(const S: string): string)
1497: Function IncludeTrailingSlash( const APath: string): string
1498: Function IncMilliSecond( const AValue : TDateTime; const ANumberOfMilliSeconds : Int64) : TDateTime
1499: Function IncMinute( const AValue : TDateTime; const ANumberOfMinutes : Int64) : TDateTime
1500: Function IncMonth( DateTime: TDateTime; NumberOfMonths: Integer): TDateTime 1501: function IncMonth(const DateTime: TDateTime; NumberOfMonths: Integer): TDateTime)
1502: Function IncSecond( const AValue : TDateTime; const ANumberOfSeconds : Int64) : TDateTime
1503: Function IncWeek( const AValue : TDateTime; const ANumberOfWeeks : Integer) : TDateTime
1504: Function IncYear( const AValue : TDateTime; const ANumberOfYears : Integer) : TDateTime 1505: Function IndexOf( AClass : TClass) : Integer
1506: Function IndexOf( AComponent : TComponent) : Integer
1507: Function IndexOf( AObject : TObject) : Integer
1508: Function INDEXOF( const ANAME : String) : INTEGER
1509: Function IndexOf( const DisplayName : string) : Integer
1510: Function IndexOf( const Item : TBookmarkStr) : Integer
1511: Function IndexOf( const S : WideString) : Integer
1512: Function IndexOf( const View : TJclFileMappingView) : Integer
1513: Function INDEXOF( FIELD : TFIELD) : INTEGER
1514: Function IndexOf( ID : LCID) : Integer 1515: Function INDEXOF( ITEM : TMENUITEM) : INTEGER
1516: Function IndexOf( Value : TListItem) : Integer
1517: Function IndexOf( Value : TTreeNode) : Integer
1518: function IndexOf(const S: string): Integer;
1519: Function IndexOfName( const Name: WideString): Integer
1520: function IndexOfName(Name: string): Integer;
1521: Function IndexOfObject( AObject : TObject)
1522: function IndexofObject(AObject:tObject):Integer
1523: Function IndexOfTabAt( X, Y : Integer) : Integer
1524: Function IndexStr( const AText : string; const AValues : array of string) : Integer
1525: Function IndexText( const AText : string; const AValues : array of string) : Integer
1526: Function IndexOfInteger( AList : TStringList; Value : Variant) : Integer
1527: Function IndexOfFloat( AList : TStringList; Value : Variant) : Integer 1528: Function IndexOfDate( AList : TStringList; Value : Variant) : Integer
1529: Function IndexOfString( AList : TStringList; Value : Variant) : Integer
1530: Function IndyCompareStr( const A1 : string; const A2 : string) : Integer
1531: Function IndyGetHostName : string
1532: Function IndyInterlockedDecrement( var I : Integer) : Integer
1533: Function IndyInterlockedExchange( var A : Integer; B : Integer) : Integer
1534: Function IndyInterlockedExchangeAdd( var A : Integer; B : Integer) : Integer
1535: Function IndyInterlockedIncrement( var I : Integer) : Integer
1536: Function IndyLowerCase( const Al : string) : string
1537: Function IndyStrToBool( const AString : String) : Boolean
1538: Function IndyUpperCase( const Al : string) : string
1539: Function InitCommonControl( CC : Integer) : Boolean
1540: Function InitTempPath : string
1541: Function InMainThread : boolean
1542: Function inOpArray( W : WideChar; sets : array of WideChar) : boolean
1543: Function Input: Text)
1544: Function InputBox( const ACaption, APrompt, ADefault : string) : string
1545: function InputBox(const ACaption: string; const APrompt: string; const ADefault: string): string)
1546: Function InputLn(const AMask: string; AEcho:Boolean; ATabWidth:Integer; AMaxLineLength:Integer): string
1547: Function InputQuery( const ACaption, APrompt: string; var Value: string): Boolean
1548: function InputQuery(const ACaption: string; const APrompt: string; var Value: string): Boolean)
1549: Function InquireSignal( RtlSigNum : Integer) : TSignalState 1550: Function InRangeR( const A, Min, Max : Double) : Boolean
1551: function Insert( Index : Integer) : TComboExItem
1552: Function Insert( Index : Integer) : TComboExItem
1553: Function Insert( Index : Integer) : THeaderSection
1554: Function Insert( Index : Integer) : TListItem
1555: Function Insert( Index : Integer) : TStatusPanel
1556: Function Insert( Index : Integer) : TWorkArea
1557: Function Insert( Index : LongInt; const Text : string) : LongInt
1558: Function Insert( Sibling : TTreeNode; const S : string) : TTreeNode
1559: Function INSERTNEWLINEAFTER( AITEM : TMENUITEM) : INTEGER 1560: Function INSERTNEWLINEBEFORE( AITEM : TMENUITEM) : INTEGER
1561: Function InsertNode( Node, Sibling : TTreeNode; const S : string; Ptr : Pointer) : TTreeNode
1562: Function InsertObject( Index : LongInt; const Text : string; const Data : Pointer) : LongInt 1563: Function InsertObject( Sibling : TTreeNode; const S : string; Ptr : Pointer) : TTreeNode
1564: Function Instance : Longint
1565: function InstanceSize: Longint
1566: Function Int(e: Extended): Extended; 1567: function Int64ToStr(i: Int64): String;
1568: Function IntegerToBcd( const AValue : Integer) : TBcd
1569: Function Intensity( const Color32 : TColor32) : Integer;
1570: Function Intensity( const R, G, B : Single) : Single;
1571: Function InterestPayment(const Rate:Extended;Period,NPeriods:Integer;const PresentValue,
       {\tt FutureValue:Extended:\ PaymentTime:\ TPaymentTime):\ Extended}
1572: Function InterestRate(NPeriods:Integer; const Payment, PresentVal,
       FutureVal: Extended; PaymentTime: TPaymentTime): Extended
1573: Function InternalDecodeDate( DateTime: TDateTime; var Year, Month, Day, DOW: Word): Boolean
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1574: Function InternalRateOfReturn( const Guess: Extended; const CashFlows: array of Double): Extended 1575: Function InternalUpdateRecord( Tree: TUpdateTree): Boolean
1576: Function IntersectRect( out Rect: TRect; const R1, R2: TRect): Boolean 1577: function IntersectRect(out Rect: TRect; const R1, R2: TRect): Boolean)
1578: Function IntMibToStr( const Value : string) : string
1579: Function IntPower( const Base : Extended; const Exponent : Integer) : Extended
1580: Function IntToBin( Value : cardinal) : string
1581: Function IntToHex( Value : Integer; Digits : Integer) : string;
1582: function IntToHex(a: integer; b: integer): string;
1583: Function IntToHex64( Value : Int64; Digits : Integer) : string;
1584: function IntToHex64(Value: Int64; Digits: Integer): string)
1585: Function IntTo3Str( Value : Longint; separator: string) : string
1586: Function inttobool( aInt : LongInt) : Boolean 1587: function IntToStr(i: Int64): String;
1588: Function IntToStr64(Value: Int64): string)
1589: function IOResult: Integer
1590: Function IPv6AddressToStr(const AValue: TIdIPv6Address): string
1591: Function IsAccel(VK: Word; const Str: string): Boolean
1592: Function IsAddressInNetwork( Address: String) : Boolean
1593: Function IsAdministrator : Boolean
1594: Function IsAlias( const Name : string) : Boolean
1595: Function IsApplicationRunning( const AClassName, ApplName : string) : Boolean
1596: Function IsASCII( const AByte : Byte) : Boolean;
1597: Function IsASCIILDH( const AByte : Byte) : Boolean;
1598: Function IsAssembly(const FileName: string): Boolean;
1599: Function IsBcdNegative( const Bcd : TBcd)
1600: Function IsBinary(const AChar : Char) : Boolean
1601: function IsConsole: Boolean)
1602: Function IsDelimiter( Delimiters, S : string; Index : Integer) : Boolean
1603: function IsDelimiter(const Delimiters: string; const S: string; Index: Integer): Boolean)
1604: Function IsDelphiDesignMode : boolean
1605: Function IsDelphiRunning : boolean
1606: Function IsDFAState : boolean
1607: Function IsDirectory( const FileName : string) : Boolean
1608: Function IsDomain( const S : String) : Boolean
1609: function IsDragObject(Sender: TObject): Boolean;
1610: Function IsEditing : Boolean
1611: Function ISEMPTY : BOOLEAN
1612: Function ISEQuAL( VALUE : TPARAMS) : BOOLEAN
1614: function IsEqualGUID(const guid1, guid2: TGUID): Boolean)
1615: Function IsFirstNode : Boolean
1616: Function IsFloatZero( const X : Float) : Boolean
1617: Function IsFormatRegistered( Extension, AppID : string) : Boolean
1618: Function IsFormOpen(const FormName: string): Boolean;
1619: Function IsFQDN( const S : String) : Boolean
1620: Function IsGrayScale : Boolean
1621: Function IsHex( AChar : Char) : Boolean;
1622: Function IsHexString(const AString: string): Boolean;
1623: Function IsHostname( const S: String): Boolean
1624: Function IsInfinite( const AValue: Double): Boolean
1625: Function IsInLeapYear( const AValue : TDateTime) : Boolean
1626: Function IsInternet: boolean;
1627: Function IsLeadChar( ACh : Char) : Boolean
1628: Function IsLeapYear( Year : Word) : Boolean
1629: function IsLeapYear(Year: Word): Boolean)
1630: function IsLibrary: Boolean)
1631: Function ISLINE : BOOLEAN
1632: Function IsLinkedTo( DataSet : TDataSet) : Boolean 1633: Function IsLinkedTo( DATASOURCE : TDATASOURCE) : BOOLEAN
1634: Function IsLiteralChar( const EditMask : string; Offset : Integer) : Boolean
1635: Function IsMatch( const Pattern, Text : string) : Boolean //Grep like RegEx
1636: Function IsMainAppWindow( Wnd : HWND) : Boolean
1637: Function IsMediaPresentInDrive( Drive : Char) : Boolean
1638: function IsMemoryManagerSet: Boolean)
1639: Function IsMultiTableQuery( const SQL : WideString) : Boolean
1640: function IsMultiThread: Boolean)
1641: Function IsNumeric( AChar : Char) : Boolean; 1642: Function IsNumeric2( const AString : string) : Boolean;
1643: Function IsOctal( AChar : Char) : Boolean;
1644: Function IsOctalString(const AString: string) : Boolean;
1645: Function IsPathDelimiter( S : string; Index : Integer) : Boolean
1646: function IsPathDelimiter(const S: string; Index: Integer): Boolean) 1647: Function IsPM( const AValue : TDateTime) : Boolean
1648: Function IsPositiveFloatArray( const X : TDynFloatArray) : Boolean
1649: Function IsPrimeFactor( const F, N : Cardinal) : Boolean
1650: Function IsPrimeRM( N : Cardinal) : Boolean //rabin miller 1651: Function IsPrimeTD( N : Cardinal) : Boolean //trial division 1652: Function IsPrivilegeEnabled( const Privilege : string) : Boolean
1653: Function ISqrt( const I : Smallint) : Smallint
1654: Function IsReadOnly(const Filename: string): boolean;
1655: Function IsRectEmpty( const Rect : TRect) : Boole 1656: function IsRectEmpty(const Rect: TRect): Boolean)
                                                         : Boolean
1657: Function IsRelativePrime( const X, Y : Cardinal) : Boolean
1658: Function ISRIGHTTOLEFT : BOOLEAN
1659: function IsRightToLeft: Boolean
1660: Function IsSameDay( const AValue, ABasis : TDateTime) : Boolean 1661: Function ISSEQUENCED : BOOLEAN
1662: Function IsSystemModule( const Module : HMODULE) : Boolean
```

```
1663: Function IsSystemResourcesMeterPresent : Boolean
1664: Function IsTCPPortOpen(dwPort : Word; ipAddressStr: String): boolean;
1665: Function IsToday( const AValue : TDateTime) : Boolean
1666: function IsToday(const AValue: TDateTime): Boolean;
1667: Function IsTopDomain( const AStr : string) : Boolean
1668: Function IsUTF8LeadByte( Lead : Char) : Boolean
1669: Function IsUTF8String( const s : UTF8String) : Boolean
1670: Function IsUTF8TrailByte(Lead: Char): Boolean 1671: Function ISVALIDCHAR(INPUTCHAR: CHAR): BOOLEAN
1672: Function IsValidDate( const AYear, AMonth, ADay : Word) : Boolean 1673: Function IsValidDateDay( const AYear, ADayOfYear : Word) : Boolean
1674: Function IsValidDateMonthWeek( const AYear, AMonth, AWeekOfMonth, ADayOfWeek: Word): Boolean
1675: Function IsValidDateTime(const AYear, AMonth, ADay, AHour, AMinute, ASecond, AMilliSecond: Word): Boolean 1676: Function IsValidDateWeek(const AYear, AWeekOfYear, ADayOfWeek: Word): Boolean 1677: Function IsValidIdent(Ident: string): Boolean
1678: function IsValidIdent(const Ident: string; AllowDots: Boolean): Boolean)
1679: Function IsValidIP( const S : String) : Boolean
1680: Function IsValidTime( const AHour, AMinute, ASecond, AMilliSecond: Word): Boolean 1681: Function IsValidISBN( const ISBN: AnsiString): Boolean
1682: Function IsVariantManagerSet: Boolean; //deprecated;
1683: Function IsVirtualPcGuest : Boolean;
1684: Function IsVmWareGuest : Boolean;
1685: Function IsVCLControl(Handle: HWnd): Boolean;
1686: Function IsWhiteString( const AStr: String): Boolean
1687: Function IsWindowResponding( Wnd: HWND; Timeout: Integer): Boolean
1688: Function IsWoW64: boolean;
1689: Function IsWin64: boolean;
1690: Function IsWow64String(var s: string): Boolean; 1691: Function IsWin64String(var s: string): Boolean;
1692: Function IsWindowsVista: boolean;
1693: Function isPowerof2(num: int64): boolean;
1694: Function powerOf2(exponent: integer): int64;
1695: function IsZero(const A: Extended; Epsilon: Extended): Boolean //overload;
1696: function IsZero1(const A: Double; Epsilon: Double): Boolean //overload;
1697: function IsZero2(const A: Single; Epsilon: Single): Boolean //overload;
1698: Function ItemAtPos(Pos: TPoint; IgnoreTableight: Boolean): Integer 1699: function ITEMATPOS(POS:TPOINT; EXISTING:BOOLEAN):INTEGER
1700: Function ItemRect( Index : Integer) : TRect
1701: function ITEMRECT(INDEX:INTEGER):TRECT
1702: Function ItemWidth( Index : Integer) : Integer
1703: Function JavahashCode(val: string): Integer;
1704: Function JosephusG(n,k: integer; var graphout: string): integer; 1705: Function <math>JulianDateToDateTime(const AValue: Double): TDateTime
1706: Function JvMessageBox( const Text, Caption : string; Flags : DWORD) : Integer;
1707: Function JvMessageBox1( const Text : string; Flags : DWORD) : Integer;
1708: Function KeepAlive : Boolean
1709: Function KeysToShiftState(Keys: Word): TShiftState;
1710: Function KeyDataToShiftState(KeyData: Longint): TShiftState;
1711: Function KeyboardStateToShiftState2(const KeyboardState: TKeyboardState): TShiftState;
1712: Function KeyboardStateToShiftState: TShiftState; overload;
1713: Function Languages : TLanguages
1714: Function Last : TClass
1715: Function Last : TComponent
1716: Function Last : TObject
1717: Function LastDelimiter( Delimiters, S : string) : Integer
1718: function LastDelimiter(const Delimiters: string; const S: string): Integer)
1719: Function LastPos( const ASubstr : string; const AStr : string) : Integer
1720: Function Latitude2WGS84(lat: double): double;
1721: Function LCM(m,n:longint):longint;
1722: Function LCMJ( const X, Y : Cardinal) : Cardinal
1723: Function Ldexp( const X : Extended; const P : Integer) : Extended
1724: Function LeftStr( const AText : AnsiString; const ACount : Integer) : AnsiString;
1725: Function LeftStr( const AText : WideString; const ACount : Integer) : WideString;
1726: function Length: Integer;
1727: Procedure LetFileList(FileList: TStringlist; apath: string);
1728: function lengthmp3(mp3path: string):integer;
1729: Function LineInRect( const P1, P2 : TPoint; const Rect : TRect) : Boolean;
1730: Function LineInRect1( const Pl, P2 : TFloatPoint; const Rect : TFloatRect) : Boolean;
1731: Function LineSegmentIntersection(const L1P1 : TFloatPoint; L1P2 : TFloatPoint; const L2P1 : TFloatPoint;
L2P2 : TFloatPoint; var P : TFloatPoint) : Boolean
1732: function LineStart(Buffer, BufPos: PChar): PChar
1733: function LineStart(Buffer, BufPos: PChar): PChar)
1734: function ListSeparator: char;
1735: function Ln(x: Extended): Extended;
1736: Function LnXP1( const X : Extended) : Extended
1737: function Lo(vdat: word): byte;
1738: Function LoadCursor(hInstance: HINST; lpCursorName: PChar): HCURSOR
1739: Function LoadedModulesList( const List: TStrings; ProcessID : DWORD; HandlesOnly : Boolean) : Boolean
1740: Function LoadFileAsString( const FileName : string) : string
1741: Function LoadFromFile( const FileName : string) : TBitmapLoader
1742: Function LoadLibraryEx(LibName: PChar; hFile: Longint; Flags: Longint): Longint; stdcall;
1743: Function LoadPackage(const Name: string): HMODULE
1744: Function LoadResource( ModuleHandle : HMODULE; ResHandle : TResourceHandle) : HGLOBAL 1745: Function LoadStr( Ident : Integer) : string
1746: Function LoadString(Instance: Longint; IDent: Integer; Buffer: PChar; Size: Integer): Integer; stdcall; 1747: Function LoadWideStr( Ident: Integer): WideString
1748: Function LOCATE(const KEYFIELDS: string;const KEYVALUES:VARIANT;OPTIONS: TLOCATEOPTIONS) : BOOLEAN 1749: Function LockRegion( libOffset : Longint; cb : Largeint; dwLockType : Longint) : HResult 1750: Function LockServer( fLock : LongBool) : HResult
```

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1751: Function LockVolume ( const Volume : string; var Handle : THandle ) : Boolean
1752: Function Log( const X : Extended) : Extended
1753: Function Log10( const X : Extended) : Extended
1754: Function Log2( const X : Extended) : Extended
1755: function LogBase10(X: Float): Float;
1756: Function LogBase2(X: Float): Float;
1757: Function LogBaseN(Base, X: Float): Float;
1758: Function LogN( const Base, X : Extended) : Extended
1759: Function LogOffOS : Boolean
1760: Function LoginDialog( const ADatabaseName : string; var AUserName, APassword : string) : Boolean
1761: Function LoginDialogEx(const ADatabaseName:string;var AUserName,
          APassword: string; NameReadOnly: Boolean;
1762: Function LongDateFormat: string;
1763: function LongTimeFormat: string;
1764: Function LongWordToFourChar( ACardinal : LongWord) : string
1765: Function LOOKUP(const KEYFIELDS: String; const KEYVALUES: VARIANT; const RESULTFIELDS: String): VARIANT
1766: Function LookupName( const name : string) : TInAddr
1767: Function LookupService( const service : string) : Integer
1768: function Low: Int64;
1769: Function LowerCase( S : string) : string
1770: Function Lowercase(s : AnyString) : AnyString;
1771: Function LRot( const Value : Byte; const Count : TBitRange) : Byte;
1772: Function LRot1( const Value : Word; const Count : TBitRange) : Word; 1773: Function LRot2( const Value : Integer; const Count : TBitRange) : Integer;
1774: function MainInstance: longword
1775: function MainThreadID: longword
1776: Function Map(x, in_min, in_max, out_min, out_max: integer): integer; //arduino
1777: Function mapMax(ax, in_min, in_max, out_min, out_max: integer): integer; 1778: Function MakeCanonicalIPv4Address( const AAddr : string) : string 1779: Function MakeCanonicalIPv6Address( const AAddr : string) : string
1780: Function MakeDIB( out Bitmap : PBitmapInfo) : Integer
1781: Function MakeDWordIntoIPv4Address( const ADWord : Cardinal) : string
1782: function MakeLong(A, B: Word): Longint)
1783: Function MakeTempFilename( const APath: String): string
1784: Function MakeValidFileName( const Str: string): string
1785: Function MakeValueMap( Enumeration : string; ToCds : Boolean) : string
1786: function MakeWord(A, B: Byte): Word)
1787: Function MakeYear4Digit( Year, Pivot : Integer) : Integer
1788: Function MapDateTime(const DateFormatType:string; DateFormat:string; Value:string; ToCds:Boolean): string
1789: Function MapValues( Mapping : string; Value : string) : string
1790: Function MaskDoFormatText( const EditMask : string; const Value : string; Blank : Char) : string
1791: Function MaskGetCharType( const EditMask : string; MaskOffset : Integer) : TMaskCharType
1792: Function MaskGetCurrentDirectives( const EditMask : string; MaskOffset : Integer) : TMaskDirectives
1793: Function MaskGetFldSeparator( const EditMask : string) : Integer
1794: Function MaskGetMaskBlank( const EditMask : string) : Char
1795: Function MaskGetMaskSave( const EditMask : string) : Boolean
1796: Function MaskOffsetToOffset( const EditMask : String; MaskOffset : Integer) : Integer
1798: Function MaskOffsetToWideOffset( const EditMask : String; MaskOffset : Integer) : Integer
1799: Function MaskString( Mask, Value : String) : String
1800: Function Match( const sString : string) : ThiRegularExpressionMatchResul
1801: Function Match1( const sString : string; iStart : integer) : ThiRegularExpressionMatchResult
1802: Function Matches( const Filename : string) : Boolean
1803: Function MatchesMask( const Filename, Mask: string) : Boolean
1804: Function MatchStr( const AText : string; const AValues : array of string) : Boolean 1805: Function MatchText( const AText : string; const AValues : array of string) : Boolean
1806: Function Max( AValueOne, AValueTwo : Integer) : Integer
1807: function Max(const x,y: Integer): Integer;
1808: Function Max1( const B1, B2 : Shortint) : Shortint;
1809: Function Max2( const B1, B2 : Smallint) : Smallint;
1810: Function Max3( const B1, B2 : Word) : Word;
1811: function Max3(const x,y,z: Integer): Integer;
1812: Function Max4( const B1, B2 : Integer) : Integer; 1813: Function Max5( const B1, B2 : Cardinal) : Cardinal;
1814: Function Max6( const B1, B2 : Int64) : Int64;
1815: Function Max64( const AValueOne, AValueTwo : Int64) : Int64
1816: Function MaxFloat( const X, Y : Float) : Float
1817: Function MaxFloatArray( const B : TDynFloatArray) : Float
1818: Function MaxFloatArrayIndex( const B : TDynFloatArray) : Integer
1819: function MaxIntValue(const Data: array of Integer):Integer)
1820: Function MaxJ( const B1, B2 : Byte) : Byte;
1821: function MaxPath: string;
1822: function MaxValue(const Data: array of Double): Double)
1823: Function MaxCalc( const Formula : string) : Extended //math expression parser 1824: Procedure MaxCalcF( const Formula : string); //out to console memo2
1825: function MD5(const fileName: string): string;
1826: Function Mean( const Data : array of Double) : Extended 1827: Function Median( const X : TDynFloatArray) : Float 1828: Function Memory : Pointer
1829: Function MemoryPos( const ASubStr : string; MemBuff : PChar; MemorySize : Integer) : Integer
1830: Function MessageBox(hndl: cardinal; text, caption: string; utype: cardinal): Integer; 1831: function MessageBox(TEXT,CAPTION:PCHAR;FLAGS:WORD):INTEGER
1832: \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;DlgType:MsgDlgType;Buttons:TMsgDlgType;Buttons:TMsgDlgButtons;HelpCtx:Longint)} : \ \texttt{Integer;DlgType:MsgDlgType;Buttons:TMsgDlgButtons: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} : \ \texttt{Integer:MsgDlgType:MsgDlgType} : \ \texttt{Integer:MsgDlgType} : \ \texttt{In
1833: Function MessageDlg1(const
          Msg:string:DlgType:TMsgDlgType;Buttons:TMsgDlgButtons;HelpCtx:Longint;DefaultButton:TMsgDlgBtn): Integer;
1834: Function MessageDlgPos(const Msg:string;DlgType:TMsgDlgType;Buttons:TMsgDlgButtons;HelpCtx:Longint;X,
          Y:Integer):Integer;
1835: Function MessageDlgPos1( const Msg : string; DlgType : TMsgDlgType; Buttons : TMsgDlgButtons; HelpCtx :
          Longint; X, Y : Integer; DefaultButton : TMsgDlgBtn) : Integer;
```

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1836: Function MessageDlgPosHelp( const Msg : string; DlgType : TMsgDlgType; Buttons : TMsgDlgButtons; HelpCtx : Longint; X, Y : Integer; const HelpFileName : string) : Integer;
1837: Function MessageDlgPosHelpl( const Msg : string; DlgType : TMsgDlgType; Buttons : TMsgDlgButtons; HelpCtx : Longint; X, Y : Integer; const HelpFileName : string; DefaultButton : TMsgDlgBtn) : Integer;
1838: Function MibToId( Mib : string) : string
1839: Function MidStr( const AText: AnsiString; const AStart, ACount: Integer): AnsiString; 1840: Function MidStr( const AText: WideString; const AStart, ACount: Integer): WideString; 1841: Function microsecondsToCentimeters(mseconds: longint): longint; //340m/s speed of sound
1842: Function Micros(const Timer:THPTimer;const TimerRunning:Boolean):Int64//TypeS('THPTimer', 'Int64
1843: Function MIDIOut( DeviceID : Cardinal) : IJclMIDIOut 1844: Procedure GetMidiOutputs( const List : TStrings)
1845: Function MIDISingleNoteTuningData( Key: TMIDINote; Frequency: Single): TSingleNoteTuningData
1846: Function MIDINoteToStr( Note: TMIDINote): string
1847: Function WinMidiOut( DeviceID: Cardinal): IJclWinMidiOut
1848: Procedure GetMidiOutputs( const List : TStrings)
1849: Procedure MidiOutCheck( Code : MMResult)
1850: Procedure MidiInCheck( Code : MMResult)
1851: Function MilliSecondOf( const AValue : TDateTime) : Word
1852: Function MilliSecondOfTheDay( const AValue : TDateTime) : LongWord 1853: Function MilliSecondOfTheHour( const AValue : TDateTime) : LongWord
1854: Function MilliSecondOfTheMinute( const AValue : TDateTime) : LongWord
1855: Function MilliSecondOfTheMonth( const AValue : TDateTime) : LongWord
1856: Function MilliSecondOfTheSecond( const AValue : TDateTime) : Word
1857: Function MilliSecondOfTheWeek( const AValue : TDateTime) : LongWord 1858: Function MilliSecondOfTheYear( const AValue : TDateTime) : Int64
1859: Function MilliSecondsBetween( const ANow, AThen : TDateTime) :
1860: Function MilliSecondSpan( const ANow, AThen : TDateTime) : Double
1861: Function Micros( const Timer: THPTimer; const TimerRunning: Boolean): Int64 1862: Function millis: int64;
1863: Function Min( AValueOne, AValueTwo : Integer) : Integer
1864: Function Min1( const B1, B2 : Shortint) : Shortint; 1865: Function Min2( const B1, B2 : Smallint) : Smallint;
1866: Function Min3( const B1, B2 : Word) : Word;
1867: Function Min4( const B1, B2 : Integer) : Integer;
1868: Function Min5( const B1, B2 : Cardinal) : Cardinal;
1869: Function Min6( const B1, B2 : Int64) : Int64;
1870: Function Min64( const AValueOne, AValueTwo : Int64) : Int64
1871: Function MinClientRect : TRect;
1872: Function MinClientRect1( IncludeScroller : Boolean) : TRect;
1873: Function MinClientRect2( TabCount : Integer; IncludeScroller : Boolean) : TRect;
1874: Function MinFloat( const X, Y : Float) : Float
1875: Function MinFloatArray( const B : TDynFloatArray) : Float
1876: Function MinFloatArrayIndex( const B : TDynFloatArray) : Integer
1877: Function MinimizeName( const Filename : string; Canvas : TCanvas; MaxLen : Integer) : string
1878: Function MinimizeName( const Filename : TFileName; Canvas: TCanvas; MaxLen : Integer) : TFileName 1879: function MinimizeName(const Filename: String; Canvas: TCanvas; MaxLen: Integer): TFileName
1880: Function MinIntValue( const Data : array of Integer) : Integer
1881: function MinIntValue(const Data: array of Integer):Integer)
1882: Function MinJ( const B1, B2 : Byte) : Byte;
1883: Function MinuteOf( const AValue : TDateTime) : Word 1884: Function MinuteOfTheDay( const AValue : TDateTime) : Word
1885: Function MinuteOfTheHour( const AValue : TDateTime) : Word
1886: Function MinuteOfTheMonth( const AValue : TDateTime) : Word
1887: Function MinuteOfTheWeek( const AValue : TDateTime) : Word 1888: Function MinuteOfTheYear( const AValue : TDateTime) : LongWord
1889: Function MinutesBetween( const ANow, AThen : TDateTime) : Int64
1890: Function MinuteSpan( const ANow, AThen : TDateTime) : Double
1891: Function MinValue( const Data : array of Double) : Double
1892: function MinValue(const Data: array of Double): Double)
1893: Function MixerLeftRightToArray( Left, Right : Cardinal) : TDynCardinalArray
1894: Function MMCheck( const MciError : MCIERROR; const Msg : string) : MCIERROR
1895: Function ModFloat( const X, Y : Float) : Float
1896: Function ModifiedJulianDateToDateTime( const AValue : Double) : TDateTime
1897: Function Modify( const Key : string; Value : Integer) : Boolean
1898: Function ModuleCacheID : Cardinal
1899: Function ModuleFromAddr( const Addr : Pointer) : HMODULE
1900: Function MonitorFromPoint( const Point: TPoint; MonitorDefault: TMonitorDefaultTo): TMonitor
1901: Function MonitorFromRect( const Rect : TRect; MonitorDefault : TMonitorDefaultTo) : TMonitor
1902: Function MonitorFromWindow( const Handle: THandle; MonitorDefault: TMonitorDefaultTo): TMonitor
1903: Function MonthOf( const AValue : TDateTime) : Word
1904: Function MonthOfTheYear( const AValue : TDateTime) : Word
1905: Function MonthsBetween( const ANow, AThen : TDateTime) : Integer
1906: Function MonthSpan( const ANow, AThen : TDateTime) : Double 1907: Function MonthStr( DateTime : TDateTime) : string
1908: Function MouseCoord( X, Y : Integer) : TGridCoord
1909: Function MOVEBY( DISTANCE : INTEGER) : INTEGER
1910: Function MoveFile( Source, Dest : string; Flags : FILEOP_FLAGS) : Boolean
1911: Function MoveNext : Boolean
1912: Function MSecsToTimeStamp( MSecs : Comp) : TTimeStamp
1913: function MSecsToTimeStamp(MSecs: Comp): TTimeStamp)
1914: Function Name : string
1915: Function NetPresentValue(const Rate:Extended; const CashFlows:array of
        Double; PaymentTime: TPaymentTime): Extended
1916: function NetworkVolume(DriveChar: Char): string
1916: Function NetWortonLine (Drivechar: Char): String
1917: Function NewBottonLine : INTEGER
1918: Function NewCompareNode( Field : TField; Operator : TCANOperator; const Value : Variant) : PExprNode
1919: Function NeWITEM( const ACAPTION : String; ASHORTCUT : TSHORTCUT; ACHECKED, AENABLED : BOOLEAN; AONCLICK :
TNOTIFYEVENT; HCTX : WORD; const ANAME : String) : TMENUITEM
1920: Function NEWLINE : TMENUITEM
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1921: Function NEWMENU( OWNER: TCOMPONENT; const ANAME: STRING; ITEMS: array of TMenuItem): TMAINMENU
1922: Function NewNode(Kind: TExprNodeKind; Operator: TCANOperator; const Data: Variant; Left,
       Right:PExprNode):PExprNode
1923: Function NEWPOPUPMENU(OWNER:TCOMPONENT; const ANAME:String; ALIGNMENT:TPOPUPALIGNMENT; AUTOPOPUP:BOOLEAN;
       const ITEMS : array of TCMENUITEM) : TPOPUPMENU
1924: Function NewState( eType : TniRegularExpressionStateType) : TniRegularExpressionState
1925: Function NEWSUBMENU(const ACAPT:String;HCTX:WORD;const ANAME:String;ITEMS:array of
       TMenuItem; AENABLED: BOOL): TMENUITEM
1926: Function NEWTOPLINE : INTEGER
1927: Function Next : TIdAuthWhatsNext
1928: Function NextCharIndex( S : String; Index : Integer) : Integer
1929: Function NextRecordSet : TCustomSQLDataSet
1930: Function NextRecordset( var RecordsAffected : Integer) :
                                                                               _Recordset
1931: Function NextSQLToken1( var p : WideChar; out Token : WideString; CurSection : TSQLToken) : TSQLToken;
1932: Function NextToken : Char
1933: Function nextToken : WideString
1934: function NextToken:Char
1935: Function Norm( const Data : array of Double) : Extended
1936: Function NormalizeAngle (const Angle : Extended) : Extended
1937: Function NormalizeBcd(const InBcd : TBcd; var OutBcd : TBcd; const Prec, Scale : Word) : Boolean
1938: Function NormalizeRect( const Rect : TRect)
                                                               : TRect
1939: function NormalizeRect(const Rect: TRect): TRect;
1940: Function Now: TDateTime 1941: function Now2: tDateTime
1942: Function NumProcessThreads : integer
1943: Function NumThreadCount : integer
1944: Function NthDayOfWeek( const AValue : TDateTime) : Word
1945: Function NtProductType : TNtProductType
1946: Function NtProductTypeString : string
1947: function Null: Variant;
1948: Function NullPoint : TPoint
1949: Function NullRect : TRect
1950: Function Null2Blank(aString:String):String;
1951: Function NumberOfPeriods( const Rate : Extended; Payment : Extended; const PresentValue, FutureValue : Extended; PaymentTime : TPaymentTime) : Extended
1952: Function NumIP : integer
1953: function Odd(x: Longint): boolean;
1954: Function OffsetFromUTC: TDateTime
1955: Function OffsetPoint( const P, Offset : TPoint) : TPoint
1956: Function OffsetRect( var Rect : TRect; DX : Integer; DY : Integer) : Boolean
1957: function OffsetRect(var Rect: TRect; DX:Integer; DY:Integer): Boolean)
1958: Function OffsetToMaskOffset( const EditMask : string; Offset : Integer) : Integer 1959: Function OkToChangeFieldAlignment( AField : TField; Alignment : TAlignment) : Boolean
1960: Function OldBCDToCurr( const BCD : TBcd; var Curr : Currency) : Boolean
1961: Function OldCurrToBCD(const Curr:Currency; var BCD:TBcd; Precision:Integer;Decimals:Integer): Boolean
1962: function OpenBit:Integer
1963: Function OpenDatabase: TDatabase
1964: Function OpenDatabase( const DatabaseName : string) : TDatabase
1965: Function OpenGLColorToWinColor( const Red, Green, Blue : Float) : TColor
1966: Function OpenObject( Value : PChar) : Boolean;
1967: Function OpenObject1( Value : string) : Boolean;
1968: Function OpenSession( const SessionName : string) : TSession
1969: Function OpenVolume( const Drive : Char) : THandle
1970: function OrdFourByteToCardinal(AByte1, AByte2, AByte3, AByte4 : Byte): Cardinal
1971: Function OrdFourByteToLongWord( AByte1, AByte2, AByte3, AByte4 : Byte) : LongWord
1972: Function OrdToBinary( const Value : Byte) : string;
1973: Function OrdToBinary1( const Value : Shortint): string;
1974: Function OrdToBinary2( const Value : Smallint): string;
1975: Function OrdToBinary3( const Value : Word) : string;
1976: Function OrdToBinary4( const Value : Integer) : string;
1977: Function OrdToBinary5( const Value : Cardinal) : string;
1978: Function OrdToBinary6( const Value : Int64) : string;
1979: Function OSCheck( RetVal : Boolean) : Boolean
1979: Function OSCHECK( RETVAL : BOOLEAN) : BOOLEAN | 1980: Function OSFileTypeToString( const OSFileType : DWORD; const OSFileSubType : DWORD) : string 1981: Function OSIdentToString( const OSIdent : DWORD) : string
1982: Function Output: Text)
1983: Function Overlay( ImageIndex : Integer; Overlay : TOverlay) : Boolean
1984: Function Owner : TCustomListView
1985: function Owner : TPersistent
1986: Function PadInputLiterals( const EditMask: String; const Value: string; Blank: Char): string
1987: Function PadL( pStr : String; pLth : integer) : String
1988: Function Padl(s : AnyString; I : longInt) : AnyString;
1989: Function PadL(h(pStr: String; pLth: integer; pChr: char): String
1990: Function PadR(pStr: String; pLth: integer): String
1991: Function Padr(s: AnyString; I: longInt): AnyString;
1992: Function PadRCh( pStr : String; pLth : integer; pChr : char) : String
1993: Function PadString( const AString : String; const ALen : Integer; const AChar : Char) : String
1994: Function Padz(s: AnyString;I: longInt): AnyString;
1995: Function PaethPredictor(a, b, c: Byte): Byte
1996: Function PARAMBYNAME(const VALUE: String): TPARAM
1997: Function ParamByName(const Value: WideString): TParameter
1998: Function ParamCount: Integer
1999: Function ParamsEncode( const ASrc : string) : string
2000: function ParamStr(Index: Integer): string)
2001: Function ParseDate( const DateStr : string) : TDateTime
2002: Function PARSESQL( SQL: String; DOCREATE: BOOLEAN): String
2003: Function ParseSQL( SQL: WideString; DoCreate: Boolean): WideString
2004: Function PathAddExtension( const Path, Extension: string) : string
2005: Function PathAddSeparator( const Path : string) : string
```

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

```
2090: Function Push( AItem : Pointer) : Pointer
2091: Function Push( AObject : TObject) : TObject
2092: Function Put1( AURL : string; const ASource : TStream) : string;
2093: Function Pythagoras( const X, Y : Extended) : Extended
2094: Function queryDLLInterface( var queryList : TStringList) : TStringList
2095: Function queryDLLInterfaceTwo( var queryList: TStringList): TStringList 2096: Function QueryInterface(const IID: TGUID; out Obj): HResult, CdStdCall
2097: Function queryPerformanceCounter2(mse: int64): int64;
2098: //Function QueryPerformanceCounter(var lpPerformanceCount: Int64): LongBool; stdcall;
2099: //Function QueryPerformanceFrequency(mse: int64): boolean;
2100: Function QueryPerformanceCounter(var lcount: Int64): Boolean; stdcall;
2101: Function QueryPerformanceFrequency(var lfreq: int64): boolean; stdcall;
2102: Procedure QueryPerformanceCounter1(var aC: Int64);
2103: Function QueryPerformanceFrequency1(var freq: int64): boolean;
2104: Function Quote (const ACommand: String): SmallInt.
2105: Function QuotedStr( S : string) : string
2106: Function RadToCycle( const Radians : Extended) : Extended
2107: Function RadToDeg( const Radians : Extended) : Extended 2108: Function RadToDeg( const Value : Extended) : Extended; 2109: Function RadToDeg1( const Value : Double) : Double;
2110: Function RadToDeg2( const Value : Single) : Single;
2111: Function RadToGrad( const Radians : Extended) : Extended
2112: Function RadToGrad( const Value : Extended) : Extended;
2113: Function RadToGrad1( const Value : Double) : Double;
2114: Function RadToGrad2( const Value : Single) : Single;
2115: Function RandG( Mean, StdDev : Extended) : Extended
2116: function Random(const ARange: Integer): Integer;
2117: function random2(a: integer): double
2118: function RandomE: Extended;
2119: function RandomF: Extended;
2120: Function RandomFrom( const AValues : array of string) : string;
2121: Function RandomRange( const AFrom, ATo : Integer) : Integer
2122: function randSeed: longint
2123: Function RawToDataColumn( ACol : Integer) : Integer
2124: Function Read : Char
2125: Function Read( pv : Pointer; cb : Longint; pcbRead : PLongint) : HResult
2126: function Read(Buffer:String;Count:LongInt):LongInt
2127: Function ReadBinaryStream( const Section, Name : string; Value : TStream) : Integer 2128: Function ReadBool( const Section, Ident : string; Default : Boolean) : Boolean 2129: Function ReadCardinal( const AConvert : boolean) : Cardinal
2130: Function ReadChar : Char
2131: Function ReadClient( var Buffer, Count : Integer) : Integer
2132: Function ReadDate( const Section, Name : string; Default : TDateTime) : TDateTime
2133: Function ReadDateTime( const Section, Name : string; Default : TDateTime) : TDateTime
2134: Function ReadFloat( const Section, Name : string; Default : Double) : Double
2135: Function ReadFromStack(const ARaiseExceptfDisconnected:Bool;ATimeout:Int;const ARaiseExceptonTimeout:
       Boolean): Integer
2136: Function ReadInteger( const AConvert : boolean) : Integer
2137: Function ReadInteger( const Section, Ident : string; Default : Longint) : Longint
2138: Function ReadLn : string
2139: Function ReadLn( ATerminator : string; const ATimeout : Integer; AMaxLineLength : Integer) : string
2140: function Readln(question: string: string;
2141: Function ReadLnWait( AFailCount : Integer) : string
2142: Function ReadReg(Base: HKEY; KeyName, ValueName: string): string;
2143: Function ReadRegistry(Base: HKEY; KeyName, ValueName: string): string; 2144: Function ReadSmallInt( const AConvert : boolean) : SmallInt
2145: Function ReadString( const ABytes : Integer) : string
2146: Function ReadString( const Section, Ident, Default : string) : string
2147: Function ReadString(Count: Integer): string
2148: Function ReadTime(const Section, Name: string; Default: TDateTime): TDateTime
2149: Function ReadTimeStampCounter: Int64
2150: Function RebootOS : Boolean
2151: Function Receive( ATimeOut : Integer) : TReplyStatus
2152: Function ReceiveBuf ( var Buf, Count : Integer) : Integer
2153: Function ReceiveLength : Integer
2154: Function ReceiveText : string
2155: Function ReceiveSerialData(var Data: TByteArray; DataSize: cardinal): cardinal
2156: Function ReceiveSerialText: string
2157: Function RecodeDate( const AValue : TDateTime; const AYear, AMonth, ADay : Word) : TDateTime
2158: Function RecodeDateTime(const AValue:TDateTime;const AYear,AMonth,ADay,AHr,AMin,ASec,
       AMilliSec:Word):TDateTime
2159: Function RecodeDay( const AValue : TDateTime; const ADay : Word) : TDateTime
2160: Function RecodeHour( const AValue : TDateTime; const AHour : Word) : TDateTime
2161: Function RecodeMilliSecond( const AValue : TDateTime; const AMilliSecond : Word) : TDateTime
2162: Function RecodeMinute( const AValue : TDateTime; const AMinute : Word) :
                                                                                             TDateTime
2163: Function RecodeMonth( const AValue : TDateTime; const AMonth : Word) : TDateTime
2164: Function RecodeSecond( const AValue : TDateTime; const ASecond : Word) : TDateTime
2165: Function RecodeTime ( const AValue: TDateTime; const AHour, AMinute, ASecond, AMilliSecond: Word): TDateTime 2166: Function RecodeYear ( const AValue: TDateTime; const AYear: Word): TDateTime
2167: Function Reconcile( const Results : OleVariant) : Boolean
2168: Function Rect( Left, Top, Right, Bottom : Integer) : TRect
2169: function Rect(ALeft: Integer; ATop: Integer; ARight: Integer; ABottom: Integer): TRect)
2170: Function Rect2( const ATopLeft, ABottomRight: TPoint): TRect;
2171: Function RectAssign( const Left, Top, Right, Bottom: Integer): TRect
2172: Function RectAssignPoints( const TopLeft, BottomRight : TPoint) : TRect
2173: Function RectBounds( const Left, Top, Width, Height: Integer): TRect 2174: Function RectCenter( const R: TRect): TPoint 2175: Function RectEqual( const R1, R2: TRect): Boolean
2176: Function RectHeight( const R : TRect) : Integer
```

```
2177: Function RectIncludesPoint( const R : TRect; const Pt : TPoint) : Boolean
2178: Function RectIncludesRect( const R1, R2 : TRect) : Boolean
2179: Function RectIntersection( const R1, R2 : TRect) : TRect
2180: Function RectIntersectRect( const R1, R2 : TRect) : Boolean
2181: Function RectIsEmpty( const R : TRect) : Boolean 2182: Function RectIsNull( const R : TRect) : Boolean
2183: Function RectIsSquare( const R : TRect) : Boolean
2184: Function RectIsValid( const R : TRect) : Boolean
2185: Function RectsAreValid( R : array of TRect) : Boolean
2186: Function RectUnion( const R1, R2 : TRect) : TRect 2187: Function RectWidth( const R : TRect) : Integer
2188: Function RedComponent( const Color32 : TColor32) : Integer
2189: Function Refresh : Boolean
2190: Function RefStringListCopy(aRefArray:TStringlist):TStringList;
2191: Function RegisterConversionFamily( const ADescription : string) : TConvFamily
2192: Function RegisterConversionType( AConvTypeInfo: TConvTypeInfo: out AType: TConvType) : Boolean;
2193: Function RegisterConversionType(const AFam:TConvFamil;const ADescr:string;const AFact:Double):TConvType
2194: Function RegistryRead(keyHandle: Longint; keyPath, myField: String): string; 2195: Function ReleaseDC(hdwnd: HWND; hdc: HDC): integer;
2196: Function ReleaseHandle : HBITMAP
2197: Function ReleaseHandle : HENHMETAFILE
2198: Function ReleaseHandle : HICON
2199: Function ReleasePalette : HPALETTE
2200: Function RemainderFloat( const X, Y : Float) : Float
2201: Function Remove( AClass : TClass) : Integer
2202: Function Remove( AComponent : TComponent) : Integer
2203: Function Remove( Altem : Integer) : Integer
2204: Function Remove( AItem : Pointer) : Pointer
2205: Function Remove( Altem : TObject) : TObject
2206: Function Remove( AObject : TObject) : Integer
2207: Function RemoveBackslash( const PathName : string) : string
2208: Function RemoveDF( aString : String) : String //removes thousand separator
2209: Function RemoveDir( Dir : string) : Boolean
2210: function RemoveDir(const Dir: string): Boolean)
2211: Function RemoveDirectory(PathName: PChar): WordBool; stdcall;
2212: Function RemoveFileExt( const FileName : string) : string
2213: Function RemoveHeaderEntry( AHeader, AEntry: string): string
2214: Function RenameFile( OldName, NewName: string): Boolean
2215: function RenameFile(const OldName: string; const NewName: string): Boolean)
2216: Function ReplaceStr( const AText, AFromText, AToText : string) : string
2217: Function ReplaceText( const AText, AFromText, AToText: string) : string
2218: Function Replicate(c : char; I : longInt) : String;
2219: Function Request : TWebRequest
2220: Function ResemblesText( const AText, AOther : string) : Boolean
2221: Function Reset : Boolean
2222: function Reset2(mypath: string):string;
2223: Function ResInstLoad(Instance:THandle;ResType:TResType; const Name:string;MaskColor: TColor): Boolean
2224: Function ResourceLoad( ResType: TResType; const Name: string; MaskColor: TColor): Boolean
2225: Function Response : TWebResponse
2226: Function ResumeSupported : Boolean 2227: Function RETHINKHOTKEYS : BOOLEAN
2228: Function RETHINKLINES : BOOLEAN
2229: Function Retrieve( const MsgNum : Integer; AMsg : TIdMessage) : Boolean
2230: Function RetrieveCurrentDir : string
2231: Function RetrieveDeltas( const cdsArray : array of TClientDataset) : Variant
2232: Function RetrieveHeader( const MsgNum : Integer; AMsg : TIdMessage) : Boolean
2233: Function RetrieveMailBoxSize : integer
2234: Function RetrieveMsgSize( const MsgNum : Integer) : Integer
2235: Function RetrieveProviders( const cdsArray: array of TClientDataset): Variant 2236: Function RetrieveRaw( const MsgNum: Integer; const Dest: TStrings): boolean 2237: Function ReturnMIMEType( var MediaType, EncType: String): Boolean
2238: Function ReverseBits( Value : Byte) : Byte;
2239: Function ReverseBits1( Value : Shortint) : Shortint;
2240: Function ReverseBits2( Value : Smallint) : Smallint;
2241: Function ReverseBits3( Value : Word) : Word;
2242: Function ReverseBits4( Value : Cardinal) : Cardinal;
2243: Function ReverseBits4( Value : Integer) : Integer;
2244: Function ReverseBits5( Value : Int64) : Int64;
2245: Function ReverseBytes( Value : Word) : Word;
2246: Function ReverseBytes1( Value : Smallint): Smallint;
2247: Function ReverseBytes2( Value : Integer) : Integer;
2248: Function ReverseBytes3( Value : Cardinal) : Cardinal;
2249: Function ReverseBytes4( Value : Int64) : Int64;
2250: Function ReverseString( const AText : string) : string
2251: Function ReverseDNSLookup(const IPAddrs:String;DNSServer:String;Timeout,Retries:Int;var
       HostName:string):Bool;
2252: Function Revert : HResult
2253: Function RGB(R,G,B: Byte): TColor;
2253: Function RGB2BGR( const Color : TColor) : TColor
2254: Function RGB2TColor( R, G, B : Byte) : TColor
2255: Function RGB7TOWebColorName( RGB : Integer) : string
2257: Function RGBTOWebColorStr( RGB : Integer) : string
2258: Function RgbToHtml( Value : TColor) : string
2259: Function HtmlToRgb(const Value: string): TColor;
2260: Function RightStr( const AStr : String; Len : Integer) : String
2261: Function RightStr( const AText : AnsiString; const ACount : Integer) : AnsiString; 2262: Function RightStr( const AText : WideString; const ACount : Integer) : WideString; 2263: Function ROL( AVal : LongWord; AShift : Byte) : LongWord 2264: Function ROR( AVal : LongWord; AShift : Byte) : LongWord
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2265: Function RotatePoint ( Point : TFloatPoint; const Center : TFloatPoint; const Angle : Float) : TFloatPoint
2266: function RotatePoint(Point: TFloatPoint; const Center: TFloatPoint; const Angle: Double): TFloatPoint;
2267: Function Round(e : Extended) : Longint;
2268: Function Round64(e: extended): Int64;
2269: Function RoundAt( const Value : string; Position : SmallInt) : string
2270: Function RoundFrequency( const Frequency: Integer): Integer
2271: Function RoundInt( Value : Integer; StepSize : Integer) : Integer
2272: Function RoundPoint( const X, Y : Double) : TPoint
2273: Function RoundRect( const ALeft, ATop, ARight, ABottom : Double) : TRect
2274: Function RowCount : Integer
2275: Function RowRequest( const Row : OleVariant; RequestType : Integer; var OwnerData : OleVariant): OleVariant
2276: Function RowRequest( Row : OleVariant; Options : TFetchOptions) : OleVariant
2277: Function RPos( const ASub, AIn : String; AStart : Integer) : Integer
2278: Function RRot( const Value : Byte; const Count : TBitRange) : Byte; 2279: Function RRot1( const Value : Word; const Count : TBitRange) : Word;
2280: Function RRot2( const Value : Integer; const Count : TBitRange) : Integer;
2281: Function RunDLL32(const ModuleNa,FuncName,CmdLine:string;WaitForCompletion:Bool;CmdShow:Integer):Boolean
2282: Function RunningProcessesList( const List: TStrings; FullPath: Boolean): Boolean
2283: Function S_AddBackSlash( const ADirName : string) : string
2284: Function S_AllTrim( const cStr : string) : string
2285: Function S_AtRepl( const cAT, cStr, cRepl : string) : string
2286: Function S_Cut( const cStr : string; const iLen : integer) : string
\textbf{2287: Function} \text{ S\_DecryptCRC32( const } \text{ crc} : \textbf{string; } \text{ StartKey, } \text{MultKey, } \text{AddKey} : \text{integer)} : \text{integer} 
2288: Function S_DirExists( const ADir : string) : Boolean
2289: Function S_Empty( const cStr : string) : boolean
2290: Function S_EncryptCRC32( const crc : LongWORD; StartKey, MultKey, AddKey : integer) : string
2291: Function S_LargeFontsActive : Boolean
2292: Function S_LimitDigits( AValue : Extended; ANumDigits : Integer) : Extended 2293: Function S_LTrim( const cStr : string) : string
2294: Function S_ReadNextTextLineFromStream( stream : TStream) : string
2295: Function S_RepeatChar( const iLen : integer; const AChar : Char)
                                                                                                                                    : String
2296: Function S_ReplFirst( const cAT, cStr, cRepl : string) : string
2297: Function S_RoundDecimal( AValue : Extended; APlaces : Integer) : Extended
2298: Function S_RTrim( const cStr : string) : string
2299: Function S_RTrimCopy( const cStr : string; iPos, iLen : integer) : string
2300: //Type TS_ShellExecuteCmd = (seCmdOpen,seCmdPrint,seCmdExplore);
2301: Function S_ShellExecute( aFilename : string; aParameters : string; aCommand : TS_ShellExecuteCmd) : string
2302: Function S_Space( const iLen : integer) : String
2303: Function S_StrBlanks( const cStr : string; const iLen : integer) : string
2304: Function S_StrBlanksCuttooLong( const cStr : string; const iLen : integer) : string
2305: Function S_StrCRC32( const Text : string) : LongWORD
2306: Function S_StrDecrypt96( const InString: string: StartKey, MultKey, AddKey: Integer): string 2307: Function S_StrEncrypt96( const InString: string: StartKey, MultKey, AddKey: Integer): string
2308: Function S_StringtoUTF_8( const AString : string) : string
2309: Function S_StrLBlanks( const cStr : string; const iLen : integer) : string 2310: function S_StrToReal(const cStr: string; var R: Double): Boolean
2311: Function S_TokenEnd( cBuffer : PChar; lEmptyToken : boolean) : boolean
2312: Function S_TokenNext( cBuffer : PChar; lEmptyToken : boolean) : string
2313: Function S_UTF_8ToString( const AString : string) : string
2314: Function S_WBox( const AText : string) : integer 2315: Function SameDate( const A, B : TDateTime) : Boolean
2316: function SameDate(const A, B: TDateTime): Boolean;
2317: Function SameDateTime( const A, B : TDateTime) : Boolean
2318: function SameDateTime(const A, B: TDateTime): Boolean;
2319: Function SameFileName(S1, S2: string): Boolean
2320: Function SameText(S1, S2: string): Boolean
2321: function SameText(const S1: string; const S2: string): Boolean)
2322: Function SameTime( const A, B : TDateTime) : Boolean
2323: function SameTime(const A, B: TDateTime): Boolean;
2324: function SameValue(const A, B: Extended; Epsilon: Extended): Boolean //overload;
2325: function SameValue1(const A, B: Double; Epsilon: Double): Boolean //overload;
2326: function SameValue2(const A, B: Single; Epsilon: Single): Boolean //overload;
2327: Function SampleVariance( const X: TDynFloatArray): Float
2328: Function Sar( const Value : Shortint; const Count : TBitRange): Shortint;
2329: Function Sar1( const Value : Smallint; const Count : TBitRange): Smallint;
2330: Function Sar2( const Value : Integer; const Count : TBitRange): Integer;
2331: Function SaveToFile( const AFileName : TFileName) : Boolean
2332: Function SaveAsExcelFile(AGrid: TStringGrid; ASheetName, AFileName: string; open: boolean): Boolean; 2333: Function SaveAsExcel(aGrid: TStringGrid; aSheetName, aFileName: string; openexcel: boolean): Boolean;
2334: Function ScanF(const aformat: String; const args: array of const): string; 2335: Function SCREENTOCLIENT(POINT:TPOINT):TPOINT
2336: \textbf{Function} \ \ Search \texttt{Buf} : \texttt{PChar}; \ \ \texttt{BufLen} : \texttt{Integer}; SelStart, SelLength : \texttt{Integer}; Search \texttt{String} : \texttt{Options} : :
           TStringSearchOptions):PChar
2337: Function SearchBuf2(Buf: String; SelStart, SelLength: Integer; SearchString:
           String;Options:TStringSearchOptions):Integer;
2338: function SearchRecattr: integer;
2339: function SearchRecExcludeAttr: integer;
2340: Function SearchRecFileSize64( const SearchRec : TSearchRec) : Int64
2341: function SearchRecname: string;
2342: function SearchRecsize: integer;
2343: function SearchRecTime: integer;
2344: Function Sec( const X : Extended) : Extended
2345: Function Secant( const X : Extended) : Extended
2346: Function SecH( const X : Extended) : Extended
2347: Function SecondOf( const AValue : TDateTime) : Word
2348: Function SecondOfTheDay( const AValue : TDateTime) : LongWord 2349: Function SecondOfTheHour( const AValue : TDateTime) : Word
2350: Function SecondOfTheMinute( const AValue : TDateTime) : Word
2351: Function SecondOfTheMonth( const AValue : TDateTime) : LongWord
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2352: Function SecondOfTheWeek( const AValue : TDateTime) : LongWord
2353: Function SecondOfTheYear( const AValue : TDateTime) : LongWord
2354: Function SecondsBetween( const ANow, AThen : TDateTime) :
2355: Function SecondSpan( const ANow, AThen : TDateTime) : Double
2356: Function SectionExists( const Section : string) : Boolean
2357: Function Seek( const KeyValues : Variant; SeekOption : TSeekOption) : Boolean
2358: Function Seek( dlibMove : Longint; dwOrigin : Longint; out libNewPosition : Largeint) : HResult
2359: function Seek(Offset:LongInt;Origin:Word):LongInt
2363: function SendAppMessage(Msg: Cardinal; WParam, LParam: Longint): Longint
2364: Function SendBuf( var Buf, Count : Integer) : Integer
2365: Function SendCmd( const AOut : string; const AResponse : SmallInt) : SmallInt;
2366: Function SendCmdl( const AOut : string; const AResponse : array of SmallInt) : SmallInt;
2367: Function SendKey( AppName : string; Key : Char) : Boolean
2368: function SendMessage(hWnd: HWND; Msg: longword; wParam: longint; lParam: longint): Boolean; 2369: Function SendStream( AStream: TStream): Boolean
2370: Function SendStreamThenDrop( AStream : TStream) : Boolean
2371: Function SendText( const S : string) : Integer
2372: Function SendSerialData(Data: TByteArray; DataSize: cardinal): cardinal
2373: Function SendSerialText(Data: String): cardinal
2374: Function Sent : Boolean
2375: Function ServicesFilePath: string
2376: Function SetAlpha( const Color32 : TColor32; NewAlpha : Integer) : TColor32
2377: Function SetBit( const Value : Byte; const Bit : TBitRange) : Byte;
2378: Function SetBit1( const Value : Shortint; const Bit : TBitRange) : Shortint; 2379: Function SetBit2( const Value : Smallint; const Bit : TBitRange) : Smallint;
                                                                                                                              Smallint;
2380: Function SetBit3( const Value : Word; const Bit : TBitRange) : Word;
2381: Function SetBit4( const Value : Cardinal; const Bit : TBitRange) : Cardinal;
2382: Function SetBit4( const Value : Integer; const Bit : TBitRange) : Integer; 2383: Function SetBit5( const Value : Int64; const Bit : TBitRange) : Int64;
2384: Function SetClipboard( NewClipboard : TClipboard) : TClipboard
2385: Function SetColorBlue( const Color: TColor; const Blue: Byte): TColor
2386: Function SetColorFlag( const Color: TColor: const Flag: Byte): TColor
2387: Function SetColorGreen( const Color: TColor; const Green: Byte): TColor
2388: Function SetColorRed( const Color: TColor; const Red: Byte): TColor
2389: Function SetCurrentDir( Dir : string) : Boolean
2390: function SetCurrentDir(const Dir: string): Boolean)
2391: Function SetCurrentDirectory(PathName: PChar): WordBool; stdcall;
2392: Function SetDirCreation( const DirName : string; const DateTime : TDateTime) : Boolean 2393: Function SetDirLastAccess( const DirName : string; const DateTime : TDateTime) : Boolean
2394: Function SetDirLastWrite( const DirName : string; const DateTime : TDateTime) : Boolean
2395: Function SetDisplayResolution( const XRes, YRes : DWORD) : Longint
2396: Function SetEndOfFile(Handle: Integer): LongBool; stdcall;
2397: Function SetEnvironmentVar( const Name, Value : string) : Boolean
2398: Function SetErrorProc( ErrorProc : TSocketErrorProc) : TSocketErrorProc
2399: Function SetFileCreation( const FileName : string; const DateTime : TDateTime) : Boolean
2400: Function SetFileLastAccess( const FileName : string; const DateTime : TDateTime) : Boolean 2401: Function SetFileLastWrite( const FileName : string; const DateTime : TDateTime) : Boolean 2402: Function SetFileTimeStamp( const FileName : string; TimeStamp : Integer) : Boolean
2403: function SETFOCUSEDCONTROL(CONTROL:TWINCONTROL):BOOLEAN
2404: Function SetLocalTime( Value : TDateTime) : boolean
2405: Function SetPrecisionTolerance( NewTolerance: Float): Float 2406: Function SetPrinter( NewPrinter: TPrinter): TPrinter
2407: Function SetRGBValue( const Red, Green, Blue : Byte) : TColor
2408: Function SetSequence( S, Localizar, Substituir : shortstring) : shortstring
2409: Function SetSize( libNewSize : Longint) : HResult
2410: Function SetUserObjectFullAccess( hUserObject : THandle) : Boolean 2411: Function Sgn( const X : Extended) : Integer
2412: function SHA1(const fileName: string): string;
2413: function SHA256(astr: string; amode: char): string)
2414: function SHA512(astr: string; amode: char): string; 2415: Function ShareMemoryManager: Boolean
2416: function ShellExecute(hWnd:HWND;Operation,FileN,Parameters,Dir:string;ShowCmd:Integer):integer;stdcall;
2417: function Shellexecute2(hwnd: HWND; const FileName: string):integer; stdcall;
2418: \textbf{Function} \ \ Shell \texttt{Execute3} \\ (a \texttt{Filename}: \ \textbf{string}; \ \ a \texttt{Parameters}: \ \textbf{string}; \ \ a \texttt{Command}: \texttt{TS\_Shell ExecuteCmd}): \ \textbf{string}; \\ a \texttt{Parameters}: \ \textbf{string}; \ \ a \texttt{Command}: \texttt{TS\_Shell ExecuteCmd}): \ \textbf{string}; \\ a \texttt{Parameters}: \ \textbf{string}: \ \ a \texttt{Parameters}: \ \textbf{string}: \\ a \texttt{Parameters}: \ \textbf{string}: \ \ a \texttt{Parameters}: \ \textbf{string}: \\ a \texttt{Parameters}: \ \textbf{string}: \ \ a \texttt{Parameters}: \ \textbf{string}: \\ a \texttt{Parameters}: \ \textbf{string}: \ \ a \texttt{Parameters}: \ \textbf{string}: \\ a \texttt{Parameters}: \ \textbf{string}: \ \ a \texttt{Parameters}: \ \textbf{string}: \\ a \texttt{Parameters}: \ \textbf{string}: \ \ a \texttt{Parameters}: \ \textbf{string}: \\ a \texttt{Parameters}: \ \textbf{string}: \ \ a \texttt{Parameters}: \ \textbf{string}: \\ a \texttt{Parameters}: \ \textbf{string}: \ \ a \texttt{Parameters}: \ \textbf{string}: \\ a \texttt{Parameters}: \ \textbf{string}: \ \ a \texttt{Parameters}: \ \textbf{string}: \\ a \texttt{Parameters}: \ \textbf{string}: \ \ a \texttt{Parameters}: \ \textbf{string}: \\ a \texttt{Parameters}: \ \textbf{string}: \ \ a \texttt{Parameters}: \ 
2419: Function SHORTCUT( KEY: WORD; SHIFT: TSHIFTSTATE): TSHORTCUT 2420: Function SHORTCUTTOTEXT( SHORTCUT: TSHORTCUT): String
2421: function ShortDateFormat: string;
2422: Function ShortenString(const DC:HDC;const S:WideString;const Width:Int;const
          RTL:Bool; EllipsisWidth:Int): WideString
2423: function ShortTimeFormat: string;
2424: function SHOWMODAL:INTEGER
2425: function ShowWindow(C1: HWND; C2: integer): boolean;
2426: procedure ShowMemory //in 2427: function ShowMemory2: string;
                                                    //in Dialog
2428: Function ShutDownOS : Boolean
2429: Function Signe( const X, Y : Extended) : Extended
2430: Function Sign( const X : Extended) : Integer
2431: Function Sin(e : Extended) : Extended; 2432: Function sinc(const x : Double) : Double
2433: Function SinJ( X : Float) : Float
2434: Function Size( const AFileName : String) : Integer
2435: function SizeOf: Longint;
2436: Function SizeofResource( ModuleHandle : HMODULE; ResHandle : TResourceHandle) : Integer 2437: function SlashSep(const Path, S: String): String
2438: Function SLNDepreciation( const Cost, Salvage : Extended; Life : Integer) : Extended
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2439: Function SleepEx( dwMilliseconds : DWORD; bAlertable : BOOL) : DWORD
2440: Function SmallPoint(X, Y: Integer): TSmallPoint)
2441: Function Soundex( const AText : string; ALength : TSoundexLength) : string
2442: Function SoundexCompare( const AText, AOther: string; ALength: TSoundexLength): Integer
2443: Function SoundexInt( const AText: string; ALength: TSoundexIntLength): Integer 2444: Function SoundexProc( const AText, AOther: string): Boolean
2445: Function SoundexSimilar( const AText, AOther: string; ALength: TSoundexLength): Boolean
2446: Function SoundexWord( const AText : string) : Word
2447: Function SourcePos : Longint
2448: function SourcePos:LongInt
2449: Function Split0( Str : string; const substr : string) : TStringList
2450: Procedure SplitNameValue (const Line : string; var Name, Value : string)
2451: Function SQLRequiresParams( const SQL : WideString) : Boolean
2452: Function Sqr(e : Extended) : Extended;
2453: Function Sqrt(e : Extended) : Extended;
2454: Function StartIP : String
2455: Function StartPan( WndHandle : THandle; AControl : TControl) : Boolean
2456: Function StartOfADay( const AYear, AMonth, ADay: Word): TDateTime; 2457: Function StartOfADayl( const AYear, ADayOfYear: Word): TDateTime; 2458: Function StartOfAMonth( const AYear, AMonth: Word): TDateTime
2459: Function StartOffAWeek( const AYear, AWeekOffYear: Word; const ADayOfWeek: Word): TDateTime 2460: Function StartOffAYear( const AYear : Word): TDateTime
2461: Function StartOfTheDay( const AValue : TDateTime) : TDateTime 2462: Function StartOfTheMonth( const AValue : TDateTime) : TDateTime
2463: Function StartOfTheWeek( const AValue : TDateTime) : TDateTime
2464: Function StartOfTheYear( const AValue : TDateTime) : TDateTime
2465: Function StartsStr( const ASubText, AText : string) : Boolean
2466: Function StartsWith( const ASubText, AText: string): Boolean
2467: Function StartsWith( const ANSIStr, APattern: String): Boolean
2468: Function StartsWith( const str: string; const sub: string): Boolean
2469: Function StartsWithACE( const ABytes: TIdBytes): Boolean
2470: Function StatusString( StatusCode : Integer) : string
2471: Function StdDev( const Data : array of Double) : Extended
2472: Function Stop : Float
2473: Function StopCount( var Counter : TJclCounter) : Float
2474: Function StoreColumns : Boolean
2475: Function StrAfter( const sString : string; const sDelimiters : string) : string;
2476: Function StrAfter1( const sString: string; const sDelimiters: string; out cDelimiter: char): string; 2477: Function StrAlloc( Size: Cardinal): PChar
2478: function StrAlloc(Size: Cardinal): PChar)
2479: Function StrBefore( const sString: string; const sDelimiters: string): string;
2480: Function StrBeforel( const sString: string; const sDelimiters:string; out cDelimiter:char): string;
2481: Function StrBufSize(Str : PChar) : Cardinal
2482: function StrBufSize(const Str: PChar): Cardinal)
2483: Function StrByteType(Str: PChar; Index: Cardinal): TMbcsByteType 2484: function StrByteType(Str: PChar; Index: Cardinal): TMbcsByteType)
2485: Function StrCat( Dest : PChar; Source : PChar) : PChar
2486: function StrCat(Dest: PChar; const Source: PChar): PChar)
2487: Function StrCharLength(Str:PChar):Integer
2488: Function StrComp( Str1, Str2 : PChar) : Integer
2489: function StrComp(const Str1: PChar; const Str2: PChar): Integer)
2490: Function StrCopy( Dest : PChar; Source : PChar) : PChar
2491: function StrCopy(Dest: PChar; const Source: PChar): PChar)
2492: Function Stream_to_AnsiString( Source : TStream) : ansistring
2493: Function Stream_to_Base64( Source : TStream) : ansistring
2494: Function Stream_to_decimalbytes( Source : TStream) : string
2495: Function Stream2WideString( oStream : TStream) : WideString
2496: Function StreamtoAnsiString( Source : TStream) : ansistring
2497: Function StreamToByte( Source : TStream) : string
2498: Function StreamToDecimalbytes( Source : TStream) : string
2499: Function StreamtoOrd( Source : TStream) : string
2500: Function StreamToString( Source : TStream) : string
2501: Function StrECopy( Dest : PChar; Source : PChar) : PChar
2502: Function StrEmpty( const sString : string) : boolean
2503: Function StrEnd( Str : PChar) : PChar
2504: function StrEnd(const Str: PChar): PChar)
2505: Function StrFilter( const sString: string; xValidChars: TCharSet): string
2506: Function StrFmt(Buffer, Format: PChar; const Args: array of const): PChar)
2507: Function StrGet(var\ S: String;\ I: Integer): Char; 2508: Function StrGet2(S: String;\ I: Integer): Char;
2509: Function StrHasPrefix( const sString: string; const sPrefix: string): boolean
2510: Function StrHasSuffix( const sString: string; const sSuffix: string): boolean
2511: Function StrHtmlDecode( const AStr : String) : String 2512: Function StrHtmlEncode( const AStr : String) : String
2513: Function StrToBytes(const Value: String): TBytes;
2514: Function StrIComp( Str1, Str2 : PChar) : Integer
2515: Function StringOfChar(c : char;I : longInt) : String;
2516: Function StringOfChar2( ch : WideChar; Count : Integer) : WideString;
2517: Function StringPad(InputStr,FillChar: String; StrLen:Integer; StrJustify:Boolean): String;
2518: Function StringRefCount(const s: String): integer;
2519: Function StringReplace(S, OldPattern, NewPattern: string; Flags: TReplaceFlags): string
2520: Function JStringReplace( const S, OldPattern, NewPattern: string; Flags: TReplaceFlags): string
2521: Function StringReplace(const SourceString, OldPattern, NewPattern: string; Flags: TReplaceFlags): string;
2522: Function StringRemove( const S, Pattern: string; Flags: TReplaceFlags): string
2523: Function StringToBoolean( const Ps : string) : Boolean
2524: function StringToColor(const S: string): TColor)
2525: function StringToCursor(const S: string): TCursor;
2526: function StringToGUID(const S: string): TGUID)
2527: Function StringTokenizer( const str : string; const delim : string) : IStringTokenizer
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2528: Function StringToStringArray( const str : string; const delim : string) : TStringDynArray
2529: Function StringWidth(S: string): Integer
2530: Function StrInternetToDateTime( Value : string) : TDateTime
2531: Function StrIsDateTime( const Ps : string) : Boolean 2532: Function StrIsFloatMoney( const Ps : string) : Boolean
2533: Function StrIsInteger( const S : string) : Boolean
2534: Function StrLCat( Dest : PChar; Source : PChar; MaxLen : Cardinal) : PChar
2535: Function StrLComp( Str1, Str2 : PChar; MaxLen : Cardinal) : Integer
2536: Function StrLCopy( Dest : PChar; Source : PChar; MaxLen : Cardinal) : PChar
2537: Function StrLen( Str : PChar) : Cardinal
2538: function StrLen(const Str: PChar): Cardinal)
2539: Function StrLessPrefix( const sString: string; const sPrefix: string): string
2540: Function StrLessSuffix( const sString: string; const sSuffix: string): string
2541: Function StrLIComp( Str1, Str2 : PChar; MaxLen : Cardinal) : Integer 2542: Function StrLower( Str : PChar) : PChar
2543: Function StrMove( Dest : PChar; Source : PChar; Count : Cardinal) : PChar
2544: function StrMove(Dest: PChar; const Source: PChar; Count: Cardinal): PChar)
2545: Function StrNew( Str : PChar) : PChar
2546: function StrNew(const Str: PChar): PChar)
2547: Function StrNextChar( Str: PChar): PChar
2548: Function StrPad( const sString: string; const sPad: string; const iLength: integer): string
2549: Function StrParse( var sString: string; const sDelimiters: string): string;
2550: Function StrParsel( var sString: string; const sDelimiters: string; out cDelimiter: char): string;
2551: Function StrPas( Str : PChar) : string
2552: function StrPas(const Str: PChar): string)
2553: Function StrPCopy( Dest : PChar; Source : string) : PChar
2554: function StrPCopy(Dest: PChar; const Source: string): PChar)
2555: Function StrPLCopy( Dest: PChar; Source: string; MaxLen: Cardinal): PChar 2556: Function StrPos(Strl, Str2: PChar): PChar 2557: Function StrScan(const Str: PChar; Chr: Char): PChar)
2558: Function StrRScan(const Str: PChar; Chr: Char): PChar)
2559: Function StrToBcd( const AValue : string) : TBcd 2560: Function StrToBool( S : string) : Boolean
2561: Function StrToBoolDef(S: string; Default: Boolean): Boolean
2562: Function StrToCard( const AStr : String) : Cardinal
2563: Function StrToConv( AText : string; out AType : TConvType) : Double
2564: Function StrToCurr( S : string) : Currency;
2565: function StrToCurr(const S: string): Currency)
2566: Function StrToCurrDef( S : string; Default : Currency) : Currency;
2567: Function StrToDate( S : string) : TDateTime;
2568: function StrToDate(const s: string): TDateTime;
2569: Function StrToDateDef( S: string; Default : TDateTime) : TDateTime; 2570: Function StrToDateTime( <math>S: string) : TDateTime;
2571: function StrToDateTime(const S: string): TDateTime)
2572: Function StrToDateTimeDef(S:string;Default:TDateTime):TDateTime;
2573: Function StrToDay( const ADay : string) : Byte
2574: Function StrToFloat(S: string): Extended;
2575: function StrToFloat(s: String): Extended;
2576: Function StrToFloatDef( S : string; Default : Extended) : Extended;
2577: function StrToFloatDef(const S: string; const Default: Extended): Extended)
2578: Function StrToFloat(S: string): Extended;
2579: Function StrToFloat2( S: string; FormatSettings: TFormatSettings): Extended;
2580: Function StrToFloatDef( S : string; Default : Extended) : Extended;
2581: \textbf{Function} \ \texttt{StrToFloatDef2}(S: \ \textbf{string}; \ \textbf{Default}: \ \texttt{Extended}; \ \texttt{FormatSettings}: \ \texttt{TFormatSettings}): \ \texttt{Extended}; \ \texttt{Extended}; \ \texttt{FormatSettings}: \ \texttt{Extended}; \ \texttt{Ex
2582: Function StrToCurr( S : string) : Currency;
2583: Function StrToCurr2( S : string; FormatSettings : TFormatSettings) : Currency;
2584: Function StrToCurrDef( S : string; Default : Currency) : Currency;
2585: Function StrToCurrDef2( S : string; Default : Currency; FormatSettings : TFormatSettings) : Currency;
2586: Function StrToTime2(S: string; FormatSettings: TFormatSettings): TDateTime;
2587: Function StrToTimeDef(S: string; Default: TDateTime): TDateTime;
2588: Function StrToTimeDef2(S: string; Default: TDateTime; FormatSettings: TFormatSettings): TDateTime;
2589: Function TryStrToTime( S : string; Value : TDateTime) : Boolean;
2590: Function StrToDateTime(S:string):TDateTime;
 2591: \textbf{Function} \  \, \texttt{StrToDateTime2}( \  \, \texttt{S} \  \, \textbf{string}; \  \, \texttt{FormatSettings} \  \, : \  \, \texttt{TFormatSettings}) \  \, : \  \, \texttt{TDateTime}; 
2592: Function StrToDateTimeDef(S: string; Default: TDateTime): TDateTime;
2593: Function StrToFloatRegionalIndependent(aValue: String; aDecimalSymbol:Char; aDigitGroupSymbol:Char): Extended
2594: Function StrToInt( S : string) : Integer
2595: function StrToInt(s: String): Longint;
2596: Function StrToInt64(S: string): Int64
2597: function StrToInt64(s: String): int64;
2598: Function StrToInt64Def(S: string; Default: Int64): Int64
2599: function StrToInt64Def(const S: string; const Default: Int64):Int64)
2600: Function StrToIntDef(S:string;Default:Integer):Integer
2601: function StrToIntDef(const S: string; Default: Integer): Integer)
2602: function StrToIntDef(s: String; def: Longint): Longint;
2603: Function StrToMonth( const AMonth : string) : Byte
2604: Function StrToTime( S : string) : TDateTime;
2605: function StrToTime(const S: string): TDateTime)
2606: Function StrToTimeDef(S: string; Default: TDateTime): TDateTime; 2607: Function StrToWord( const Value: String): Word
2608: Function StrToXmlDate( const DateStr : string; const Format : string) : string
2609: Function StrToXmlDateTime( const DateStr : string; const Format : string) : string
2610: Function StrToXmlTime( const TimeStr : string; const Format : string) : string 2611: Function StrUpper( Str : PChar) : PChar
2612: Function StuffString( const AText : string; AStart, ALength : Cardinal; const ASubText : string) : string
2613: Function Sum( const Data: array of Double): Extended
2614: Function SumFloatArray( const B: TDynFloatArray): Float
2615: Function SumInt( const Data: array of Integer): Integer
2616: Function SumOfSquares( const Data: array of Double): Extended
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2617: Function SumPairProductFloatArray( const X, Y : TDynFloatArray) : Float 2618: Function SumSquareDiffFloatArray( const B : TDynFloatArray; Diff : Float) : Float
2619: Function SumSquareFloatArray( const B : TDynFloatArray) : Float 2620: Function Supports( CursorOptions : TCursorOptions) : Boolean
2621: Function SupportsClipboardFormat( AFormat : Word) : Boolean
2622: Function SwapWord(w : word): word)
2623: Function SwapInt(i : integer): integer)
2624: Function SwapLong(L : longint): longint)
2625: Function Swap(i : integer): integer)
2626: Function SYDDepreciation( const Cost, Salvage : Extended; Life, Period : Integer) : Extended
2627: Function SyncTime : Boolean
2628: Function SysErrorMessage( ErrorCode : Integer) : string
2629: function SysErrorMessage(ErrorCode: Integer): string)
2630: Function SystemTimeToDateTime(SystemTime: TSystemTime): TDateTime
2631: function SystemTimeToDateTime(const SystemTime: TSystemTime): TDateTime;
2632: Function SysStringLen(const S: WideString): Integer; stdcall;
2633: Function TabRect( Index : Integer) : TRect
2634: Function Tan( const X : Extended) : Extended
2635: Function TaskMessageDlg(const Title,
           {\tt Msg: {\tt string:}} \\ {\tt DlgType:} \\ {\tt TMsgDlgType:} \\ {\tt Buttons:} \\ {\tt TMsgDlgButtons:} \\ {\tt HelpCtx:Longint):} \\ {\tt Integer:} \\ {\tt Integer:} \\ {\tt TMsgDlgButtons:} \\ {\tt T
2636: Function TaskMessageDlg1( const Title, Msg: string; DlgType: TMsgDlgType; Buttons: TMsgDlgButtons;
           HelpCtx : Longint; DefaultButton : TMsgDlgBtn) : Integer;
2637: \textbf{Function} \hspace{0.1cm} \texttt{TaskMessageDlgPos(} \hspace{0.1cm} \textbf{const} \hspace{0.1cm} \texttt{Title,} \hspace{0.1cm} \texttt{Msg} : \hspace{0.1cm} \textbf{string;} \hspace{0.1cm} \texttt{DlgType} : \hspace{0.1cm} \texttt{TMsgDlgType;} \hspace{0.1cm} \texttt{Buttons} : \hspace{0.1cm} \texttt{TMsgDlgButtons;} \\
HelpCtx : Longint; X, Y : Integer) : Integer;
2638: Function TaskMessageDlgPosl( const Title, Msg : string; DlgType : TMsgDlgType; Buttons : TMsgDlgButtons;
HelpCtx : Longint; X, Y : Integer; DefaultButton : TMsgDlgBtn) : Integer;
2639: Function TaskMessageDlgPosHelp( const Title, Msg : string; DlgType: TMsgDlgType; Buttons :
TMsgDlgButtons; HelpCtx : Longint; X, Y : Integer; const HelpFileName : string) : Integer; 2640: Function TaskMessageDlgPosHelp1(const Title, Msg:string;DlgType: TMsgDlgType; Buttons : TMsgDlgButtons;
           HelpCtx:Longint; X,Y: Integer;const HelpFileName:string;DefaultButton:TMsgDlgBtn): Integer;
2641: Function TenToY( const Y : Float) : Float
2642: Function TerminateApp(ProcessID: DWORD; Timeout: Integer): TJclTerminateAppResult 2643: Function TerminateTask(Wnd: HWND; Timeout: Integer): TJclTerminateAppResult
2644: Function TestBit( const Value : Byte; const Bit : TBitRange) : Boolean; 2646: Function TestBit2( const Value : Shortint; const Bit : TBitRange) : Boolean; 2646: Function TestBit3( const Value : Smallint; const Bit : TBitRange) : Boolean;
2647: Function TestBit4( const Value : Word; const Bit : TBitRange) : Boolean;
2648: Function TestBit5( const Value : Cardinal; const Bit : TBitRange) : Boolean;
2649: Function TestBit6( const Value : Integer; const Bit : TBitRange) : Boolean; 2650: Function TestBit7( const Value : Int64; const Bit : TBitRange) : Boolean;
2651: Function TestBits( const Value, Mask : Byte) : Boolean;
2652: Function TestBits1( const Value, Mask: Shortint) : Boolean; 2653: Function TestBits2( const Value, Mask: Smallint) : Boolean;
2654: Function TestBits3( const Value, Mask :
                                                                                        Word) : Boolean;
2655: Function TestBits4( const Value, Mask: Cardinal): Boolean; 2656: Function TestBits5( const Value, Mask: Integer): Boolean; 2657: Function TestBits6( const Value, Mask: Int64): Boolean;
2658: Function TestFDIVInstruction : Boolean
2659: function TestStreamFormat(Stream: TStream): TStreamOriginalFormat
2660: Function TextExtent( const Text: string): TSize 2661: function TextHeight(Text: string): Integer;
2662: Function TextIsSame(const A1: string; const A2: string): Boolean 2663: Function TextStartsWith(const S, SubS: string): Boolean
2664: function TextToFloat(Buffer: PChar; var Value: Extended; ValueType: TFloatValue): Boolean)
2665: Function ConvInteger(i : integer):string;
2666: Function IntegerToText(i : integer):string;
2667: Function TEXTTOSHORTCUT( TEXT : String) : TSHORTCUT
2668: function TextWidth(Text: string): Integer;
2669: Function ThreadCount : integer
2670: function ThousandSeparator: char:
2671: Function Ticks : Cardinal
2672: Function Time : TDateTime
2673: function Time: TDateTime;
2674: function TimeGetTime: int64;
2675: Function TimeOf( const AValue : TDateTime) : TDateTime
2676: function TimeSeparator: char;
2677: function TimeStampToDateTime(const TimeStamp: TTimeStamp): TDateTime
2678: Function TimeStampToMSecs( TimeStamp : TTimeStamp) : Comp
2679: function TimeStampToMSecs(const TimeStamp: TTimeStamp): Comp)
2680: Function TimeToStr(DateTime: TDateTime): string;
2681: function TimeToStr(const DateTime: TDateTime): string;
2682: Function TimeZoneBias : TDateTime
2683: Function ToCommon( const AValue : Double) : Double 2684: function ToCommon(const AValue: Double): Double;
2685: Function Today : TDateTime
2686: Function ToggleBit( const Value : Byte; const Bit : TBitRange) : Byte;
2687: Function ToggleBit1( const Value : Shortint; const Bit : TBitRange) : Shortint; 2688: Function ToggleBit2( const Value : Smallint; const Bit : TBitRange) : Smallint;
2689: Function ToggleBit3( const Value : Word; const Bit : TBitRange) : Word;
2690: Function ToggleBit4 (const Value : Cardinal; const Bit : TBitRange) : Cardinal; 2691: Function ToggleBit5 (const Value : Integer; const Bit : TBitRange) : Integer;
2692: Function ToggleBit6( const Value : Int64; const Bit : TBitRange) : Int64;
2693: function TokenComponentIdent:String
2694: Function TokenFloat : Extended
2695: function TokenFloat:Extended
2696: Function TokenInt : Longint
2697: function TokenInt:LongInt
2698: Function TokenString : string
2699: function TokenString:String
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2700: Function TokenSymbolIs( const S : string) : Boolean
2701: function TokenSymbolIs(S:String):Boolean
2702: Function Tomorrow : TDateTime
2703: Function ToRightOf( const pc : TControl; piSpace : Integer) : Integer
2704: Function ToString : string
2705: Function TotalVariance( const Data: array of Double): Extended 2706: Function Trace2( AURL: string): string;
2707: Function TrackMenu( Button : TToolButton) : Boolean
2708: Function TRANSLATE( SRC, DEST : PCHAR; TOOEM : BOOLEAN) : INTEGER
2709: Function TranslateURI( const URI: string): string
2710: Function TranslationMatchesLanguages( Exact: Boolean): Boolean
2711: Function TransparentStretchBlt( DstDC: HDC; DstX, DstY, DstW, DstH:Integer; SrcDC: HDC; SrcX, SrcY, SrcW,
             SrcH:Integer;MaskDC : HDC; MaskX, MaskY : Integer) : Boolean
2712: Function Trim( S : string) : string;
2713: Function Trim( S : WideString) : WideString;
2714: Function Trim(s : AnyString) : AnyString;
2715: Function TrimAllOf( ATrim, AText : String) : String
2716: Function TrimLeft( S: string): string;
2717: Function TrimLeft( S: WideString): WideString;
2718: function TrimLeft(const S: string): string;
2719: Function TrimRight( S: string): string;
2720: Function TrimRight( S: WideString): WideString;
2721: function TrimRight(const S: string): string)
2722: function TrueBoolStrs: array of string 2723: Function Trunc(e : Extended) : Longint;
2724: Function Trunc64(e: extended): Int64;
2725: Function TruncPower( const Base, Exponent : Float) : Float
2726: Function TryConvTypeToFamily( const AFrom, ATo: TConvType; out AFamily: TConvFamily): Boolean; 2727: Function TryConvTypeToFamily1( const AType: TConvType; out AFamily: TConvFamily): Boolean; 2728: function TryEncodeDate(Year, Month, Day: Word; var Date: TDateTime): Boolean;
2729: Function TryEncodeDateDay( const AYear, ADayOfYear : Word; out AValue : TDateTime) : Boolean
2730: \textbf{Function} \ \texttt{TryEncodeDateMonthWeek}(\textbf{const} \ \texttt{AY}, \texttt{AMonth}, \texttt{AWeekOfMonth}, \texttt{ADayOfWeek}: \texttt{Word}; \textbf{var} \ \texttt{AValue}: \texttt{TDateTime}): \ \texttt{Boolean} \ \texttt{Boolean} \ \texttt{AValue}: \texttt{AVal
2731: Function TryEncodeDateTime(const AYear, AMonth, ADay, AHour, AMin, ASec, AMilliSecond: Word; out
             AValue:TDateTime):Boolean
2732: Function TryEncodeDateWeek(const AY,AWeekOfYear:Word;out AValue:TDateTime;const ADayOfWeek:Word): Boolean
2733: Function TryEncodeDayOfWeekInMonth(const AYear, AMonth, ANthDayOfWeek, ADayOfWeek:Word; out
             AVal:TDateTime):Bool
2734: function TryEncodeTime(Hour, Min, Sec, MSec: Word; var Time: TDateTime): Boolean; 2735: Function TryFloatToDateTime( Value : Extended; AResult : TDateTime) : Boolean
2736: Function TryJulianDateToDateTime( const AValue : Double; out ADateTime : TDateTime) : Boolean
2737: Function TryLock : Boolean
2738: Function TryModifiedJulianDateToDateTime( const AValue : Double; out ADateTime : TDateTime) : Boolean
2739: Function TryRecodeDateTime( const AValue : TDateTime; const AYear, AMonth, ADay, AHour, AMinute, ASecond,
             AMilliSecond : Word; out AResult : TDateTime) : Boolean
2740: Function TryStrToBcd( const AValue : string; var Bcd : TBcd) : Boolean
2741: Function TryStrToConv( AText: string; out AValue: Double; out AType: TConvType): Boolean 2742: Function TryStrToDate( S: string; Value: TDateTime): Boolean;
2743: Function TryStrToDateTime( S : string; Value : TDateTime) : Boolean;
2744: Function TryStrToTime( S : string; Value : TDateTime) : Boolean;
2745: Function TryStrToInt(const S: AnsiString; var I: Integer): Boolean;
2746: Function TryStrToInt64(const S: AnsiString; var I: Int64): Boolean;
2747: Function TwoByteToWord( AByte1, AByte2 : Byte) : Word
2748: Function TwoCharToWord( AChar1, AChar2 : Char) : Word
2749: Function TwoToY( const Y : Float) : Float
2750: Function UCS4StringToWideString( const S : UCS4String) : WideString
2751: Function UIDL( const ADest: TStrings; const AMsgNum: Integer): Boolean 2752: function Unassigned: Variant;
2753: Function UndoLastChange( FollowChange : Boolean) : Boolean
2754: function UniCodeToStr(Value: string): string;
2755: Function UnionRect( out Rect : TRect; const R1, R2 : TRect) : Boolean
2756: function UnionRect(out Rect: TRect; const R1, R2: TRect): Boolean)
 2757 \colon \textbf{Function} \ \texttt{UnixDateTimeToDelphiDateTime} ( \ \texttt{UnixDateTime} : \ \texttt{Cardinal}) \ : \ \texttt{TDateTime} 
2758: Function UnixPathToDosPath( const Path : string) : string
2759: Function UnixToDateTime( const AValue : Int64) : TDateTime
2760: function UnixToDateTime(U: Int64): TDateTime;
2761: Function UnlockRegion( libOffset : Longint; cb : Largeint; dwLockType : Longint) : HResult
2762: Function UnlockResource( ResData : HGLOBAL) : LongBool
2763: Function UnlockVolume( var Handle : THandle) : Boolean 2764: Function UnMaskString( Mask, Value : String) : String 2765: function UpCase(ch : Char ) : Char; 2766: Function UpCaseFirst( const AStr : string) : string
2767: Function UpCaseFirstWord( const AStr : string) : string
2768: Function UpdateAction( Action : TBasicAction) : Boolean
2769: Function UpdateKind: TUpdateKind
2770: Function UpDATESTATUS: TUPDATESTATUS
2771: Function UpperCase(S: string): string
2772: Function UpperCase(S: AnyString): AnyString;
2773: Function URLDecode( ASrc : string) : string
2774: Function URLDecode( const ASrc : string) : string
2775: Function UseRightToLeftAlignment : Boolean
2776: Function UseRightToLeftAlignmentForField( const AField: TField; Alignment: TAlignment): Boolean
2777: Function UseRightToLeftReading: Boolean 2778: Function UTF8CharLength(Lead: Char): Integer 2779: Function UTF8CharSize(Lead: Char): Integer
2780: Function UTF8Charsize( Lead : Char) : Integer 2780: Function UTF8Decode( const S : UTF8String) : WideString 2781: Function UTF8Encode( const WS : WideString) : UTF8String 2782: Function UTF8LowerCase( const S : UTF8string) : UTF8string 2783: Function Utf8ToAnsi( const S : UTF8String) : string
2784: Function Utf8ToAnsiEx( const S : UTF8String; const cp : integer) : string
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2785: Function UTF8UpperCase( const S : UTF8string) : UTF8string
2786: Function ValidFieldIndex(FieldIndex: Integer): Boolean
2787: Function ValidParentForm(control: TControl): TForm
2788: Function Value : Variant
2789: Function ValueExists( const Section, Ident : string) : Boolean
2790: Function ValueOf( const Key: string): Integer
2791: Function ValueInSet(AValue: Variant; ASet: Variant): Boolean;
2792: Function VALUEOFKEY( const AKEY : VARIANT) : VARIANT
2793: Function VarArrayFromStrings( Strings : TStrings) : Variant
2794: Function VarArrayFromWideStrings( Strings : TWideStrings) : Variant
2795: Function VarArrayGet(var S : Variant; I : Integer) : Variant;
2796: Function VarFMTBcd : TVarType
2797: Function VarFMTBcdCreatel: Variant;
2798: Function VarFMTBcdCreate2( const AValue : string; Precision, Scale : Word) : Variant;
2799: Function VarFMTBcdCreate3( const AValue : Double; Precision : Word; Scale : Word) : Variant;
2800: Function VarFMTBcdCreate4( const ABcd : TBcd) : Variant;
2801: Function Variance( const Data : array of Double) : Extended
2802: Function VariantAdd2( const V1 : Variant; const V2 : Variant) : Variant
2803: Function VariantAnd2( const V1 : Variant; const V2 : Variant) : Variant
2804: Function VariantDiv2( const V1 : Variant; const V2 : Variant) : Variant
2805: Function VariantGetElement( const V : Variant; i1 : integer) : Variant
2806: Function VariantGetElement1( const V : Variant; i1, i2 : integer) : Variant;
2807: Function VariantGetElement2( const V:Variant; i1, i2, i3 : integer) : Variant;
2808: Function VariantGetElement3( const V : Variant; i1, i2, i3, i4 : integer) : Variant; 2809: Function VariantGetElement4( const V : Variant; i1, i2, i3, i4, i5 : integer) : Variant; 2810: Function VariantMod2( const V1 : Variant; const V2 : Variant) : Variant
2811: Function VariantMul2( const V1 : Variant; const V2 : Variant) : Variant
2812: Function VariantNeg( const V1 : Variant) : Variant 2813: Function VariantNot( const V1 : Variant) : Variant
2814: Function VariantOr2( const V1 : Variant; const V2 : Variant) : Variant
2815: Function VariantShl2( const V1: Variant; const V2: Variant): Variant
2816: Function VariantShr2( const V1: Variant; const V2: Variant): Variant
2817: Function VariantSub2( const V1 : Variant; const V2 : Variant) : Variant
2818: Function VariantXor2( const V1 : Variant; const V2 : Variant) : Variant
2819: function VarIsEmpty(const V: Variant): Boolean;
2820: Function VarIsFMTBcd( const AValue : Variant) : Boolean;
2821: function VarIsNull(const V: Variant): Boolean;
2822: Function VarToBcd( const AValue : Variant) : TBcd
2823: function VarType(const V: Variant): TVarType;
2824: Function VarType( const V : Variant) : TVarType
2825: Function VarAsType( const V : Variant; AVarType : TVarType) : Variant
2826: Function VarIsType( const V : Variant; AVarType : TVarType) : Boolean;
2827: Function VarIsType1 (const V : Variant; const AVarTypes : array of TVarType) : Boolean;
2828: Function VarIsByRef( const V : Variant) : Boolean
2829: Function VarIsEmpty( const V : Variant) : Boolean
2830: Procedure VarCheckEmpty( const V : Variant)
2831: Function VarIsNull (const V : Variant) : Boolean 2832: Function VarIsClear(const V : Variant) : Boolean
2833: Function VarIsCustom( const V : Variant) : Boolean
2834: Function VarIsOrdinal(const V : Variant) : Boolean
2835: Function VarIsFloat( const V : Variant) : Boolean
2836: Function VarIsNumeric( const V : Variant) : Boolean
2837: Function VarIsStr( const V : Variant) : Boolean
2838: Function VarToStr( const V : Variant) : string
2839: Function VarToStrDef( const V : Variant; const ADefault : string) : string
2840: Function VarToWideStr( const V : Variant) : WideString
2841: Function VarToWideStrDef( const V : Variant; const ADefault : WideString) : WideString
2842: Function VarToDateTime( const V : Variant) : TDateTime
2843: Function VarFromDateTime( const DateTime: TDateTime): Variant
2844: Function VarInRange( const AValue, AMin, AMax: Variant): Boolean
2845: Function VarEnsureRange( const AValue, AMin, AMax: Variant): Variant
2846: TVariantRelationship', '( vrEqual, vrLessThan, vrGreaterThan, vrNotEqual ) 2847: Function VarSameValue( const A, B : Variant) : Boolean
2848: Function VarCompareValue( const A, B : Variant) : TVariantRelationship 2849: Function VarIsEmptyParam( const V : Variant) : Boolean
2850: Function VarIsError( const V : Variant; out AResult : HRESULT) : Boolean;
2851: Function VarIsError1( const V : Variant) : Boolean;
2852: Function VarAsError( AResult : HRESULT) : Variant
2853: Procedure VarCopyNoInd( var Dest : Variant; const Source : Variant)
2854: Function VarIsArray( const A : Variant) : Boolean;
2855: Function VarIsArray1( const A : Variant; AResolveByRef : Boolean) : Boolean;
2856: Function VarArrayCreate( const Bounds : array of Integer; AVarType : TVarType) : Variant
2857: Function VarArrayOf( const Values : array of Variant) : Variant 2858: Function VarArrayRef( const A : Variant) : Variant
2859: Function VarTypeIsValidArrayType( const AVarType : TVarType) : Boolean
2860: Function VarTypeIsValidElementType( const AVarType: TVarType): Boolean
2861: Function VarArrayDimCount( const A : Variant) : Integer
2862: Function VarArrayLowBound( const A : Variant; Dim : Integer) : Integer
2863: Function VarArrayHighBound( const A : Variant; Dim : Integer) : Integer
2864: Function VarArrayLock( const A : Variant) : ____Pointer 2865: Procedure VarArrayUnlock( const A : Variant)
2866: Function VarArrayGet( const A : Variant; const Indices : array of Integer) : Variant
2867: Procedure VarArrayPut( var A : Variant; const Value : Variant; const Indices : array of Integer)
2868: Procedure DynArrayToVariant( var V : Variant; const DynArray : ___Pointer; TypeInfo : ___Pointer)
2869: Procedure DynArrayFromVariant( var DynArray : ___Pointer; const V : Variant; TypeInfo : ___Pointer)
2870: Function Unassigned : Variant
2871: Function Null : Variant
2872: Function VectorAdd( const V1, V2 : TFloatPoint) : TFloatPoint
2873: function VectorAdd(const V1, V2: TFloatPoint): TFloatPoint;
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2874: Function VectorDot( const V1, V2 : TFloatPoint) : Double
2875: function VectorDot(const V1, V2: TFloatPoint): Double;
2876: Function VectorLengthSqr(const V: TFloatPoint): Double 2877: function VectorLengthSqr(const V: TFloatPoint): Double;
2878: Function VectorMult(const V: TFloatPoint; const s: Double): TFloatPoint
2879: function VectorMult(const V: TFloatPoint; const s: Double): TFloatPoint;
2880: Function VectorSubtract( const V1, V2 : TFloatPoint) : TFloatPoint
2881: function VectorSubtract(const V1, V2: TFloatPoint): TFloatPoint;
2882: Function Verify(AUserName : String) : String
2883: Function Versine( X : Float) : Float
2884: function VersionCheck: boolean;
2885: Function VersionLanguageId( const LangIdRec : TLangIdRec) : string
2886: Function VersionLanguageName( const LangId : Word) : string
2887: Function VersionResourceAvailable( const FileName : string) : Boolean
2888: Function Visible : Boolean
2889: function VolumeID(DriveChar: Char): string
2890: Function WaitFor( const AString : string) : string
2891: Function WaitFor( const TimeOut : Cardinal) : TJclWaitResult
2892: Function WaitFor1 : TWaitResult;
2893: Function WaitForData( Timeout : Longint) : Boolean
2894: Function WebColorNameToColor( WebColorName : string) : TColor
2895: Function WebColorStrToColor( WebColor : string) : TColor
2896: Function WebColorToRGB( WebColor : Integer) : Integer 2897: Function wGet(aURL, afile: string): boolean; ' 2898: Function wGet2(aURL, afile: string): boolean; ' //witl
                                                                        //without file open
2899: Function WebGet(aURL, afile: string): boolean;
2900: Function WebExists: boolean; //alias to isinternet 2901: Function WeekOf( const AValue : TDateTime) : Word
2902: Function WeekOfTheMonth( const AValue : TDateTime) : Word;
2903: Function WeekOfTheMonth1( const AValue : TDateTime; var AYear, AMonth : Word) : Word;
2904: Function WeekOfTheYear( const AValue : TDateTime) : Word;
2905: Function WeekOfTheYearl( const AValue : TDateTime; var AYear : Word) : Word;
2906: Function WeeksBetween( const ANow, AThen : TDateTime) : Integer
2907: Function WeeksInAYear( const AYear: Word): Word
2908: Function WeeksInYear( const AValue: TDateTime): Word
2909: Function WeekSpan( const ANow, AThen : TDateTime) : Double
2910: Function WideAdjustLineBreaks( const S: WideString; Style : TTextLineBreakStyle) : WideString 2911: Function WideCat( const x, y : WideString) : WideString 2912: Function WideCompareStr( S1, S2 : WideString) : Integer
2913: function WideCompareStr(const S1: WideString; const S2: WideString): Integer)
2914: Function WideCompareText( S1, S2 : WideString) : Integer
2915: function WideCompareText(const S1: WideString; const S2: WideString): Integer)
2916: Function WideCopy( const src : WideString; index, count : Integer) : WideString
2917: Function WideDequotedStr( const S : WideString; AQuote : WideChar) : WideString
2918: Function WideEqual( const x, y : WideString) : Boolean
2919: function WideFormat(const Format: WideString; const Args: array of const): WideString)
2920: Function WideGreater( const x, y : WideString) : Boolean 2921: Function WideLength( const src : WideString) : Integer
2922: Function WideLess( const x, y: WideString): Boolean 2923: Function WideLowerCase( S: WideString): WideString
2924: function WideLowerCase(const S: WideString): WideString)
2925: Function WidePos( const src, sub : WideString) : Integer
2926: Function WideQuotedStr( const S : WideString; Quote : WideChar) : WideString
2927: Function WideReplaceStr( const AText, AFromText, AToText : WideString) : WideString
2928: Function WideReplaceText( const AText, AFromText, AToText: WideString) : WideString 2929: Function WideSameStr( S1, S2 : WideString) : Boolean
2930: function WideSameStr(const S1: WideString; const S2: WideString): Boolean)
2931: Function WideSameText( S1, S2 : WideString) : Boolean
2932: function WideSameText(const S1: WideString; const S2: WideString): Boolean)
2933: Function WideStringReplace(const S,OldPattern, NewPattern: Widestring; Flags: TReplaceFlags): Widestring 2934: Function WideStringToUCS4String( const S : WideString) : UCS4String
2935: Function WideUpperCase( S : WideString) : WideString
2936: Function Win32BackupFile( const FileName : string; Move : Boolean) : Boolean
2937: function Win32Check(RetVal: boolean): boolean)
2938: Function Win32DeleteFile( const FileName : string: MoveToRecycleBin : Boolean) : Boolean 2939: Function Win32RestoreFile( const FileName : string) : Boolean
2940: Function Win32Type : TIdWin32Type
2941: Function WinColor( const Color32 : TColor32) : TColor
2942: function winexec(FileName: pchar; showCmd: integer): integer;
2943: Function WinExec32( const Cmd : string; const CmdShow : Integer) : Boolean
2944: Function WinExec32AndWait( const Cmd : string; const CmdShow : Integer) : Cardinal
2945: Function WithinPastDays( const ANow, AThen: TDateTime; const ADays: Integer): Boolean 2946: Function WithinPastHours( const ANow, AThen: TDateTime; const AHours: Int64): Boolean
2947: Function WithinPastMilliSeconds ( const ANow, AThen : TDateTime; const AMilliSeconds : Int64) : Boolean
2948: Function WithinPastMinutes( const ANow, AThen : TDateTime; const AMonths: Int64): Boolean 2949: Function WithinPastMonths( const ANow, AThen : TDateTime; const AMonths: Integer): Boolean
2950: Function WithinPastSeconds( const ANow, AThen : TDateTime; const ASeconds : Int64) : Boolean
2951: Function WithinPastWeeks (const ANow, AThen: TDateTime; const AWeeks: Integer): Boolean 2952: Function WithinPastYears (const ANow, AThen: TDateTime; const AYears: Integer): Boolean
2953: Function WNetAddConnection( lpRemoteName, lpPassword, lpLocalName : PChar) : DWORD 2954: Function WordToStr( const Value : Word) : String
2955: Function WordGridFormatIdentToInt( const Ident : string; var Value : Longint) : Boolean 2956: Function IntToWordGridFormatIdent( Value : Longint; var Ident : string) : Boolean 2957: Procedure GetWordGridFormatValues( Proc : TGetStrProc)
2958: Function WorkArea : Integer
2959: Function WrapText( Line : string; MaxCol : Integer) : string;
2960: Function WrapText( Line, BreakStr : string; BreakChars : TSysCharSet; MaxCol : Integer) : string; 2961: Function Write( pv : Pointer; cb : Longint; pcbWritten : PLongint) : HResult
2962: function Write(Buffer:String;Count:LongInt):LongInt
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2963: Function WriteClient( var Buffer, Count : Integer) : Integer 2964: Function WriteFile( const AFile : string; const AEnableTransferFile : Boolean) : Cardinal
2965: Function WriteHeaders (StatusCode: Integer; const ReasonString, Headers: string): Boolean
2966: Function WriteString( const AString : string) : Boolean
2967: Function WStrGet(var S : AnyString; I : Integer) : WideChar;
2968: Function wvsprintf( Output : PChar; Format : PChar; arglist : va_list) : Integer 2969: Function wsprintf( Output : PChar; Format : PChar) : Integer
2970: Function XmlDateTimeToStr( const XmlDateTime : string; const Format : string) : string
2971: Function XmlTimeToStr( const XmlTime : string; const Format : string) : string
2972: Function XorDecode( const Key, Source : string) : string
2973: Function XorEncode( const Key, Source : string) : string
2974: Function KorString( const Key, Src : ShortString) : ShortString
2975: Function Yield: Bool
2976: Function YearOf( const AValue: TDateTime): Word
2977: Function YearsBetween( const ANow, AThen : TDateTime) : Integer
2978: Function YearSpan( const ANow, AThen : TDateTime) : Double
2979: Function Yesterday : TDateTime
2980: Function YesNoDialog(const ACaption, AMsg: string): boolean;
2981: Function( const Name : string; Proc : TUserFunction) 2982: Function using Special_Scholz from 3.8.5.0
2983: Function TimeToFloat(value:Extended):Extended; // Normalstunden --> Industriestunden 2984: Function FloatToTime(value:Extended):Extended; // Industriestunden --> Normalstunden
2985: Function FloatToTime2Dec(value:Extended):Extended;
2986: Function MinToStd(value:Extended):Extended;
2987: Function MinToStdAsString(value:Extended):String
2988: Function RoundFloatToStr(zahl:Extended; decimals:integer):String;
2989: Function RoundFloat(zahl:Extended; decimals:integer):Extended;
2990: Function Round2Dec (zahl:Extended):Extended;
2991: Function GetAngle(x,y:Extended):Double;
2992: Function AddAngle(a1,a2:Double):Double;
2993:
2995: unit uPSI StText;
                  2996: *******
2997: Function TextSeek( var F : TextFile; Target : LongInt) : Boolean
2998: Function TextFileSize( var F : TextFile) : LongInt
2999: Function TextPos( var F : TextFile) : LongInt
3000: Function TextFlush( var F : TextFile) : Boolean
3003: from JvVCLUtils;
3005: { Windows resources (bitmaps and icons) VCL-oriented routines }
3006: procedure DrawBitmapTransparent(Dest:TCanvas;DstX,DstY:Integer;Bitmap:TBitmap;TransparentColor:TColor);
      procedure DrawBitmapRectTransparent(Dest: TCanvas;DstX,
      DstY:Int;SrcRect:TRect;Bitmap:TBitmap;TransparColor:TColor);
3008: procedure StretchBitmapRectTransparent(Dest: TCanyas; DstX, DstY, DstW,DstH: Integer; SrcRect: TRect;
      Bitmap: TBitmap; TransparentColor: TColor);
3009: function MakeBitmap(ResID: Pchar): TBitmap;
3010: function MakeBitmapID(ResID: Word): TBitmap;
3011: function MakeModuleBitmap(Module: THandle; ResID: PChar): TBitmap;
3012: function CreateTwoColorsBrushPattern(Color1, Color2: TColor): TBitmap;
3013: function CreateDisabledBitmap_NewStyle(FOriginal: TBitmap; BackColor: TColor): TBitmap;
3014: function CreateDisabledBitmapEx(FOriginal: TBitmap; OutlineColor, BackColor,
3015: HighlightColor, ShadowColor: TColor; DrawHighlight: Boolean): TBitmap; 3016: function CreateDisabledBitmap(FOriginal: TBitmap; OutlineColor: TColor): TBitmap;
3017: function ChangeBitmapColor(Bitmap: TBitmap; Color, NewColor: TColor): TBitmap;
3018: procedure AssignBitmapCell(Source: TGraphic; Dest: TBitmap; Cols, Rows, Index: Integer);
3019: {$IFDEF WIN32}
3020: procedure ImageListDrawDisabled(Images: TImageList; Canvas: TCanvas;
3021: X, Y, Index: Integer; HighlightColor, GrayColor: TColor; DrawHighlight: Boolean);
3023: function MakeIcon(ResID: PChar): TIcon;
3024: function MakeIconID(ResID: Word): TIcon;
3025: function MakeModuleIcon(Module: THandle; ResID: PChar): TIcon;
3026: function CreateBitmapFromIcon(Icon: TIcon; BackColor: TColor): TBitmap;
       { $IFDEF WIN32 }
3028: function CreateIconFromBitmap(Bitmap: TBitmap; TransparentColor: TColor): TIcon;
3029: {$ENDIF}
3030: { Service routines }
3031: procedure NotImplemented;
3032: procedure ResourceNotFound(ResID: PChar);
3033: function PointInRect(const P: TPoint; const R: TRect): Boolean;
3034: function PointInPolyRqn(const P: TPoint; const Points: array of TPoint): Boolean;
3035: function PaletteColor(Color: TColor): Longint;
3036: function WidthOf(R: TRect): Integer;
3037: function HeightOf(R: TRect): Integer;
3038: procedure PaintInverseRect(const RectOrg, RectEnd: TPoint);
3039: procedure DrawInvertFrame(ScreenRect: TRect; Width: Integer);
3040: procedure CopyParentImage(Control: TControl; Dest: TCanvas);
3041: procedure Delay(MSecs: Longint);
3042: procedure CenterControl(Control: TControl);
3043: Function PaletteEntries( Palette : HPALETTE) : Integer
3044: Function WindowClassName( Wnd : HWND) : string
3045: Function ScreenWorkArea : TRect
3046: Procedure MoveWindowOrg( DC : HDC; DX, DY : Integer)
3047: Procedure SwitchToWindow( Wnd : HWND; Restore : Boolean) 3048: Procedure ActivateWindow( Wnd : HWND)
3049: Procedure ShowWinNoAnimate( Handle : HWND; CmdShow : Integer)
```

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3050: Procedure CenterWindow( Wnd : HWND)
3051: Procedure ShadeRect( DC : HDC; const Rect : TRect)
3052: Procedure KillMessage( Wnd : HWND; Msg : Cardinal)
3053: Function DialogsToPixelsX( Dlgs : Word)
                                                           : Word
3054: Function DialogsToPixelsY( Dlgs : Word) : Word
3055: Function PixelsToDialogsX( Pixs : Word) : Word
3056: Function PixelsToDialogsY( Pixs : Word) : Word
3058: procedure ShowMDIClientEdge(ClientHandle: THandle; ShowEdge: Boolean);
3059: function MakeVariant(const Values: array of Variant): Variant;
3060: { $ENDIF }
3061: function CreateRotatedFont(Font: TFont; Angle: Integer): HFONT;
3062: function MsgBox(const Caption, Text: string; Flags: Integer): Integer;
3063: function MsgDlg(const Msg:string; AType:TMsgDlgType; AButtons: TMsgDlgButtons; HelpCtx: Longint): Word;
3064: {STEDEE CRITILDER}
3065: function FindPrevInstance(const MainFormClass: ShortString; const ATitle: string): HWND;
3066: function ActivatePrevInstance(const MainFormClass: ShortString; const ATitle: string): Boolean;
3067: √$ELSE
3068: function FindPrevInstance(const MainFormClass, ATitle: string): HWND;
3069: function ActivatePrevInstance(const MainFormClass, ATitle: string): Boolean;
3070: {SENDIF CBUILDER}
3071: function IsForegroundTask: Boolean;
3072: procedure MergeForm(AControl: TWinControl; AForm: TForm; Align: TAlign; Show: Boolean); 3073: function GetAveCharSize(Canvas: TCanvas): TPoint;
3074: function MinimizeText(const Text: string; Canvas: TCanvas; MaxWidth: Integer): string;
3075: procedure FreeUnusedOle;
3076: procedure Beep;
3077: function GetWindowsVersionJ: string;
3078: function LoadDLL(const LibName: string): THandle;
3079: function RegisterServer(const ModuleName: string): Boolean;
3080: {$IFNDEF WIN32}
3081: function IsLibrary: Boolean;
3082: {$ENDIF}
3083: { Gradient filling routine }
3084: type TFillDirection = (fdTopToBottom, fdBottomToTop, fdLeftToRight, fdRightToLeft);
3085: procedure GradientFillRect(Canvas: TCanvas; ARect: TRect; StartColor, EndColor: TColor; Direction:
       TFillDirection; Colors: Byte);
3086: { String routines }
3087: function GetEnvVar(const VarName: string): string;
3088: function AnsiUpperFirstChar(const S: string): string;
3089: function StringToPChar(var S: string): PChar;
3090: function StrPAlloc(const S: string): PChar;
3091: procedure SplitCommandLine(const CmdLine: string; var ExeName, Params: string);
3092: function DropT(const S: string): string;
3093: { Memory routines }
3094: function AllocMemo(Size: Longint): Pointer;
3095: function ReallocMemo(fpBlock: Pointer; Size: Longint): Pointer;
3096: procedure FreeMemo(var fpBlock: Pointer);
3097: function GetMemoSize(fpBlock: Pointer): Longint;
3098: function CompareMem(fpBlock1, fpBlock2: Pointer; Size: Cardinal): Boolean;
3099: {$IFNDEF COMPILER5_UP}
3100: procedure FreeAndNil(var Obj);
3101: { $ENDIF }
3102: // from PNGLoader
3103: Function OptimizeForPNG(Image:TLinearBitmap;QuantizationSteps:Integer;TransparentColor:TColor):Integer
3104: Procedure TransformRGB2LOCO( Image : TLinearBitmap)
3105: Procedure TransformLOCO2RGB( Image : TLinearBitmap)
3106: Procedure Iransionunocozkosk inage: InfinearBitunap)
3106: Procedure SortPalette( const Pal : TPalette; var ColorMap : TColorMap)
3107: Function DrawButtonFace( Canvas : TCanvas; const Client : TRect; BevelWidth : Integer; Style :
    TButtonStyle; IsRounded, IsDown, IsFocused : Boolean) : TRect //TButtons
3108: AddDelphiFunction('Function IsAnAllResult( const AModalResult : TModalResult) : Boolean
          Function InitWndProc( HWindow : HWnd; Message, WParam : Longint; LParam : Longint) : Longint
3109:
        AddConstantN('CTL3D_ALL','LongWord').SetUInt( $FFFF);
//Procedure ChangeBiDiModeAlignment( var Alignment: TAlignment)
3110:
3111:
        //Function SendAppMessage(Msg: Cardinal; WParam, LParam : Longint) : Longint //Function SendAppMessage(Msg: Cardinal; WParam, LParam : Longint) : Longint //Procedure MoveWindowOrg(DC: HDC; DX, DY: Integer)

Procedure SetImeNode(hWnd: HWND; Mode: TImeMode)

Procedure SetImeName(Name: TImeName)
3112:
3114:
3115:
3116:
        Function Win32NLSEnableIME( hWnd : HWND; Enable : Boolean) : Boolean
        Function Imm32GetContext( hWnd : HWND) : HIMC
3117:
         Function Imm32ReleaseContext( hWnd : HWND; hImc : HIMC) : Boolean
3118:
3119:
        \textbf{Function} \ \texttt{Imm32GetConversionStatus( hImc: HIMC; \textbf{var} \ \texttt{Conversion, Sentence: longword): Boolean}
        Function Imm32SetConversionStatus( hImc: HIMC; Conversion, Sentence: longword): Boolean Function Imm32SetOpenStatus( hImc: HIMC; fOpen: Boolean): Boolean
3120:
3121:
3122: // Function Imm32SetCompositionWindow( hImc : HIMC; lpCompForm : PCOMPOSITIONFORM) : Boolean
3123:
        //Function Imm32SetCompositionFont( hImc : HIMC; lpLogfont : PLOGFONTA) : Boolean
3124:
        \textbf{Function} \  \, \texttt{Imm32GetCompositionString(hImc:HIMC:dWord1:longword:lpBuf:string:dwBufLen:longint):Longint} \\
        Function Imm32IsIME( hKl : longword) : Boolean
Function Imm32NotifyIME( hImc : HIMC; dwAction, dwIndex, dwValue:longword):Boolean
3125:
3126:
        Procedure DragDone( Drop : Boolean)
3128:
3129:
3131: function CanvasMaxTextHeight(Canvas: TCanvas): Integer;
3132: function ReplaceComponentReference(This, NewReference: TComponent; var VarReference: TComponent): Boolean; 3133: procedure DrawLine(Canvas: TCanvas; X, Y, X2, Y2: Integer);
3134: function IsPositiveResult(Value: TModalResult): Boolean; 3135: function IsNegativeResult(Value: TModalResult): Boolean;
3136: function IsAbortResult(const Value: TModalResult): Boolean;
```

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3137: function StripAllFromResult(const Value: TModalResult): TModalResult;
3138: // returns either BrightColor or DarkColor depending on the luminance of AColor
3139: // This function gives the same result (AFAIK) as the function used in Windows to
       // calculate the desktop icon text color based on the desktop background color
3140:
3141: function SelectColorByLuminance(AColor, DarkColor, BrightColor: TColor): TColor; 3142: type TJvHTMLCalcType = (htmlShow, htmlCalcWidth, htmlCalcHeight, htmlHyperLink);
3143:
3144: procedure HTMLDrawTextEx(Canvas: TCanvas; Rect: TRect;
3145:
         const State: TOwnerDrawState; const Text: string; var Width: Integer;
3146:
         CalcType: TJvHTMLCalcType; MouseX, MouseY: Integer; var MouseOnLink: Boolean;
var LinkName: string; Scale: Integer = 100); overload;
3147:
3148: procedure HTMLDrawTextEx(Canvas: TCanvas; Rect: TRect;
3149:
         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;
3150:
3151:
3152: function HTMLDrawText(Canvas: TCanvas; Rect: TRect;
         const State: TOwnerDrawState; const Text: string; Scale: Integer = 100): string;
3154: function HTMLDrawTextHL(Canvas: TCanvas; Rect: TRect;
         const State: TOwnerDrawState; const Text: string; MouseX, MouseY: Integer;
3155:
         Scale: Integer = 100): string;
3156:
3157: function HTMLPlainText(const Text: string): string;
3158: function HTMLTextExtent(Canvas: TCanvas; Rect: TRect;
3159: const State: TOwnerDrawState; const Text: string; Scale: Integer = 100): TSize; 3160: function HTMLTextWidth(Canvas: TCanvas; Rect: TRect;
3161: const State: TOwnerDrawState; const Text: string; Scale: Integer = 100): Integer; 3162: function HTMLTextHeight(Canvas: TCanvas; const Text: string; Scale: Integer = 100): Integer;
3163: function HTMLPrepareText(const Text: string): string;
3164:
3165: ******* uPSI_JvAppUtils;
3166: Function GetDefaultSection( Component : TComponent) : string
3167: Procedure GetDefaultIniData(Control:TControl; var IniFileName, Section : string; UseRegistry : Boolean)
3168: Procedure GetDefaultIniData( Control : TControl; var IniFileName, Section : string)
3169: Function GetDefaultIniName : string
3170:
       //'OnGetDefaultIniName','TOnGetDefaultIniName').SetString();
3171: Function GetDefaultIniRegKey: string
3172: Function FindForm( FormClass : TFormClass) : TForm
3173: Function FindShowForm(FormClass: TFormClass; const Caption: string): TForm 3174: Function ShowDialog(FormClass: TFormClass): Boolean
       //Function InstantiateForm( FormClass : TFormClass; var Reference) : TForm
3176: Procedure SaveFormPlacement( Form : TForm; const IniFileName : string; UseRegistry : Boolean)
3177: Procedure RestoreFormPlacement( Form : TForm; const IniFileName : string; UseRegistry : Boolean)
3178: Procedure SaveMDIChildrenReg( MainForm : TForm; IniFile : TRegIniFile) 3179: Procedure SaveFormPlacement( Form : TForm; const IniFileName : string)
3180: Procedure RestoreFormPlacement( Form : TForm; const IniFileName : string)
3181: Function GetUniqueFileNameInDir( const Path, FileNameMask : string) : string
3182: Function StrToIniStr( const Str : string) : string 3183: Function IniStrToStr( const Str : string) : string
3184: Function IniReadString( IniFile : TObject; const Section, Ident, Default : string) : string
3185: Procedure IniWriteString( IniFile : TObject; const Section, Ident, Value : string)
3186: Function IniReadInteger( IniFile : TObject; const Section, Ident : string; Default : Longint) : Longint 3187: Procedure IniWriteInteger( IniFile : TObject; const Section, Ident : string; Value : Longint)
3188: Function IniReadBool( IniFile : TObject; const Section, Ident : string; Default : Boolean) : Boolean
3189: Procedure IniWriteBool( IniFile : TObject; const Section, Ident : string; Value : Boolean)
3190: Procedure IniReadSections( IniFile : TObject; Strings : TStrings)
3191: Procedure IniEraseSection( IniFile : TObject; const Section : string)
3192: Procedure IniDeleteKey( IniFile : TObject; const Section, Ident : string)
3193: Procedure AppBroadcast( Msg, wParam : Longint; lParam : Longint) 3194: Procedure AppBroadcast( Msg, wParam : Word; lParam : Longint)
3195: Procedure AppTaskbarIcons( AppOnly : Boolean)
3196: Procedure InternalSaveGridLayout( Grid : TCustomGrid; IniFile : TObject; const Section : string)
3197: Procedure InternalRestoreGridLayout( Grid : TCustomGrid; IniFile : TObject; const Section : string)
3198: Procedure InternalSaveMDIChildren( MainForm : TForm; IniFile : TObject)
3201: Function CreateLocate( DataSet : TDataSet) : TJvLocateObject
3202: Function IsDataSetEmpty( DataSet : TDataSet) : Boolean
3203: Procedure RefreshQuery( Query: TDataSet)
3204: Function DataSetSortedSearch(DataSet:TDataSet;const Value,FieldName:string;CaseInsensitive:Bool):Boolean
3205: Function DataSetSectionName( DataSet : TDataSet) : string
3206: Procedure InternalSaveFields( DataSet : TDataSet; IniFile : TObject; const Section : string)
3207: Procedure InternalRestoreFields(DataSet:TDataSet;IniFile:TObject;const Section:string;RestoreVisible:Bool)
3208: Function DataSetLocateThrough(DataSet:TDataSet; const KeyFields: string; const KeyValues: Variant;
       Options: TLocateOptions) : Boolean
3209: Procedure SaveFields( DataSet : TDataSet; IniFile : TIniFile)
3210: Procedure RestoreFields( DataSet : TDataSet; IniFile : TIniFile; RestoreVisible : Boolean)
3211: Procedure AssignRecord( Source, Dest : TDataSet; ByName : Boolean)
3212: Function ConfirmDelete : Boolean
3213: Procedure ConfirmDataSetCancel( DataSet : TDataSet)
3214: Procedure CheckRequiredField( Field : TField)
3215: Procedure CheckRequiredFields( const Fields : array of TField)
3216: Function DateToSQL( Value : TDateTime) : string
3217: Function FormatSQLDateRange( Date1, Date2 : TDateTime; const FieldName : string) : string 3218: Function FormatSQLDateRangeEx( Date1, Date2 : TDateTime; const FieldName : string) : string
3219: Function FormatSQLNumericRange(const FieldName:string;LowVal, HighVal,LowEmpty,
       HighEmpty:Double;Inclusive:Bool):string
3220: Function StrMaskSQL( const Value : string) : string
3221: Function FormatSQLCondition(const FieldName,Operator,Val:string;FieldType:TFieldType;Exact:Bool):string
3222: Function FormatAnsiSQLCondition(const FieldName,Operator,Val:string;FieldType;TFieldType;Exact:Bool):string
3223: Procedure _DBError( const Msg : string)
```

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3224:
        Const('TrueExpr','String').SetString('0=0
        Const('sdfStandard16','String').SetString('''''mm''/''dd''/''yyyy''"''
Const('sdfStandard32','String').SetString(''''''dd/mm/yyyy''''''
3225:
         Const('sdfOracle','String').SetString('"TO_DATE('"dd/mm/yyyy"'', ''DD/MM/YYYY'')"
3227:
         Const('sdfInterbase','String').SetString('"CAST('"mm"/"dd"/"yyyy"'' AS DATE)"
3228:
         Const('sdfMSSQL','String').SetString('"CONVERT(datetime, ''"mm"/"dd"/"yyyy"'', 103)"
3229:
3230:
        AddTypeS('Largeint', 'Longint
         addTypeS('TIFException', '(ErNoError, erCannotImport, erInvalidType, ErInternalError,
3231:
3232:
            'erInvalidHeader, erInvalidOpcode, erInvalidOpcodeParameter, erNoMainProc, erOutOfGlobalVarsRange, '+
           'erOutOfProcRange, ErOutOfRange, erOutOfStackRange, ErTypeMismatch, erUnexpectedEof, '+
'erVersionError, ErDivideByZero, ErMathError, erCouldNotCallProc, erOutofRecordRange, '+
'erOutOfMemory, erException, erNullPointerException, erNullVariantErrorerInterfaceNotSupportederError);
3233:
3234:
3236:
       procedure SIRegister_JclIniFiles(CL: TPSPascalCompiler);
3237:
3238:
       begin
3239:
        Function JIniReadBool( const FileName, Section, Line : string) : Boolean
         Function JIniReadInteger( const FileName, Section, Line : string) : Integer
3240:
        Function JIniReadString( const FileName, Section, Line: string): string
Procedure JIniWriteBool( const FileName, Section, Line: string; Value: Boolean)
3241:
3242:
        Procedure JIniWriteInteger( const FileName, Section, Line : string; Value : Integer)
3243:
         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)
3245:
3246:
3247: end;
3248:
3249: (* === compile-time registration functions === *)
3250: (*----
       procedure SIRegister_JclDateTime(CL: TPSPascalCompiler);
3251:
3252:
       begin
          'UnixTimeStart','LongInt').SetInt( 25569);
        Function JEncodeDate( const Year : Integer; Month, Day : Word) : TDateTime
3254:
3255:
         \textbf{Procedure} \  \, \texttt{JDecodeDate(Date:TDateTime; var} \  \, \texttt{Year,Month,Day:Word);}
        Procedure DecodeDatel( Date : TDateTime; var Year : Integer; var Month, Day : Word);
3256:
3257:
         Procedure DecodeDate2( Date : TDateTime; var Year, Month, Day : Integer);
         Function CenturyOfDate( const DateTime : TDateTime) : Integer
3258:
3259:
        Function CenturyBaseYear( const DateTime : TDateTime) : Integer
        Function DayOfDate( const DateTime : TDateTime) : Integer
Function MonthOfDate( const DateTime : TDateTime) : Integer
3260:
3261:
3262:
         Function YearOfDate( const DateTime : TDateTime) : Integer
        Function JDayOfTheYear( const DateTime : TDateTime; var Year : Integer; Function DayOfTheYear( const DateTime : TDateTime) : Integer;
3263:
3264:
        Function DayOfTheYearToDateTime( const Year, Day : Integer) : TDateTime
Function HourOfTime( const DateTime : TDateTime) : Integer
3265:
3266:
         Function MinuteOfTime( const DateTime : TDateTime) : Integer
3268:
         Function SecondOfTime( const DateTime : TDateTime) : Integer
        Function GetIsOYearNumberofDays(const Year: Word): Word
Function IsISOLongYear(const Year: Word): Boolean;
3269:
3270:
         Function IsISOLongYear1( const DateTime : TDateTime) : Boolean;
3271:
3272:
         Function ISODayOfWeek( const DateTime : TDateTime) : Word
        Function JISOWeekNumber( DateTime: TDateTime; var YearOfWeekNumber, WeekDay: Integer): Integer;
Function ISOWeekNumber1( DateTime: TDateTime; var YearOfWeekNumber: Integer): Integer;
3273:
3274:
3275:
         Function ISOWeekNumber2( DateTime : TDateTime) : Integer;
        Function IsOWeekNounder2( DateTime : IDateTime : Integer,
Function IsOWeekToDateTime( const Year, Week, Day : Integer) : TDateTime
Function JIsLeapYear( const Year : Integer) : Boolean;
Function IsLeapYear1( const DateTime : TDateTime) : Boolean;
Function JDaysInMonth( const DateTime : TDateTime) : Integer
3276:
3277:
3278:
3279:
         Function Make4DigitYear( Year, Pivot : Integer) : Integer
3280:
         Function JMakeYear4Digit( Year, WindowsillYear : Integer) : Integer
3281:
3282:
         Function JEasterSunday( const Year : Integer) : TDateTime // TDosDateTime', 'Integer
        Function Jasterlime (Form : string; Daterlime : TDaterlime): string
Function FATDatesEqual (const FileTime), FileTime2 : Int64): Boolean;
3283:
3284:
         Function FATDatesEqual1( const FileTime1, FileTime2 : TFileTime) : Boolean;
        Function HoursToMSecs( Hours : Integer) : Integer
3286:
        Function MinutesToMSecs( Minutes : Integer) : Integer
Function SecondsToMSecs( Seconds : Integer) : Integer
3287:
3288:
         Function TimeOfDateTimeToSeconds( DateTime : TDateTime) : Integer
3289:
         Function TimeOfDateTimeToMSecs( DateTime : TDateTime) : Integer
3290:
        Function DateTimeToLocalDateTime( DateTime : TDateTime) : TDateTimeFunction LocalDateTimeToDateTime( DateTime : TDateTime) : TDateTime
3291:
3292:
         Function DateTimeToDosDateTime( const DateTime : TDateTime) : TDosDateTime
3293:
         Function JDateTimeToFileTime( DateTime : TDateTime) : TFileTime
3294:
3295:
         Function JDateTimeToSystemTime( DateTime : TDateTime) : TSystemTime;
3296:
        Procedure DateTimeToSystemTime1( DateTime : TDateTime; var SysTime : TSystemTime);
Function LocalDateTimeToFileTime( DateTime : TDateTime) : FileTime
3297:
3298:
         Function DosDateTimeToDateTime( const DosTime : TDosDateTime) :
                                                                                              TDateTime
3299:
         \textbf{Function} \  \, \texttt{JDosDateTimeToFileTime(DosTime:TDosDateTime):TFileTime;}
3300:
         Procedure DosDateTimeToFileTime1( DTH, DTL : Word; FT : TFileTime);
        Function DosDateTimeToSystemTime( const DosTime: TDosDateTime): TSystemTime Function DosDateTimeToStr( DateTime: Integer): string
Function JFileTimeToDateTime( const FileTime: TFileTime): TDateTime
3301:
3302:
        Function FileTimeToLocalDateTime( const FileTime : TFileTime) : TDateTime Function JFileTimeToDosDateTime( const FileTime : TFileTime) : TDosDateTime;
3304:
3305:
3306:
         Procedure FileTimeToDosDateTime1( const FileTime : TFileTime; var Date, Time : Word);
         Function JFileTimeToSystemTime( const FileTime : TFileTime) : TSystemTime;
3307:
         Procedure FileTimeToSystemTime1( const FileTime : TFileTime; var ST : TSystemTime);
3308:
        Function FileTimeToStr( const FileTime: TFileTime): string
Function SystemTimeToDosDateTime( const SystemTime: TSystemTime): TDosDateTime
3309:
3310:
        Function JSystemTimeToFoSbateTime( const SystemTime: TSystemTime): TFileTime;

Procedure SystemTimeToFileTime1( const SystemTime: TSystemTime; FTime: TFileTime);
3311:
```

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3313:
               Function SystemTimeToStr( const SystemTime : TSystemTime) : string
               Function CreationDateTimeOfFile( const Sr : TSearchRec) : TDateTime
3314:
                Function LastAccessDateTimeOfFile( const Sr : TSearchRec) : TDateTime
3316:
               Function LastWriteDateTimeOfFile( const Sr : TSearchRec) : TDateTime
3317:
                  TJclUnixTime32', 'Longword
               Function JDateTimeToUnixTime( DateTime : TDateTime) : TJclUnixTime32
3318:
               Function JUnixTimeToDateTime( const UnixTime : TJclUnixTime32) : TDateTime
3319:
               Function FileTimeToUnixTime( const AValue : TFileTime) : TJclUnixTime32
Function UnixTimeToFileTime( const AValue : TJclUnixTime32) : TFileTime
3320:
3321:
3322:
               Function JNullStamp : TTimeStamp
               Function JCompareTimeStamps( const Stamp1, Stamp2 : TTimeStamp) : Int64
3323:
               Function JEqualTimeStamps (const Stamp1, Stamp2 : TTimeStamp) : Boolean Function JIsNullTimeStamp (const Stamp : TTimeStamp) : Boolean
3325:
               Function TimeStampDOW( const Stamp : TTimeStamp) : Integer
Function FirstWeekDay( const Year, Month : Integer; var DOW : Integer) : Integer;
3326:
3327:
3328:
               Function FirstWeekDayl( const Year, Month : Integer) : Integer;
               Function LastWeekDay( const Year, Month : Integer; var DOW : Integer) : Integer;
3329:
               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;
3330.
3331:
3332:
                Function FirstWeekendDayl( const Year, Month : Integer) : Integer;
               Function LastWeekendDay( const Year, Month : Integer; var DOW : Integer) : Integer;
3334:
               Function LastWeekendDay1( const Year, Month : Integer) : Integer;
Function IndexedWeekendDay( const Year, Month : Integer; Index : Integer) : Integer
3335:
3336:
               Function FirstDayOfWeek( const Year, Month, DayOfWeek: Integer): Integer
3337:
3338:
               Function LastDayOfWeek( const Year, Month, DayOfWeek: Integer) : Integer
3339:
               Function IndexedDayOfWeek( const Year, Month, DayOfWeek, Index: Integer) : Integer
3340:
                FindClass('TOBJECT'), 'EJclDateTimeError
3341: end;
3342:
3343:
             procedure SIRegister_JclMiscel2(CL: TPSPascalCompiler);
3344: begin
             Function SetDisplayResolution( const XRes, YRes : DWORD) : Longint
3345:
               Function CreateDoSprocessRedirected (const CommandLine, InputFile, OutputFile: string): Boolean Function WinExec32( const Cmd : string; const CmdShow: Integer): Boolean
3346:
3347:
3348:
               Function WinExec32AndWait( const Cmd : string; const CmdShow : Integer) : Cardinal
3349:
               Function WinExec32AndRedirectOutput(const Cmd: string; var Output: string; RawOutput:Boolean):Cardinal
                 TJclKillLevel', '(klNormal, klNoSignal, klTimeOut)
3350:
3351:
               Function ExitWindows( ExitCode : Cardinal) : Boolean
               Function LogOffOS( KillLevel : TJclKillLevel) : Boolean
3352:
3353:
               Function PowerOffOS( KillLevel : TJclKillLevel) : Boolean
Function ShutDownOS( KillLevel : TJclKillLevel) : Boolean
3354:
               Function RebootOS( KillLevel : TJclKillLevel) : Boolean
3355:
                Function HibernateOS( Force, DisableWakeEvents : Boolean) : Boolean
3356:
               Function SuspendOS( Force, DisableWakeEvents : Boolean) : Boolean
3357:
               \textbf{Function} \ \texttt{ShutDownDialog(} \ \textbf{const} \ \texttt{DialogMessage:string}; \\ \texttt{TimeOut:DWORD}; \\ \texttt{Force,Reboot:Boolean):Boolean}; \\ \texttt{Force,Reboot:Boolean):} \\ \texttt{Boolean}; \\ \texttt{Boolean};
3358:
               Function ShutDownDialog1(const MachineName,DialogMessage:string;TimeOut:DWORD;Force,Reboot:Bool):Bool;
3359:
3360:
               Function AbortShutDown : Boolean;
               Function AbortShutDown1( const MachineName : string) : Boolean;
3361:
                  TJclAllowedPowerOperation', '( apoHibernate, apoShutdown, apoSuspend )
TJclAllowedPowerOperations', 'set of TJclAllowedPowerOperation
3362:
3363:
               Function GetAllowedPowerOperations : TJclAllowedPowerOperations
3364:
                  FindClass('TOBJECT'),'EJclCreateProcessError
               Procedure CreateProcAsUser( const UserDomain, UserName, PassWord, CommandLine : string)
3366:
               Procedure CreateProcAsUserEx(const UserDomain, UserName, Password, CommandLine:string/const
3367:
             Environment: PChar);
3368:
                  // with Add(EJclCreateProcessError) do
               end;
3369:
3370:
3371:
3372: procedure SIRegister_JclAnsiStrings(CL: TPSPascalCompiler);
3373:
             begin
3374:
                //'AnsiSigns','Set').SetSet(['-',
                'C1_UPPER','LongWord').SetUInt( $0001);
'C1_LOWER','LongWord').SetUInt( $0002);
3375:
3376:
                                       ,'LongWord').SetUInt( $0004);
3377:
                'C1 DIGIT'
3378:
                'C1_SPACE', 'LongWord').SetUInt( $0008);
3379:
               'C1_PUNCT', 'LongWord').SetUInt( $0010);
3380:
                'C1_CNTRL','LongWord').SetUInt( $0020);
               C1_BLANK', 'LongWord').SetUInt( $0040);
'C1_SDIGIT', 'LongWord').SetUInt( $0080);
3381:
3382:
3383:
                'C1_ALPHA', 'LongWord').SetUInt( $0100);
3384:
                 AnsiChar' 'Char
3385:
               Function StrIsAlpha(const S : AnsiString) : Boolean
3386:
               Function StrIsAlphaNum( const S : AnsiString) : Boolean
               Function StrIsAlphaNumUnderscore( const S : AnsiString) : Boolean
3387:
3388:
               \textbf{Function} \  \, \texttt{StrContainsChars}(\textbf{const} \  \, \texttt{S:AnsiString}; \texttt{Chars:TSysCharSet}; \  \, \texttt{CheckAll} \  \, : \  \, \texttt{Boolean}) \  \, : \  \, \texttt{Boolean} \  \, : \  \, \texttt{Boolean}) \  \, : \  \, \texttt{Boolean} \  \, : \  \, \texttt{Boo
               Function StrConsistsOfNumberChars( const S : AnsiString) : Boolean
Function StrIsDigit( const S : AnsiString) : Boolean
3389:
3390:
                Function StrIsSubset( const S : AnsiString; const ValidChars : TSysCharSet) : Boolean
3392:
               Function StrSame( const S1, S2 : AnsiString) : Boolean
3393:
                // 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
3394:
3395:
               Function StrDoubleQuote( const S : AnsiString) : AnsiString
3396:
3397:
               Function StrEnsureNoPrefix( const Prefix, Text : AnsiString) : AnsiString
               Function StrEnsureNoSuffix( const Suffix, Text : AnsiString) : AnsiString
3398:
               Function StrEnsurePrefix( const Prefix, Text : AnsiString) : AnsiString
Function StrEnsureSuffix( const Suffix, Text : AnsiString) : AnsiString
3399:
```

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3401:
        Function StrEscapedToString( const S : AnsiString) : AnsiString
3402:
        Function JStrLower( const S : AnsiString) : AnsiString
         Procedure StrLowerInPlace( var S : AnsiString)
         ///Procedure StrLowerBuff( S : PAnsiChar)
3404:
3405:
        Procedure JStrMove( var Dest:AnsiString; const Source:AnsiString; const ToIndex,FromIndex,Count:Integer;
        Function StrPadLeft( const S : AnsiString; Len : Integer; C : AnsiChar) : AnsiString
Function StrPadRight( const S : AnsiString; Len : Integer; C : AnsiChar) : AnsiString
3406:
3407:
         Function StrProper( const S : AnsiString) : AnsiString
3408:
3409:
         //Procedure StrProperBuff( S : PAnsiChar)
        Function StrQuote( const S : AnsiString; C : AnsiChar) : AnsiString
3410:
        Function StrRemoveChars( const S : AnsiString; const Chars : TSysCharSet) : AnsiString
Function StrKeepChars( const S : AnsiString; const Chars : TSysCharSet) : AnsiString
3411:
3413:
        Procedure JStrReplace(var S:AnsiString; const Search, Replace: AnsiString; Flags: TReplaceFlags)
        Function StrReplaceChar( const S: AnsiString; const Source, Replace: AnsiChar): AnsiString
Function StrReplaceChars(const S:AnsiString; const Chars:TSysCharSet; Replace:AnsiChar): AnsiString
3414:
3415:
3416:
         Function StrReplaceButChars(const S:AnsiString;const Chars:TSysCharSet;Replace:AnsiChar):AnsiString;
        Function StrRepeat( const S : AnsiString; Count : Integer) : AnsiString
3417:
3418:
        Function StrRepeatLength( const S: AnsiString; const L: Integer): AnsiString
        Function StrReverse(const S : AnsiString) : AnsiString
3419:
        Procedure StrReverseInPlace( var S : AnsiString)

Function StrSingleQuote( const S : AnsiString) : AnsiString
3420:
3421:
        Function StrSmartCase( const S : AnsiString; Delimiters : TSysCharSet) : AnsiString
3422:
3423:
        \textbf{Function} \ \texttt{StrStringToEscaped}( \ \textbf{const} \ \texttt{S} \ : \ \texttt{AnsiString}) \ : \ \texttt{AnsiString}
        Function StrStripNonNumberChars( const S : AnsiString) : AnsiString
Function StrToHex( const Source : AnsiString) : AnsiString
3424:
3425:
3426:
         Function StrTrimCharLeft( const S : AnsiString; C : AnsiChar) : AnsiString
3427:
        Function StrTrimCharsLeft( const S : AnsiString; const Chars : TSysCharSet) : AnsiString
Function StrTrimCharRight( const S : AnsiString; C : AnsiChar) : AnsiString
Function StrTrimCharsRight( const S : AnsiString; const Chars : TSysCharSet) : AnsiString
3428:
3429:
        Function StrTrimQuotes( const S : AnsiString) : AnsiString
3431:
        Function JStrUpper( const S : AnsiString) : AnsiString
        Procedure StrUpperInPlace( var S : AnsiString)
//Procedure StrUpperBuff( S : PAnsiChar)
3432:
3433:
        Function StrOemToAnsi( const S : AnsiString) : AnsiString
Function StrAnsiToOem( const S : AnsiString) : AnsiString
3434:
3436:
        Procedure StrAddRef( var S : AnsiString)
3437:
        Function StrAllocSize( const S : AnsiString) : Longint
        Procedure StrDecRef( var S : AnsiString)
3438:
3439:
         //Function StrLen( S : PAnsiChar) : Integer
         Function StrLength( const S : AnsiString) : Longint
3440:
        Function StrRefCount( const S : AnsiString) : Longint
3441:
        Procedure StrResetLength( var S : AnsiString)
3442:
        Function StrCharCount( const S : AnsiString; C : AnsiChar) : Integer
3443:
         Function StrCharsCount( const S : AnsiString; Chars : TSysCharSet) : Integer
        Function StrStrCount( const S, SubS : AnsiString) : Integer
Function StrCompare( const S1, S2 : AnsiString) : Integer
3445:
3446:
        Function StrCompareRange( const S1, S2 : AnsiString; const Index, Count : Integer) : Integer
3447:
         //Function StrFillChar( const C : AnsiChar; Count : Integer) : AnsiString;
3448:
3449:
         Function StrFillCharl( const C : Char; Count : Integer) : AnsiString;
        Function StrFillChar(const C: Char; Count: Integer): string)';
Function IntFillChar(const I: Integer; Count: Integer): string)'
3450:
3451:
         Function ByteFillChar(const B: Byte; Count: Integer): string)');
3452:
        Function ArrFillChar(const AC: Char; Count: Integer): TCharArray; ');
3453:
3454:
        Function ArrByteFillChar(const AB: Char; Count: Integer): TByteArray;
        Function StrFind( const Substr, S : AnsiString; const Index : Integer) : Integer
3455:
         //Function StrHasPrefix( const S : AnsiString; const Prefixes : array of AnsiString) : Boolean
3456:
         Function StrIndex( const S : AnsiString; const List : array of AnsiString) : Integer
3457:
        Function StrILastPos( const SubStr, S : AnsiString) : Integer
3458:
        Function StrIPos( const SubStr, S : AnsiString) : Integer
Function StrIsOneOf( const S : AnsiString; const List : array of AnsiString) : Boolean
Function StrLastPos( const SubStr, S : AnsiString) : Integer
3459:
3460:
3461:
3462:
         Function StrMatch( const Substr, S : AnsiString; const Index : Integer) : Integer
3463:
        \textbf{Function} \  \, \texttt{StrMatches}( \  \, \textbf{const} \  \, \texttt{Substr}, \  \, \texttt{S} \  \, \texttt{:} \  \, \texttt{AnsiString}; \  \, \textbf{const} \  \, \texttt{Index} : \  \, \texttt{Integer}) \  \, \texttt{:} \  \, \texttt{Boolean}
        Function StrNIPos( const S, SubStr : AnsiString; N : Integer) : Integer Function StrNPos( const S, SubStr : AnsiString; N : Integer) : Integer
3464:
3465:
        Function StrPrefixIndex( const S : AnsiString) const Prefixes : array of AnsiString) : Integer
        Function StrSearch( const Substr, S : AnsiString; const Index : Integer) : Integer
3467:
3468:
         // {\tt Function StrAfter(\ const\ SubStr,\ S\ :\ AnsiString)\ :\ AnsiString}
3469:
         //Function StrBefore( const SubStr, S : AnsiString) : AnsiString
        Function StrBetween( const S : AnsiString; const Start, Stop : AnsiChar) : AnsiString Function StrBetween( const S : AnsiString; N : Integer) : AnsiString
3470:
3471:
        Function StrLeft( const S : AnsiString; Count : Integer) : AnsiString
3472:
        Function StrMid( const S : AnsiString; Start, Count : Integer) : AnsiString Function StrRestOf( const S : AnsiString; N : Integer) : AnsiString
3473:
3474:
        Function StrRight( const S : AnsiString; Count : Integer)
3475:
                                                                                   : AnsiString
3476:
         Function CharEqualNoCase( const C1, C2 : AnsiChar) : Boolean
        Function CharIsAlpha( const C : AnsiChar) : Boolean
Function CharIsAlphaNum( const C : AnsiChar) : Boolean
3477:
3478:
        Function CharlsBlank( const C : AnsiChar) : Boolean
3479:
         Function CharlsControl( const C : AnsiChar) : Boolean
3481:
        Function CharlsDelete( const C : AnsiChar) : Boolean
        Function CharlsDigit( const C : AnsiChar) : Boolean
Function CharlsLower( const C : AnsiChar) : Boolean
3482:
3483:
        Function CharlsNumberChar( const C : AnsiChar) : Boolean
3484:
        Function CharlsPrintable( const C : AnsiChar) :
3485:
                                                                       Boolean
        Function CharlsPunctuation(const C : AnsiChar) : Boolean
3486:
        Function CharlsReturn( const C : AnsiChar) : Boolean Function CharlsSpace( const C : AnsiChar) : Boolean
3487:
3488:
        Function CharlsUpper(const C : AnsiChar) : Boolean
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Function CharlsWhiteSpace( const C : AnsiChar) : Boolean
3490:
        Function CharType( const C : AnsiChar) : Word
3491:
        Function CharHex( const C : AnsiChar) : Byte
        Function CharLower( const C : AnsiChar) : AnsiChar
Function CharUpper( const C : AnsiChar) : AnsiChar
3493:
3494:
        Function CharToggleCase( const C : AnsiChar) : AnsiChar
3495:
        Function CharPos( const S : AnsiString; const C : AnsiChar; const Index : Integer) : Integer
3496:
        Function CharLastPos( const S: AnsiString; C : AnsiChar; const Index: Integer): Integer Function Charles( const S: AnsiString; C: AnsiChar; const Index: Integer): Integer
3497:
3498:
3499:
        Function CharReplace( var S : AnsiString; const Search, Replace : AnsiChar) : Integer
        Procedure StrIToStrings(S, Sep : AnsiString; const List : TStrings; const AllowEmptyString : Boolean)

Procedure StrToStrings(S, Sep : AnsiString; const List : TStrings; const AllowEmptyString : Boolean)
3500:
3502:
        Function StringsToStr(const List:TStrings;const Sep:AnsiString;const AllowEmptyString:Bool):AnsiString;
        Procedure TrimStrings( const List : TStrings; DeleteIfEmpty : Boolean)
Procedure TrimStringsRight( const List : TStrings; DeleteIfEmpty : Boolean)
3503:
3504:
        Procedure TrimStringsLeft( const List: TStrings; DeleteIfEmpty: Boolean)

Function AddStringToStrings(const S:AnsiString;Strings:TStrings; const Unique:Boolean):Boolean
3505:
3506:
3507:
        Function BooleanToStr( B : Boolean) : AnsiString
        Function FileToString( const FileName : AnsiString) : AnsiString
3508:
        Procedure StringToFile( const FileName, Contents: AnsiString; Append: Boolean)
Function StrToken( var S: AnsiString; Separator: AnsiChar): AnsiString
3509:
3510:
        Procedure StrTokens( const S : AnsiString; const List : TStrings)
3511:
        Procedure StrTokenToStrings( S : AnsiString; Separator : AnsiChar; const List : TStrings)
3512:
        //Function StrWord( var S : PAnsiChar; out Word : AnsiString) : Boolean Function StrToFloatSafe( const S : AnsiString) : Float
3513:
3514:
3515:
        Function StrToIntSafe( const S : AnsiString) : Integer
3516:
        Procedure StrNormIndex( const StrLen : Integer; var Index : Integer; var Count : Integer);
        Function ArrayOf( List : TStrings) : TDynStringArray;
  EJclStringError', 'EJclError
3517:
3518:
        function IsClass(Address: TObject): Boolean
3520:
        function IsObject(Address: TObject): Boolean;
3521:
        // Console Utilities
        //function ReadKey: Char;
3522:
3523:
        function IntToStrZeroPad(Value, Count: Integer): AnsiString;
        function JclGUIDToString(const GUID: TGUID): string;
3525:
        function JclStringToGUID(const S: string): TGUID;
3526:
3527: end;
3528:
3529:
          3530: **
3531: Procedure ExecuteSOLScript(Base:TDataBase; const Script: string; const
       Commit:TCommit;OnProgress:TOnProgress; const UserData : Integer)
3532: Function GetQueryResult( const DatabaseName, SQL : string)
3533: Function GetStoredProcResult( const ADatabaseName, AStoredProcName : string; AParams : array of Variant; const AResultName : string) : Variant
3534: //Function StrFieldDesc( Field : FLDDesc) : string
3535: Function Var2Type( V : Variant; const VarType : Integer) : Variant
3536: Procedure CopyRecord( DataSet : TDataSet)
3537: //Procedure AddReference( Tbl : TTable; RefName : string; RefField : Word; MasterTable : string;
MasterField: Word; ModOp, DelOp: RINTQual)
3538: Procedure AddMasterPassword( Table: TTable; pswd: string)
3539: Procedure PackTable( Table: TTable)
3540: Procedure PackEncryptedTable( Table: TTable; pswd: string)
3541: Function EncodeQuotes( const S : string) : string 3542: Function Cmp( const S1, S2 : string) : Boolean
3543: Function SubStr( const S : string; const Index : Integer; const Separator : string) : string
3544: Function SubStrEnd( const S : string; const Index : Integer; const Separator : string) : string
3545: Function ReplaceString( S : string; const OldPattern, NewPattern : string) : string
3549: Function CreateDbLocate : TJvLocateObject
3550: //Function CheckOpen( Status : DBIResult) : Boolean
3551: Procedure FetchAllRecords( DataSet : TBDEDataSet)
3552: Function TransActive( Database : TDatabase) : Boolean
3553: Function AsyncQrySupported( Database : TDatabase) : Boolean
3554: Function GetQuoteChar( Database : TDatabase) : string
3555: Procedure ExecuteQuery( const DbName, QueryText : string)
3556: Procedure ExecuteQueryEx( const SessName, DbName, QueryText : string) 3557: Function FieldLogicMap( FldType : TFieldType) : Integer
3558: Function FieldSubtypeMap( FldType : TFieldType) : Integer Value : string; Buffer : Pointer)
3559: Function GetAliasPath( const AliasName : string) : string
3560: Function IsDirectory( const DatabaseName : string) : Boolean
3561: Function GetBdeDirectory: string
3562: Function LoginToDatabase( Database: TDatabase; OnLogin: TDatabaseLoginEvent): Boolean
3563: Function DataSetFindValue( ADataSet : TBDEDataSet; const Value, FieldName : string) : Boolean 3564: Function DataSetFindLike( ADataSet : TBDEDataSet; const Value, FieldName : string) : Boolean
3565: Function DataSetRecNo( DataSet : TDataSet) : Longint
3566: Function DataSetRecordCount( DataSet : TDataSet) : Longint 3567: Function DataSetPositionStr( DataSet : TDataSet) : string
3568: Procedure DataSetShowDeleted( DataSet : TBDEDataSet; Show : Boolean)
3569: Function CurrentRecordDeleted( DataSet : TBDEDataSet) : Boolean
3570: Function IsFilterApplicable( DataSet : TDataSet) : Boolean
3571: Function IsBookmarkStable( DataSet : TBDEDataSet) : Boolean
3572: Procedure SetIndex( Table : TTable; const IndexFieldNames : string)
3573: Procedure RestoreIndex( Table : TTable)
3574: Procedure DeleteRange( Table: TTable; IndexFields: array of const; FieldValues: array of const)
3575: Procedure PackTable( Table: TTable; IndexFields: array of const; FieldValues: array of const)
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3576: Procedure ReindexTable( Table : TTable)
3577: Procedure BdeFlushBuffers
3578: Function GetNativeHandle( Database : TDatabase; Buffer : Pointer; BufSize : Integer) : Pointer
3579: Procedure ToggleDebugLayer( Active : Boolean; const DebugFile : string)
3580: Procedure DbNotSupported
3581: Procedure ExportDataSet( Source : TBDEDataSet; DestTable : TTable; TableType : TTableType; const
       AsciiCharSet: string; AsciiDelimited: Boolean; MaxRecordCount: Longint)
3582: Procedure ExportDataSetEx( Source : TBDEDataSet; DestTable : TTable; TableType : TTableType; const
       AsciiCharSet:string;AsciiDelimited:Boolean;AsciiDelimiter,AsciiSeparator:Char;MaxRecordCount:Longint);
3583: Procedure
       ImportDataSet(Source:TBDEDataSet;DestTable:TTable;MaxRecordCount:Longint;Mappings:TStrings;Mode:TBatchMode);
3584: Procedure InitRSRUN(Database: TDatabase; const ConName: string; ConType:Integer; const ConServer: string);
3586: function CurrentYear: Word;
3587: function IsLeapYear(AYear: Integer): Boolean;
3588: function DaysPerMonth(AYear, AMonth: Integer): Integer;
3589: function FirstDayOfPrevMonth: TDateTime;
3590: function LastDayOfPrevMonth: TDateTime; 3591: function FirstDayOfNextMonth: TDateTime;
3592: function ExtractDay(ADate: TDateTime): Word;
3593: function ExtractMonth(ADate: TDateTime): Word;
3594: function ExtractYear(ADate: TDateTime): Word;
3595: function IncDate(ADate: TDateTime; Days, Months, Years: Integer): TDateTime; 3596: function IncDay(ADate: TDateTime; Delta: Integer): TDateTime; 3597: function IncMonth(ADate: TDateTime; Delta: Integer): TDateTime;
3598: function IncYear(ADate: TDateTime; Delta: Integer): TDateTime;
3599: function ValidDate(ADate: TDateTime): Boolean;
3600: procedure DateDiff(Date1, Date2: TDateTime; var Days, Months, Years: Word);
3601: function MonthsBetween(Date1, Date2: TDateTime): Double;
3602: function DaysInPeriod(Date1, Date2: TDateTime): Longint;
3603: { Count days between Date1 and Date2 + 1, so if Date1 = Date2 result = 1 }
3604: function DaysBetween(Datel, Date2: TDateTime): Longint;
3605: { The same as previous but if Date2 < Date1 result = 0 }
3606: function IncTime(ATime: TDateTime; Hours, Minutes, Seconds, MSecs: Integer): TDateTime; 3607: function IncHour(ATime: TDateTime; Delta: Integer): TDateTime;
3608: function IncMinute(ATime: TDateTime; Delta: Integer): TDateTime;
3609: function IncSecond(ATime: TDateTime; Delta: Integer): TDateTime;
3610: function IncMSec(ATime: TDateTime; Delta: Integer): TDateTime;
3611: function CutTime(ADate: TDateTime): TDateTime; { Set time to 00:00:00:00 }
      { String to date conversions }
3613: function GetDateOrder(const DateFormat: string): TDateOrder;
3614: function MonthFromName(const S: string; MaxLen: Byte): Byte; 3615: function StrToDateDef(const S: string; Default: TDateTime): TDateTime;
3616: function StrToDateFmt(const DateFormat, S: string): TDateTime;
3617: function StrToDateFmtDef(const DateFormat, S: string; Default: TDateTime): TDateTime;
3618: function DefDateFormat(FourDigitYear: Boolean): string;
3619: function DefDateMask(BlanksChar: Char; FourDigitYear: Boolean): string;
3622: { GetWordOnPos returns Word from string, S, on the cursor position, P} 3623: function GetWordOnPos(const S: string; const P: Integer): string;
3624: { GetWordOnPosEx work like GetWordOnPos function, also returns Word position in iBeg, iEnd variables } 3625: function GetWordOnPosEx(const S: string; const P: Integer; var iBeg, iEnd: Integer): string;
3626: { SubStr returns substring from string, S, separated with Separator string}
3627: function SubStr(const S: string; const Index: Integer; const Separator: string): string;
3628: { SubStrEnd same to previous function but Index numerated from the end of string } 3629: function SubStrEnd(const S: string; const Index: Integer; const Separator: string): string;
3630: { SubWord returns next Word from string, P, and offsets Pointer to the end of Word, P2 }
3631: function SubWord(P: PChar; var P2: PChar): string;
3632: { NumberByWord returns the text representation of 3633: the number, N, in normal russian language. Was typed from Monitor magazine }
3634: function NumberByWord(const N: Longint): string;
3635: // function CurrencyByWord(Value : Currency) : string; GetLineByPos returns Line number, there 3636: //the symbol Pos is pointed. Lines separated with #13 symbol } 3637: function GetLineByPos(const S: string; const Pos: Integer): Integer;
3638: { GetXYByPos is same to previous function, but returns X position in line too}
       procedure GetXYByPos(const S: string; const Pos: Integer; var X, Y: Integer);
3640: { ReplaceString searches for all substrings, OldPattern,in a string, S, and replaces them with NewPattern } 3641: function ReplaceString(S: string; const OldPattern, NewPattern: string): string; 3642: { ConcatSep concatenate S and S2 strings with Separator. if S = '', separator don't included }
3643: function ConcatSep(const S, S2, Separator: string): string;
3644: { ConcatLeftSep is same to previous function, but strings concatenate right to left }
3645: function ConcatLeftSep(const S, S2, Separator: string): string;
3646: { MinimizeString truncs long string, S, and appends '...' symbols, if Length of S is more than MaxLen }
3647: function MinimizeString(const S: string; const MaxLen: Integer): string;
3648: { Next 4 function for russian chars transliterating.
3649:
         This functions are needed because Oem2Ansi and Ansi2Oem functions sometimes works sucks }
3650: procedure Dos2Win(var S: string);
3651: procedure Win2Dos(var S: string);
3652: function Dos2WinRes(const S: string): string;
3653: function Win2DosRes(const S: string): string
3654: function Win2Koi(const S: string): string;
3655: { Spaces returns string consists on N space chars }
3656: function Spaces(const N: Integer): string;
3657: { AddSpaces add spaces to string, S, if it Length is smaller than N }
3658: function AddSpaces(const S: string; const N: Integer): string;
3659: { function LastDate for russian users only } { returns date relative to current date: '' }
3660: function LastDate(const Dat: TDateTime): string;
3661: { CurrencyToStr format currency, Cur, using ffCurrency float format}
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3662: function CurrencyToStr(const Cur: currency): string;
3663: { Cmp compares two strings and returns True if they are equal. Case-insensitive.}
3664: function Cmp(const S1, S2: string): Boolean;
3665: { StringCat add S2 string to S1 and returns this string }
3666: function StringCat(var S1: string; S2: string): string;
3667: { HasChar returns True, if Char, Ch, contains in string, S } 3668: function HasChar(const Ch: Char; const S: string): Boolean;
3669: function HasAnyChar(const Chars: string; const S: string): Boolean;
3670: function CharInSet(const Ch: Char; const SetOfChar: TSetOfChar): Boolean;
3671: function CountOfChar(const Ch: Char; const S: string): Integer;
3672: function DefStr(const S: string; Default: string): string;
3673: {**** files routines}
3674: { GetWinDir returns Windows folder name }
3675: function GetWinDir: TFileName;
3676: function GetSysDir: String;
3677: { GetTempDir returns Windows temporary folder name }
3678: function GetTempDir: string;
3679: { GenTempFileName returns temporary file name on drive, there FileName is placed }
3680: function GenTempFileName(FileName: string): string;
3681: { GenTempFileNameExt same to previous function, but returning filename has given extension, FileExt } 3682: function GenTempFileNameExt(FileName: string; const FileExt: string): string;
3683: { ClearDir clears folder Dir }
3684: function ClearDir(const Dir: string): Boolean;
3685: { DeleteDir clears and than delete folder Dir }
3686: function DeleteDir(const Dir: string): Boolean;
3687: { FileEquMask returns True if file, FileName, is compatible with given dos file mask, Mask }
3688: function FileEquMask(FileName, Mask: TFileName): Boolean;
3689: { FileEquMasks returns True if file, FileName, is compatible with given Masks.
3690: Masks must be converted with comma ('.'.') }
3690: Masks must be separated with comma (';') }
3691: function FileEquMasks(FileName, Masks: TFileName): Boolean;
3692: procedure DeleteFiles(const Folder: TFileName; const Masks: string);
3693: { LZFileExpand expand file, FileSource into FileDest.File must be compressed, using MS Compress program } 3694: function LZFileExpand(const FileSource, FileDest: string): Boolean;
3695: { FileGetInfo fills SearchRec record for specified file attributes}
3696: function FileGetInfo(FileName: TFileName; var SearchRec: TSearchRec): Boolean;
3697: { HasSubFolder returns True, if folder APath contains other folders } 3698: function HasSubFolder(APath: TFileName): Boolean;
3699: { IsEmptyFolder returns True, if there are no files or folders in given folder, APath} 3700: function IsEmptyFolder(APath: TFileName): Boolean;
3701: { AddSlash add slash Char to Dir parameter, if needed }
3702: procedure AddSlash(var Dir: TFileName);
3703: { AddSlash returns string with added slash Char to Dir parameter, if needed } 3704: function AddSlash2(const Dir: TFileName): string;
3705: { AddPath returns FileName with Path, if FileName not contain any path }
3706: function AddPath(const FileName, Path: TFileName): TFileName; 3707: function AddPaths(const PathList, Path: string): string;
3708: function ParentPath(const Path: TFileName): TFileName;
3709: function FindInPath(const FileName, PathList: string): TFileName;
3710: function FindInPaths(const fileName, paths: String): String;
3711: {$IFNDEF BCB1}
3712: { BrowseForFol
3712: { BrowseForFolder displays Browse For Folder dialog }
3713: function BrowseForFolder(const Handle: HWND; const Title: string; var Folder: string): Boolean;
       { $ENDIF BCB1 }
3715: Function BrowseForFolder(const ATitle: string; AllowCreate : Boolean; var ADirectory : string;
       AHelpContext : THelpContext) : Boolean
3716: Function BrowseForComputer(const ATitle : string; AllowCreate : Boolean; var ADirectory : string;
       AHelpContext : THelpContext) : Boolean
3717: Function BrowseDirectory(var AFolderName:string;const DlgText:string;AHelpContext:THelpContext):Boolean
3718: \textbf{Function} \ \ \texttt{BrowseComputer}(\textbf{var} \ \ \texttt{AComputerName}: \textbf{string}; \textbf{const} \ \ \texttt{DlgText}: \textbf{string}; \texttt{AHelpContext}: \texttt{THelpContext}): \texttt{Boolean}
3719:
3720: { DeleteReadOnlyFile clears R/O file attribute and delete file }
3721: function DeleteReadOnlyFile(const FileName: TFileName): Boolean;
3722: { HasParam returns True, if program running with specified parameter, Param }
3723: function HasParam(const Param: string): Boolean; 3724: function HasSwitch(const Param: string): Boolean;
3725: function Switch(const Param: string): string
        { ExePath returns ExtractFilePath(ParamStr(0)) }
3726:
3727: function ExePath: TFileName;
3728: function CopyDir(const SourceDir, DestDir: TFileName): Boolean;
3729: function FileTimeToDateTime(const FT: TFileTime): TDateTime;
3730: function MakeValidFileName(const FileName: TFileName; const ReplaceBadChar: Char): TFileName;
3731: {**** Graphic routines }
3732: { TTFontSelected returns True, if True Type font is selected in specified device context } 3733: function TTFontSelected(const DC: HDC): Boolean;
3734: { TrueInflateRect inflates rect in other method, than InflateRect API function }
3735: function TrueInflateRect(const R: TRect; const I: Integer): TRect;
3736: {**** Windows routines }
        { SetWindowTop put window to top without recreating window
3737:
3738: procedure SetWindowTop(const Handle: HWND; const Top: Boolean);
3739: {**** other routines }
3740: { KeyPressed returns True, if Key VK is now pressed }
3741: function KeyPressed(VK: Integer): Boolean;
3742: procedure SwapInt(var Int1, Int2: Integer);
3743: function IntPower(Base, Exponent: Integer): Integer;
3744: function ChangeTopException(E: TObject): TObject;
3745: function StrToBool(const S: string): Boolean;
3746: {$IFNDEF COMPILER3_UP}
3747: { AnsiStrLIComp compares S1 to S2, without case-sensitivity, up to a maximum
         Length of MaxLen bytes. The compare operation is controlled by the
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3749: current Windows locale. The return value is the same as for CompareStr. } 3750: function AnsiStrLIComp(S1, S2: PChar; MaxLen: Cardinal): Integer;
3751: function AnsiStrIComp(S1, S2: PChar): Integer;
3752:
3753: function Var2Type(V: Variant; const VarType: Integer): Variant;
3754: function VarToInt(V: Variant): Integer;
3755: function VarToFloat(V: Variant): Double;
3756: { following functions are not documented because they are don't work properly , so don't use them }
3757: function ReplaceSokr1(S: string; const Word, Frase: string): string;
3758: { ReplaceSokr1 is full equal to ReplaceString function - only for compatibility - don't use }
3759: { GetSubStr is full equal to SubStr function - only for compatibility - don't use } 3760: function GetSubStr(const S: string; const Index: Integer; const Separator: Char): string;
3761: function GetParameter: string;
3762: function GetLongFileName(FileName: string): string;
3763: {* from FileCtrl}
3764: function DirectoryExists(const Name: string): Boolean;
3765: procedure ForceDirectories(Dir: string);
        { # from FileCtrl}
3766:
3767: function FileNewExt(const FileName, NewExt: TFileName): TFileName;
3768: function GetComputerID: string;
3769: function GetComputerName: string;
3770: {**** string routines }
3771: { ReplaceAllSokr searches for all substrings, Words,in a string, S, and replaces them with Frases with the
same Index.Also see RAUtilsW.ReplaceSokr1 function }
3772: function ReplaceAllSokr(S: string; Words, Frases: TStrings): string;
3773: { ReplaceSokr searches the Word in a string, S, on PosBeg position,
3774:
          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
3775: function ReplaceSokr(S:string;PosBeq,Len:Integer;Words,Frases:TStrings;var NewSelStart:Integer): string;
3776: { CountOfLines calculates the lines count in a string, each line separated from another with CrLf sequence }
3777: function CountOfLines(const S: string): Integer;
3778: { DeleteEmptyLines deletes all empty lines from strings, Ss. Lines contained only spaces also deletes. } 3779: procedure DeleteEmptyLines(Ss: TStrings);
3780: { SQLAddWhere addes or modifies existing where-statement, where, to the strings, SQL.
          Note: If strings SQL allready contains where-statement, it must be started on begining of any line }
3782: procedure SQLAddWhere(SQL: TStrings; const Where: string);
3783: {**** files routines - }
3784: { ResSaveToFile save resource named as Name with Typ type into file FileName.
3785:
          Resource can be compressed using MS Compress program }
3786: function ResSaveToFile(const Typ, Name: string; const Compressed:Boolean; const FileName: string): Boolean;
3787: function ResSaveToFileEx(Inst:HINST;Typ,Name:PChar;const Compressed:Bool;const FileName:string): Bool
3788: function ResSaveToString(Instance: HINST; const Typ, Name: string; var S: string): Boolean; 3789: { Execute executes other program and waiting for it terminating, then return its Exit Code }
3790: function ExecuteJ(const CommandLine, WorkingDirectory: string): Integer;
3791: { IniReadSection read section, Section, from ini-file,
3792:
          IniFileName, into strings, Ss.This function reads ALL strings from specified section.
3793:
         Note: TIninFile.ReadSection function reads only strings with '=' symbol.
3794: function IniReadSection(const IniFileName: TFileName: const Section: string; Ss: TStrings): Boolean;
3794: Function infreadsection coast infricance into string }
3795: { LoadTextFile load text file, FileName, into string }
3796: function LoadTextFile(const FileName: TFileName): string;
3797: procedure SaveTextFile(const FileName: TFileName; const Source: string);
3798: { ReadFolder reads files list from disk folder, Folder, that are equal Mask, into strings, FileList} 3799: function ReadFolder(const Folder, Mask: TFileName; FileList: TStrings): Integer;
3800: function ReadFolders(const Folder: TFileName; FolderList: TStrings): Integer
3801: {SIFDEF COMPILER3_UP}
3802: { TargetFileName - if FileName is ShortCut returns filename ShortCut linked to }
3803: function TargetFileName(const FileName: TFileName): TFileName;
3804: { return filename ShortCut linked to }
3805: function ResolveLink(const hWnd: HWND; const LinkFile: TFileName; var FileName: TFileName): HRESULT;
3806: {$ENDIF COMPILER3_UP}
3807: {**** Graphic routines - }
3808: { LoadIcoToImage loads two icons from resource named NameRes,into two image lists ALarge and ASmall}
3809: procedure LoadIcoToImage(ALarge, ASmall: TImageList; const NameRes: string);
3810: { RATextOut same with TCanvas.TextOut procedure, but can clipping drawing with rectangle, RClip. }
3811: procedure RATextOut(Canvas: TCanvas; const R, RClip: TRect; const S: string);
3812: { RATextOutEx same with RATextOut function, but can calculate needed height for correct output }
       function RATextOutEx(Canvas: TCanvas: const R,RClip:TRect; const S: string; const CalcHeight:Boolean):Integer;
3813:
3814: { RATextCalcHeight calculate needed height to correct output, using RATextOut or RATextOutEx functions } 3815: function RATextCalcHeight(Canvas: TCanvas; const R: TRect; const S: string): Integer;
3816: { Cinema draws some visual effect }
       procedure Cinema(Canvas: TCanvas; rS {Source}, rD {Dest}: TRect);
3818: { Roughed fills rect with special 3D pattern }
3819: procedure Roughed (ACanvas: TCanvas; const ARect: TRect; const AVert: Boolean);
3820: { 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 )
3821: function BitmapFromBitmap(SrcBitmap: TBitmap; const AWidth, AHeight, Index: Integer): TBitmap;
3822:
        { TextWidth calculate text with for writing using standard desktop font }
3823: function TextWidth(AStr: string): Integer;
3824: { DefineCursor load cursor from resource, and return available cursor number, assigned to it } 3825: function DefineCursor(Identifer: PChar): TCursor;
3826: {**** other routines - }
3827: { FindFormByClass returns first form specified class, FormClass, owned by Application global variable }
3828: function FindFormByClass(FormClass: TFormClass): TForm;
3829: function FindFormByClassName(FormClassName: string): TForm;
3830: { FindByTag returns the control with specified class, ComponentClass, from WinContol.Controls property,
3831: having Tag property value, equaled to Tag parameter }
3832: function FindByTag(WinControl:TWinControl;ComponentClass:TComponentClass:const Tag:Integer):TComponent;
3833: { ControlAtPos2 equal to TWinControl.ControlAtPos function, but works better } 3834: function ControlAtPos2(Parent: TWinControl; X, Y: Integer): TControl;
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3835: { RBTag searches WinControl.Controls for checked RadioButton and returns its Tag property value } 3836: function RBTag(Parent: TWinControl): Integer;
3837: { AppMinimized returns True, if Application is minimized }
3838: function AppMinimized: Boolean;
3839: { MessageBox is Application.MessageBox with string (not PChar) parameters.
3840: if Caption parameter = '', it replaced with Application.Title }
3841: function MessageBoxJ(const Msg: string; Caption: string; const Flags: Integer): Integer;
3842: function MsgDlg2(const Msg, ACaption: string; DlgType: TMsgDlgType;
3843: Buttons: TMsgDlgButtons; HelpContext: Integer; Control: TWinControl): Integer; 3844: function MsgDlgDef(const Msg, ACaption: string; DlgType: TMsgDlgType;
         Buttons: TMsqDlgButtons; DefButton:TMsqDlgBtn; HelpContext: Integer; Control: TWinControl): Integer;
3845:
3846: { Delay stop program execution to MSec msec }
3847: procedure Delay(MSec: Longword);
3848: procedure CenterHor(Parent: TControl; MinLeft: Integer; Controls: array of TControl);
3849: procedure EnableControls(Control: TWinControl; const Enable: Boolean);
3850: procedure EnableMenuItems(MenuItem: TMenuItem; const Tag: Integer; const Enable: Boolean);
       procedure ExpandWidth(Parent: TControl; MinWidth: Integer; Controls: array of TControl);
3852: function PanelBorder(Panel: TCustomPanel): Integer;
3853: function Pixels(Control: TControl; APixels: Integer): Integer;
3854: procedure SetChildPropOrd(Owner: TComponent; PropName: string; Value: Longint);
3855: procedure Error(const Msg: string);
3856: procedure ItemHtDrawEx(Canvas: TCanvas; Rect: TRect; const State: TOwnerDrawState; const Text: string;
         const HideSelColor: Boolean; var PlainItem: string; var Width: Integer; CalcWidth: Boolean);
3857:
3858: {ex. Text parameter:'Item 1 <b>bbold</b><isitalic ITALIC <c:Red>red<c:Green>green <c:blue>blue</i>'}
3859: function ItemHtDraw(Canvas: TCanvas; Rect: TRect; const State: TOwnerDrawState; const Text: string;
3860:
         const HideSelColor: Boolean): string;
3861: function ItemHtWidth(Canvas: TCanvas; Rect: TRect; const State: TOwnerDrawState; const Text: string;
3862: const HideSelColor: Boolean): Integer;
3863: function ItemHtPlain(const Text: string): string;
3864: { ClearList - clears list of TObject }
3865: procedure ClearList(List: TList);
3866: procedure MemStreamToClipBoard(MemStream: TMemoryStream; const Format: Word); 3867: procedure ClipBoardToMemStream(MemStream: TMemoryStream; const Format: Word);
3868:
       { RTTI support }
       function GetPropType(Obj: TObject; const PropName: string): TTypeKind;
3870: function GetPropStr(Obj: TObject; const PropName: string): string; 3871: function GetPropOrd(Obj: TObject; const PropName: string): Integer;
3872: function GetPropMethod(Obj: TObject; const PropName: string): TMethod; 3873: procedure PrepareIniSection(SS: TStrings);
       { following functions are not documented because they are don't work properly, so don't use them }
3875:
3876: function CompareMem(P1, P2: Pointer; Length: Integer): Boolean; assembler;
3877:
       { $ENDIF }
3878:
3879:
       procedure SIRegister_JvBoxProcs(CL: TPSPascalCompiler);
3880: begin
        Procedure BoxMoveSelectedItems( SrcList, DstList : TWinControl)
3881:
3882:
        Procedure BoxMoveAllItems( SrcList, DstList : TWinControl)
3883:
        Procedure BoxDragOver(List:TWinControl;Source:TObject;X,Y:Int;State:TDragState;var
       Accept:Bool;Sorted:Bool;
3884: Procedure BoxMoveFocusedItem( List : TWinControl; DstIndex : Integer)
3885:
        Procedure BoxMoveSelected( List : TWinControl; Items : TStrings)
        Procedure BoxSetItem( List : TWinControl; Index : Integer)
3886:
        Function BoxGetFirstSelection( List : TWinControl) : Integer
3887:
        Function BoxCanDropItem( List : TWinControl; X, Y : Integer; var DragIndex : Integer) : Boolean
3888:
3889:
       end;
3890:
3891:
       procedure SIRegister_JvCsvParse(CL: TPSPascalCompiler);
3892: begin
        Const('MaxInitStrNum','LongInt').SetInt( 9);
3893:
       Function JvAnsiStrSplit( const InString : AnsiString; const SplitChar, QuoteChar:AnsiChar; var OutStrings
3894:
         array of AnsiString; MaxSplit : Integer) : Integer
3895: Function JvStrSplit( const InString: string; const SplitChar, QuoteChar: Char; var OutStrings: array of
       string; MaxSplit : Integer) : Integer
3896: Function JvAnsiStrSplitStrings(const InStr:AnsiString;const SplitChar, QuoteChar:AnsiChar;OutStrs:TStrings):Integer;
3897: Function JvAnsiStrStrip( S : AnsiString) : AnsiString
3898: Function JvStrStrip(S:string):string
3899: Function GetString( var Source : AnsiString; const Separator : AnsiString) : AnsiString 3900: Function PadString( const S : AnsiString; Len : Integer; PadChar : AnsiChar) : AnsiString 3901: Function BuildPathName( const PathName, FileName : AnsiString) : AnsiString
3902: Function StrEatWhiteSpace( const S : string) : string
3903: Function HexToAscii( const S : AnsiString) : AnsiString 3904: Function AsciiToHex( const S : AnsiString) : AnsiString
3905: Function StripQuotes( const S1 : AnsiString) : AnsiString
3906: Function ValidNumericLiteral( S1 : PAnsiChar) : Boolean
3907: Function ValidIntLiteral(S1: PAnsiChar): Boolean 3908: Function ValidHexLiteral(S1: PAnsiChar): Boolean
3909: Function HexPCharToInt( S1 : PAnsiChar) : Integer
3910: Function ValidStringLiteral(S1: PAnsiChar): Boolean
3911: Function StripPCharQuotes(S1: PAnsiChar): AnsiString
3912: Function JvValidIdentifierAnsi( S1 : PAnsiChar) : Boolean
3913: Function JvValidIdentifier( S1 : String) : Boolean
3914: Function JvEndChar( X : AnsiChar) : Boolean
3915: Procedure JvGetToken(S1, S2: PAnsiChar)
3916: Function IsExpressionKeyword( S1 : PAnsiChar) : Boolean
3917: Function IsKeyword(S1: PAnsiChar): Boolean
3918: Function JvValidVarReference(S1: PAnsiChar): Boolean
3919: Function GetParenthesis(S1, S2: PAnsiChar): Boolean
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3920: Procedure JvGetVarReference( S1, S2, SIdx : PAnsiChar)
3921: Procedure JvEatWhitespaceChars( S1 : PAnsiChar);
3922: Procedure JvEatWhitespaceChars1( S1 : PWideChar);
3923: Function GetTokenCount : Integer
3924: Procedure ResetTokenCount
3925: end;
3926:
3927: procedure SIRegister JvDBOueryParamsForm(CL: TPSPascalCompiler);
3928: begin
3929: SIRegister TJvOueryParamsDialog(CL);
3930: Function EditQueryParams( DataSet: TDataSet; List: TParams; AHelpContext: THelpContext): Boolean
3932:
3935: function AnsiChangeCase(const S: string): string;
3936: function GetWordOnPos(const S: string; const P: Integer): string;
3937: function GetWordOnPosEx(const S: string; const P: Integer; var iBeg, iEnd: Integer): string;
3938: function Cmp(const S1, S2: string): Boolean;
3939: { Spaces returns string consists on N space chars }
3940: function Spaces(const N: Integer): string;
3941: { HasChar returns True, if char, Ch, contains in string, S }
3942: function HasChar(const Ch: Char; const S: string): Boolean;
3943: function HasAnyChar(const Chars: string; const S: string): Boolean;
3944: { SubStr returns substring from string, S, separated with Separator string} 3945: function SubStr(const S: string; const Index: Integer; const Separator: string): string;
3946: { SubStrEnd same to previous function but Index numerated from the end of string } 3947: function SubStrEnd(const S: string; const Index: Integer; const Separator: string): string;
3948: { ReplaceString searches for all substrings, OldPattern, in a string, S, replaces them with NewPattern } 3949: function ReplaceString(S: string; const OldPattern, NewPattern: string): string;
3950: function CharInSet(const Ch: Char; const SetOfChar: TSetOfChar): Boolean;
3951: { GetXYByPos is same to previous function, but returns X position in line too}
3952: procedure GetXYByPos(const S: string; const Pos: Integer; var X, Y: Integer)
3953: { AddSlash returns string with added slash char to Dir parameter, if needed }
3954: function AddSlash2(const Dir: TFileName): string;
3955: { AddPath returns FileName with Path, if FileName not contain any path }
3956: function AddPath(const FileName, Path: TFileName): TFileName;
3957: { ExePath returns ExtractFilePath(ParamStr(0)) }
3958: function ExePath: TFileName;
3959: function LoadTextFile(const FileName: TFileName): string;
3960: procedure SaveTextFile(const FileName: TFileName; const Source: string);
3961: { ConcatSep concatenate S and S2 strings with Separator. if S = '', separator don't included } 3962: function ConcatSep(const S, S2, Separator: string): string;
3963: { FileEquMask returns True if file, FileName, is compatible with given dos file mask, Mask } 3964: function FileEquMask(FileName, Mask: TFileName): Boolean; 3965: { FileEquMasks returns True if file, FileName, is compatible with given Masks.
3966: Masks must be separated with comma (';') }
3967: function FileEquMasks(FileName, Masks: TFileName): Boolean;
3968: function StringEndsWith(const Str, SubStr: string): Boolean; 3969: function ExtractFilePath2(const FileName: string): string;
3970: function StrToOem(const AnsiStr: string): string;
3971: { StrToOem translates a string from the Windows character set into the OEM character set. } 3972: function OemToAnsiStr(const OemStr: string): string;
3973: { OemToAnsiStr translates a string from the OEM character set into the Windows character set. }
3974: function IsEmptyStr(const S: string; const EmptyChars: TCharSet): Boolean;
3975: { EmptyStr returns true if the given string contains only character from the EmptyChars. } 3976: function ReplaceStr(const S, Srch, Replace: string): string;
3977: { Returns string with every occurrence of Srch string replaced with Replace string. }
3978: function DelSpace(const S: string): string;
3979: { DelSpace return a string with all white spaces removed. }
3980: function DelChars(const S: string; Chr: Char): string;
3981: { DelChars return a string with all Chr characters removed. } 3982: function DelBSpace(const S: string): string;
3983: { DelBSpace trims leading spaces from the given string. }
3984: function DelESpace(const S: string): string;
       { DelESpace trims trailing spaces from the given string. }
3986: function DelRSpace(const S: string): string;
3987:
       { DelRSpace trims leading and trailing spaces from the given string. }
3988: function DelSpacel(const S: string): string;
3989: { DelSpacel return a string with all non-single white spaces removed. }
3990: function Tab2Space(const S: string; Numb: Byte): string;
3991: { Tab2Space converts any tabulation character in the given string to the Numb spaces characters. }
3992: function NPos(const C: string; S: string; N: Integer): Integer;
3993: { NPos searches for a N-th position of substring C in a given string. }
3994: function MakeStr(C: Char; N: Integer): string;
3995: function MS(C: Char; N: Integer): string;
3996: { MakeStr return a string of length N filled with character C. }
3997: function AddChar(C: Char; const S: string; N: Integer): string;
3998: { AddChar return a string left-padded to length N with characters C. }
3999: function AddCharR(C: Char; const S: string; N: Integer): string;
4000: { AddCharR return a string right-padded to length N with characters C. }
4001: function LeftStr(const S: string; N: Integer): string;
4002: { LeftStr return a string right-padded to length N with blanks. } 4003: function RightStr(const S: string; N: Integer): string;
4004: { RightStr return a string left-padded to length N with blanks. } 4005: function CenterStr(const S: string; Len: Integer): string;
4006: { CenterStr centers the characters in the string based upon the Len specified. } 4007: function CompStr(const S1, S2: string): Integer; 4008: {CompStr compares S1 to S2, case-sensitivity. return val is -1 if S1 < S2,0 if S1 = S2,or 1 if S1>S2. }
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4009: function CompText(const S1, S2: string): Integer;
4010: { CompText compares S1 to S2, without case-sensitivity. The return value is the same as for CompStr. }
      function Copy2Symb(const S: string; Symb: Char): string;
      { Copy2Symb returns a substring of a string S from begining to first character Symb. }
4012:
4013: 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. }
4014:
4015: function Copy2Space(const S: string): string;
4016: { Copy2Symb returns a substring of a string S from begining to first white space. }
4017: function Copy2SpaceDel(var S: string): string;
4018: { Copy2SpaceDel returns a substring of a string S from begining to first
4019:
        white space and removes this substring from S. }
4020: function AnsiProperCase(const S: string; const WordDelims: TCharSet): string;
4021: { Returns string, with the first letter of each word in uppercase,
4022: all other letters in lowercase. Words are delimited by WordDelims. } 4023: function WordCount(const S: string; const WordDelims: TCharSet): Integer;
      { WordCount given a set of word delimiters, returns number of words in S. }
      function WordPosition(const N: Integer; const S: string; const WordDelims: TCharSet): Integer;
4026: { Given a set of word delimiters, returns start position of N'th word in S. }
4027: function ExtractWord(N: Integer; const S: string; const WordDelims: TCharSet): string;
4028: function ExtractWordPos(N:Integer; const S:string; const WordDelims:TCharSet; var Pos: Integer): string;
      function ExtractDelimited(N: Integer; const S: string; const Delims: TCharSet): string;
4030: { ExtractWord, ExtractWordPos and ExtractDelimited given a set of word
4031:
        delimiters, return the N'th word in S. \}
4032: 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.}
4033:
4034: function IsWordPresent(const W, S: string; const WordDelims: TCharSet): Boolean;
      { IsWordPresent given a set of word delimiters, returns True if word W is present in string S. }
4035:
4036:
      function QuotedString(const S: string; Quote: Char): string;
4037: { QuotedString returns the given string as a quoted string, using the provided Quote character. } 4038: function ExtractQuotedString(const S: string; Quote: Char): string;
4039: { ExtractQuotedString removes the Quote characters from the beginning and end of a quoted string,
4040: and reduces pairs of Quote characters within the quoted string and end of a quoted string, 4041: function FindPart(const HelpWilds, InputStr: string): Integer; 4042: { FindPart compares a string with '?' and another, returns the position of HelpWilds in InputStr. } 4043: function IsWild(InputStr, Wilds: string; IgnoreCase: Boolean): Boolean;
4044: { IsWild compares InputString with WildCard string and returns True if corresponds. }
4045: function XorString(const Key, Src: ShortString): ShortString; 4046: function XorEncode(const Key, Source: string): string;
      function XorDecode(const Key, Source: string): string;
{ ** Command line routines ** }
4048:
4049:
4050: function FindCmdLineSwitch(const Switch: string; SwitchChars: TCharSet; IgnoreCase: Boolean): Boolean;
      { $ENDIF }
4051:
      function GetCmdLineArg(const Switch: string; SwitchChars: TCharSet): string;
       { ** Numeric string handling routines **
4053:
4054: function Numb2USA(const S: string): string;
4055: { Numb2USA converts numeric string S to USA-format. }
4056: function Dec2Hex(N: Longint; A: Byte): string;
4057: function D2H(N: Longint; A: Byte): string;
4058: { Dec2Hex converts the given value to a hexadecimal string representation
4059: with the minimum number of digits (A) specified. } 4060: function Hex2Dec(const S: string): Longint;
4061: function H2D(const S: string): Longint;
4062: { Hex2Dec converts the given hexadecimal string to the corresponding integer value. }
4063: function Dec2Numb(N: Longint; A, B: Byte): string;
4064: { Dec2Numb converts the given value to a string representation with the
        base equal to B and with the minimum number of digits (A) specified.
4066: function Numb2Dec(S: string; B: Byte): Longint;
4067: { Numb2Dec converts the given B-based numeric string to the corresponding integer value. }
4068: function IntToBin(Value: Longint; Digits, Spaces: Integer): string;
      { IntToBin converts given value to a bin string representation with min number of digits specified. }
      function IntToRoman(Value: Longint): string;
4071: { IntToRoman converts the given value to a roman numeric string representation. } 4072: function RomanToInt(const S: string): Longint;
4073: { 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.
4075: procedure I64ToCardinals(I: Int64; var LowPart, HighPart: Cardinal)
4078: procedure CopyFileJ(const FileName, DestName: string; ProgressControl: TControl);
      procedure CopyFileEx(const FileName,DestName:string;OverwriteReadOnly,ShellDialog:Boolean;ProgressControl:
      TControl);
4080: procedure MoveFile(const FileName, DestName: TFileName);
4081: procedure MoveFileEx(const FileName, DestName: TFileName; ShellDialog: Boolean);
      { $IFDEF COMPILER4_UP }
4083: function GetFileSize(const FileName: string): Int64;
4084:
4085: function GetFileSize(const FileName: string): Longint;
4086: {$ENDIF}
4087: function FileDateTime(const FileName: string): TDateTime;
4088: function HasAttr(const FileName: string; Attr: Integer): Boolean;
4089: function DeleteFiles(const FileMask: string): Boolean;
4090: function DeleteFilesEx(const FileMasks: array of string): Boolean
4091: function ClearDir(const Path: string; Delete: Boolean): Boolean;
4092: function NormalDir(const DirName: string): string;
4093: function RemoveBackSlash(const DirName: string): string;
4094: function ValidFileName(const FileName: string): Boolean;
4095: function DirExists(Name: string): Boolean;
4096: procedure ForceDirectories(Dir: string);
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4097: function FileLock(Handle: Integer; Offset, LockSize: Longint): Integer;
        {$IFDEF COMPILER4_UP} overload; {$ENDIF}
4098:
4100: function FileLock(Handle: Integer; Offset, LockSize: Int64): Integer; overload;
4101: { $ENDIF }
4102: function FileUnlock(Handle: Integer; Offset, LockSize: Longint): Integer;
4103: {$IFDEF COMPILER4_UP} overload; {$ENDIF} 4104: {$IFDEF COMPILER4_UP}
4105: function FileUnlock(Handle: Integer; Offset, LockSize: Int64): Integer; overload;
4106: { SENDIF }
4107: function GetTempDir: string;
4108: function GetWindowsDir: string;
4109: function GetSystemDir: string
4110: function BrowseDirectory(var AFolderName:string; const DlgText:string; AHelpContext:THelpContext): Boolean;
      {STEDER WIN32}
4111:
4112: function BrowseComputer(var ComputerName:string; const DlgText:string; AHelpContext:THelpContext): Boolean;
4113: function ShortToLongFileName(const ShortName: string): string;
4114: function ShortToLongPath(const ShortName: string): string;
4115: function LongToShortFileName(const LongName: string): string;
4116: function LongToShortPath(const LongName: string): string;
4117: procedure CreateFileLink(const FileName, DisplayName: string; Folder: Integer);
4118: procedure DeleteFileLink(const DisplayName: string; Folder: Integer);
4119: {$ENDIF WIN32}
4120: {$IFNDEF COMPILER3_UP}
4121: function IsPathDelimiter(const S: string; Index: Integer): Boolean;
4122: { $ENDIF }
4123: Function CreateCalculatorForm( AOwner : TComponent; AHelpContext : THelpContext) : TJvCalculatorForm
4124: Function CreatePopupCalculator( AOwner : TComponent; ABiDiMode : TBiDiMode) : TWinControl 4125: Function CreatePopupCalculator( AOwner : TComponent) : TWinControl
4126: Procedure SetupPopupCalculator( PopupCalc : TWinControl; APrecision : Byte; ABeepOnError : Boolean)
4127:
4130:
       Procedure VariantArrayRedim( var V : Variant; High : Integer)
       Procedure VariantCast( const src : Variant; var dst : Variant; vt : Integer)
4132:
       Procedure VariantCpy( const src : Variant; var dst : Variant)
4133:
       Procedure VariantAdd( const src : Variant; var dst : Variant)
       Procedure VariantSub( const src : Variant; var dst : Variant)
4134:
4135:
       Procedure VariantMul( const src : Variant; var dst :
                                                                  Variant
       Procedure VariantDiv( const src : Variant; var dst : Variant
4136:
4137:
       Procedure VariantMod( const src : Variant; var dst : Variant
       Procedure VariantAnd( const src : Variant; var dst : Variant)
4138:
4139:
       Procedure VariantOr( const src :
                                            Variant; var dst :
                                                                 Variant)
       Procedure VariantXor( const src : Variant; var dst : Variant)
4141:
       Procedure VariantShl( const src : Variant; var dst : Variant)
4142:
       Procedure VariantShr( const src : Variant; var dst : Variant)
       Function VariantAdd2( const V1 : Variant; const V2 : Variant) : Variant
4143:
       Function VariantSub2( const V1 : Variant; const V2 : Variant)
4144:
                                                                             : Variant
4145:
       Function VariantMul2( const V1 : Variant; const V2 : Variant)
4146:
       Function VariantDiv2( const V1 : Variant; const V2 : Variant) : Variant
       Function VariantMod2( const V1 : Variant; const V2 : Variant) : Variant
4147:
       Function VariantAnd2( const V1 : Variant; const V2 : Variant) : Variant
4148:
       Function VariantOr2( const V1 : Variant; const V2 : Variant) : Variant
4149:
4150:
       Function VariantXor2( const V1 : Variant; const V2 : Variant) : Variant
4151:
       Function VariantShl2( const V1 : Variant; const V2 : Variant) : Variant
       Function VariantShr2( const V1 : Variant; const V2 : Variant) : Variant
4152:
4153:
       Function VariantNot( const V1 : Variant) : Variant
       Function VariantNeg( const V1 : Variant) : Variant
4154:
       Function VariantGetElement( const V : Variant; i1 : integer) : Variant;
Function VariantGetElement1( const V : Variant; i1, i2 : integer) : Variant;
Function VariantGetElement2( const V : Variant; i1, i2, i3 : integer) : Variant;
4155:
4156:
4157:
       Function VariantGetElement3( const V : Variant; i1, i2, i3, i4 : integer) : Variant;
4159:
       Function VariantGetElement4( const V : Variant; i1, i2, i3, i4, i5 : integer) : Variant;
       Procedure VariantPutElement( var V : Variant; const data : Variant; i1 : integer);

Procedure VariantPutElement1( var V : Variant; const data : Variant; i1, i2 : integer);

Procedure VariantPutElement2( var V : Variant; const data : Variant; i1, i2, i3 : integer);
4160:
4161:
       Procedure VariantPutElement3( var V : Variant; const data : Variant; i1, i2, i3, i4 : integer);
4164: Procedure VariantPutElement4( var V : Variant; const data : Variant; i1, i2, i3, i4, i5 : integer);
4165: end;
4166:
4168: function IsEven(I: Integer): Boolean;
4169: function InchesToPixels(DC: HDC; Value: Single; IsHorizontal: Boolean): Integer; 4170: function CentimetersToPixels(DC: HDC; Value: Single; IsHorizontal: Boolean): Integer;
4171: procedure SwapInt(var I1, I2: Integer);
4172: function Spaces(Count: Integer): string;
4173: function DupStr(const Str: string; Count: Integer): string;
4174: function DupChar(C: Char; Count: Integer): string; 4175: procedure Msg(const AMsg: string);
4176: function RectW(R: TRect): Integer;
4177: function RectH(R: TRect): Integer;
4178: function IncColor(AColor: Longint; AOffset: Byte): Longint;
4179: function DecColor(AColor: Longint; AOffset: Byte): Longint;
4180: function IsItAFilledBitmap(Bmp: TBitmap): Boolean;
4181: procedure DrawTextInRectWithAlign(DC: HDC; R: TRect; const Text: string;
4182:
       HAlign: TglHorAlign; VAlign: TglVertAlign; Style: TglTextStyle; Fnt: TFont; Flags: UINT);
4183: procedure DrawTextInRect(DC: HDC; R:TRect; const Text:string;Style:TglTextStyle;Fnt:TFont;Flags: UINT);
4184: procedure ExtTextOutExt(DC: HDC; X, Y: Integer; R: TRect; const Text: string;
4185: Style: TglTextStyle; ADelineated, ASupress3D: Boolean; FontColor, DelinColor, HighlightColor, ShadowColor:
      TColor; Illumination: TJvgIllumination; Gradient: TJvgGradient; Font: TFont);
```

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4186: procedure DrawBox(DC:HDC; var R:TRect; Style:TglBoxStyle;BackgrColor: Longint; ATransparent: Boolean);
4187: function DrawBoxEx(DC: HDC; ARect: TRect; Borders: TglSides;
         BevelInner, BevelOuter: TPanelBevel; Bold:Boolean; BackgrColor: Longint; ATransparent: Boolean): TRect;
4189: procedure GradientBox(DC: HDC; R: TRect; Gradient: TJvgGradient;PenStyle, PenWidth: Integer);
4190: procedure ChangeBitmapColor(Bitmap: TBitmap; FromColor, ToColor: TColor);
4191: procedure DrawBitmapExt(DC: HDC: { DC - background & result} 4192: SourceBitmap: R: TRect; X, Y: Integer; //...X,Y _in_ rect!
         BitmapOption: TglWallpaperOption; DrawState: TglDrawState;
ATransparent: Boolean; TransparentColor: TColor; DisabledMaskColor: TColor);
4194:
4195: procedure CreateBitmapExt(DC: HDC: { DC - background & result} 4196: SourceBitmap: TBitmap: R: TRect; X, Y: Integer; //...X,Y _in_ rect! 4197: BitmapOption: TglWallpaperOption; DrawState: TglDrawState;
4198: ATransparent: Boolean; TransparentColor: TColor; DisabledMaskColor: TColor); 4199: procedure BringParentWindowToTop(Wnd: TWinControl); 4200: function GetParentForm(Control: TControl): TForm;
4201: \textbf{procedure} \ \texttt{GetWindowImageFrom(Control:TWinControl;X,Y:Integer;ADrawSelf,ADrawChildWindows:Boolean;DC:HDC)} \\
4202: procedure GetWindowImage(Control: TWinControl; ADrawSelf, ADrawChildWindows: Boolean; DC: HDC);
4203: procedure GetParentImageRect(Control: TControl; Rect: TRect; DC: HDC); 4204: function CreateRotatedFont(F: TFont; Escapement: Integer): HFONT;
4205: function FindMainWindow(const AWndClass, AWndTitle: string): THandle;
4206: procedure CalcShadowAndHighlightColors(BaseColor: TColor; Colors: TJvgLabelColors);
       function CalcMathString(AExpression: string): Single;
4208: function IIF(AExpression: Boolean; IfTrue, IfFalse: Variant): Variant; overload;
4209: function IIF(AExpression: Boolean; const IfTrue, IfFalse: string): string; overload;
4210: function GetTransparentColor(Bitmap: TBitmap; AutoTrColor: TglAutoTransparentColor): TColor;
4211: procedure TypeStringOnKeyboard(const S: string);
4212: function NextStringGridCell( Grid: TStringGrid ): Boolean;
4213: procedure DrawTextExtAligned(Canvas:TCanvas;const
       Text:string;R:TRect;Alignment:TglAlignment;WordWrap:Boolean);
4214: procedure LoadComponentFromTextFile(Component: TComponent; const FileName: string);
       procedure SaveComponentToTextFile(Component: TComponent; const FileName: string)
4215:
4216: function ComponentToString(Component: TComponent): string;
4217: procedure StringToComponent(Component: TComponent; const Value: string);
4218: function PlayWaveResource(const ResName: string): Boolean;
4219: function UserName: string;
4220: function ComputerName: string;
4221: function CreateIniFileName: string;
4222: function ExpandString(const Str: string; Len: Integer): string;
4223: function Transliterate(const Str: string; RusToLat: Boolean): string;
4224: function IsSmallFonts: Boolean;
4225: function SystemColorDepth: Integer;
4226: function GetFileTypeJ(const FileName: string): TqlFileType;
4227: Function GetFileType( hFile : THandle) : DWORD');
4228: function FindControlAtPt(Control: TWinControl; Pt: TPoint; MinClass: TClass): TControl;
4229: function StrPosExt(const Str1, Str2: PChar; Str2Len: DWORD): PChar;
4230:
       4231:
4232: function LineStart(Buffer, BufPos: PChar): PChar
      function ExtractStrings(Separators, WhiteSpace: TSysCharSet; Content: PChar;'+
4234:
          'Strings: TStrings): Integer
        Function TestStreamFormat( Stream : TStream) : TStreamOriginalFormat
4235:
        Procedure RegisterClass( AClass : TPersistentClass)
4236:
        Procedure RegisterClasses( AClasses : array of TPersistentClass)
4237:
4238:
        Procedure RegisterClassAlias( AClass : TPersistentClass; const Alias : string)
        Procedure UnRegisterClass( AClass: TPersistentClass)
Procedure UnRegisterClasses( AClasses: array of TPersistentClass)
4239:
4240:
        Procedure UnRegisterModuleClasses( Module : HMODULE)
4241:
        Function FindGlobalComponent( const Name : string) : TComponent
4242:
4243:
        \textbf{Function} \  \, \texttt{IsUniqueGlobalComponentName} \, ( \  \, \textbf{const} \  \, \texttt{Name} \, : \, \, \textbf{string}) \, \, : \, \, \texttt{Boolean}
        Function InitInheritedComponent(Instance: TComponent; RootAncestor: TClass): Boolean
Function InitComponentRes(const ResName: string; Instance: TComponent): Boolean
4244:
4245:
        Function ReadComponentRes( const ResName : string; Instance : TComponent) : TComponent
        Function ReadComponentResEx( HInstance : THandle; const ResName : string) : TComponent Function ReadComponentResFile( const FileName : string; Instance : TComponent) : TComponent Procedure WriteComponentResFile( const FileName : string; Instance : TComponent)
4247:
4248:
4249:
        Procedure GlobalFixupReferences
        Procedure GetFixupReferenceNames( Root : TComponent; Names : TStrings)
4251:
4252:
        Procedure GetFixupInstanceNames(Root: TComponent; const ReferenceRootName string; Names : TStrings)
        Procedure RedirectFixupReferences( Root: TComponent; const OldRootName, NewRootName: string)

Procedure RemoveFixupReferences( Root: TComponent; const RootName: string)
4253:
4254:
        Procedure RemoveFixups( Instance : TPersistent)
4255:
4256:
        Function FindNestedComponent( Root : TComponent; const NamePath : string) : TComponent
4257:
        Procedure BeginGlobalLoading
4258:
        Procedure NotifyGlobalLoading
4259:
        Procedure EndGlobalLoading
        Function GetUltimateOwner1( ACollection : TCollection) : TPersistent;
4260:
4261:
        \textbf{Function} \ \ \texttt{GetUltimateOwner}( \ \ \texttt{APersistent} \ : \ \ \texttt{TPersistent}) \ : \ \ \texttt{TPersistent};
        // AddTypeS('TWndMethod', 'Procedure (var Message : TMessage) 
//Function MakeObjectInstance( Method : TWndMethod) : Pointer
4262:
4263:
        Procedure FreeObjectInstance( ObjectInstance : Pointer)
       // Function AllocateHWnd( Method : TWndMethod) : HWND
4265:
4269: Procedure VarSQLTimeStampCreate4( var aDest : Variant; const ASQLTimeStamp : TSQLTimeStamp);
4270: Function VarSQLTimeStampCreate3: Variant;
4271: Function VarSQLTimeStampCreate2( const AValue : string) : Variant; 4272: Function VarSQLTimeStampCreate1( const AValue : TDateTime) : Variant;
4273: Function VarSQLTimeStampCreate( const ASQLTimeStamp : TSQLTimeStamp) : Variant;
```

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4274: Function VarSOLTimeStamp : TVarType
4275: Function VarIsSQLTimeStamp( const aValue : Variant) : Boolean;
4276: Function LocalToUTC( var TZInfo : TTimeZone; var Value : TSQLTimeStamp) : TSQLTimeStamp //beta 4277: Function UTCToLocal( var TZInfo : TTimeZone; var Value : TSQLTimeStamp) : TSQLTimeStamp //beta
4278: Function VarToSQLTimeStamp( const aValue : Variant) : TSQLTimeStamp
4279: Function SQLTimeStampToStr( const Format : string; DateTime : TSQLTimeStamp) : string
4280: Function SQLDayOfWeek( const DateTime : TSQLTimeStamp) : integer
4281: Function DateTimeToSQLTimeStamp( const DateTime : TDateTime) : TSQLTimeStamp 4282: Function SQLTimeStampToDateTime( const DateTime : TSQLTimeStamp) : TDateTime
4283: Function TryStrToSQLTimeStamp( const S : string; var TimeStamp : TSQLTimeStamp) : Boolean 4284: Function StrToSQLTimeStamp( const S : string) : TSQLTimeStamp
4285: Procedure CheckSqlTimeStamp( const ASQLTimeStamp): TSQLTimeStamp)
4286: Function ExtractFieldName( const Fields: WideString; var Pos: Integer): WideString; 4287: Function ExtractFieldName( const Fields: WideString; var Pos: Integer): WideString;
      //'Procedure RegisterFields( const FieldClasses : array of TFieldClass)
4288:
4289: Procedure DatabaseError( const Message : WideString; Component : TComponent)
4290: Procedure DatabaseErrorFmt(const Message:WIdeString; const Args:array of const;Component:TComponent)
4291: Procedure DisposeMem( var Buffer, Size : Integer)
4292: Function BuffersEqual( Buf1, Buf2 : Pointer; Size : Integer) : Boolean
4293: Function GetFieldProperty(DataSet:TDataSet; Control:TComponent; const FieldName: WideString): TField
4293: Function GetFieldProperty(Dataset.IDataset, Constant Telling 1 4294: Function VarTypeToDataType( VarType : Integer) : TFieldType
4296: {template functions}
4297: function ReplaceFirst(const SourceStr, FindStr, ReplaceStr: string): string;
4298: function ReplaceLast(const SourceStr, FindStr, ReplaceStr: string): string;
4299: function InsertLastBlock(var SourceStr: string; BlockStr: string): Boolean.
4300: function RemoveMasterBlocks(const SourceStr: string): string;
4301: function RemoveFields(const SourceStr: string): string;
4302: {http functions}
4303: function URLEncode(const Value: AnsiString): AnsiString; // Converts string To A URLEncoded string
4304: function URLDecode(const Value: AnsiString): AnsiString; // Converts string From A URLEncoded string
4305: {set functions}
4306: procedure SplitSet(AText: string; AList: TStringList);
4307: function JoinSet(AList: TStringList): string;
4308: function FirstOfSet(const AText: string): string
4309: function LastOfSet(const AText: string): string
4310: function CountOfSet(const AText: string): Integer;
4311: function SetRotateRight(const AText: string): string;
4312: function SetRotateLeft(const AText: string): string;
4313: function SetPick(const AText: string; AIndex: Integer): string;
4314: function SetSort(const AText: string): string;
4315: function SetUnion(const Set1, Set2: string): string;
4316: function SetIntersect(const Set1, Set2: string): string;
4317: function SetExclude(const Set1, Set2: string): string;
4318: {replace any <,> etc by &lt; &gt;}
4319: function XMLSafe(const AText: string): string;
4320: {simple hash, Result can be used in Encrypt}
4321: function Hash(const AText: string): Integer;
4322: { Base64 encode and decode a string }
4323: function B64Encode(const S: AnsiString): AnsiString;
4324: function B64Decode(const S: AnsiString): AnsiString;
4325: {Basic encryption from a Borland Example} 4326: function Encrypt(const InString: AnsiString; StartKey, MultKey, AddKey: Integer): AnsiString;
4327: function Decrypt(const InString: AnsiString; StartKey, MultKey, AddKey: Integer): AnsiString;
4328: {Using Encrypt and Decrypt in combination with B64Encode and B64Decode} 4329: function EncryptB64(const InString: AnsiString; StartKey, MultKey, AddKey: Integer): AnsiString; 4330: function DecryptB64(const InString: AnsiString; StartKey, MultKey, AddKey: Integer): AnsiString;
4331: procedure CSVToTags(Src, Dst: TStringList);
4332: // converts a csv list to a tagged string list
4333: procedure TagsToCSV(Src, Dst: TStringList);
4334: // converts a tagged string list to a csv list
4335: // only fieldnames from the first record are scanned ib the other records
4336: procedure ListSelect(Src, Dst: TStringList; const AKey, AValue: string);
4337:
       {selects akey=avalue from Src and returns recordset in Dst}
4338: procedure ListFilter(Src: TStringList; const AKey, AValue: string);
      {filters Src for akey=avalue}
      procedure ListOrderBy(Src: TStringList; const AKey: string; Numeric: Boolean);
4341:
       {orders a tagged Src list by akey}
4342: function PosStr(const FindString, SourceString: string;
4343:
         StartPos: Integer = 1): Integer;
4344: { PosStr searches the first occurrence of a substring FindString in a string
4345:
         given by SourceString with case sensitivity (upper and lower case characters
4346:
         are differed). This function returns the index value of the first character
4347:
         of a specified substring from which it occurs in a given string starting with
         StartPos character index. If a specified substring is not found Q_PosStr
4348:
         returns zero. author of algorithm is Peter Morris (UK) (Faststrings unit from www.torry.ru). }
4349:
4350: function PosStrLast(const FindString, SourceString: string): Integer;
      {finds the last occurance}
4351:
4352: function LastPosChar(const FindChar: Char; SourceString: string): Integer;
4353: function PosText(const FindString, SourceString: string; StartPos: Integer = 1): Integer;
4354: { PosText searches the first occurrence of a substring FindString in a string
4355:
         given by SourceString without case sensitivity (upper and lower case characters are not differed). This
      function returns the index value of the first character of a specified substring from which it occurs in a given string starting with Start
4356: function PosTextLast(const FindString, SourceString: string): Integer;
4357: {finds the last occurance}
4358: function NameValuesToXML(const AText: string): string;
4359: { $IFDEF MSWINDOWS
4360: procedure LoadResourceFile(AFile: string; MemStream: TMemoryStream);
```

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4361: {SENDIF MSWINDOWS}
4362: procedure DirFiles(const ADir, AMask: string; AFileList: TStringList);
4363: procedure RecurseDirFiles(const ADir: string; var AFileList: TStringList);
4364: procedure RecurseDirProgs(const ADir: string; var AFileList: TStringList);
4365: procedure SaveString(const AFile, AText: string);
4366: Procedure SaveStringasFile( const AFile, AText: string)
4367: function LoadStringJ(const AFile: string): string;
4368: Function LoadStringofFile( const AFile : string) : string
4369: Procedure SaveStringtoFile( const AFile, AText: string)
4370: Function LoadStringfromFile( const AFile: string): string
4371: function HexToColor(const AText: string): TColor;
4372: function UppercaseHTMLTags(const AText: string): string
4373: function LowercaseHTMLTags(const AText: string): string;
4374: procedure GetHTMLAnchors(const AFile: string; AList: TStringList);
4375: function RelativePath(const ASrc, ADst: string): string;
4376: function GetToken(var Start: Integer; const SourceText: string): string;
4377: function PosNonSpace(Start: Integer; const SourceText: string): Integer;
4378: function PosEscaped(Start: Integer; const SourceText, FindText: string; EscapeChar: Char): Integer;
4379: function DeleteEscaped(const SourceText: string; EscapeChar: char): string; 4380: function BeginOfAttribute(Start: Integer; const SourceText: string): Integer;
4381: // parses the beginning of an attribute: space + alpha character
4382: function ParseAttribute(var Start:Integer; const SourceText:string; var AName, AValue:string): Boolean;
4383: //parses a name="value" attrib from Start; returns 0 when not found or else the position behind attribute 4384: procedure ParseAttributes(const SourceText: string; Attributes: TStrings);
4385: // parses all name=value attributes to the attributes TStringList
4386: function HasStrValue(const AText, AName: string; var AValue: string): Boolean;
4387: // checks if a name="value" pair exists and returns any value
4388: function GetStrValue(const AText, AName, ADefault: string): string;
4389: // retrieves string value from a line like:
4390: // name="jan verhoeven" email="jan! dott verhoeven att wxs dott n!"
4391: // returns ADefault when not found
4392: function GetHTMLColorValue(const AText, AName: string; ADefault: TColor): TColor;
4393: // same for a color
4394: function GetIntValue(const AText, AName: string; ADefault: Integer): Integer;
       // same for an Integer
4396: function GetFloatValue(const AText, AName: string; ADefault: Extended): Extended;
4397: // same for a float
4398: function GetBoolValue(const AText, AName: string): Boolean;
4399: // same for Boolean but without default
4400: function GetValue(const AText, AName: string): string;
4401: //retrieves string value from a line like: name="jan verhoeven" email="jan1 verhoeven att wxs dott nl"
4402: procedure SetValue(var AText: string; const AName, AValue: string); 4403: // sets a string value in a line
4404: procedure DeleteValue(var AText: string; const AName: string);
4405: // deletes a AName="value" pair from AText
4406: procedure GetNames(AText: string; AList: TStringList);
4407: // get a list of names from a string with name="value" pairs 4408: function GetHTMLColor(AColor: TColor): string;
4409: // converts a color value to the HTML hex value
4410: function BackPosStr(Start: Integer; const FindString, SourceString: string): Integer;
4411: // finds a string backward case sensitive 4412: function BackPosText(Start: Integer; const FindString, SourceString: string): Integer;
4413: // finds a string backward case insensitive
4414: function PosRangeStr(Start: Integer; const HeadString, TailString, SourceString: string;
4415:
        var RangeBegin: Integer; var RangeEnd: Integer): Boolean;
4416: // finds a text range, e.g. <TD>....</TD> case sensitive
4417: function PosRangeText(Start: Integer; const HeadString, TailString, SourceString: string;
4418:
        var RangeBegin: Integer; var RangeEnd: Integer): Boolean;
4419: // finds a text range, e.g. <TD>.... case insensitive
4420: function BackPosRangeStr(Start: Integer; const HeadString, TailString, SourceString: string;
4421: var RangeBegin: Integer; var RangeEnd: Integer): Boolean;
       // finds a text range backward, e.g. <TD>....</TD> case sensitive
4423: function BackPosRangeText(Start: Integer; const HeadString, TailString, SourceString: string;
4424:
        var RangeBegin: Integer; var RangeEnd: Integer): Boolean;
4425: // finds a text range backward, e.g. <TD>.... case insensitive 4426: function PosTag(Start: Integer; SourceString: string; var RangeBegin: Integer;
         var RangeEnd: Integer): Boolean;
4427:
4428: // finds a HTML or XML tag: <....>
4429: function InnerTag(Start: Integer; const HeadString, TailString, SourceString: string; 4430: var RangeBegin: Integer; var RangeEnd: Integer): Boolean;
4431: // finds the innertext between opening and closing tags
4432: function Easter(NYear: Integer): TDateTime;
4433: // returns the easter date of a year.
4434: function GetWeekNumber(Today: TDateTime): string;
4435: //gets a datecode. Returns year and weeknumber in format: YYWW 4436: function ParseNumber(const S: string): Integer;
4437: // parse number returns the last position, starting from 1
4438: function ParseDate(const S: string): Integer;
4439: // parse a SQL style data string from positions 1,
4440: // starts and ends with #
4441:
4443:
4444: function VarIsInt(Value: Variant): Boolean
       // VarIsInt returns VarIsOrdinal-[varBoolean]
4446: { PosIdx returns the index of the first appearance of SubStr in Str. The search starts at index "Index". }
4447: function PosIdx(const SubStr, S: string; Index: Integer = 0): Integer; 4448: function PosIdxW(const SubStr, S: WideString; Index: Integer = 0): Integer;
4449: function PosLastCharIdx(Ch: Char; const S: string; Index: Integer = 0): Integer;
```

```
4450: { GetWordOnPos\ returns\ Word\ from\ string,\ S,\ on\ the\ cursor\ position,\ P} 4451: function GetWordOnPos\ (const\ S:\ string;\ const\ P:\ Integer):\ string;
4452: function GetWordOnPosW(const S: WideString; const P: Integer): WideString;
4453: function GetWordOnPos2(const S: string; P: Integer; var iBeg, iEnd: Integer): string; 4454: function GetWordOnPos2W(const S: WideString; P: Integer; var iBeg, iEnd: Integer): WideString;
4455: { GetWordOnPosEx working like GetWordOnPos function, but 4456: also returns Word position in iBeg, iEnd variables }
4457: function GetWordOnPosEx(const S: string; const P: Integer; var iBeg, iEnd: Integer): string;
4458: function GetWordOnPosExW(const S: WideString; const P: Integer; var iBeg, iEnd: Integer): WideString; 4459: function GetNextWordPosEx(const Text: string; StartIndex: Integer; var iBeg, iEnd: Integer): string;
4460: function GetNextWordPosExW(const Text:WideString;StartIndex:Integer; var iBeg,iEnd:Integer):WideString;
4461: procedure GetEndPosCaret(const Text: string; CaretX, CaretY: Integer; var X, Y: Integer);
4462:
       { GetEndPosCaret returns the caret position of the last char. For the position
4463: after the last char of Text you must add 1 to the returned X value. }
4464: procedure GetEndPosCaretW(const Text: WideString;CaretX,CaretY:Integer;var X,Y:Integer);
4465: { GetEndPosCaret returns the caret position of the last char. For the position 4466: after the last char of Text you must add 1 to the returned X value. }
4467: { SubStrBySeparator returns substring from string, S, separated with Separator string} 4468: function SubStrBySeparator(const S:string;const Index:Integer;const Separator:string;StartIndex:Int=1):string;
       function SubStrBySeparatorW(const S:WideString;const Index:Int;const
        Separator: WideString; StartIndex: Int: WideString;
4470: { SubStrEnd same to previous function but Index numerated from the end of string }
4471: function SubStrEnd(const S: string; const Index integer; const Separator: string): string;
4472: { SubWord returns next Word from string, P, and offsets Pointer to the end of Word, P2 }
4473: function SubWord(P: PChar; var P2: PChar): string;
4474: function CurrencyByWord(Value: Currency): string;
4475: { GetLineByPos returns the Line number, there the symbol Pos is pointed. Lines separated with #13 symbol } 4476: function GetLineByPos(const S: string; const Pos: Integer): Integer;
       { GetXYByPos is same as GetLineByPos, but returns X position in line as well}
       procedure GetXYByPos(const S: string; const Pos: Integer; var X, Y: Integer)
4478:
       procedure GetXYByPosW(const S: WideString; const Pos: Integer; var X, Y: Integer);
4479:
4480: { ReplaceString searches for all substrings, OldPattern,
          in a string, S, and replaces them with NewPattern }
4481:
4482: function ReplaceString(S: string; const OldPattern, NewPattern: string; StartIndex:Integer = 1):string;
       function ReplaceStringW(S: WideString; const OldPattern,NewPattern:
WideString;StartIndex:Integer=1):WideString;
4483:
        { ConcatSep concatenate S1 and S2 strings with Separator. if S = '' then separator not included }
4484:
       function ConcatSep(const S1, S2, Separator: string): string; ($IFDEF SUPPORTS_INLINE) inline; ($ENDIF
4486: { ConcatLeftSep is same to previous function, but strings concatenate right to left }
4487: function ConcatLeftSep(const S1, S2, Separator: string): string; {$IFDEF SUPPORTS_INLINE} inline; {$ENDIF}
4489: {
          Next 4 function for russian chars transliterating.
4490:
          This functions are needed because Oem2Ansi and Ansi2Oem functions sometimes suck }
4491: procedure Dos2Win(var S: AnsiString);
4492: procedure Win2Dos(var S: AnsiString);
4493: function Dos2WinRes(const S: AnsiString): AnsiString; inline; {$ENDIF SUPPORTS_INLINE, 4494: function Win2DosRes(const S: AnsiString): AnsiString; inline; {$ENDIF SUPPORTS_INLINE}
4495: function Win2Koi(const S: AnsiString): AnsiString;
       FillString fills the string Buffer with Count Chars }
procedure FillString(var Buffer: string; Count: Integer; const Value: Char); overload;
4496:
4498: procedure FillString(var Buffer: string; StartIndex, Count: Integer; const Value: Char); overload;
4499: { MoveString copies Count Chars from Source to Dest }
4500: procedure MoveString(const Source: string; var Dest: string; Count: Integer); {$IFDEF SUPPORTS INLINE}
        inline; {$ENDIF SUPPORTS_INLINE} overload;
4501: procedure MoveString(const Source: string; SrcStartIdx: Integer; var Dest: string;
          DstStartIdx: Integer;Count: Integer); [$IFDEF SUPPORTS_INLINE] inline; [$ENDIF SUPPORTS_INLINE] overload; FillWideChar fills Buffer with Count WideChars (2 Bytes) }
4502:
4503:
4504: procedure FillWideChar(var Buffer; Count: Integer; const Value: WideChar);
        { MoveWideChar copies Count WideChars from Source to Dest }
4506: procedure MoveWideChar(const Source; var Dest;Count:Integer); { $IFDEF SUPPORTS_INLINE} inline; { $ENDIF
           PPORTS INLINE
4507: { FillNativeChar fills Buffer with Count NativeChars }
4508: procedure FillNativeChar(var Buffer; Count: Integer; const Value: Char); // D2009 internal error {$IFDEF
        SUPPORTS_INLINE } inline; { $ENDIF SUPPORTS_INLINE }
       { MoveWideChar copies Count WideChars from Source to Dest }
4510: procedure MoveNativeChar(const Source; var Dest; Count: Integer); // D2009 internal error {$IFDEF
       SUPPORTS_INLINE} inline; {$\frac{\xi}{\xi}\text{ENDIF SUPPORTS_INLINE}\}$
{ IsSubString() compares the sub string to the string. Indices are 1th based.
4512: function IsSubString(const S: string; StartIndex: Integer; const SubStr: string): Boolean;
4513:
        { Spaces returns string consists on N space chars } function Spaces(const N: Integer): string;
4514:
          AddSpaces adds spaces to string S, if its Length is smaller than N \}
4516: function AddSpaces(const S: string; const N: Integer): string;
4517: function SpacesW(const N: Integer): WideString;
4518: function AddSpacesW(const S: WideString; const N: Integer): WideString;
4519: { function LastDateRUS for russian users only }
          returns date relative to current date: 'äâà äíÿ íàçàä' }
4521: function LastDateRUS(const Dat: TDateTime): string;
4522: { CurrencyToStr format Currency, Cur, using ffCurrency float format}
4523: function CurrencyToStr(const Cur: Currency): string;
4524: { HasChar returns True, if Char, Ch, contains in string, S }
4525: function HasChar(const Ch: Char; const S: string): Boolean;
4526: function HasCharW(const Ch: WideChar; const S: WideString): Boolean; inline; ($ENDIF SUPPORTS_INLINE)
4527: function HasAnyChar(const Chars: string; const S: string): Boolean;
4529: function CharInSet(const Ch: AnsiChar;const SetOfChar:TSysCharSet):Boolean;inline; ($ENDIF SUPPORTS_INLINE)
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4530: {SENDIF ~COMPILER12 UP}
4531: function CharInSetW(const Ch: WideChar; const SetOfChar: TSysCharSet):Boolean; inline; ($ENDIF
         SUPPORTS_INLINE)
4532: function CountOfChar(const Ch: Char; const S: string): Integer;
4533: function DefStr(const S: string; Default: string): string; {$IFDEF SUPPORTS_INLINE} inline; {$ENDIF}
SUPPORTS_INLINE | 4534: { StrLICompW2 is a faster replacement for JclUnicode.StrLICompW |
4535: function StrLICompW2(S1, S2: PWideChar; MaxLen: Integer): Integer;
4536: function StrPosW(S, SubStr: PWideChar): PWideChar;
4537: function StrLenW(S: PWideChar): Integer;
4538: function TrimW(const S: WideString): WideString; {$IFDEF SUPPORTS_INLINE} inline; {$ENDIF SUPPORTS_INLINE} 4539: function TrimLeftW(const S: WideString): WideString; {$IFDEF SUPPORTS_INLINE} inline; {$ENDIF
         SUPPORTS_INLINE
4540: function TrimRightW(const S: WideString): WideString; inline; ($ENDIF SUPPORTS_INLINE)
4541: TPixelFormat', '( pfDevice, pflbit, pf4bit, pf8bit, pf24bit )
4542: TMappingMethod',
                             '( mmHistogram, mmQuantize, mmTrunc784, mmTrunc666, mmTripel, mmGrayscale )
4543: Function GetBitmapPixelFormat( Bitmap : TBitmap) : TPixelFormat
4544: Function GetPaletteBitmapFormat( Bitmap : TBitmap) : TPixelFormat 4545: Procedure SetBitmapPixelFormat( Bitmap: TBitmap; PixelFormat: TPixelFormat; Method: TMappingMethod)
4546: Function BitmapToMemoryStream(Bitmap:TBitmap;PixelFormat:TPixelFormat;Method:TMappingMethod):TMemoryStream;
4547: Procedure GrayscaleBitmap( Bitmap: TBitmap)
4548: Function BitmapToMemory( Bitmap : TBitmap; Colors : Integer) : TStream
4549: Procedure SaveBitmapToFile( const Filename : string; Bitmap : TBitmap; Colors : Integer)
4550: Function ScreenPixelFormat : TPixelFormat
4551: Function ScreenColorCount : Integer
4552: Procedure TileImage( Canvas : TCanvas; Rect : TRect; Image : TGraphic)
4553: Function ZoomImage( ImageW, ImageH, MaxW, MaxH : Integer; Stretch : Boolean) : TPoint
4554: //
            SIRegister_TJvGradient(CL);
4555:
4557: procedure SetDelimitedText(List: TStrings; const Text: string; Delimiter: Char);
4558: const
          { $IFDEF MSWINDOWS }
4559:
4560:
          DefaultCaseSensitivity = False;
4561:
4562:
           STEDER UNIX)
4563:
          DefaultCaseSensitivity = True;
          { $ENDIF UNIX }
4564:
4565: { GenTempFileName returns temporary file name on
          drive, there FileName is placed }
4566:
4567: function GenTempFileName(FileName: string): string;
4568: { GenTempFileNameExt same to previous function, but 4569: returning filename has given extension, FileExt }
4570: function GenTempFileNameExt(FileName: string; const FileExt: string): string;
4571: { ClearDir clears folder Dir }
4572: function ClearDir(const Dir: string): Boolean;
4573:
       { DeleteDir clears and than delete folder Dir
       function DeleteDir(const Dir: string): Boolean;
4575: { FileEquMask returns True if file, FileName, is compatible with given dos file mask, Mask } 4576: { function FileEquMask(FileName, Mask: TFileName; CaseSensitive: Boolean=DefaultCaseSensitivity): Boolean; 4577: { FileEquMasks returns True if file, FileName, is compatible with given Masks. 4578: Masks must be separated with SepPath (MSW: ';' / UNIX: ':') }
4579: function FileEquMasks(FileName, Masks: TFileName;
         CaseSensitive: Boolean = DefaultCaseSensitivity): Boolean;
4580:
4581: function DeleteFiles(const Folder: TFileName; const Masks: string): Boolean;
4582:
       { $IFDEF MSWINDOWS }
4583: { LZFileExpand expand file, FileSource,
          into FileDest. Given file must be compressed, using MS Compress program }
4584:
4585: function LZFileExpand(const FileSource, FileDest: string): Boolean;
4586:
4587:
         FileGetInfo fills SearchRec record for specified file attributes}
       function FileGetInfo(FileName: TFileName; var SearchRec: TSearchRec): Boolean;
       { HasSubFolder returns True, if folder APath contains other folders } function HasSubFolder(APath: TFileName): Boolean;
4589:
4590:
4591: { IsEmptyFolder returns True, if there are no files or
          folders in given folder, APath}
4593: function IsEmptyFolder(APath: TFileName): Boolean;
4594: { AddSlash returns string with added slash Char to Dir parameter, if needed }
4595: function AddSlash(const Dir: TFileName): string; {$IFDEF SUPPORTS_INLINE} inline; {$ENDIF SUPPORTS_INLINE}
4596: { AddPath returns FileName with Path, if FileName not contain any path }
4597: function AddPath(const FileName, Path: TFileName): TFileName;
4598: function AddPaths(const PathList, Path: string): string;
4599: function ParentPath(const Path: TFileName): TFileName;
4600: function FindInPath(const FileName, PathList: string): TFileName;
4601: { DeleteReadOnlyFile clears R/O file attribute and delete file }
       function DeleteReadOnlyFile(const FileName: TFileName): Boolean
4603:
       { HasParam returns True, if program running with specified parameter, Param }
4604: function HasParam(const Param: string): Boolean;
4605: function HasSwitch(const Param: string): Boolean;
4606: function Switch(const Param: string): string;
4607:
       { ExePath returns ExtractFilePath(ParamStr(0))
4608: function ExePath: TFileName: [$IFDEF SUPPORTS_INLINE]
4609: function CopyDir(const SourceDir, DestDir: TFileName): Boolean;
4610: //function FileTimeToDateTime(const FT: TFileTime): TDateTime;
4611: procedure FileTimeToDosDateTimeDWord(const FT: TFileTime; out Dft: DWORD);
4612: function MakeValidFileName(const FileName: TFileName; ReplaceBadChar: Char): TFileName;
4613: {**** Graphic routines }
4614: { ISTTFontSelected returns True, if True Type font is selected in specified device context }
4615: function IsTTFontSelected(const DC: HDC): Boolean;
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4616: function KeyPressed(VK: Integer): Boolean;
4617: Function is Keypressed: boolean; //true if key on memo2 (shell output) is pressed
4618: { TrueInflateRect inflates rect in other method, than InflateRect API function } 4619: function TrueInflateRect(const R: TRect; const I: Integer): TRect;
4620: {**** Color routines }
4621: procedure RGBToHSV(R, G, B: Integer; var H, S, V: Integer);
4622: function RGBToBGR(Value: Cardinal): Cardinal;
4623: //function ColorToPrettyName(Value: TColor): string;
4624: //function PrettyNameToColor(const Value: string): TColor;
4625: {**** other routines }
4626: procedure SwapInt(var Int1, Int2: Integer); {$IFDEF SUPPORTS_INLINE} inline; {$ENDIF SUPPORTS_INLINE}
4627: function IntPower(Base, Exponent: Integer): Integer;
4628: function ChangeTopException(E: TObject): TObject; // Linux version writes error message to ErrOutput
4629: function StrToBool(const S: string): Boolean;
4630: function Var2Type(V: Variant; const DestVarType: Integer): Variant; 4631: function VarToInt(V: Variant): Integer;
4632: function VarToFloat(V: Variant): Double;
4633: { following functions are not documented because they not work properly sometimes, so do not use them }
4634: // (rom) ReplaceStrings1, GetSubStr removed
4635: function GetLongFileName(const FileName: string): string;
4636: function FileNewExt(const FileName, NewExt: TFileName): TFileName;
4637: function GetParameter: string;
4638: function GetComputerID: string;
4639: function GetComputerName: string;
4640: {**** string routines }
4641: { ReplaceAllStrings searches for all substrings, Words,
4642: in a string, S, and replaces them with Frases with the same Index. } 4643: function ReplaceAllStrings(const S: string; Words, Frases: TStrings): string;
4644: { ReplaceStrings searches the Word in a string, S, on PosBeg position, 4645: 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
4646: function ReplaceStrings(const S:string;PosBeg,Len:Int;Words,Frases:TStrings;var NewSelStart:Int):string;
4647: { CountOfLines calculates the lines count in a string, S,
         each line must be separated from another with CrLf sequence
4648:
4649: function CountOfLines(const S: string): Integer;
4650: { DeleteLines deletes all lines from strings which in the words, words.
4651: The word of will be deleted from strings. }
4652: procedure DeleteOfLines(Ss: TStrings; const Words: array of string);
4653: { DeleteEmptyLines deletes all empty lines from strings, Ss.
         Lines contained only spaces also deletes. }
4654:
4655: procedure DeleteEmptyLines(Ss: TStrings);
       { SQLAddWhere addes or modifies existing where-statement, where, to the strings, SQL. Note: If strings SQL allready contains where-statement,
4656:
4657:
         it must be started on the begining of any line
       procedure SQLAddWhere(SQL: TStrings; const Where: string);
4659:
       {**** files routines - }
4660:
       { $IFDEF MSWINDOWS }
4661:
       { ResSaveToFile save resource named as Name with Typ type into file FileName.
         Resource can be compressed using MS Compress program}
4664: function ResSaveToFile(const Typ,Name:string; const Compressed: Boolean; const FileName: string): Boolean;
4665: function ResSaveToFileEx(Instance:HINST;Typ,Name:PChar;const Compressed:Boolean;const FileName:string):
       Boolean;
4666: function ResSaveToString(Instance: HINST; const Typ, Name: string; var S: string): Boolean
4667: { $ENDIF MSWINDOWS }
4668: { IniReadSection read section, Section, from ini-file,
4669:
         IniFileName, into strings, Ss.This function reads ALL strings from specified section.
         Note: TIninFile.ReadSection function reads only strings with '=' symbol.}
4671: function IniReadSection(const IniFileName: TFileName: const Section: string; Ss: TStrings): Boolean;
4672: { LoadTextFile load text file, FileName, into string } 4673: function LoadTextFile(const FileName: TFileName): string; 4674: procedure SaveTextFile(const FileName: TFileName; const Source: string);
       { ReadFolder reads files list from disk folder, Folder, that are equal to mask, Mask, into strings, FileList}
4676: function ReadFolder(const Folder, Mask: TFileName; FileList: TStrings): Integer;
4677: function ReadFolders(const Folder: TFileName; FolderList: TStrings): Integer;
4678: { RATextOut same with TCanvas: TextOut procedure, but can clipping drawing with rectangle, RClip. }
4679: procedure RATextOut(Canvas: TCanvas; const R, RClip: TRect; const S: string);
       { RATextOutEx same with RATextOut function, but can calculate needed height for correct output
4681: function RATextOutEx(Canvas:TCanvas:const R,RClip:TRect; const S:string;const CalcHeight:Boolean):Integer;
4682: { RATextCalcHeight calculate needed height for
4683: correct output, using RATextOut or RATextOutEx functions }
4684: function RATextCalcHeight(Canvas: TCanvas; const R: TRect; const S: string): Integer;
4685: { Cinema draws some visual effect }
468: procedure Cinema(Canvas: TCanvas; rS {Source}, rD {Dest}: TRect);
4687: { Roughed fills rect with special 3D pattern }
4688: procedure Roughed(ACanvas: TCanvas; const ARect: TRect; const AVert: Boolean);
       { 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 } 4690: function BitmapFromBitmap(SrcBitmap: TBitmap; const AWidth, AHeight, Index: Integer): TBitmap; 4691: { TextWidth calculate text with for writing using standard desktop font }
4692: function TextWidth(const AStr: string): Integer;
       { TextHeight calculate text height for writing using standard desktop font }
4693:
4694: function TextHeight(const AStr: string): Integer;
4695: procedure SetChildPropOrd(Owner: TComponent; const PropName: string; Value: Longint);
4696: procedure Error(const Msg: string);
4697: procedure ItemHtDrawEx(Canvas: TCanvas: Rect: TRect; const State: TOwnerDrawState; const Text: string;
4698:
         const HideSelColor: Boolean; var PlainItem: string; var Width: Integer; CalcWidth: Boolean);
4699: {example Text parameter:'Item 1<b>bold</b><i>italic ITALIC <c:Red>red<c:Green>green<c:blue>blue</i>' }
4700: function ItemHtDraw(Canvas: TCanvas; Rect: TRect;
        const State: TOwnerDrawState; const Text: string; const HideSelColor: Boolean): string;
```

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4702: function ItemHtWidth(Canvas: TCanvas; Rect: TRect;
        const State: TOwnerDrawState; const Text: string; const HideSelColor: Boolean): Integer;
4703:
4704: function ItemHtPlain(const Text: string): string;
4705: { ClearList - clears list of TObject }
4706: procedure ClearList(List: TList);
4707: procedure MemStreamToClipBoard(MemStream: TMemoryStream; const Format: Word);
4708: procedure ClipBoardToMemStream(MemStream: TMemoryStream; const Format: Word);
       { RTTI support }
4710: function GetPropType(Obj: TObject; const PropName: string): TTypeKind;
4711: function GetPropStr(Obj: Tobject; const PropName: string): string; 4712: function GetPropOrd(Obj: Tobject; const PropName: string): Integer
4713: function GetPropMethod(Obj: TObject; const PropName: string): TMethod;
4714: procedure PrepareIniSection(Ss: TStrings);
4715: { following functions are not documented because they are don't work properly, so don't use them }
4716: // (rom) from JvBandWindows to make it obsolete
4717: function PointL(const X, Y: Longint): TPointL; {$IFDEF SUPPORTS_INLINE} inline; {$ENDIF SUPPORTS_INLINE}
4718: // (rom) from JvBandUtils to make it obsolete
4719: function iif(const Test: Boolean; const ATrue, AFalse: Variant): Variant;
4720: procedure CopyIconToClipboard(Icon: TIcon; BackColor: TColor);
4721: function CreateIconFromClipboard: TIcon;
4722: { begin JvIconClipboardUtils } { Icon clipboard routines }
4723: function CF_ICON: Word;
4724: procedure AssignClipboardIcon(Icon: TIcon);
4725: { Real-size icons support routines (32-bit only) } 4726: procedure GetIconSize(Icon: HICON; var W, H: Integer);
4727: function CreateRealSizeIcon(Icon: TIcon): HICON;
4728: procedure DrawRealSizeIcon(Canvas: TCanvas; Icon: TIcon; X, Y: Integer);
4729: {end JvIconClipboardUtils }
4730: function CreateScreenCompatibleDC: HDC;
4731: function InvalidateRect(hWnd: HWND; const lpRect: TRect; bErase: BOOL): BOOL; overload; ($IFDEF
        SUPPORTS_INLINE | inline; { $ENDIF }
4732: function InvalidateRect(hWnd: HWND; lpRect: PRect; bErase: BOOL): BOOL; overload; 4733: { begin JvRLE } // (rom) changed API for inclusion in JCL
4734: procedure RleCompressTo(InStream, OutStream: TStream);
4735: procedure RleDecompressTo(InStream, OutStream: TStream);
4736: procedure RleCompress(Stream: TStream);
4737: procedure RleDecompress(Stream: TStream);
4738: { end JvRLE } { begin JvDateUtil }
4739: function CurrentYear: Word; ($IFDEF SUPPORTS_
4740: function IsLeapYear(AYear: Integer): Boolean;
                                                 SUPPORTS_INLINE | inline; { $ENDIF SUPPORTS_INLINE }
4741: function DaysInAMonth(const AYear, AMonth: Word): Word;
4742: function DaysPerMonth(AYear, AMonth: Integer): Integer; 4743: function FirstDayOfPrevMonth: TDateTime;
4744: function LastDayOfPrevMonth: TDateTime;
4745: function FirstDayOfNextMonth: TDateTime;
4746: function ExtractDay(ADate: TDateTime): Word;
4747: function ExtractMonth(ADate: TDateTime): Word;
4748: function ExtractYear(ADate: TDateTime): Word;
4749: function IncDate(ADate: TDateTime; Days, Months, Years: Integer): TDateTime;
4750: function IncDay(ADate: TDateTime; Delta:Integer): TDateTime; function IncMonth(ADate: TDateTime; Delta: Integer): TDateTime; function IncMonth(ADate: TDateTime; Delta: Integer): TDateTime;
4752: function IncYear(ADate: TDateTime; Delta: Integer): TDateTime;
4753: function ValidDate(ADate: TDateTime): Boolean;
4754: procedure DateDiff(Date1, Date2: TDateTime; var Days, Months, Years: Word);
4755: function MonthsBetween(Date1, Date2: TDateTime): Double; 4756: function DaysInPeriod(Date1, Date2: TDateTime): Longint;
       { Count days between Date1 and Date2 + 1, so if Date1 = Date2 result = 1 }
4758: function DaysBetween(Date1, Date2: TDateTime): Longint;
4759: { The same as previous but if Date2 < Date1 result = 0 }
4760: function IncHime(ATime: TDateTime; Hours, Minutes, Seconds, MSecs: Integer): TDateTime; 4761: function IncHour(ATime: TDateTime; Delta: Integer): TDateTime;
4762: function IncMinute(ATime: TDateTime; Delta: Integer): TDateTime;
4763: function IncSecond(ATime: TDateTime; Delta: Integer): TDateTime;
4764: function IncMSec(ATime: TDateTime; Delta: Integer): TDateTime; 4765: function CutTime(ADate: TDateTime): TDateTime; { Set time to 00:00:00:00 }
4766: { String to date conversions }
4767: function GetDateOrder(const DateFormat: string): TDateOrder;
4768: function MonthFromName(const S: string; MaxLen: Byte): Byte; 4769: function StrToDateDef(const S: string; Default: TDateTime): TDateTime;
4770: function StrToDateFmt(const DateFormat, S: string): TDateTime;
4771: function StrToDateFmtDef(const DateFormat, S: string; Default: TDateTime): TDateTime;
4772: //function DefDateFormat(AFourDigitYear: Boolean): string;
4773: //function DefDateMask(BlanksChar: Char; AFourDigitYear: Boolean): string;
4774: function FormatLongDate(Value: TDateTime): string;
4775: function FormatLongDateTime(Value: TDateTime): string;
4776: { end JvDateUtil }
4777: function BufToBinStr(Buf: Pointer; BufSize: Integer): string;
4778: function BinStrToBuf(Value: string; Buf: Pointer; BufSize: Integer): Integer; 4779: { begin JvStrUtils } { ** Common string handling routines ** }
4781: function iconversion(InP: PAnsiChar; OutP: Pointer; InBytes, OutBytes: Cardinal;
       const ToCode, FromCode: AnsiString): Boolean;
4782:
4783: function iconvString(const S, ToCode, FromCode: AnsiString): string;
4784: function iconvWideString(const S: WideString; const ToCode, FromCode: AnsiString): WideString;
4785: function OemStrToAnsi(const S: AnsiString): AnsiString;
4786: function AnsiStrToOem(const S: AnsiString): AnsiString;
       (SENDIF UNIX)
4788: function StrToOem(const AnsiStr: AnsiString): AnsiString;
4789: { StrToOem translates a string from the Windows character set into the OEM character set. }
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4790: function OemToAnsiStr(const OemStr: AnsiString): AnsiString;
          { OemToAnsiStr translates a string from the OEM character set into the Windows character set. }
          function IsEmptyStr(const S: string; const EmptyChars: TSysCharSet): Boolean;
          { EmptyStr returns True if the given string contains only character from the EmptyChars. } function ReplaceStr(const S, Srch, Replace: string): string;
4793 .
4794:
4795: { Returns string with every occurrence of Srch string replaced with Replace string. } 4796: function DelSpace(const S: string): string;
          { DelSpace return a string with all white spaces removed. }
4798: function DelChars(const S: string; Chr: Char): string;
          { DelChars return a string with all Chr characters removed. } function DelBSpace(const S: string): string;
4799:
4800:
          { DelBSpace trims leading spaces from the given string. }
4802:
           function DelESpace(const S: string): string;
4803: { DelESpace trims trailing spaces from the given string. } 4804: function DelRSpace(const S: string): string;
             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. }
4807:
4808: function Tab2Space(const S: string; Numb: Byte): string;
4809: { Tab2Space converts any tabulation character in the given string to the
              Numb spaces characters.
4811: function NPos(const C: string; S: string; N: Integer): Integer;
4812: { NPos searches for a N-th position of substring C in a given string. } 4813: function MakeStr(C: Char; N: Integer): string; overload;
4814: {\finder COMPILER12_UP}
4815: function MakeStr(C: WideChar; N: Integer): WideString; overload;
4816: {$ENDIF !COMPILER12_UP}
4817: 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. } function AddChar(C: Char; const S: string; N: Integer): string;
4818:
           { AddChar return a string left-padded to length N with characters C. }
4820:
4821: function AddCharR(C: Char; const S: string; N: Integer): string;
          { AddCharR return a string right-padded to length N with characters C. }
4822:
4823: function LeftStr(const S: string; N: Integer): string;
          { LeftStr return a string right-padded to length N with blanks. }
4825: function RightStr(const S: string; N: Integer): string;
4826: { RightStr return a string left-padded to length N with blanks. } 4827: function CenterStr(const S: string; Len: Integer): string;
          { CenterStr centers the characters in the string based upon the Len specified.
4829: function CompStr(const S1, S2: string): Integer; { SIPDEF SUPPORTS_INLINE } inline; { SENDIF SUPPORTS_INLINE }
4830: { CompStr compares S1 to S2, with case-sensitivity. The return value is
4831: -1 if S1 < S2, 0 if S1 = S2, or 1 if S1 > S2. }
4832: function CompText(const S1, S2: string):Integer; {$IFDEF SUPPORTS_INLINE} inline; {$ENDIF SUPPORTS_INLINE} 4833: { CompText compares S1 to S2, without case-sensitivity. The return value is the same as for CompStr. }
4834: function Copy2Symb(const S: string; Symb: Char): string;
4835: { Copy2Symb returns a substring of a string S from begining to first character Symb. } 4836: function Copy2SymbDel(var S: string; Symb: Char): string;
4837: { Copy2SymbDel returns a substring of a string S from begining to first
4838:
              character Symb and removes this substring from S. }
4839: function Copy2Space(const S: string): string;
4840: { Copy2Symb returns a substring of a string S from begining to first white space. }
4841: function Copy2SpaceDel(var S: string): string;
4842: { Copy2SpaceDel returns a substring of a string S from begining to first
              white space and removes this substring from S. }
4843:
4844: function AnsiProperCase(const S: string; const WordDelims: TSysCharSet): string; 4845: { Returns string, with the first letter of each word in uppercase,
              all other letters in lowercase. Words are delimited by WordDelims.
4847: function WordCount(const S: string; const WordDelims: TSysCharSet): Integer;
4848: { WordCount given a set of word delimiters, returns number of words in S. } 4849: function WordPosition(const N: Integer; const S: string; const WordDelims: TSysCharSet): Integer;
          Given a set of word delimiters, returns start position of N'th word in S. }
function ExtractWord(N: Integer; const S: string; const WordDelims: TSysCharSet): string;
4852: \textbf{ function } \texttt{ExtractWordPos}(\texttt{N}: \texttt{Integer}; \textbf{const } \texttt{S}: \textbf{ string}; \textbf{const } \texttt{WordDelims}: \texttt{TSysCharSet}; \textbf{var } \texttt{Pos}: \texttt{Integer}): \textbf{ string}; \textbf{ string}; \textbf{ string}: \texttt{String}: \texttt{Stri
4853: function ExtractDelimited(N: Integer; const S: string; const Delims: TSysCharSet): string;
4854: { ExtractWord, ExtractWordPos and ExtractDelimited given a set of word
              delimiters, return the N'th word in S. }
4856: function ExtractSubstr(const S: string; var Pos: Integer; const Delims: TSysCharSet): string;
4857: { ExtractSubstr given a set of word delimiters, returns the substring from S,
4858: that started from position Pos. }
4859: function IsWordPresent(const W, S: string; const WordDelims: TSysCharSet): Boolean;
          { IsWordPresent given a set of word delimiters, returns True if word W is present in string S. }
4861: function QuotedString(const S: string; Quote: Char): string;
4862:
          { QuotedString returns the given string as a quoted string, using the provided Quote character. } function ExtractQuotedString(const S: string; Quote: Char): string;
4863:
4864: { ExtractQuotedString removes the Quote characters from the beginning and
              end of a quoted string, and reduces pairs of Quote characters within quoted string to single character.}
4866: function FindPart(const HelpWilds, InputStr: string): Integer;
4867: { FindPart compares a string with '?' and another, returns the position of HelpWilds in InputStr. } 4868: function IsWild(InputStr, Wilds: string; IgnoreCase: Boolean): Boolean;
          { IsWild compares InputString with WildCard string and returns True if corresponds. }
4870: function XorString(const Key, Src: ShortString): ShortString;
4871: function XorEncode(const Key, Source: string): string;
4872: function XorDecode(const Key, Source: string): string;
4873: { ** Command line routines ** }
           function GetCmdLineArg(const Switch: string; ASwitchChars: TSysCharSet): string;
4875: { ** Numeric string handling routines ** }
4876: function Numb2USA(const S: string): string
4877: { Numb2USA converts numeric string S to USA-format. }
4878: function Dec2Hex(N: Longint; A: Byte): string; {$IFDEF SUPPORTS_INLINE} inline; {$ENDIF SUPPORTS_INLINE}
```

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4879: { Dec2Hex converts the given value to a hexadecimal string representation 4880: with the minimum number of digits (A) specified. }
4881: function Hex2Dec(const S: string): Longint;
       { Hex2Dec converts the given hexadecimal string to the corresponding integer value. }
4882.
4883: function Dec2Numb(N: Int64; A, B: Byte): string;
4884: { Dec2Numb converts the given value to a string representation with the 4885: base equal to B and with the minimum number of digits (A) specified. }
4886: function Numb2Dec(S: string; B: Byte): Int64;
4887: { Numb2Dec converts the given B-based numeric string to the corresponding
4888:
         integer value. }
4889: function IntToBin(Value: Longint; Digits, Spaces: Integer): string;
4890: { IntToBin converts the given value to a binary string representation
4891:
         with the minimum number of digits specified. }
4892: function IntToRoman(Value: Longint): string;
4893: { IntToRoman converts the given value to a roman numeric string representation. } 4894: function RomanToInt(const S: string): Longint;
4895: { RomanToInt converts the given string to an integer value. If the string
4896: doesn't contain a valid roman numeric value, the 0 value is returned.
4897: function FindNotBlankCharPos(const S: string): Integer;
4898: function FindNotBlankCharPosW(const S: WideString): Integer;
4899: function AnsiChangeCase(const S: string): string;
4900: function WideChangeCase(const S: string): string;
4901: function StartsText(const SubStr, S: string): Boolean;
4902: function EndsText(const SubStr, S: string): Boolean;
4903: function DequotedStr(const S: string; QuoteChar: Char = '''): string;
4904: function AnsiDequotedStr(const S: string; AQuote: Char): string; //follow Delphi 2009's "Ansi" prefix
4905: {end JvStrUtils}
4906: {STEDEE UNIX}
4907: function GetTempFileName(const Prefix: AnsiString): AnsiString;
4908: {$ENDIF UNIX}
4909: { begin JvFile
        begin JvFileUtil }
4910: function FileDateTime(const FileName: string): TDateTime;
4911: function FileDateFine(Const FileName: string): DateInner/
4912: function DeleteFilesEx(const FileMasks: array of string): Boolean;
4913: function NormalDir(const DirName: string): string;
4914: function RemoveBackSlash(const DirName: string): string; // only for Windows/DOS Paths
4915: function ValidFileName(const FileName: string): Boolean;
4916: { $IFDEF MSWINDOWS }
4917: function FileLock(Handle: Integer; Offset, LockSize: Longint): Integer; overload;
4918: function FileLock(Handle: Integer; Offset, LockSize: Int64): Integer; overload;
4919: function FileUnlock(Handle: Integer; Offset, LockSize: Longint): Integer; overload;
4920: function FileUnlock(Handle: Integer; Offset, LockSize: Int64): Integer; overload;
4921: { $ENDIF MSWINDOWS }
4922: function GetWindowsDir: string;
4923: function GetSystemDir: string;
4924: function ShortToLongFileName(const ShortName: string): string;
4925: function LongToShortFileName(const LongName: string): string;
4926: function ShortToLongPath(const ShortName: string): string;
4927: function LongToShortPath(const LongName: string): string
4928: {SIFDEF MSWINDOWS
4929: procedure CreateFileLink(const FileName, DisplayName: string; Folder: Integer);
4930: procedure DeleteFileLink(const DisplayName: string; Folder: Integer);
4931: {$ENDIF MSWINDOWS}
4932: { end JvFileUtil }
4933: // Works like PtInRect but includes all edges in comparision
4934: function PtInRectInclusive(R: TRect; Pt: TPoint): Boolean;
4935: // Works like PtInRect but excludes all edges from comparision
4936: function PtInRectExclusive(R: TRect; Pt: TPoint): Boolean;
4937: function FourDigitYear: Boolean; {SIFDEF SUPPORTS_DEPRECATED} deprecated; {SENDIF}
4938: function IsFourDigitYear: Boolean;
4939: { moved from JvJVCLUTils }
4940: //Open an object with the shell (url or something like that)
4941: function OpenObject(const Value: string): Boolean; overload;
4942: function OpenObject(Value: PChar): Boolean; overload;
4943: {$IFDEF MSWINDOWS}
4944: //Raise the last Exception
4945: procedure RaiseLastWin32; overload;
4946: procedure RaiseLastWin32(const Text: string); overload;
4947: //Raise the last Exception with a small comment from your part { GetFileVersion returns the most
       significant 32 bits of a file's binary version number. Typically, this includes the major and minor
       version placed together in one 32-bit Integer. I
4948: function GetFileVersion(const AFileName: string): Cardinal;
4949: {$EXTERNALSYM GetFileVersion}
4950: //Get version of Shell.dll
4951: function GetShellVersion: Cardinal;
4952: {$EXTERNALSYM GetShellVersion}
4953: // CD functions on HW
4954: procedure OpenCdDrive;
4955: procedure CloseCdDrive;
4956: // returns True if Drive is accessible
4957: function DiskInDrive(Drive: Char): Boolean;
4958: {$ENDIF MSWINDOWS}
4959: //Same as linux function ;)
4960: procedure PError(const Text: string);
4961: // execute a program without waiting
4962: procedure Exec(const FileName, Parameters, Directory: string);
4963: // execute a program and wait for it to finish
4964: function ExecuteAndWait(CmdLine:string;const WorkingDirectory:string;Visibility:Integer=SW_SHOW): Int;
4965: // returns True if this is the first instance of the program that is running
```

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4966: function FirstInstance(const ATitle: string): Boolean;
4967: // restores a window based on it's classname and Caption. Either can be left empty
4968: // to widen the search
4969: procedure RestoreOtherInstance(const MainFormClassName, MainFormCaption: string);
4970: // manipulate the traybar and start button
4971: procedure HideTraybar;
4972: procedure ShowTraybar;
4973: procedure ShowStartButton(Visible: Boolean = True);
4974: // (rom) SC_MONITORPOWER is documented as Win 95 only(rom) better do some testing set monitor functions
4975: procedure MonitorOn;
4976: procedure MonitorOff;
4977: procedure LowPower;
4978:
       // send a key to the window named AppName
4979: function SendKey(const AppName: string; Key: Char): Boolean;
4980: { $IFDEF MSWINDOWS }
4981: // returns a list of all win currently visible, the Objects property is filled with their window handle
4982: procedure GetVisibleWindows(List: TStrings);
4983: // associates an extension to a specific program
4984: procedure AssociateExtension(const IconPath, ProgramName, Path, Extension: string);
4985: procedure AddToRecentDocs(const FileName: string);
       function GetRecentDocs: TStringList;
       { $ENDIF MSWINDOWS }
4987:
4988: function CharlsMoney(const Ch: Char): Boolean;
4989: //function StrToCurrDef(const Str: string; Def: Currency): Currency; 4990: function IntToExtended(I: Integer): Extended;
4991: { GetChangedText works out the new text given the current cursor pos & the key pressed
4992:
         It is not very useful in other contexts, but in this unit as it is needed in both MemoEx and TypedEdit }
4993: function GetChangedText(const Text: string; SelStart, SelLength: Integer; Key: Char): string; 4994: function MakeYear4Digit(Year, Pivot: Integer): Integer; 4995: //function StrIsInteger(const S: string): Boolean;
4996: function StrIsFloatMoney(const Ps: string): Boolean;
4997: function StrIsDateTime(const Ps: string): Boolean; 4998: function PreformatDateString(Ps: string): string;
4999: function BooleanToInteger(const B: Boolean): Integer;
5000: function StringToBoolean(const Ps: string): Boolean;
5001: function SafeStrToDateTime(const Ps: string): TDateTime;
5002: function SafeStrToDate(const Ps: string): TDateTime; 5003: function SafeStrToTime(const Ps: string): TDateTime;
5004: function StrDelete(const psSub, psMain: string): string;
         { returns the fractional value of pcValue}
5005:
5006: function TimeOnly(pcValue: TDateTime): TTime;
5007: { returns the integral value of pcValue } 5008: function DateOnly(pcValue: TDateTime): TDate;
5009: type TdtKind = (dtkDateOnly, dtkTimeOnly, dtkDateTime);
5010: const { TDateTime value used to signify Null value}
5011: NullEquivalentDate: TDateTime = 0.0;
5012: function DateIsNull(const pdtValue: TDateTime; const pdtKind: TdtKind): Boolean;
5013: // Replacement for Win32Check to avoid platform specific warnings in D6
5014: function OSCheck(RetVal: Boolean): Boolean;
5015: { Shortens a fully qualified Path name so that it can be drawn with a specified length limit.
5016:
         {\it Same as FileCtrl.} {\it MinimizeName in functionality (but not implementation). Included here to}
5017: not be forced to use FileCtrl unnecessarily }
5018: function MinimizeFileName(const FileName: string; Canvas: TCanvas; MaxLen: Integer): string;
5019: function MinimizeText(const Text: string; Canvas: TCanvas; MaxWidth: Integer): string;
5020: { MinimizeString trunactes long string, S, and appends'...'symbols,if Length of S is more than MaxLen } 5021: function MinimizeString(const S: string; const MaxLen: Integer): string; 5022: procedure RunDll32Internal(Wnd:THandle; const DLLName,FuncName,CmdLine:string;CmdShow:Integer=
       SW_SHOWDEFAULT);
5023: { GetDLLVersion loads DLLName, gets a pointer to DLLVersion function and calls it, returning major and minor version values from the function. Returns False if DLL not loaded or if GetDLLVersion couldn't be
       found. )
5024: function GetDLLVersion(const DLLName: string; var pdwMajor, pdwMinor: Integer): Boolean;
5025: { $ENDIF MSWINDOWS }
5026: procedure ResourceNotFound(ResID: PChar);
5027: function EmptyRect: TRect;
5028: function RectWidth(R: TRect): Integer;
5029: function RectHeight(R: TRect): Integer;
5030: function CompareRect(const R1, R2: TRect): Boolean;
5031: procedure RectNormalize(var R: TRect);
5032: function RectIsSquare(const R: TRect): Boolean;
5033: function RectSquare(var ARect: TRect; AMaxSize: Integer = -1): Boolean;
5034: //If AMaxSize = -1 ,then auto calc Square's max size
5035: {$IFDEF MSWINDOWS}
5036: procedure FreeUnusedOle;
5037: function GetWindowsVersion: string;
5038: function LoadDLL(const LibName: string): THandle;
5039: function RegisterServer(const ModuleName: string): Boolean;
5040: function UnregisterServer(const ModuleName: string): Boolean;
5041: {$ENDIF MSWINDOWS}
5042: { String routines }
5043: function GetEnvVar(const VarName: string): string;
5044: function AnsiUpperFirstChar(const S: string): string; //follow Delphi 2009's example with "Ansi" prefix
5045: function StringToPChar(var S: string): PChar;
5046: function StrPAlloc(const S: string): PChar;
5047: procedure SplitCommandLine(const CmdLine: string; var ExeName, Params: string);
5048: function DropT(const S: string): string;
5049: { Memory routines }
5050: function AllocMemo(Size: Longint): Pointer;
5051: function ReallocMemo(fpBlock: Pointer; Size: Longint): Pointer;
```

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5052: procedure FreeMemo(var fpBlock: Pointer);
5053: function GetMemoSize(fpBlock: Pointer): Longint;
5054: function CompareMem(fpBlock1, fpBlock2: Pointer; Size: Cardinal): Boolean;
5055: { Manipulate huge pointers routines }
5056: procedure HugeInc(var HugePtr: Pointer; Amount: Longint);
5057: procedure HugeDec(var HugePtr: Pointer; Amount: Longint);
5058: function HugeOffset(HugePtr: Pointer; Amount: Longint): Pointer;
5059: procedure HugeMove(Base: Pointer; Dst, Src, Size: Longint)
5060: procedure HMemCpy(DstPtr, SrcPtr: Pointer; Amount: Longint);
5061: function WindowClassName(Wnd: THandle): string;
5062: procedure SwitchToWindow(Wnd: THandle; Restore: Boolean);
5063: procedure ActivateWindow(Wnd: THandle);
5064: procedure ShowWinNoAnimate(Handle: THandle; CmdShow: Integer);
5065: procedure KillMessage(Wnd: THandle; Msg: Cardinal);
5066: { SetWindowTop put window to top without recreating window }
5067: procedure SetWindowTop(const Handle: THandle; const Top: Boolean);
5068: procedure CenterWindow(Wnd: THandle);
5069: function MakeVariant(const Values: array of Variant): Variant;
5070: { Convert dialog units to pixels and backwards }
5071: { SIFDEF MSWINDOWS }
5072: function DialogUnitsToPixelsX(DlgUnits: Word): Word;
5073: function DialogUnitsToPixelsY(DlgUnits: Word): Word;
5074: function PixelsToDialogUnitsX(PixUnits: Word): Word;
5075: function PixelsToDialogUnitsY(PixUnits: Word): Word;
         { SENDIF MSWINDOWS }
5077: function GetUniqueFileNameInDir(const Path, FileNameMask: string): string;
5078: { $IFDEF BCB}
5079: function FindPrevInstance(const MainFormClass: ShortString; const ATitle: string): THandle;
5080: function ActivatePrevInstance(const MainFormClass: ShortString/const ATitle: string): Boolean;
5082: function FindPrevInstance(const MainFormClass, ATitle: string): THandle;
5083: function ActivatePrevInstance(const MainFormClass, ATitle: string): Boolean;
5084: {$ENDIF BCB}
5085: {$IFDEF MSWINDOWS}
         { BrowseForFolderNative displays Browse For Folder dialog
5087: function BrowseForFolderNative(const Handle: THandle; const Title: string; var Folder: string): Boolean;
5088: { $ENDIF MSWINDOWS }
5089: procedure AntiAlias(Clip: TBitmap);
5090: procedure AntiAliasRect(Clip: TBitmap; XOrigin, YOrigin, XFinal, YFinal: Integer);
5091: procedure CopyRectDIBits(ACanvas: TCanvas; const DestRect: TRect;
5092:
           ABitmap: TBitmap; const SourceRect: TRect);
5093: function IsTrueType(const FontName: string): Boolean;
         // Removes all non-numeric characters from AValue and returns the resulting string
5095: function TextToValText(const AValue: string): string;
 5096: \textbf{Function} \ \texttt{ExecRegExpr( const} \ \texttt{ARegExpr, AInputStr} : \ \texttt{RegExprString)} : \ \texttt{boolean} 
5097: Procedure SplitRegExpr( const ARegExpr, AInputStr : RegExprString; APieces : TStrings)
5098: Function ReplaceRegExpr(const ARegExpr,AInputStr,
AReplaceStr:RegExprString;AUseSubstitution:bool):RegExprString;
5099: Function QuoteRegExprMetaChars( const AStr : RegExprString) : RegExprString
5100: Function RegExprSubExpressions(const ARegExpr:string; ASubExprs:TStrings; AExtendedSyntax : boolean) :
5101:
5102: *********upsi JvTFUtils;
5103: Function JExtractYear( ADate : TDateTime) : Word
          Function JExtractMonth( ADate : TDateTime) : Word Function JExtractDay( ADate : TDateTime) : Word
5104:
5105:
          Function ExtractHours( ATime : TDateTime) : Word
5106:
          Function ExtractMins( ATime : TDateTime) :
5107:
                                                                              Word
          Function ExtractSecs( ATime : TDateTime) : Word
5108:
          Function ExtractMSecs( ATime : TDateTime) : Word
Function FirstOfMonth( ADate : TDateTime) : TDateTime
5109:
5110:
          Function GetDayOfNthDOW( Year, Month, DOW, N : Word) : Word
5111:
5112:
          Function GetWeeksInMonth( Year, Month : Word; StartOfWeek : Integer) : Word
5113:
           \begin{tabular}{ll}  \begin
          Procedure IncDOW( var DOW : TTFDayOfWeek; N : Integer)
Procedure IncDays( var ADate : TDateTime; N : Integer)
Procedure IncWeeks( var ADate : TDateTime; N : Integer)
5114:
5115:
          Procedure IncMonths( var ADate : TDateTime; N : Integer)
5117:
          Procedure IncYears( var ADate : TDateTime; N : Integer)
5118:
5119:
          Function EndOfMonth( ADate : TDateTime) : TDateTime
          Function IsFirstOfMonth( ADate : TDateTime) : Boolean
Function IsEndOfMonth( ADate : TDateTime) : Boolean
5120:
5121:
5122:
          Procedure EnsureMonth( Month : Word)
5123:
          Procedure EnsureDOW( DOW : Word)
          Function EqualDates( D1, D2 : TDateTime) : Boolean Function Lesser( N1, N2 : Integer) : Integer
5124:
5125:
5126:
          Function Greater( N1, N2 : Integer) : Integer
5127:
          \textbf{Function} \ \ \texttt{GetDivLength} ( \ \ \texttt{TotalLength}, \ \ \texttt{DivCount}, \ \ \texttt{DivNum} \ : \ \ \texttt{Integer}) \ : \ \ \texttt{Integer}
5128:
          Function GetDivNum( TotalLength, DivCount, X : Integer) : Integer
          Function GetDivStart( TotalLength, DivCount, DivNum : Integer) : Integer
5129:
          Function DOWToBorl( ADOW : TTFDayOfWeek) : Integer
Function BorlToDOW( BorlDOW : Integer) : TTFDayOfWeek
Function DateToDOW( ADate : TDateTime) : TTFDayOfWeek
5131:
5132:
          Procedure CalcTextPos( HostRect : TRect; var TextLeft, TextTop:Integer; var TextBounds : TRect;
5133:
         AFont:TFont;AAngle: Integer; HAlign : TAlignment; VAlign : TJvTFVAlignment; ATxt : string)
5134: Procedure DrawAngleText( ACanvas: TCanvas; HostRect: TRect; var TextBounds: TRect; AAngle: Integer;
HAlign: TAlignment; VAlign: TJvTFVAlignment; ATxt: string)
5135: Function JRectWidth( ARect: TRect): Integer
5136: Function JRectHeight( ARect: TRect): Integer
5137: Function JEmptyRect : TRect
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5138:
         Function IsClassByName(Obj: TObject; ClassName: string): Boolean
5139:
5140: procedure SIRegister MSysUtils(CL: TPSPascalCompiler);
5141:
        begin
         Procedure HideTaskBarButton( hWindow : HWND)
5142:
         Function msLoadStr( ID : Integer) : String
Function msFormat( fmt : String; params : array of const) : String
5143:
5144:
         Function msFileExists( const FileName : String) : Boolean
5145:
5146:
         Function msIntToStr( Int : Int64) : String
5147:
         Function msStrPas( const Str : PChar) : String
Function msRenameFile( const OldName, NewName : String) : Boolean
5148:
         Function CutFileName( s : String) : String
5149:
5150:
         Function GetVersionInfo( var VersionString : String) : DWORD
         Function FormatTime( t : Cardinal) : String
Function msCreateDir( const Dir : string) : Boolean
5151:
5152:
5153:
         Function SetAutoRun( NeedAutoRun: Boolean; AppName: String): Boolean
         Function SetTreeViewStyle( const hTV : HWND; dwNewStyle : dword) : DWORD
5154:
5155
         Function msStrLen( Str : PChar) : Integer
         Function msbirlen( Str : Penar) : Integer
Function msbirectoryExists( const Directory : String) : Boolean
Function GetFolder( hWnd : hWnd; RootDir : Integer; Caption : String) : String
5156:
5157:
         Function SetBlendWindow( hWnd : HWND; AlphaBlend : Byte) : LongBool
         Function EditWindowProc( hWnd : HWND; Msg : UINT; wParam : WPARAM; lParam : LPARAM) : LRESULT
5159:
5160:
         Procedure SetEditWndProc( hWnd : HWND; ptr : TObject)
         Function GetTextFromFile(Filename: String): string
Function IsTopMost(hWnd: HWND): Bool // 'LWA_ALPHA', 'LongWord').SetUInt($00000002);
5161:
5162:
5163:
         Function msStrToIntDef( const s : String; const i : Integer) : Integer
5164:
         Function msStrToInt( s : String) : Integer
         Function GetItemText( hDlg : THandle; ID : DWORD) : String
5165:
5166: end;
5167:
5168:
        procedure SIRegister_ESBMaths2(CL: TPSPascalCompiler);
5169: begin
          //TDynFloatArray', 'array of Extended
TDynLWordArray', 'array of LongWord
TDynLIntArray', 'array of LongInt
5170:
5171:
5172:
5173:
          TDynFloatMatrix', 'array of TDynFloatArray
          TDynLWordMatrix', 'array of TDynLWordArray
TDynLIntMatrix', 'array of TDynLIntArray
5174:
5175:
5176:
         Function SquareAll( const X : TDynFloatArray) : TDynFloatArray
5177:
         Function InverseAll( const X : TDynFloatArray) : TDynFloatArray
5178:
         \textbf{Function} \  \, \texttt{LnAll(} \  \, \textbf{const} \  \, \texttt{X} \  \, \texttt{TDynFloatArray)} \  \, \texttt{:} \  \, \texttt{TDynFloatArray}) \\
         Function Log10All( const X : TDynFloatArray) : TDynFloatArray
5179:
         Function LinearTransform( const X : TDynFloatArray; Offset, Scale : Extended) : TDynFloatArray
5180:
         Function AddVectors( const X, Y : TDynFloatArray) : TDynFloatArray

Function SubVectors( const X, Y : TDynFloatArray) : TDynFloatArray
5182:
         Function MultVectors( const X, Y : TDynFloatArray) : TDynFloatArray

Function DotProduct( const X, Y : TDynFloatArray) : Extended
5183:
5184:
         Function MNorm( const X : TDynFloatArray) : Extended
5185:
5186:
         Function MatrixIsRectangular( const X : TDynFloatMatrix) : Boolean
         Procedure MatrixDimensions(const X:TDynFloatMatrix;var Rows,Columns:LongWord;var Rectangular:Boolean;
5187:
5188:
         Function MatrixIsSquare( const X : TDvnFloatMatrix) : Boolean
         Function MatricesSameDimensions( const X, Y : TDynFloatMatrix)
5189:
         Function AddMatrices(const X, Y: TDynFloatMatrix): TDynFloatMatrix

Procedure AddToMatrix(var X: TDynFloatMatrix; const Y: TDynFloatMatrix)
5190:
5191:
         Function SubtractMatrices( const X, Y: TDynFloatMatrix): TDynFloatMatrix

Procedure SubtractFromMatrix( var X: TDynFloatMatrix; const Y: TDynFloatMatrix)
5192:
5193:
         Function MultiplyMatrixByConst( const X : TDynFloatMatrix; const K : Extended) : TDynFloatMatrix
Procedure MultiplyMatrixByConst2( var X : TDynFloatMatrix; const K : Extended);
5194:
5195:
         Function MultiplyMatrices( const X, Y : TDynFloatMatrix) : TDynFloatMatrix;
Function TransposeMatrix( const X : TDynFloatMatrix) : TDynFloatMatrix;
Function GrandMean( const X : TDynFloatMatrix; var N : LongWord) : Extended
5196:
5197:
5198:
5199:
5200:
5201:
        procedure SIRegister ESBMaths(CL: TPSPascalCompiler);
5202: begin
          'ESBMinSingle', 'Single').setExtended( 1.5e-45);
         'ESBMaxSingle', 'Single').setExtended( 3.4e+38);
'ESBMinDouble', 'Double').setExtended( 5.0e-324);
5204:
5205:
5206:
          'ESBMaxDouble', 'Double').setExtended( 1.7e+308);
         'ESBMinExtended', 'Extended').setExtended( 3.6e-4951);
'ESBMaxExtended', 'Extended').setExtended( 1.1e+4932);
5207:
5208:
5209:
          'ESBMinCurrency','Currency').SetExtended( - 922337203685477.5807);
          'ESBMaxCurrency','Currency').SetExtended( 922337203685477.5807);
5210:
          "ESBSqrt2', 'Extended').setExtended( 1.4142135623730950488);
'ESBSqrt3', 'Extended').setExtended( 1.7320508075688772935);
5211:
5212:
5213:
         'ESBSqrt5','Extended').setExtended( 2.2360679774997896964);
         'ESBSqrt10','Extended').setExtended(3.1622776601683793320);
'ESBSqrtPi','Extended').setExtended(1.77245385090551602729);
5214:
5215:
          'ESBCbrt2',
                          Extended').setExtended( 1.2599210498948731648);
5216:
         'ESBCbrt2', 'Extended').setExtended( 1.2599210496948731646), 'ESBCbrt3', 'Extended').setExtended( 1.4422495703074083823); 'ESBCbrt10', 'Extended').setExtended( 2.1544346900318837219); 'ESBCbrt100', 'Extended').setExtended( 4.6415888336127788924); 'ESBCbrtPi', 'Extended').setExtended( 1.4645918875615232630);
5218:
5219:
5220:
          'ESBInvSqrt2','Extended').setExtended( 0.70710678118654752440);
5221:
          'ESBInvSqrt3','Extended').setExtended( 0.57735026918962576451);
5222:
         'ESBInvSqrt5', Extended').setExtended( 0.44721359549995793928);
'ESBInvSqrtPi', 'Extended').setExtended( 0.56418958354775628695);
'ESBInvCbrtPi', 'Extended').setExtended( 0.68278406325529568147);
5223:
5224:
5225:
        'ESBe', 'Extended').setExtended( 2.7182818284590452354);
```

```
5227:
        'ESBe2', 'Extended').setExtended( 7.3890560989306502272);
         'ESBePi', 'Extended').setExtended( 23.140692632779269006);
5228:
          ESBePiOn2', 'Extended').setExtended( 4.8104773809653516555);
5230:
         'ESBePiOn4','Extended').setExtended( 2.1932800507380154566);
        'ESBLn2','Extended').setExtended( 0.69314718055994530942);
'ESBLn10','Extended').setExtended( 2.30258509299404568402);
5231:
5232:
         ESBLnPi', 'Extended').setExtended( 1.14472988584940017414);
5233:
        'ESBLog10Base2','Extended').setExtended( 3.3219280948873623478);
'ESBLog2Base10','Extended').setExtended( 0.30102999566398119521);
5234:
5235:
         'ESBLog3Base10','Extended').setExtended( 0.47712125471966243730);
5236:
          ESBLogPiBase10','Extended').setExtended(0.4971498726941339);
5237:
         'ESBLogEBase10','Extended').setExtended( 0.43429448190325182765);
         'ESBPi', 'Extended').setExtended( 3.1415926535897932385);
'ESBInvPi', 'Extended').setExtended( 3.1830988618379067154e-1);
'ESBTwoPi', 'Extended').setExtended( 6.2831853071795864769);
5239:
5240:
5241:
5242:
          ESBThreePi', 'Extended').setExtended( 9.4247779607693797153);
         'ESBPi2','Extended').setExtended( 9.8696044010893586188);
5243:
        'ESBPiTOE','Extended').setExtended( 22.459157718361045473);
'ESBPiOn2','Extended').setExtended( 1.5707963267948966192);
5244 .
5245:
5246:
         'ESBPiOn3','Extended').setExtended( 1.0471975511965977462);
          ESBPiOn4', 'Extended').setExtended( 0.7853981633974483096);
5247:
        'ESBThreePiOn2','Extended').setExtended( 4.7123889803846898577);
5248:
         'ESBFourPiOn3', 'Extended').setExtended( 4.1887902047863909846);
'ESBFourPiOn3', 'Extended').setExtended( 9223372036854775808.0);
5249:
5250:
         ESBOneRadian', 'Extended').setExtended( 57.295779513082320877);
'ESBOneDegree', 'Extended').setExtended( 1.7453292519943295769E-2);
5251:
5252:
5253:
         'ESBOneMinute', 'Extended').setExtended( 2.9088820866572159615E-4);
         'ESBOneSecond', 'Extended').setExtended( 4.8481368110953599359E-6);
5254:
        'ESBGamma', 'Extended').setExtended( 0.57721566490153286061);
'ESBLnRt2Pi', 'Extended').setExtended( 9.189385332046727E-1);
5255:
5256:
         //LongWord', 'Car
TBitList', 'Word
5257:
                         'Cardinal
5258:
        Function UMul( const Num1, Num2 : LongWord) : LongWord
5259:
5260:
        Function UMulDiv2p32( const Num1, Num2 : LongWord) : LongWord
        Function UMulDiv( const Num1, Num2, Divisor : LongWord) : LongWord
5261:
5262:
        Function UMulMod( const Num1, Num2, Modulus : LongWord) : LongWord
5263:
        Function SameFloat( const X1, X2 : Extended) : Boolean Function FloatIsZero( const X : Extended) : Boolean
5264:
        Function FloatIsPositive( const X : Extended) : Boolean Function FloatIsNegative( const X : Extended) : Boolean
5265:
5266:
5267:
        Procedure IncLim( var B : Byte; const Limit : Byte)
        Procedure IncLimSI( var B : ShortInt; const Limit : ShortInt)
5268:
        Procedure IncLimW( var B : Word; const Limit : Word)
5269:
        Procedure IncLimI( var B : Integer; const Limit : Integer)
5270:
5271:
        Procedure IncLimL( var B : LongInt; const Limit : LongInt)
        Procedure DecLim( var B : Byte; const Limit : Byte)
5272:
        Procedure DecLimSI( var B : ShortInt; const Limit : ShortInt)
5273:
        Procedure DecLimW( var B : Word; const Limit : Word)
5275:
        Procedure DecLimI( var B : Integer; const Limit : Integer)
5276:
        Procedure DecLimL( var B : LongInt; const Limit : LongInt)
5277:
        Function MaxB( const B1, B2 : Byte) : Byte
5278:
        Function MinB( const B1, B2 : Byte)
                                                     : Byte
        Function MaxSI( const B1, B2 : ShortInt) : ShortInt
5279:
5280:
        Function MinSI( const B1, B2 : ShortInt) : ShortInt
        Function MaxW( const B1, B2 : Word) : Word
Function MinW( const B1, B2 : Word) : Word
5281:
5282:
5283:
        Function esbMaxI( const B1, B2 : Integer) : Integer
        Function esbMinI( const B1, B2 : Integer) : Integer
5284:
        Function MaxL( const B1, B2 : LongInt) : LongInt Function MinL( const B1, B2 : LongInt) : LongInt
5285:
5286:
        Procedure SwapB( var B1, B2 : Byte)
5287:
5288:
        Procedure SwapSI( var B1, B2 : ShortInt)
5289:
        Procedure SwapW( var B1, B2 : Word)
5290:
        Procedure SwapI( var B1, B2 : SmallInt)
        Procedure SwapL( var B1, B2 : LongInt)
5291:
        Procedure SwapI32( var B1, B2 : Integer)
5292:
        Procedure SwapC( var B1, B2 : LongWord)
5293:
5294:
        Procedure SwapInt64( var X, Y : Int64)
5295:
        \textbf{Function} \ \texttt{esbSign}( \ \textbf{const} \ \texttt{B} \ : \ \texttt{LongInt}) \ : \ \texttt{ShortInt}
        Function Max4Word( const X1, X2, X3, X4 : Word) : Word
Function Min4Word( const X1, X2, X3, X4 : Word) : Word
5296:
5297:
5298:
        Function Max3Word( const X1, X2, X3 : Word) : Word
        Function Min3Word( const X1, X2, X3 : Word) : Word
5299:
5300:
        Function MaxBArray( const B : array of Byte) : Byte
        Function MaxWArray( const B : array of Word) : Word
5301:
        Function MaxSIArray( const B : array of ShortInt) : ShortInt
5302:
        Function MaxIArray( const B : array of Integer) : Integer
Function MaxLArray( const B : array of LongInt) : LongInt
5303:
5304:
        Function MinBArray( const B : array of Byte) : Byte
5305:
        Function MinWArray( const B : array of Word) : Word
5306:
5307:
        Function MinSIArray( const B : array of ShortInt) : ShortInt
5308:
        Function MinIArray( const B : array of Integer) : Integer
        Function MinLArray( const B : array of LongInt) : LongInt
5309:
        Function SumBArray( const B : array of Byte) : Byte
5310:
        Function SumBArray2( const B : array of Byte) : Word
5311:
        Function SumSlArray( const B : array of ShortInt) : ShortInt
Function SumSlArray2( const B : array of ShortInt) : Integer
5312:
5313:
        Function SumWArray( const B : array of Word) : Word

Function SumWArray( const B : array of Word) : LongInt
5314:
```

```
5316:
        Function SumIArray( const B : array of Integer) : Integer
        Function SumLArray( const B : array of LongInt) : LongInt
5317:
         Function SumLWArray( const B : array of LongWord) : LongWord
5319:
        Function ESBDigits( const X : LongWord) : Byte
5320:
        Function BitsHighest( const X : LongWord) : Integer
        Function ESBBitsNeeded( const X : LongWord) : Integer
5321:
        Function esbGCD( const X, Y : LongWord) : LongWord
Function esbLCM( const X, Y : LongInt) : Int64
5322:
5323:
5324:
         //Function esbLCM( const X, Y : LongInt) : LongInt
5325:
        Function RelativePrime( const X, Y : LongWord) : Boolean
5326:
        Function Get87ControlWord : TBitList
        Procedure Set87ControlWord( const CWord : TBitList)
        Procedure SwapExt( var X, Y : Extended)
Procedure SwapDbl( var X, Y : Double)
5328:
5329:
        Procedure SwapSing( var X, Y : Single)
Function esbSgn( const X : Extended) : ShortInt
5330:
5331:
        Function Distance( const X1, Y1, X2, Y2 : Extended) : Extended
5332:
        Function ExtMod( const X, Y : Extended) : Extended Function ExtRem( const X, Y : Extended) : Extended
5333:
5334:
        Function CompMOD( const X, Y : Comp) : Comp
5335:
         Procedure Polar2XY( const Rho, Theta : Extended; var X, Y : Extended)
        Procedure XY2Polar( const X, Y : Extended; var Rho, Theta : Extended)
5337:
5338:
        \textbf{Function} \  \, \texttt{DMS2Extended( const Degs, Mins, Secs: Extended): Extended}
        Procedure Extended2DMS( const X : Extended; var Degs, Mins, Secs : Extended)
5339:
        Function MaxExt( const X, Y : Extended) : Extended
Function MinExt( const X, Y : Extended) : Extended
5340:
5341:
5342:
        Function MaxEArray( const B : array of Extended) : Extended Function MinEArray( const B : array of Extended) : Extended Function MaxSArray( const B : array of Single) : Single
5343:
5344:
        Function MinSArray( const B : array of Single) : Single
5345:
        Function MaxCArray( const B : array of Comp) : Comp
5346:
        Function MinCArray( const B : array of Comp) : Comp
5347:
        Function SumSArray( const B : array of Single) : Single
5348:
        Function SumEArray( const B : array of Extended) : Extended
Function SumSqEArray( const B : array of Extended) : Extended
5349:
5351:
        Function SumSqDiffEArray( const B : array of Extended; Diff : Extended) : Extended
5352:
        \textbf{Function} \  \, \texttt{SumXYEArray}( \  \, \textbf{const} \  \, \texttt{X}, \  \, \texttt{Y} \  \, : \  \, \textbf{array of} \  \, \texttt{Extended}) \  \, : \  \, \texttt{Extended}
        Function SumCArray( const B : array of Comp) : Comp
Function FactorialX( A : LongWord) : Extended
5353:
5354:
        Function PermutationX( N, R : LongWord) : Extended
Function esbBinomialCoeff( N, R : LongWord) : Extended
5355:
5356:
        Function IsPositiveEArray( const X : array of Extended) : Boolean
Function esbGeometricMean( const X : array of Extended) : Extended
5357:
5358:
        Function esbHarmonicMean( const X : array of Extended) : Extended
        Function ESBMean( const X : array of Extended) : Extended
Function esbSampleVariance( const X : array of Extended) : Extended
5360:
5361:
        Function esbPopulationVariance( const X : array of Extended) : Extended
5362:
        Procedure esbSampleVarianceAndMean( const X : array of Extended; var Variance, Mean : Extended)
5363:
        Procedure esbPopulationVarianceAndMean( const X : array of Extended; var Variance, Mean : Extended)
5364:
        Function GetMedian( const SortedX : array of Extended) : Extended
Function GetMode( const SortedX : array of Extended; var Mode : Extended) : Boolean
5365:
5366:
5367:
        Procedure GetQuartiles( const SortedX : array of Extended; var Q1, Q3 : Extended)
        Function ESBMagnitude( const X : Extended) : Integer
5368:
        Function ESBTan( Angle : Extended) : Extended
Function ESBCot( Angle : Extended) : Extended
5369:
5370:
        Function ESBCosec( const Angle : Extended) : Extended
Function ESBSec( const Angle : Extended) : Extended
5371:
5372:
5373:
        Function ESBArcTan( X, Y : Extended) : Extended
5374:
        Procedure ESBSinCos( Angle : Extended; var SinX, CosX : Extended)
        Function ESBArcCos( const X : Extended) : Extended Function ESBArcSin( const X : Extended) : Extended
5375:
5376:
         Function ESBArcSec( const X : Extended) : Extended
5377:
5378:
        Function ESBArcCosec( const X : Extended) : Extended
        Function ESBLog10( const X : Extended) : Extended Function ESBLog2( const X : Extended) : Extended
5379:
5380:
        Function ESBLogBase(const X, Base: Extended): Extended
Function Pow2(const X: Extended): Extended
5381:
5382:
5383:
        Function IntPow( const Base : Extended; const Exponent : LongWord) : Extended
        Function ESBIntPower( const X : Extended; const N : LongInt) : Extended
5384:
        Function XtoY( const X, Y : Extended) : Extended
5385:
        Function esbTenToY( const Y : Extended) : Extended
5386:
5387:
        Function esbTwoToY( const Y : Extended) : Extended
5388:
        Function LogXtoBaseY( const X, Y : Extended) : Extended
        Function esbISqrt( const I : LongWord) : Longword
5389:
        Function ILog2( const I : LongWord) : LongWord
Function IGreatestPowerOf2( const N : LongWord) : LongWord)
5390:
5391:
        Function ESBArCosh( X : Extended) : Extended
Function ESBArSinh( X : Extended) : Extended
5392:
5393:
        Function ESBArTanh( X : Extended) : Extended
5394:
        Function ESBCosh( X : Extended) : Extended
Function ESBSinh( X : Extended) : Extended
5395:
5396:
        Function ESBTanh( X : Extended) : Extended
5397:
        Function InverseGamma ( const X : Extended) : Extended
5398:
5399:
        Function esbGamma( const X : Extended) : Extended
        Function esbLnGamma( const X : Extended) : Extended Function esbBeta( const X, Y : Extended) : Extended
5400:
5401:
5402:
        Function IncompleteBeta( X : Extended; P, O : Extended) : Extended
5403: end;
5404:
```

```
5406: Function Add_uint64_WithCarry( x, y : uint64; var Carry : Boolean) : uint64
5407: Function Add_uint32_WithCarry( x, y : uint32; var Carry : Boolean) : uint32
5408: Function Subtract_wint64_WithBorrow( x, y : wint64; var Borrow : Boolean) : wint64
5409: Function Subtract_uint32_WithBorrow( x, y : uint32; var Borrow : Boolean) : uint32
5410: Function BitCount_8( Value : byte) : integer 5411: Function BitCount_16( Value : uint16) : integer
5412: Function BitCount_32( Value : uint32) : integer
5413: Function BitCount_64( Value : uint64) : integer
5414: Function CountSetBits_64( Value : uint64) : integer TPrimalityTestNoticeProc', 5415: Procedure ( CountPrimalityTests : integer)
        Function gcd( a, b : THugeCardinal) : THugeCardinal
5417:
        Function lcm( a, b : THugeCardinal) : THugeCardinal
        Function isCoPrime( a, b : THugeCardinal) : boolean
5418:
        Function isProbablyPrime(p: THuqeCardinal;OnProgress: TProgress; var wasAborted: boolean): boolean
5419:
        Function hasSmallFactor( p : THugeCardinal) : boolean
        //Function GeneratePrime( NumBits : integer; OnProgress : TProgress; OnPrimalityTest:
       TPrimalityTestNoticeProc; PassCount: integer; Pool1:TMemoryStreamPool;var Prime: THugeCardinal; var
       NumbersTested: integer) : boolean
       Function Inverse( Prime, Modulus : THugeCardinal) : THugeCardinal
        Const('StandardExponent', 'LongInt').SetInt( 65537);
        //Procedure Compute_RSA_Fundamentals_2Factors( RequiredBitLengthOfN : integer; Fixed_e:uint64; var N, e, d,
5424:
        Totient : TProgress;
       OnPrimalityTest:TPrimalityTestNoticeProc;GeneratePrimePassCount:integer;Pool1:TMemoryStreamPool;var Numbers
        Function Validate_RSA_Fundamentals( var N, e, d, Totient : THugeCardinal) : boolean')
5426:
5427:
       procedure SIRegister_xrtl_math_Integer(CL: TPSPascalCompiler);
5428: begin
         AddTypeS('TXRTLInteger', 'array of Integer
5429:
          AddClassN(FindClass('TOBJECT'), 'EXRTLMathException
5431:
          (FindClass('TOBJECT'), 'EXRTLExtendInvalidArgument
         AddClassN(FindClass('TOBJECT'),'EXRTLDivisionByZero
AddClassN(FindClass('TOBJECT'),'EXRTLExpInvalidArgument
5432:
5433:
          AddClassN(FindClass('TOBJECT'),'EXRTLINvalidRadix
AddClassN(FindClass('TOBJECT'),'EXRTLInvalidRadixDigit
5434:
5435:
         AddClassN(FindClass('TOBJECT'), 'EXRTLRootInvalidArgument
5436:
         'BitsPerByte', 'LongInt').SetInt( 8);
BitsPerDigit', 'LongInt').SetInt( 32);
SignBitMask', 'LongWord').SetUInt( $80000000);
5437:
5438:
5439:
        Function XRTLDataBits( const Alinteger: TXRTLInteger): Integer
Function XRTLDataBits( const Alinteger: TXRTLInteger): Integer
Function XRTLDataBits( const Alinteger: TXRTLInteger): Integer
Procedure XRTLBitPosition( const BitIndex: Integer; var Index, Mask: Integer)
5440:
5441:
5442:
5443:
        Procedure XRTLBitSet( var AInteger : TXRTLInteger; const BitIndex : Integer)
5444:
        Procedure XRTLBitReset( var AInteger : TXRTLInteger; const BitIndex : Integer)
Function XRTLBitGet( const AInteger : TXRTLInteger; const BitIndex : Integer) : Integer
5445:
5446:
        Function XRTLBitGetBool( const AInteger: TXRTLInteger; const BitIndex: Integer): Boolean
5447:
        Function XRTLExtend(const AInteger:TXRTLInteger;ADataBits:Integer;Sign:Int;var AResult:TXRTLInteger):Int;
5448:
        Function XRTLZeroExtend(const AInteger:TXRTLInteger;ADataBits:Integer; var AResult:TXRTLInteger):Integer;Function XRTLSignExtend(const AInteger:TXRTLInteger; ADataBits:Integer;var AResult:TXRTLInteger):Integer;
5449:
5450:
        Function XRTLSignStrip(const AInteger:TXRTLInteger;var AResult:TXRTLInteger;const AMinDataBits:Int):Int;
5451:
        Procedure XRTLNot( const AInteger : TXRTLInteger; var AResult : TXRTLInteger)
5452:
        Procedure XRTLOr( const AInteger1, AInteger2 : TXRTLInteger; var AResult : TXRTLInteger
5453:
        Procedure XRTLAnd( const AInteger1, AInteger2 : TXRTLInteger; var AResult : TXRTLInteger)
Procedure XRTLXor( const AInteger1, AInteger2 : TXRTLInteger; var AResult : TXRTLInteger)
Function XRTLSign( const AInteger : TXRTLInteger) : Integer
5454:
5455:
5456:
        Procedure XRTLZero( var AInteger : TXRTLInteger)
5457:
        Procedure XRTLOne( var AInteger : TXRTLInteger)
5458:
        Procedure XRTLMOne( var AInteger : TXRTLInteger)
Procedure XRTLTwo( var AInteger : TXRTLInteger)
5459:
5460:
        Function XRTLNeg( const AInteger: TXRTLInteger; var AResult: TXRTLInteger): Integer
5461:
5462:
        Function XRTLAbs( const AInteger: TXRTLInteger; var AResult: TXRTLInteger): Integer
        Procedure XRTLFullSum( const A, B, C : Integer; var Sum, Carry : Integer)
Function XRTLAdd( const AInteger1, AInteger2 : TXRTLInteger; var AResult : TXRTLInteger) : Integer;
Function XRTLAdd1(const AInteger1:TXRTLInteger;const AInteger2:Int64;var AResult:TXRTLInteger):Integer;
5463:
5464:
5465:
        Function XRTLSub( const AInteger1, AInteger2 : TXRTLInteger; var AResult : TXRTLInteger) : Integer;
5466:
        Function XRTLSub1( const AInteger1:TXRTLInteger; const AInteger2:Int64; var AResult:TXRTLInteger):Integer;
5467:
5468:
        \textbf{Function} \  \, \texttt{XRTLCompare( const} \  \, \texttt{AInteger1, AInteger2: TXRTLInteger): Integer;}
        Function XRTLComparel( const AInteger1 : TXRTLInteger; const AInteger2 : Int64) : Integer;
Function XRTLUMul( const AInteger1, AInteger2 : TXRTLInteger; var AResult : TXRTLInteger) : Integer
Function XRTLMulAdd(const AInteger1, AInteger2, AInteger3:TXRTLInteger; var AResult:TXRTLInteger):Integer
5469:
5470:
5471:
5472:
        Function XRTLMul( const AInteger1, AInteger2 : TXRTLInteger; var AResult : TXRTLInteger) : Integer
        Procedure XRTLDivMod( const AInteger1, AInteger2 : TXRTLInteger; var QResult, RResult : TXRTLInteger)
Procedure XRTLSqr( const AInteger : TXRTLInteger; var AResult : TXRTLInteger)
5473:
5474:
        Procedure XRTLSqrt( const AInteger : TXRTLInteger; var AResult : TXRTLInteger)
        Procedure XRTLRoot( const AInteger1, AInteger2: TXRTLInteger; var AResult: TXRTLInteger)
5476:
5477:
        Procedure XRTLRootApprox(const AInteger1,AInteger2:TXRTLInteger;var ALowApproxResult,
       AHighApproxResult:TXRTLInteger)
       Procedure XRTLURootApprox(const AInteger1, AInteger2:TXRTLInteger; var ALowApproxResult,
       AHighApproxResult:TXRTLInteger);
5479:
        Procedure XRTLExp( const AInteger1, AInteger2 : TXRTLInteger; var AResult : TXRTLInteger)
        Procedure XRTLExpMod( const AInteger1, AInteger2, AInteger3 : TXRTLInteger; var AResult: TXRTLInteger)
5480:
        Procedure XRTLSLBL(const AInteger: TXRTLInteger; const BitCount:Integer; var AResult: TXRTLInteger)
Procedure XRTLSABL(const AInteger: TXRTLInteger; const BitCount:Integer; var AResult: TXRTLInteger)
5481:
5482:
        Procedure XRTLRCBL(const AInteger: TXRTLInteger; const BitCount:Integer; var AResult: TXRTLInteger)
5483:
5484:
        Procedure XRTLSLDL(const AInteger:TXRTLInteger;const DigitCount:Integer; var AResult:TXRTLInteger)
        Procedure XRTLSADL(const AInteger: TXRTLInteger; const DigitCount:Integer; var AResult: TXRTLInteger)
Procedure XRTLRCDL(const AInteger:TXRTLInteger; const DigitCount:Integer; var AResult: TXRTLInteger)
5485:
5486:
        Procedure XRTLSLBR(const AInteger: TXRTLInteger; const BitCount:Integer; var AResult: TXRTLInteger)
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5488:
        Procedure XRTLSABR(const AInteger: TXRTLInteger; const BitCount:Integer; var AResult: TXRTLInteger)
        Procedure XRTLRCBR(const Ainteger: TXRTLInteger; const BitCount:Integer; var AResult: TXRTLInteger)
5489:
        Procedure XRTLSLDR(const AInteger:TXRTLInteger; const DigitCount:Integer; var AResult: TXRTLInteger)
5491:
        Procedure XRTLSADR(const AInteger: TXRTLInteger; const DigitCount:Integer;var AResult: TXRTLInteger)
5492:
        Procedure XRTLRCDR(const AInteger: TXRTLInteger;const DigitCount:Integer;var AResult: TXRTLInteger)
        Function XRTLToHex( const AInteger: TXRTLInteger; Digits: Integer): string
Function XRTLToBin( const AInteger: TXRTLInteger; Digits: Integer): string
5493:
5494:
        Function XRTLToString( const AInteger: TXRTLInteger; Radix: Integer; Digits: Integer): string
5495:
        Procedure XRTLFromHex( const Value : string; var AResult : TXRTLInteger)
Procedure XRTLFromBin( const Value : string; var AResult : TXRTLInteger)
5496:
5497:
        Procedure XRTLFromString( const Value : string; var AResult : TXRTLInteger; Radix : Integer)
5498:
        Procedure XRTLAssign( const AInteger : TXRTLInteger; var AResult : TXRTLInteger);
5499:
        Procedure XRTLAssign1( const Value : Integer; var AResult : TXRTLInteger);
Procedure XRTLAssign2( const Value : Int64; var AResult : TXRTLInteger);
Procedure XRTLAppend( const ALow, AHigh : TXRTLInteger; var AResult : TXRTLInteger)
5500:
5501:
5502:
5503:
        Procedure XRTLSplit(const AInteger: TXRTLInteger; var ALow, AHigh: TXRTLInteger; LowDigits: Integer)
        Function XRTLGetMSBitIndex( const AInteger : TXRTLInteger) : Integer
5504:
        Procedure XRTLMinMax(const AInteger1, AInteger2: TXRTLInteger; var AMinResult, AMaxResult: TXRTLInteger)
Procedure XRTLMin( const AInteger1, AInteger2: TXRTLInteger; var AResult: TXRTLInteger);
Procedure XRTLMin1(const AInteger1: TXRTLInteger; const AInteger2:Integer; var AResult: TXRTLInteger);
5505:
5506:
5507:
        Procedure XRTLMax( const AInteger1, AInteger2: TXRTLInteger; var AResult: TXRTLInteger);
5508:
        Procedure XRTLMax1(const AInteger1:TXRTLInteger; const AInteger2:Integer; var AResult:TXRTLInteger);
5509:
        Procedure XRTLGCD( const AInteger1, AInteger2 : TXRTLInteger; var AResult : TXRTLInteger)
Procedure XRTLSwap( var AInteger1, AInteger2 : TXRTLInteger)
5510:
5511:
        Procedure XRTLFactorial( const AInteger: TXRTLInteger: var AResult: TXRTLInteger)

Procedure XRTLFactorialMod( const AInteger: TXRTLInteger: var AResult: TXRTLInteger)
5512:
5513:
5514:
5515:
       procedure SIRegister_JvXPCoreUtils(CL: TPSPascalCompiler);
5516:
5517:
       begin
        Function JvXPMethodsEqual( const Method1, Method2 : TMethod) : Boolean
5518:
       Procedure JvXPDrawLine( const ACanvas: TCanvas; const X1, Y1, X2, Y2: Integer)
Procedure JvXPCreateGradientRect( const AWidth, AHeight: Integer; const StartColor, EndColor: TColor;
5519:
5520:
       const Colors:TJvXPGradientColors;const Style:TJvXPGradientStyle;const Dithered:Boolean;var Bitmap:TBitmap);
        Procedure JvXPAdjustBoundRect(const BorderWidth:Byte; const ShowBoundLines:Boolean; const
       BoundLines: TJvXPBoundLines; var Rect : TRect)
5522: Procedure JvXPDrawBoundLines(const ACan:TCanvas;const BoundLines:TJvXPBoundLines;const
       AColor: TColor; const Rect: TRect);
       Procedure JvXPConvertToGray2( Bitmap : TBitmap)
        Procedure JvXPRenderText( const AParent : TControl; const ACanvas : TCanvas; ACaption : TCaption; const
       AFont : TFont; const AEnabled, AShowAccelChar : Boolean; var ARect : TRect; AFlags : Integer)
       Procedure JvXPFrame3D(const ACanvas:TCanvas;const Rect:TRect;const TopColor;BottomColor:TColor;const
5525:
       Swapped:Boolean);
        Procedure JvXPColorizeBitmap( Bitmap : TBitmap; const AColor : TColor)
        Procedure JvXPSetDrawFlags(const AAlignment: TAlignment;const AWordWrap: Boolean; var Flags : Integer)
5527:
        Procedure JvXPPlaceText( const AParent: TControl; const ACanvas: TCanvas; const AText: TCaption; const
5528:
       AFont : TFont; const AEnabled, AShowAccelChar:Boolean; const AAlignment: TAlignment;const
       AWordWrap:Boolean; var Rect: TRect)
5529:
5530:
5531:
5532: procedure SIRegister uwinstr(CL: TPSPascalCompiler);
5533:
       begin
        Function StrDec( S : String) : String
5534:
5535:
        Function uIsNumeric( var S : String: var X : Float) : Boolean
Function ReadNumFromEdit( Edit : TEdit) : Float
5536:
        Procedure WriteNumToFile( var F : Text; X : Float)
5537:
5538: end;
5539:
       procedure SIRegister utexplot(CL: TPSPascalCompiler);
5540:
5541:
       begin
        Function TeX_InitGraphics(FileName: String; PgWidth, PgHeight: Integer; Header: Boolean): Boolean
5543:
        Procedure TeX_SetWindow( X1, X2, Y1, Y2 : Integer; GraphBorder : Boolean)
Procedure TeX_LeaveGraphics( Footer : Boolean)
5544:
        Procedure TeX_SetOxScale( Scale : TScale; OxMin, OxMax, OxStep : Float)
Procedure TeX_SetOyScale( Scale : TScale; OyMin, OyMax, OyStep : Float)
5545:
5546:
        Procedure TeX_SetGraphTitle( Title : String)
5547:
        Procedure TeX_SetOxTitle( Title : String)
Procedure TeX_SetOyTitle( Title : String)
5548:
5549:
        Procedure TeX_PlotOxAxis
5550:
        Procedure TeX_PlotOyAxis
5551:
5552:
        Procedure TeX_PlotGrid( Grid : TGrid)
5553:
        Procedure TeX_WriteGraphTitle
        Function TeX SetMaxCurv( NCurv : Byte) : Boolean
5554:
        Procedure TeX_SetPointParam( CurvIndex, Symbol, Size : Integer)
5555:
        Procedure TeX_SetLineParam( CurvIndex, Style : Integer; Width : Float; Smooth : Boolean)
5556:
5557:
        Procedure TeX_SetCurvLegend( CurvIndex : Integer; Legend : String)
        Procedure TeX_SetCurvStep( CurvIndex, Step : Integer)
5558:
        Procedure TeX_PlotCurve( X, Y : TVector; Lb, Ub, CurvIndex : Integer)
5559:
        Procedure TeX_PlotCurveWithErrorBars( X, Y, S : TVector; Ns, Lb, Ub, CurvIndex : Integer)
Procedure TeX_PlotFunc( Func : TFunc; X1, X2 : Float; Npt : Integer; CurvIndex : Integer)
5561:
        Procedure TeX_WriteLegend( NCurv : Integer; ShowPoints, ShowLines : Boolean)
Procedure TeX_ConRec( Nx, Ny, Nc : Integer; X, Y, Z : TVector; F : TMatrix)
Function Xcm( X : Float) : Float
5562:
5563:
5564:
        Function Ycm( Y : Float) : Float
5565:
5566: end;
5567:
5568:
5569: procedure SIRegister_VarRecUtils(CL: TPSPascalCompiler);
```

```
5570: begin
5571:
             TConstArray', 'array of TVarRec
           Function CopyVarRec( const Item : TVarRec) : TVarRec
5573 .
           Function CreateConstArray( const Elements : array of const) : TConstArray
5574:
           Procedure FinalizeVarRec( var Item : TVarRec)
5575:
           Procedure FinalizeConstArray( var Arr : TConstArray)
5576:
         end;
5577:
5578: procedure SIRegister_StStrS(CL: TPSPascalCompiler);
5579:
         begin
           Function HexBS( B : Byte) : ShortString
5580:
           Function HexWS( W : Word) : ShortString
5581:
5582:
           Function HexLS( L : LongInt) : ShortString
           Function HexPtrS( P : Pointer) : ShortString
5583:
           Function BinaryBS( B : Byte) :
5584:
                                                                ShortString
5585:
           Function BinaryWS( W : Word) : ShortString
           Function BinaryLS( L : LongInt) : ShortString
           Function OctalBS( B : Byte) : ShortString
Function OctalWS( W : Word) : ShortString
5587:
5588:
5589:
           Function OctalLS( L : LongInt) : ShortString
           Function Str2Int16S( const S : ShortString; var I : SmallInt) : Boolean
           Function Str2WordS( const S : ShortString; var I : Word) : Boolean
5591:
5592:
           Function Str2LongS( const S : ShortString; var I : LongInt) : Boolean
           Function Str2RealS( const S : ShortString; var R : Double) : Boolean
5593:
           Function Str2RealS( const S : ShortString; var R : Real) : Boolean
5594:
5595:
           Function Str2ExtS( const S : ShortString; var R : Extended) : Boolean
5596:
           Function Long2StrS( L : LongInt) : ShortString
           Function Real2StrS( R : Double; Width : Byte; Places : ShortInt) : ShortString
Function Ext2StrS( R : Extended; Width : Byte; Places : ShortInt) : ShortString
5597:
5598:
           Function ValPrepS( const S : ShortString) : ShortString
5600:
           Function CharStrS( C : AnsiChar; Len : Cardinal) : ShortString
           Function PadChS( const S : ShortString; C : AnsiChar; Len : Cardinal) : ShortString
Function PadS( const S : ShortString; Len : Cardinal) : ShortString
5601:
5602:
           Function LeftPadChS( const S : ShortString; C : AnsiChar; Len : Cardinal) : ShortString
Function LeftPadS( const S : ShortString; Len : Cardinal) : ShortString
5603:
5605:
           Function TrimLeadS( const S : ShortString) : ShortString
           Function TrimTrailS( const S : ShortString) : ShortString
5606:
           Function TrimS( const S : ShortString) : ShortString
5607:
5608:
           Function TrimSpacesS( const S : ShortString) : ShortString
           Function CenterChS( const S : ShortString; C : AnsiChar; Len : Cardinal) : ShortString
5609:
5610:
           Function CenterS( const S : ShortString; Len : Cardinal) : ShortString
           Function EntabS( const S : ShortString; TabSize : Byte) : ShortString
Function DetabS( const S : ShortString; TabSize : Byte) : ShortString
5611:
5612:
           Function ScrambleS( const S, Key : ShortString) : ShortString
                                                                                                                    : ShortString
           \textbf{Function} \  \, \texttt{SubstituteS( const S, FromStr, ToStr : ShortString)} \\
5614:
5615:
           \textbf{Function} \ \ \texttt{FilterS} ( \ \ \textbf{const} \ \ \texttt{S}, \ \ \textbf{Filters} \ : \ \ \textbf{ShortString}) \ : \ \ \textbf{ShortString}
           Function CharExistsS( const S: ShortString; C: AnsiChar): Boolean
Function CharCountS( const S: ShortString; C: AnsiChar): Byte
5616:
5618:
           Function WordCountS( const S, WordDelims : ShortString) : Cardinal
           5619:
5620:
           Function AsciiCountS( const S, WordDelims: ShortString; Quote: AnsiChar): Cardinal
5621:
           Function AsciiPositionS(N:Cardinal;const S,WordDelims:ShortString;Quote:AnsiChar;var Pos:Cardinal):Boolean
           \textbf{Function} \ \texttt{ExtractAsciiS}(\texttt{N}:\texttt{Cardinal}; \textbf{const} \ \texttt{S}, \texttt{WordDelims}: \textbf{ShortString}; \texttt{Quote}:\texttt{AnsiChar}): \ \textbf{ShortString}: \texttt{ShortString}: \texttt{
5623:
5624:
           Procedure WordWrapS(const InSt: ShortString; var OutSt,Overlap: ShortString;
         Margin:Cardinal;PadToMargin:Boolean)
Function CompStringS( const S1, S2 : ShortString) : Integer
5625:
           Function CompUCStringS( const S1, S2 : ShortString) : Integer
5626:
5627:
           Function SoundexS( const S : ShortString) : ShortString
5628:
           Function MakeLetterSetS( const S : ShortString) : Longint
           Procedure BMMakeTableS( const MatchString : ShortString; var BT : BTable)
5629:
           Function BMSearchS(var Buffer,BufLength:Card;var BT:BTable;const MatchString:ShortString;var
         Pos:Cardinal):Bool;
5631:
         Function BMSearchUCS(var Buffer, BufLength:Card;var BT:BTable;const MatchString:ShortString;var
         Pos:Cardinal):Bool;
         Function DefaultExtensionS( const Name, Ext : ShortString) : ShortString
           \textbf{Function} \  \, \texttt{ForceExtensionS}( \  \, \textbf{const} \  \, \texttt{Name} \,, \  \, \texttt{Ext} \, \, : \, \, \textbf{ShortString})
                                                                                                              : ShortString
5633:
           Function JustFilenameS( const PathName : ShortString) : ShortString
5634:
           Function JustNameS( const PathName : ShortString) : ShortString
Function JustExtensionS( const Name : ShortString) : ShortString
5635:
5636:
           Function JustPathnameS( const PathName : ShortString) : ShortString
5638:
           Function AddBackSlashS( const DirName : ShortString) : ShortString
5639:
           Function CleanPathNameS( const PathName : ShortString) : ShortString
           Function HasExtensionS( const Name : ShortString; var DotPos : Cardinal) : Boolean
5640:
           Function CommaizeS( L : LongInt) : ShortString
           Function CommaizeChS( L : Longint; Ch : AnsiChar) : ShortString
           Function FloatFormS(const Mask:ShortString;R:TstFloat;const LtCurr;RtCurr:ShortString;Sep,
5643:
         DecPt:Char):ShortString;
         Function LongIntFormS(const Mask:ShortString;L:LongInt;const LtCurr,
RtCurr:ShortString;Sep:AnsiChar):ShortString;
5645: 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
5646:
5647:
5648:
           Function StrStInsertS( const S1, S2 : ShortString; Pos : Cardinal) : ShortString
           Function StrChDeleteS( const S : ShortString; Pos : Cardinal) : ShortString
Function StrStDeleteS( const S : ShortString; Pos, Count : Cardinal) : ShortString
5650:
5651:
           Function ContainsOnlyS( const S, Chars : ShortString; var BadPos : Cardinal) : Boolean
5652:
5653: Function ContainsOtherThanS( const S, Chars: ShortString; var BadPos: Cardinal): Boolean
```

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5654:
            Function CopyLeftS( const S : ShortString; Len : Cardinal) : ShortString
            Function CopyMidS( const S: ShortString; First, Len: Cardinal): ShortString
5655:
            Function CopyRightS( const S : ShortString; First : Cardinal) : ShortString
            Function CopyRightAbsS( const S : ShortString; NumChars : Cardinal) : ShortString
5657:
5658:
            Function CopyFromNthWordS(const S,WordDelims:string;const AWord:String;N:Cardinal;var
          SubString: ShortString) : Boolean;
           Function DeleteFromNthWordS(const S, WordDelims:String; AWord:ShortString; N:Cardinal; var
          SubStr:ShortString): Boolean;
5660:
            Function CopyFromToWordS(const S,WordDelims,Word1,Word2:ShortString;N1,N2:Cardinal;var
          SubString: ShortString): Boolean;
5661:
            Function DeleteFromToWordS(const S, WordDelims, Wrd1, Wrd2:ShortString; N1, N2:Cardinal; var
          SubString: ShortString): Boolean;
            Function CopyWithinS( const S, Delimiter : ShortString; Strip : Boolean) : ShortString
            Function DeleteWithinS( const S, Delimiter : ShortString) : ShortString
5663:
            Function ExtractTokensS(const S.
5664:
          Delims: ShortString; QuoteChar: AnsiChar; AllowNulls: Boolean; Tokens: TStrings): Cardinal
           Function IsChAlphaS( C : Char) : Boolean
5666.
            Function IsChNumericS( C : Char; const Numbers : ShortString) : Boolean
            Function IsChAlphaNumericS( C : Char; const Numbers : ShortString) : Boolean Function IsStrAlphaS( const S : Shortstring) : Boolean Function IsStrNumericS( const S, Numbers : ShortString) : Boolean
5667:
5668:
            Function IsStrAlphaNumericS( const S, Numbers : ShortString) : Boolean
5670:
5671:
            Function LastWordS( const S, WordDelims, AWord: ShortString; var Position: Cardinal): Boolean
            Function LastWordAbsS( const S, WordDelims: ShortString; var Position: Cardinal): Boolean Function LastStringS( const S, AString: ShortString; var Position: Cardinal): Boolean
5672:
5674:
            Function LeftTrimCharsS( const S, Chars : ShortString) : ShortString
5675:
            Function KeepCharsS( const S, Chars : ShortString) : ShortString
5676:
            Function RepeatStringS(const RepeatString:ShortString;var Repetitions: Cardinal; MaxLen :
          Cardinal):ShortString;
           Function ReplaceStrings(const S,OldString,NewString:ShortString;N:Cardinal;var
           Replacements:Cardinal):ShortString;
5678:
            \textbf{Function} \ \texttt{ReplaceStringAllS} (\textbf{const} \ \texttt{S}, \texttt{OldString}, \texttt{NewString} : \textbf{ShortString}; \textbf{var} \ \texttt{Replacements} : \texttt{Cardinal}) : \textbf{ShortString}; \textbf{ShortString} : \textbf
            Function ReplaceWordS(const S, WordDelims, OldWord, NewW:ShortString; N:Cardinal; var
5679:
          Replacements:Cardinal):ShortString
           Function ReplaceWordAllS(const S, WordDelims, OldWord, NewWord: ShortString; var
          Replacements:Cardinal):ShortString
           Function RightTrimCharsS( const S, Chars : ShortString) : ShortString
Function StrWithinS(const S, SearchStr: ShortString; Start: Cardinal; var Position: Cardinal): boolean
Function TrimCharsS( const S, Chars : ShortString) : ShortString
5681:
5682:
5683:
            Function WordPosS(const S, WordDelims, AWord: ShortString; N: Cardinal; var Position: Cardinal): Boolean
5684:
5685: end:
5686:
5687:
5689: Function SignL( L : LongInt) : Integer 5690: Function SignF( F : Extended) : Integer
5691: Function MinWord( A, B : Word) : Word
5692: Function MidWord( W1, W2, W3 : Word) : Word
5693: Function MaxWord( A, B : Word) : Word
5694: Function MinLong( A, B : LongInt) : LongInt
5695: Function MidLong( L1, L2, L3 : LongInt) : LongInt
5696: Function MaxLong( A, B : LongInt) : LongInt
5697: Function MinFloat(F1, F2 : Extended)
5698: Function MidFloat( F1, F2, F3 : Extended) : Extended
5699: Function MaxFloat(F1, F2 : Extended) : Extended 5700: Function MakeInteger16(H, L : Byte) : SmallInt
5701: Function MakeWordS( H, L : Byte) : Word
5702: Function SwapNibble(B: Byte): Byte
5703: Function SwapWord( L : LongInt) : LongInt
5704: Procedure SetFlag( var Flags : Word; FlagMask : Word)
5705: Procedure ClearFlag( var Flags : Word; FlagMask : Word)
5706: Function FlagIsSet(Flags, FlagMask: Word): Boolean
5707: Procedure SetByteFlag( var Flags : Byte; FlagMask : Byte)
5708: Procedure ClearByteFlag( var Flags : Byte; FlagMask : Byte) 5709: Function ByteFlagIsSet( Flags, FlagMask : Byte) : Boolean
5710: Procedure SetLongFlag( var Flags : LongInt; FlagMask : LongInt)
5711: Procedure ClearLongFlag( var Flags : LongInt; FlagMask : LongInt)
5712: Function LongFlagIsSet( Flags, FlagMask : LongInt) : Boolean
5713: Procedure ExchangeBytes( var I, J : Byte) 5714: Procedure ExchangeWords( var I, J : Word)
5715: Procedure ExchangeLongInts( var I, J : LongInt)
5716: Procedure ExchangeStructs( var I, J, Size : Cardinal)
5717: Procedure FillWord( var Dest, Count : Cardinal; Filler : Word)
5718: Procedure FillStruct( var Dest, Count : Cardinal; var Filler, FillerSize : Cardinal)
5721: Function AccruedInterestMaturity(Issue,Maturity:TStDate;Rate,Par:Extended;Basis: TStBasis): Extended
5722: Function AccruedInterestPeriodic(Issue, Settlement, Maturity: TStDate; Rate,
           Par:Extended; Frequency: TStFrequency; Basis: TStBasis): Extended
5723: Function BondDuration( Settlement, Maturity: TStDate; Rate,
           Yield: Extended; Frequency: TStFrequency; Basis: TStBasis): Extended;
5724: Function BondPrice(Settlement, Maturity: TStDate; Rate, Yield,
Redemption:Extended;Freq:TStFrequency;Basis:TStBasis): Extended
5725: Function CumulativeInterest( Rate : Extended; NPeriods : Integer; PV : Extended; StartPeriod, EndPeriod :
           Integer; Frequency: TStFrequency; Timing: TStPaymentTime): Extended
5726: Function CumulativePrincipal(Rate: Extended; NPeriods: Integer; PV: Extended; StartPeriod, EndPeriod: Integer; Frequency: TStFrequency; Timing: TStPaymentTime): Extended

5727: Function DayCount(Day1, Day2: TStDate; Basis: TStBasis): LongInt

5728: Function DecliningBalance(Cost, Salvage: Extended; Life, Period, Month: Integer): Extended
```

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5729: Function DiscountRate(Settlement, Maturity:TStDate; Price, Redemption: Extended; Basis:TStBasis): Extended;
5730: Function DollarToDecimal(FracDollar: Extended; Fraction: Integer): Extended
5731: Function DollarToDecimalText( DecDollar : Extended) : string
5732: Function DollarToFraction( DecDollar : Extended; Fraction : Integer) : Extended
5733: Function DollarToFractionStr( FracDollar : Extended; Fraction : Integer) : string
5734: Function EffectiveInterestRate( NominalRate : Extended; Frequency : TStFrequency) : Extended
5735: Function FutureValueS(Rate:Extended; NPeriods:Int; Pmt,
          PV:Extended;Freq:TStFrequency;Timing:TStPaymentTime):Extended;
5736: Function FutureValueSchedule( Principal : Extended; const Schedule : array of Double) : Extended 5737: Function FutureValueSchedule16( Principal : Extended; const Schedule, NRates : Integer) : Extended
5738: Function InterestRateS(NPeriods:Int;Pmt,PV,
         FV:Extended; Freq:TStFrequency; Timing:TStPaymentTime; Guess:Extended):Extend;
5739: Function InternalRateOfReturn( const Values : array of Double; Guess : Extended) : Extended
5740: Function InternalRateOfReturn16( const Values, NValues : Integer; Guess : Extended) : Extended
5741: Function IsCardValid( const S : string) : Boolean
5742: Function ModifiedDuration(Settlement, Maturity:TStDate;Rate,
          Yield:Extended;Freq:TStFrequency;Basis:TStBasis):Extended;
5743: Function ModifiedIRR(const Values: array of Double; FinanceRate, ReinvestRate: Extended) : Extended
5744: Function ModifiedIRR16(const Values, NValues:Integer; FinanceRate, ReinvestRate: Extended) : Extended
5745: Function NetPresentValueS( Rate : Extended; const Values : array of Double) : Extended
5746: Function NetPresentValue16( Rate : Extended; const Values, NValues : Integer) : Extended
5747: Function NominalInterestRate( EffectRate : Extended; Frequency : TStFrequency) : Extended
5748: Function NonperiodicIRR(const Values:array of Double;const Dates:array of TStDate;Guess:Extended):Extended;
5749: Function NonperiodicNPV(Rate:Extended; Const Values: array of Double; const Dates:array of TStDate):Extended; 5750: Function Payment( Rate: Extended; NPeriods: Integer; PV, FV: Extended; Frequency: TStFrequency; Timing
           TStPaymentTime): Extended
5751: \textbf{Function} \texttt{ Periods(Rate:Extended;Pmt,PV,FV:Extended;Frequency:TStFrequency;Timing:TStPaymentTime):Integer; \\
5752: Function PresentValueS( Rate: Extended; NPeriods: Integer; Pmt, FV: Extended; Frequency; Timing: TStPaymentTime): Extended
5753: \textbf{Function} \ \texttt{ReceivedAtMaturity}(Settlement, \texttt{Maturity}: TStDate; Invest, \texttt{Discount}: \texttt{Extended}; \texttt{Basis}: TStBasis) : \texttt{Extended}; \texttt{Maturity}: TStDate; \texttt{Matur
5754: Function RoundToDecimal( Value : Extended; Places : Integer; Bankers : Boolean) : Extended
5755: Function TBillEquivYield( Settlement, Maturity : TStDate; Discount : Extended) : Extended
5756: Function TBillPrice( Settlement, Maturity : TStDate; Discount : Extended) : Extended 5757: Function TBillYield( Settlement, Maturity : TStDate; Price : Extended) : Extended
5758: Function VariableDecliningBalance(Cost, Salvage: Extended; Life: Integer; StartPeriod, EndPeriod, Factor: Extended; NoSwitch: boolean): Extended
5759: Function YieldDiscounted(Settlement, Maturity:TStDate; Price, Redemption: Extended; Basis:TStBasis):Extended;
5760: Function YieldPeriodic(Settlement, Maturity: TStDate; Rate, Price,
         Redemption:Extended;Freq:TStFrequency;Basis:TStBasis): Extended
5761: Function YieldMaturity(Issue,Settlement,Maturity:TStDate;Rate,Price:Extended;Basis:TStBasis):Extended;
5762:
          5763:
5764: Procedure PlanetsPos( JD : Double; var PA : TStPlanetsArray)
5767: Function AveDev16( const Data, NData : Integer) : Double
5768: Function Confidence (Alpha, StandardDev: Double; Size: LongInt): Double 5769: Function Correlation (const Data1, Data2: array of Double): Double
5770: Function Correlation16( const Data1, Data2, NData : Integer) : Double
5771: Function Covariance( const Data1, Data2 : array of Double) : Double 5772: Function Covariance16( const Data1, Data2, NData : Integer) : Double
5773: Function DevSq( const Data : array of Double) : Double
5774: Function DevSq16( const Data, NData : Integer) : Double
5775: Procedure Frequency(const Data:array of Double;const Bins:array of Double;var Counts: array of LongInt);
5776: //Procedure Frequency16( const Data, NData : Integer; const Bins, NBins : Integer; var Counts)
5777: Function GeometricMeanS( const Data : array of Double) : Double
5778: Function GeometricMean16( const Data, NData : Integer) : Double
5779: Function HarmonicMeanS( const Data : array of Double) : Double
5780: Function HarmonicMean16( const Data, NData : Integer) : Double
5781: Function Largest( const Data: array of Double: K : Integer) : Double 5782: Function Largest16( const Data, NData : Integer; K : Integer) : Double
5783: Function MedianS( const Data : array of Double) : Double
5784: Function Median16( const Data, NData : Integer) : Double
5785: Function Mode( const Data: array of Double) : Double 5786: Function Model6( const Data, NData: Integer) : Double
5787: Function Percentile( const Data : array of Double; K : Double) : Double
5788: Function Percentile16( const Data, NData : Integer; K : Double) : Double
5789: Function PercentRank( const Data : array of Double; X : Double) : Double
5790: Function PercentRank16( const Data, NData : Integer; X : Double) : Double 5791: Function Permutations( Number, NumberChosen : Integer) : Extended 5792: Function Combinations( Number, NumberChosen : Integer) : Extended
5793: Function FactorialS( N : Integer) : Extended
5794: Function Rank( Number : Double; const Data : array of Double; Ascending : Boolean) : Integer
5795: Function Rankl6( Number : Double; const Data, NData : Integer; Ascending : Boolean) : Integer 5796: Function Smallest( const Data : array of Double; K : Integer) : Double
5797: Function Smallest16( const Data, NData : Integer; K : Integer) : Double
5798: Function TrimMean( const Data : array of Double; Percent : Double) : Double 5799: Function TrimMean16( const Data, NData : Integer; Percent : Double) : Double
         AddTypeS('TStLinEst', 'record B0: Double; B1: double; seB0: double; seB'
+'1: Double; R2: Double; sigma: Double; SSr: double; SSe: Double; F0: Double; df: Integer; end
5800:
5802: Procedure LinEst(const KnownY:array of Double;const KnownX:array of Double;var
         LF:TStLinEst;ErrorStats:Bool;
5803: Procedure LogEst(const KnownY:array of Double;const KnownX:array of Double; var
         LF:TStLinEst;ErrorStats:Bool;
5804: Function Forecast(X: Double; const KnownY: array of Double; const KnownX: array of Double) : Double
5805: Function ForecastExponential(X:Double;const KnownY:array of Double;const KnownX:array of Double):Double;
5806: Function Intercept( const KnownY : array of Double; const KnownX : array of Double) : Double 5807: Function RSquared( const KnownY : array of Double; const KnownX : array of Double) : Double 5808: Function Slope( const KnownY : array of Double; const KnownX : array of Double) : Double
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5809: Function StandardErrorY( const KnownY : array of Double; const KnownX : array of Double) : Double
5810: Function BetaDist( X, Alpha, Beta, A, B : Single) : Single
5811: Function BetaTnv( Probability, Alpha, Beta, A, B : Single) : Single
5812: Function BinomDist( NumberS, Trials : Integer; ProbabilityS : Single; Cumulative : Boolean) : Single
5813: Function CritBinom( Trials : Integer; ProbabilityS, Alpha : Single) : Integer
5814: Function ChiDist( X : Single; DegreesFreedom : Integer) : Single 5815: Function ChiInv( Probability : Single; DegreesFreedom : Integer) : Single
5816: Function ExponDist( X, Lambda : Single; Cumulative : Boolean) : Single
5817: Function FDist( X : Single; DegreesFreedom1, DegreesFreedom2 : Integer) : Single
5818: Function FInv( Probability : Single; DegreesFreedom1, DegreesFreedom2 : Integer) : Single
5819: Function LogNormDist( X, Mean, StandardDev : Single) : Single
5820: Function LogInv( Probability, Mean, StandardDev : Single) : Single
5821: Function NormDist( X, Mean, StandardDev : Single; Cumulative : Boolean) : Single
5822: Function NormInv( Probability, Mean, StandardDev : Single) : Single 5823: Function NormSDist( Z : Single) : Single
5824: Function NormSInv( Probability : Single) : Single
5825: Function Poisson( X : Integer; Mean : Single; Cumulative : Boolean) : Single
5826: Function TDist( X : Single; DegreesFreedom : Integer; TwoTails : Boolean) 5827: Function TInv( Probability : Single; DegreesFreedom : Integer) : Single 5828: Function Erfc( X : Single) : Single
                                                                                                                     : Single
5829: Function GammaIn( X : Single) : Single

5830: Function LargestSort( const Data : array of Double; K : Integer) : Double

5831: Function SmallestSort( const Data : array of double; K : Integer) : Double
5832:
5833: procedure SIRegister_TStSorter(CL: TPSPascalCompiler);
5834:
          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
5835:
5836:
5837:
         Procedure ArraySort( var A, RecLen, NumRecs : Cardinal; Compare : TUntypedCompareFunc)
5839:
5840: procedure SIRegister_StAstro(CL: TPSPascalCompiler);
5841: Function AmountOfSunlight( LD: TStDate; Longitude, Latitude: Double): TStTime
         Function FixedRiseSet( LD : TStDate; RA, DC, Longitude, Latitude : Double) : TStRiseSetRec
5842:
          Function SunPos( UT : TStDateTimeRec) : TStPosRec
5843:
         Function SunPosPrim( UT : TStDateTimeRec) : TStSunXYZRec
Function SunRiseSet( LD : TStDate; Longitude, Latitude : Double) : TStRiseSetRec
Function Twilight( LD : TStDate; Longitude, Latitude : Double; TwiType:TStTwilight):TStRiseSetRec
Function LunarPhase( UT : TStDateTimeRec) : Double
Function MoonPos( UT : TStDateTimeRec) : TStMoonPosRec
5844:
5845:
5846:
5847:
5848:
         Function MoonRiseSet( LD : TStDate; Longitude, Latitude : Double) : TStRiseSetRec Function FirstQuarter( D : TStDate) : TStLunarRecord
5849:
5850:
          Function FullMoon( D : TStDate) : TStLunarRecord
5851:
          Function LastQuarter( D : TStDate) : TStLunarRecord
5852:
         Function NewMoon( D : TStDate) : TStLunarRecord
Function NextFirstQuarter( D : TStDate) : TStDateTimeRec
Function NextFullMoon( D : TStDate) : TStDateTimeRec
5853:
5854:
5855:
          Function NextLastQuarter( D : TStDate) : TStDateTimeRec
5857:
          Function NextNewMoon( D : TStDate) : TStDateTimeRec
         Function PrevFirstQuarter( D : TStDate) : TStDateTimeRec
Function PrevFullMoon( D : TStDate) : TStDateTimeRec
5858:
5859:
          Function PrevLastQuarter( D : TStDate) : TStDateTimeRec
5860:
          Function PrevNewMoon( D : TStDate) : TStDateTimeRec
5861:
5862:
         Function SiderealTime( UT : TStDateTimeRec) : Double
         Function Solstice( Y, Epoch : Integer; Summer : Boolean) : TStDateTimeRec Function Equinox( Y, Epoch : Integer; Vernal : Boolean) : TStDateTimeRec
5863:
5864:
          Function SEaster( Y, Epoch : Integer) : TStDate
5865:
         Function DateTimeToAJD( D : TDateTime) : Double
5866:
         Function HoursMin( RA : Double) : ShortString
Function DegsMin( DC : Double) : ShortString
5867:
5868:
5869:
         Function AJDToDateTime( D : Double) : TDateTime
5870:
5871: Procedure SIRegister_StDate(CL: TPSPascalCompiler);
        Function CurrentDate: TStDate
Function StValidDate( Day, Month, Year, Epoch: Integer): Boolean
5872:
5873:
          Function DMYtoStDate( Day, Month, Year, Epoch : Integer) : TStDate
5875:
          Procedure StDateToDMY( Julian : TStDate; var Day, Month, Year : Integer)
5876:
         Function StIncDate( Julian : TStDate; Days, Months, Years : Integer) : TStDate
5877:
         \textbf{Function} \  \, \texttt{IncDateTrunc}(\  \, \texttt{Julian} \, : \, \, \texttt{TStDate}; \, \, \texttt{Months}, \, \, \texttt{Years} \, : \, \, \texttt{Integer}) \, : \, \, \texttt{TStDate}
         Procedure StDateDiff( Date1, Date2: TStDate; var Days, Months, Years: Integer)
Function BondDateDiff( Date1, Date2: TStDate; DayBasis: TStBondDateType): TStDate
5878:
5879:
5880:
          Function WeekOfYear( Julian : TStDate) : Byte
5881:
         Function AstJulianDate( Julian : TStDate) : Double
Function AstJulianDatetoStDate( AstJulian : Double; Truncate : Boolean) : TStDate
5882:
          Function AstJulianDatePrim( Year, Month, Date : Integer; UT : TStTime) : Double
5883:
          Function StDayOfWeek( Julian : TStDate) : TStDayType
5884:
5885:
          Function DayOfWeekDMY( Day, Month, Year, Epoch : Integer) : TStDayType
5886:
         Function StIsLeapYear( Year : Integer) : Boolean
         Function StDaysInMonth( Month : Integer; Year, Epoch : Integer) : Integer
5887:
         Function ResolveEpoch( Year, Epoch: Integer): Integer
Function ValidTime( Hours, Minutes, Seconds: Integer): Boolean
5889:
5890:
         Procedure StTimeToHMS( T : TStTime; var Hours, Minutes, Seconds : Byte)
5891:
         Function HMStoStTime( Hours, Minutes, Seconds : Byte) : TStTime
5892:
         Function CurrentTime : TStTime
          Procedure TimeDiff( Time1, Time2 : TStTime; var Hours, Minutes, Seconds : Byte)
5893:
         Function StIncTime( T: TStTime; Hours, Minutes, Seconds: Byte): TStTime
Function DecTime( T: TStTime; Hours, Minutes, Seconds: Byte): TStTime
Function RoundToNearestHour( T: TStTime; Truncate: Boolean): TStTime
Function RoundToNearestMinute( const T: TStTime; Truncate: Boolean): TStTime
5894:
5895:
```

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5898:
        Procedure DateTimeDiff(const DT1:TStDateTimeRec; var DT2:TStDateTimeRec; var Days:LongInt; var Secs:LongInt
        Procedure IncDateTime(const DT1:TStDateTimeRec;var DT2:TStDateTimeRec;Days:Integer;Secs:LongInt)
5899:
        Function DateTimeToStDate( DT : TDateTime) : TStDate
Function DateTimeToStTime( DT : TDateTime) : TStTime
5901:
5902:
        Function StDateToDateTime( D : TStDate) : TDateTime
        Function StTimeToDateTime( T : TStTime) : TDateTime
5903:
5904:
        Function Convert2ByteDate( TwoByteDate : Word) : TStDate
        Function Convert4ByteDate( FourByteDate : TStDate) : Word
5905:
5906:
5907: Procedure SIRegister_StDateSt(CL: TPSPascalCompiler);
5908: Function DateStringHMStoAstdD( const Picture, DS : string; H, M, S, Epoch : integer) : Double
        Function MonthToString( const Month : Integer) : string
5910:
        Function DateStringToStDate( const Picture, S : string; Epoch : Integer) : TStDate
        Function DateStringToDMY(const Picture, S:string; Epoch:Integer; var D, M, Y: Integer):Boolean
Function StDateToDateString( const Picture: string; const Julian: TStDate; Pack: Boolean):string
5911:
5912:
5913:
        Function DayOfWeekToString( const WeekDay : TStDayType) : string
        Function DMYtoDateString(const Picture:string;Day,Month,Year,Epoch:Integer;Pack:Boolean): string);
5914:
        Function CurrentDateString( const Picture : string; Pack : Boolean) : string
Function CurrentTimeString( const Picture : string; Pack : Boolean) : string
5915.
5916:
        Function TimeStringToHMS( const Picture, St : string; var H, M, S : Integer) : Boolean Function TimeStringToStTime( const Picture, S : string) : TStTime
5917:
5918:
        Function StTimeToAmpmString( const Picture: string; const T: TStTime; Pack: Boolean): string
Function StTimeToTimeString( const Picture: string; const T: TStTime; Pack: Boolean): string
5919:
5920:
        Function DateStringIsBlank( const Ficture, S : string): Boolean
Function InternationalDate( ForceCentury: Boolean): string
5921:
5922:
5923:
        Function InternationalLongDate( ShortNames : Boolean; ExcludeDOW : Boolean) : string
5924:
        Function InternationalTime( ShowSeconds : Boolean) : string
5925:
        Procedure ResetInternationalInfo
5926:
5927: procedure SIRegister_StBase(CL: TPSPascalCompiler);
5928:
        Function DestroyNode( Container: TStContainer; Node: TStNode; OtherData: Pointer): Boolean
        Function AnsiUpperCaseShort32( const S : string) : string
5929:
        Function AnsiCompareTextShort32( const S1, S2 : string) : Integer
Function AnsiCompareStrShort32( const S1, S2 : string) : Integer
Function HugeCompressRLE( const InBuffer, InLen : Longint; var OutBuffer) : Longint
5930:
5931:
5932:
5933:
        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)
5934:
5935:
        Function Upcase( C : AnsiChar) : AnsiChar
Function LoCase( C : AnsiChar) : AnsiChar
5936:
5937:
        Function CompareLetterSets( Set1, Set2 : LongInt) : Cardinal
Function CompStruct( const S1, S2, Size : Cardinal) : Integer
Function Search(const Buffer,BufLength:Cardinal;const Match,MatLength:Cardinal;var Pos:Cardinal):Bool;
5938:
5939:
5940:
         Function StSearch(const Buffer, BufLength: Cardinal; const Match, MatLength: Cardinal; var Pos: Cardi): Boolean
5941:
5942:
        \textbf{Function} \ \ \texttt{SearchUC}(\textbf{const} \ \ \texttt{Buffer}, \texttt{BufLength}: \texttt{Cardinal}; \textbf{const} \ \ \texttt{Match}, \texttt{MatLength}: \texttt{Cardinal}; \textbf{var} \ \ \texttt{Pos}: \texttt{Cardi}) : \texttt{Boolean}
         \begin{tabular}{ll} Function & IsOrInheritsFrom( Root, Candidate : TClass) : boolean \\  \begin{tabular}{ll} Procedure & RaiseContainerError( Code : longint) \\ \end{tabular} 
5943:
5944:
        Procedure RaiseContainerErrorFmt( Code : Longint; Data : array of const)
        Function ProductOverflow(A, B : LongInt): Boolean
Function StNewStr(S: string): PShortString
Procedure StDisposeStr(PS: PShortString)
5946:
5947:
5948:
        Procedure ValLongInt( S : ShortString; var LI : Longint; var ErrorCode : integer)
5949:
        Procedure ValSmallint( const S : ShortString; var SI : smallint; var ErrorCode : integer)
5950:
5951:
        Procedure ValWord( const S : ShortString; var Wd : word; var ErrorCode : integer)
        Procedure RaiseStError( ExceptionClass : EStExceptionClass; Code : LongInt)
Procedure RaiseStWin32Error( ExceptionClass : EStExceptionClass; Code : LongInt)
5952:
5953:
5954:
         Procedure RaiseStWin32ErrorEx( ExceptionClass: EStExceptionClass; Code: LongInt; Info: string)
5955:
5956: procedure SIRegister_usvd(CL: TPSPascalCompiler);
5957: begin
5958:
       Procedure SV_Decomp( A : TMatrix; Lb, Ub1, Ub2 : Integer; S : TVector; V : TMatrix)
5959:
         Procedure SV_SetZero( S : TVector; Lb, Ub : Integer; Tol : Float)
5960:
        Procedure SV_Solve(U:TMatrix; S:TVector;V:TMatrix;B:TVector;Lb,Ub1,Ub2:Integer;X:TVector);
5961: Procedure SV_Approx( U : TMatrix; S : TVector; V : TMatrix; Lb, Ub1, Ub2 : Integer; A : TMatrix)
5962: Procedure RKF45(F:TDiffEqs;Neqn:Int;Y,Yp:TVector;var T:Float;Tout,RelErr,AbsErr:Float;var Flag:Int;
5963: end;
5964:
5966: Function IntPowerS( Base : Extended; Exponent : Integer) : Extended
5967: Function Powers( Base, Exponent : Extended) : Extended 5968: Function StInvCos( X : Double) : Double
5969: Function StInvSin( Y : Double) : Double
5970: Function StInvTan2( X, Y : Double) : Double 5971: Function StTan( A : Double) : Double
5972: Procedure DumpException: //unit StExpEng;
5973: Function HexifyBlock( var Buffer, BufferSize : Integer) : string
5974:
5970: Function Adler32ofStream( Stream: TStream; CurCrc: LongInt): LongInt
5978: Function Adler32ofFile( FileName: AnsiString): LongInt
5979: Function Crc16Prim( var Data, DataSize, CurCrc : Cardinal) : Cardinal
5980: Function Crc160fStream( Stream: TStream; CurCrc: Cardinal): Cardinal 5981: Function Crc160fFile(FileName: AnsiString): Cardinal
5982: Function Crc32Prim( var Data, DataSize : Cardinal; CurCrc : LongInt) : LongInt
5983: Function Crc320fStream( Stream: TStream; CurCrc: LongInt): LongInt 5984: Function Crc320fFile( FileName: AnsiString): LongInt
5985: Function InternetSumPrim( var Data, DataSize, CurCrc : Cardinal) : Cardinal
5986: Function InternetSumOfStream( Stream: TStream; CurCrc: Cardinal): Cardinal
```

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5987: Function InternetSumOfFile( FileName : AnsiString) : Cardinal
5988: Function Kermitl6Prim( var Data, DataSize, CurCrc : Cardinal) : Cardinal
5989: Function Kermit160fStream( Stream : TStream; CurCrc : Cardinal) : Cardinal
5990: Function Kermit160fFile( FileName : AnsiString) : Cardinal
5991:
            5992: //**
5993: Function AddRed( const B1, B2: TbcdS): TbcdS
5994: Function SubBed( const B1, B2: TbcdS): TbcdS
5995: Function MulBcd( const B1, B2 : TbcdS) : TbcdS
5996: Function DivBcd( const B1, B2 : TbcdS) : TbcdS
                                                      : TbcdS
5997: Function ModBcd( const B1, B2 : TbcdS)
5998: Function NegBcd( const B : TbcdS) : TbcdS
5999: Function AbsBcd( const B : TbcdS) : TbcdS
6000: Function FracBcd( const B : TbcdS) : TbcdS
6001: Function IntBcd( const B : TbcdS) : TbcdS
6002: Function RoundDigitsBcd( const B : TbcdS; Digits : Cardinal) : TbcdS
6003: Function RoundPlacesBcd( const B : TbcdS; Places : Cardinal) : TbcdS
6004: Function ValBcd( const S : string) : TbcdS 6005: Function LongBcd( L : LongInt) : TbcdS 6006: Function ExtBcd( E : Extended) : TbcdS
6007: Function ExpBcd( const B : TbcdS) : TbcdS
6008: Function LnBcd( const B : TbcdS) : TbcdS
6009: Function IntPowBcd( const B : TbcdS; E : LongInt) : TbcdS 6010: Function PowBcd( const B, E : TbcdS) : TbcdS 6011: Function SqrtBcd( const B : TbcdS) : TbcdS
6012: Function CmpBcd( const B1, B2 : TbcdS) : Integer
6013: Function EqDigitsBcd( const B1, B2 : TbcdS; Digits : Cardinal) : Boolean
6014: Function EqPlacesBcd( const B1, B2 : TbcdS; Digits : Cardinal) : Boolean
6015: Function IsIntBcd( const B : TbcdS) : Boolean
6016: Function TruncBcd( const B : TbcdS) : LongInt
6017: Function BcdExt( const B : TbcdS) : Extended
6018: Function RoundBcd( const B : TbcdS) : LongInt
6019: Function StrBcd( const B : TbcdS; Width, Places : Cardinal) : string
6020: Function StrExpBcd( const B : TbcdS; Width : Cardinal) : string
6021: Function FormatBcd( const Format : string; const B : TbcdS) : string
6022: Function StrGeneralBcd( const B : TbcdS) : string
6023: Function FloatFormBcd(const Mask:string;B:TbcdS;const LtCurr,RtCurr:string;Sep,DecPt:AnsiChar):string
6024: Procedure ConvertBcd( const SrcB, SrcSize : Byte; var DestB, DestSize : Byte)
6027: Procedure StParseLine( const Data : AnsiString; Schema : TStTextDataSchema; Result : TStrings)
6028: Function StFieldTypeToStr(FieldType: TStSchemaFieldType): AnsiString
6029: Function StStrToFieldType( const S : AnsiString) : TStSchemaFieldType
6030: Function StDeEscape( const EscStr : AnsiString) : Char
6031: Function StDoEscape(Delim : Char) : AnsiString
6032: Function StTrimTrailingChars( const S : AnsiString; Trailer : Char) : AnsiString
6033: Function AnsiHashText( const S : string; Size : Integer) : Integer 6034: Function AnsiHashStr( const S : string; Size : Integer) : Integer
6035: Function AnsiELFHashText( const S : string; Size : Integer) : Integer
6036: Function AnsiELFHashStr( const S : string; Size : Integer) : Integer
6037:
                     6038: /
         with AddClassN(FindClass('TStComponent'), 'TStNetConnection') do begin
6039:
6040:
            Constructor Create( AOwner : TComponent)
6041:
            Function Connect : DWord
6042:
            Function Disconnect : DWord
            RegisterProperty('Password', 'String', iptrw);
Property('UserName', 'String', iptrw);
6043:
6044:
6045:
           Property('ConnectOptions', 'TStNetConnectOptionsSet', iptrw);
Property('DisconnectOptions', 'TStNetDisconnectOptionsSet', iptrw);
6046:
           Property('DisconnectOptions', 'TStNetDisconnectOptionsSet',
Property('LocalDevice', 'String', iptrw);
Property('ServerName', 'String', iptrw);
Property('ShareName', 'String', iptrw);
Property('OnConnect', 'TNotifyEvent', iptrw);
Property('OnConnectFail', 'TOnConnectFailEvent', iptrw);
Property('OnConnectCancel', 'TOnConnectCancelEvent', iptrw);
6047:
6048:
6049:
6050:
6051:
           Property('OnDisconnect', 'TNotifyEvent', iptrw);
Property('OnDisconnectFail', 'TOnDisconnectFailEvent', iptrw);
Property('OnDisconnectCancel', 'TOnDisconnectCancelEvent', iptrw);
6053:
6054:
6055:
6056:
         end;
6057: //*******Thread Functions Context of Win API --- more objects in SyncObjs.pas
6058: / /153 unit uPSI_SyncObjs, unit uPSIParallelJobs;
6059: Procedure InitializeCriticalSection( var lpCriticalSection: TRTLCriticalSection)
6060: Procedure EnterCriticalSection( var lpCriticalSection: TRTLCriticalSection) 6061: Procedure LeaveCriticalSection( var lpCriticalSection: TRTLCriticalSection)
6062: Function InitializeCriticalSectionAndSpinCount(var
       {\tt lpCriticalSection:TRTLCriticalSection;dwSpinCount:DWORD):BOOL;}
6063: Function SetCriticalSectionSpinCount(var lpCriticalSection:TRTLCriticalSection;dwSpinCount:DWORD):DWORD;
6064: Function TryEnterCriticalSection( var lpCriticalSection: TRTLCriticalSection): BOOL
6065: Procedure DeleteCriticalSection( var lpCriticalSection : TRTLCriticalSection)
6066: Function GetThreadContext( hThread: THandle; var lpContext: TContext): BOOL 6067: Function SetThreadContext( hThread: THandle; const lpContext: TContext): BOOL
6068: Function SuspendThread( hThread: THandle): DWORD 6069: Function ResumeThread( hThread: THandle): DWORD
6070: Function CreateThread2(ThreadFunc: TThreadFunction2; thrid: DWord) : THandle
6071: Function GetCurrentThread : THandle
6072: Procedure ExitThread( dwExitCode : DWORD)
6073: Function TerminateThread( hThread : THandle; dwExitCode : DWORD) : BOOL
6074: Function GetExitCodeThread( hThread : THandle; var lpExitCode : DWORD) : BOOL
```

```
6075: Procedure EndThread(ExitCode: Integer);
6076: Function WaitForSingleObject( hHandle : THandle; dwMilliseconds : DWORD) : DWORD
6077: Function MakeProcInstance( Proc : FARPROC; Instance : THandle) : FARPROC 6078: Procedure FreeProcInstance( Proc : FARPROC)
6079: Procedure FreeLibraryAndExitThread( hLibModule : HMODULE; dwExitCode : DWORD)
6080: Function DisableThreadLibraryCalls( hLibModule : HMODULE) : BOOL
6081: Procedure ParallelJob( ASelf: TObject; ATarget: Pointer; AParam: Pointer; ASafeSection: boolean);
6082: Procedure ParallelJob1( ATarget : Pointer; AParam : Pointer; ASafeSection : boolean);
6083: Procedure
       ParallelJob2(AJobGroup:TJobsGroup;ASelf:TObject;ATarget:Pointer;AParam:Pointer;ASafeSection:boolean);
6084: Procedure ParallelJob3( AJobGroup:TJobsGroup;ATarget:Pointer;AParam:Pointer;ASafeSection: boolean);
6085: Function CreateParallelJob(ASelf:TObject;ATarget:Pointer;AParam:Pointer;ASafeSection:boolean):TParallelJob;
6086: Function CreateParallelJob1(ATarget:Pointer; AParam:Pointer; ASafeSection : boolean) : TParallelJob;
6087: Function CurrentParallelJobInfo : TParallelJobInfo 6088: Function ObtainParallelJobInfo : TParallelJobInfo
6089:
6091: Function MimeEncodeString( const S : AnsiString) : AnsiString
6092: Function MimeDecodeString( const S : AnsiString) : AnsiString
6093: Procedure MimeEncodeStream( const InputStream : TStream; const OutputStream : TStream)
6094: Procedure MimeDecodeStream( const InputStream : TStream; const OutputStream : TStream)
        Function MimeEncodedSize( const I : Cardinal) : Cardinal Function MimeDecodedSize( const I : Cardinal) : Cardinal
6095:
6096:
6097:
         Procedure MimeEncode( var InputBuffer : string; const InputByteCount : Cardinal; var OutputBuffer)
         Function MimeDecode(var InputBuffer:string/const InputBytesCount:Cardinal/var OutputBuffer):Cardinal/
6098:
6099:
         Function MimeDecodePartial(var InputBuffer:string;const InputBytesCount:Cardinal;var
       OutputBuffer:string;var ByteBuffer: Cardinal; var ByteBufferSpace: Cardinal): Cardinal Function MimeDecodePartialEnd(var OutputBuf:string;const ByteBuf:Cardinal;const
6100:
       ByteBufferSpace:Cardinal): Cardinal;
Procedure DirectPrint( const Printer, Data : string)
6103:
6104:
         Procedure SetPrinterPixelsPerInch
6105:
         Function GetPrinterResolution : TPoint
         Function CharFitsWithinDots( const Text : string; const Dots : Integer) : Integer
6107:
         Procedure PrintMemo( const Memo: TMemo; const Rect: TRect)
6108:
6109:
Function StrChr( lpStart : PChar; wMatch : WORD) : PChar
6111:
         Function StrChrI( lpStart : PChar; wMatch : WORD) : PChar
6112:
         Function StrCmpN( lpStr1, lpStr2 : PChar; nChar : Integer) : Integer
6113:
         Function StrCmpNI( lpStr1, lpStr2 : PChar; nChar : Integer) : Integer
6114:
         Function StrCSpn( lpStr_, lpSet : PChar) : Integer
         Function StrCSpnI( lpStr1, lpSet : PChar) : Integer
Function StrDup( lpSrch : PChar) : PChar
Function StrFormatByteSize( dw : DWORD; szBuf : PChar; uiBufSize : UINT) : PChar
6116:
6117:
6118:
         Function StrFormatkBSize( qdw : Dword; szBuf : PChar; uiBufSize : UINT) : PChar
6120: Function StrFromTimeInterval(pszOut: PChar; cchMax:UINT;dwTimeMS:DWORD; digits: Integer): Integer 6121: Function StrIsIntlEqual( fCaseSens: BOOL; lpString1, lpString2: PChar; nChar: Integer): BOOL 6122: /Function StrNCat( psz1: PChar; psz2: PChar; cchMax: Integer): PChar
         Function StrPBrk( psz, pszSet : PChar) : PChar
6123:
         Function StrRChr( lpStart, lpEnd : PChar; wMatch : WORD) : PChar
        Function StrRChrI( lpStart, lpEnd: PChar; wMatch: WORD): PChar
Function StrRChrI( lpSource, lpLast, lpSrch: PChar): PChar
Function StrStrI( lpSource, lpLast, lpSrch: PChar): PChar
Function StrStr( lpFirst, lpSrch: PChar): Integer
6125:
6126:
6127:
6128:
         Function StrStrI( lpFirst, lpSrch : PChar) : PChar
6129:
         Function StrToInt( lpSrch : PChar) : Integer
Function StrToIntEx( pszString : PChar; dwFlags : DWORD; var piRet : Integer) : BOOL
Function StrTrim( psz : PChar; pszTrimChars : PChar) : BOOL
6130:
6131:
6132:
         Function ChrCmpI( w1, w2 : WORD) : BOOL
         Function ChrCmpIA( w1, w2 : WORD) : BOOL
Function ChrCmpIW( w1, w2 : WORD) : BOOL
6134:
6135:
         Function StrIntlEqN(s1,s2: PChar; nChar: Integer): BOOL
Function StrIntlEqNI(s1,s2: PChar; nChar: Integer): BOOL
6136:
         Function StrCatBuff( pszDest, pszSrc : PChar; cchDestBuffSize : Integer) : PChar
6138:
         Function StrCpyNX( pszl : PChar; psz2 : PChar; cchMax : Integer) : PChar
6139:
6140:
         Function IntlStrEqWorker( fCaseSens : BOOL; lpString1, lpString2 : PChar; nChar : Integer) : BOOL
         Function IntlStrEqN( s1, s2 : PChar; nChar : Integer) : BOOL SZ_CONTENTTYPE_HTMLA', 'String').SetString( 'text/html
6141:
6142:
         SZ_CONTENTTYPE_HTMLW','String').SetString( 'text/html
6143:
         SZ_CONTENTTYPE_HTML','string').SetString( SZ_CONTENTTYPE_HTMLA);
SZ_CONTENTTYPE_CDFA','String').SetString( 'application/x-cdf
6144:
6145:
         SZ_CONTENTIFE_CDFW', 'String').SetString( 'application',x-cdf SZ_CONTENTIFE_CDFW','string').SetString( SZ_CONTENTIFE_CDFA);
6146:
6147:
        Function PathIsHTMLFile( pszPath : PChar) : BOOL
STIF_DEFAULT', 'LongWord').SetUInt( $00000000);
STIF_SUPPORT_HEX', 'LongWord').SetUInt( $00000001);
Function StrNCmpI( lpStr1, lpStr2 : PChar; nChar : Integer) : Integer
6148:
6149:
6150:
         Function StrNCpy( pszl, psz2 : PChar; cchMax : Integer) : PChar
Function StrCatN( pszl : PChar; psz2 : PChar; cchMax : Integer) : PChar
6152:
6153:
         Function PathAddBackslash( pszPath : PChar) : PChar
Function PathAddExtension( pszPath : PChar; pszExt : PChar) : BOOL
6154:
6155:
         Function PathAppend( pszPath : PChar; pMore : PChar) : BOOL
         Function PathBuildRoot( szRoot: PChar; iDrive: Integer): PChar
Function PathCanonicalize( pszBuf: PChar; pszPath: PChar): BOOL
6157:
6158:
         Function PathCombine( szDest : PChar; lpszDir, lpszFile : PChar) : PChar
Function PathCompactPath( hDC : HDC; pszPath : PChar; dx : UINT) : BOOL
6159:
```

```
6161:
        Function PathCompactPathEx( pszOut : PChar; pszSrc : PChar; cchMax : UINT; dwFlags:DWORD) : BOOL
         Function PathCommonPrefix( pszFile1, pszFile2 : PChar; achPath : PChar) : Integer
6162:
         Function PathFileExists( pszPath : PChar) : BOOL
        Function PathFindExtension(pszPath: PChar): PChar
Function PathFindFileName(pszPath: PChar): PChar
6164:
6165:
        Function PathFindNextComponent(pszPath: PChar): PChar
Function PathFindOnPath(pszPath: PChar): PChar): BOOL
6166:
6167:
        Function PathGetArgs(pszPath: PChar): PChar

Function PathFindSuffixArray(pszPath: PChar; const apszSuffix: PChar; iArraySize: Integer): PChar
6169:
6170:
        Function PathIsLFNFileSpec( lpName : PChar) : BOOL
        Function PathGetCharType( ch : Char) : UINT
6171:
        GCT_INVALID','LongWord').SetUInt($0000);
6173:
         GCT_LFNCHAR'
                         ,'LongWord').SetUInt( $0001);
        GCT_SHORTCHAR', 'LongWord').SetUInt( $0002);
6174:
6175:
        GCT_WILD','LongWord').SetUInt( $0004);
6176:
        GCT_SEPARATOR','LongWord').SetUInt( $0008);
         Function PathGetDriveNumber( pszPath : PChar) : Integer
6177:
        Function PathIsDirectory( pszPath : PChar) : BOOL Function PathIsDirectoryEmpty( pszPath : PChar) : BOOL
6178:
6179:
        Function PathIsFileSpec( pszPath : PChar) : BOOL
6180:
         Function PathIsPrefix( pszPrefix, pszPath : PChar) : BOOL
         Function PathIsRelative( pszPath : PChar) : BOOL
6182:
6183:
        Function PathIsRoot( pszPath : PChar) : BOOL
        Function PathIsSameRoot( pszPath1, pszPath2 : PChar) : BOOL
Function PathIsUNC( pszPath : PChar) : BOOL
6184:
6185:
6186:
         Function PathIsNetworkPath( pszPath : PChar) : BOOL
6187:
        Function PathIsUNCServer( pszPath : PChar) : BOOL
6188:
        Function PathIsUNCServerShare( pszPath : PChar) : BOOL
        Function PathIsContentType(pszPath, pszContentType: PChar): BOOL
Function PathIsURL(pszPath: PChar): BOOL
6189:
        Function PathMakePretty( pszPath : PChar) : BOOL
Function PathMatchSpec( pszFile, pszSpec : PChar) : BOOL
6191:
6192:
        Function PathParseIconLocation(pszIconFile: PChar): Integer Procedure PathQuoteSpaces(lpsz: PChar)
6193:
6194:
         Function PathRelativePathTo(pszPath:PChar;pszFrom:PChar;dwAttrFrom:DWORD;pszTo:PChar;dwAttrTo:DWORD):BOOL;
6195:
6196:
        Procedure PathRemoveArgs( pszPath : PChar)
6197:
        \textbf{Function} \hspace{0.1cm} \texttt{PathRemoveBackslash( pszPath : PChar) : PChar}
        Procedure PathRemoveBlanks( pszPath : PChar)
6198:
6199:
         Procedure PathRemoveExtension( pszPath : PChar)
6200:
         Function PathRemoveFileSpec( pszPath : PChar) : BOOL
6201:
         \textbf{Function} \hspace{0.1cm} \texttt{PathRenameExtension(} \hspace{0.1cm} \texttt{pszPath:} \hspace{0.1cm} \texttt{PChar;} \hspace{0.1cm} \texttt{pszExt:} \hspace{0.1cm} \texttt{PChar):} \hspace{0.1cm} \texttt{BOOL}
        Function PathSearchAndQualify( pszPath : PChar; pszBuf : PChar; cchBuf : UINT) : BOOL Procedure PathSetDlgItemPath( hDlg : HWND; id : Integer; pszPath : PChar)
6202:
6203:
         Function PathSkipRoot( pszPath : PChar) : PChar
6205:
        Procedure PathStripPath( pszPath : PChar)
Function PathStripToRoot( pszPath : PChar) : BOOL
6206:
         Procedure PathUnquoteSpaces( lpsz : PChar)
6207:
         Function PathMakeSystemFolder( pszPath : PChar) : BOOL
6209:
         Function PathUnmakeSystemFolder( pszPath : PChar) : BOOL
6210:
        Function PathIsSystemFolder( pszPath : PChar; dwAttrb : DWORD) : BOOL
         Procedure PathUndecorate( pszPath : PChar)
6211:
         Function PathUnExpandEnvStrings( pszPath : PChar; pszBuf : PChar; cchBuf : UINT) : BOOL
6212:
        URL_SCHEME_INVALID', 'LongInt').SetInt( - 1);
URL_SCHEME_UNKNOWN', 'LongInt').SetInt( 0);
6213:
6214:
6215:
        URL_SCHEME_FTP','LongInt').SetInt( 1);
URL_SCHEME_HTTP','LongInt').SetInt( 2);
6216:
         URL_SCHEME_GOPHER', 'LongInt').SetInt( 3);
6217:
         URL_SCHEME_MAILTO','LongInt').SetInt( 4);
6218:
        URL_SCHEME_NEWS','LongInt').SetInt( 5);
URL_SCHEME_NNTP','LongInt').SetInt( 6);
URL_SCHEME_TELNET','LongInt').SetInt( 7);
6219:
6220:
6221:
6222:
         URL_SCHEME_WAIS','LongInt').SetInt( 8);
6223:
        URL_SCHEME_FILE','LongInt').SetInt( 9);
        URL_SCHEME_MK','LongInt').SetInt( 10);
6224:
        URL_SCHEME_HTTPS','LongInt').SetInt( 11);
URL_SCHEME_SHELL','LongInt').SetInt( 12);
6225:
         URL_SCHEME_SNEWS', 'LongInt').SetInt( 13);
6227:
6228:
        URL_SCHEME_LOCAL','LongInt').SetInt( 14);
        URL_SCHEME_JAVASCRIPT','LongInt').SetInt( 15);
URL_SCHEME_VBSCRIPT','LongInt').SetInt( 16);
URL_SCHEME_ABOUT','LongInt').SetInt( 17);
6229:
6230:
6231:
6232:
        URL_SCHEME_RES','LongInt').SetInt( 18);
        URL_SCHEME_MAXVALUE','LongInt').SetInt( 19);
URL_SCHEME', 'Integer
6233:
6234:
         URL_PART_NONE', 'LongInt').SetInt( 0);
6235:
6236:
        URL_PART_SCHEME', 'LongInt').SetInt( 1);
        URL_PART_HOSTNAME', 'LongInt').SetInt( 2);
URL_PART_USERNAME', 'LongInt').SetInt( 3);
URL_PART_PASSWORD', 'LongInt').SetInt( 4);
6237:
6238:
6239:
        URL_PART_PORT','LongInt').SetInt( 5);
URL_PART_QUERY','LongInt').SetInt( 6);
6241:
        URL_PART', 'DWORD
URLIS_URL', 'LongInt').SetInt( 0);
6242:
6243:
6244:
         URLIS_OPAQUE','LongInt').SetInt( 1);
         URLIS_NOHISTORY','LongInt').SetInt(
6245:
        URLIS_FILEURL', 'LongInt').SetInt( 3);
URLIS_APPLIABLE', 'LongInt').SetInt( 4);
URLIS_DIRECTORY', 'LongInt').SetInt( 5);
URLIS_HASQUERY', 'LongInt').SetInt( 6);
6246:
6247:
6248:
```

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6250:
                 TUrlis', 'DWORD
                 URL_UNESCAPE','LongWord').SetUInt( $10000000);
6251:
                  URL_ESCAPE_UNSAFE', 'LongWord').SetUInt( $20000000);
6253:
                 URL_PLUGGABLE_PROTOCOL','LongWord').SetUInt( $40000000);
URL_WININET_COMPATIBILITY','LongWord').SetUInt( DWORD ( $80000000 ));
URL_DONT_ESCAPE_EXTRA_INFO','LongWord').SetUInt( $02000000);
6254:
6255:
                 URL_ESCAPE_SPACES_ONLY','LongWord').SetUInt( $04000000);
6256:
                  URL_DONT_SIMPLIFY','LongWord').SetUInt( $08000000);
                 URL_NO_META','longword').SetUInt( URL_DONT_SIMPLIFY);
6258:
6259:
                 URL_UNESCAPE_INPLACE', 'LongWord').SetUInt( $00100000);
                  URL_CONVERT_IF_DOSPATH','LongWord').SetUInt( $00200000);
6260:
                 URL_CONVERT_IF_JOSPATH','LongWord').SetUInt( $00200000);
URL_UNESCAPE_HIGH_ANSI_ONLY','LongWord').SetUInt( $00400000);
URL_INTERNAL_PATH','LongWord').SetUInt( $00800000);
URL_FILE_USE_PATHURL','LongWord').SetUInt( $00010000);
URL_ESCAPE_PERCENT','LongWord').SetUInt( $00001000);
6262:
6263:
6264:
                 URL_ESCAPE_SEGMENT_ONLY', 'LongWord').SetUInt( $00002000);
URL_PARTFLAG_KEEPSCHEME', 'LongWord').SetUInt( $00000001);
6265:
                 URL_APPLY_DEFAULT', 'LongWord').SetUInt( $00000001);
URL_APPLY_GUESSSCHEME', 'LongWord').SetUInt( $0000002);
URL_APPLY_GUESSFILE', 'LongWord').SetUInt( $00000004);
URL_APPLY_FORCEAPPLY', 'LongWord').SetUInt( $00000008);
6267:
6268:
6269:
6271:
                 Function UrlCompare( psz1, psz2 : PChar; fIgnoreSlash : BOOL) : Integer
6272:
                 \textbf{Function} \  \, \texttt{UrlCombine} \\ (\texttt{pszBase}, \texttt{pszRelative:PChar}; \texttt{pszCombin:PChar}; \textbf{out} \  \, \texttt{pcchCombin:DWORD}; \\ dw \\ \texttt{Flags:DWORD):HRESULT}; \\ \textbf{out} \\
                 Function UrlCanonicalize(pszUrl:PChar;pszCanonicalized:PChar;pschCanonic:DWORD;dwFlags:DWORD):HRESULT;
6273:
                 Function UrlIsOpaque( pszURL : PChar) : BOOL
6275:
                 Function UrlIsNoHistory( pszURL : PChar) : BOOL
6276:
                 Function UrlIsFileUrl( pszURL : PChar) : BOOL
Function UrlIs( pszUrl : PChar; UrlIs : TUrlIs) : BOOL
6277:
6278:
                 Function UrlGetLocation(psz1: PChar): PChar
                 Function UrlUnescape( pszUrl, pszUnescaped : PChar;pcchUnescaped:DWORD; dwFlags : DWORD) : HRESULT
6279:
                 Function UrlEscape(pszUrl: PChar; pszEscaped: PChar; pcchEscaped:DWORD; dwFlags: DWORD) : HRESULT Function UrlCreateFromPath(pszPath:PChar; pszUrl: PChar;pcchUrl: DWORD; dwFlags: DWORD) : HRESULT
6280:
6281:
                 Function PathCreateFromUrl(pszUrl:PChar; pszPath:PChar; pcchPath:DWORD; dwFlags : DWORD) : HRESULT
Function UrlHash( pszUrl: PChar; pbHash : BYTE; cbHash : DWORD) : HRESULT
6282:
6283:
                  Function UrlGetPart(pszIn: PChar; pszOut: PChar; pschOut: DWORD; dwPart,dwFlags: DWORD) : HRESULT
                 Function UrlApplyScheme( pszIn: PChar; pszOut: PChar; pccHout: DWORD; dwFalgs: 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
6285:
6286:
6287:
6288:
                 Function SHDeleteEmptyKey( hKey: HKEY; pszSubKey: PChar): DWORD

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

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

Function SHDeleteValue( hKey: HKEY; pszSubKey, pszValue: PChar): DWORD

Function SHEnumKeyEx( hKey: HKEY; dwIndex: DWORD; pszName: PChar; var pcchName: DWORD): Longint

Function SHEnumValue( hKey: HKEY; dwIndex: DWORD; pszValueName: PChar; var
6289:
6290:
6291:
6292:
6293:
               pchValueName: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
6295:
                  Function SHRegGetPath(hKey:HKEY; pcszSubKey,pcszValue: PChar; pszPath: PChar; dwFlags: DWORD): DWORD
                 Function SHRegSetPath( hKey:HKEY; pcszSubKey, pcszValue: pchar; pszPath: PChar; dwFlags: DWORD): DWORD SHREGDEL_DEFAULT', 'LongWord').SetUInt( $0000000); SHREGDEL_HKCU', 'LongWord').SetUInt( $00000001); SHREGDEL_HKCU', 'LongWord').SetUInt( $00000001);
6297:
6298:
6299:
6300:
                  SHREGDEL_HKLM', 'LongWord').SetUInt( $00000010);
                  SHREGDEL_BOTH', 'LongWord').SetUInt( $00000011);
6301:
6302:
                  SHREGENUM_DEFAULT', 'LongWord').SetUInt( $00000000);
                 SHREGENUM_HKCU','LongWord').SetUInt( $00000001);
SHREGENUM_HKLM','LongWord').SetUInt( $00000010);
6303:
6304:
                  SHREGENUM_BOTH','LongWord').SetUInt( $00000011);
6305:
                  SHREGSET_HKCU', 'LongWord').SetUInt( $00000001);
6306:
                 SHREGSET_FORCE_HKCU', 'LongWord').SetUInt( $00000002);
SHREGSET_HKLM', 'LongWord').SetUInt( $00000004);
SHREGSET_FORCE_HKLM', 'LongWord').SetUInt( $00000008);
6307:
6308:
6309:
                 TSHRegDelFlags', 'DWORD TSHRegEnumFlags', 'DWORD
6310:
6311:
6312:
                 HUSKEY', 'THandle
                 ASSOCF_INIT_NOREMAPCLSID','LongWord').SetUInt( $0000001);
6313:
                 ASSOCF_INIT_BYEXENAME','LongWord').SetUInt( $0000002);
ASSOCF_OPEN_BYEXENAME','LongWord').SetUInt( $00000002);
6315:
                 ASSOCF_INIT_DEFAULTTOSTAR','LongWord').SetUInt( $00000004);
ASSOCF_INIT_DEFAULTTOFOLDER','LongWord').SetUInt( $00000008);
6316:
6317:
                 ASSOCF_NOUSERSETTINGS','LongWord').SetUInt($0000010);
ASSOCF_NOTRUNCATE','LongWord').SetUInt($00000020);
6318:
6319:
6320:
                 ASSOCF_VERIFY','LongWord').SetUInt( $00000040);
                 ASSOCF_REMAPRUNDLL','LongWord').SetUInt( $00000080);
ASSOCF_NOFIXUPS','LongWord').SetUInt( $00000100);
6321:
6322:
                 ASSOCF_IGNOREBASECLASS','LongWord').SetUInt( $00000200);
6323:
                 ASSOCF', 'DWORD
6324:
                 ASSOCSTR_COMMAND', 'LongInt').SetInt( 1);
6325:
                 ASSOCSTR_EXECUTABLE', 'LongInt').SetInt( 2);
ASSOCSTR_EXECUTABLE', 'LongInt').SetInt( 2);
ASSOCSTR_FRIENDLYDOCNAME', 'LongInt').SetInt( 3);
ASSOCSTR_FRIENDLYAPPNAME', 'LongInt').SetInt( 4);
ASSOCSTR_NOOPEN', 'LongInt').SetInt( 5);
ASSOCSTR_SHELLNEWVALUE', 'LongInt').SetInt( 6);
6326:
6327:
6329:
6330:
                 ASSOCSTR_DDECOMMAND', 'LongInt').SetInt( 7);
ASSOCSTR_DDEIFEXEC', 'LongInt').SetInt( 8);
6331:
6332:
                  ASSOCSTR_DDEAPPLICATION', 'LongInt').SetInt( 9);
6333:
                 ASSOCSTR_DDETOPIC','LongInt').SetInt(10);
ASSOCSTR_INFOTIP','LongInt').SetInt(11);
6334:
6335:
6336:
                 ASSOCSTR_MAX', 'LongInt').SetInt( 12);
                 ASSOCSTR', 'DWORD
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6338:
         ASSOCKEY SHELLEXECCLASS', 'LongInt').SetInt( 1);
         ASSOCKEY_APP', 'LongInt').SetInt(2);
6339:
         ASSOCKEY_CLASS', 'LongInt').SetInt( 3);
6341:
         ASSOCKEY_BASECLASS', 'LongInt').SetInt(4);
6342:
         ASSOCKEY_MAX','LongInt').SetInt( 5);
         ASSOCKEY', 'DWORD
6343:
         ASSOCDATA_MSIDESCRIPTOR','LongInt').SetInt( 1);
6344:
         ASSOCDATA_NOACTIVATEHANDLER', 'LongInt').SetInt( 2);
ASSOCDATA_QUERYCLASSSTORE', 'LongInt').SetInt( 3);
ASSOCDATA_HASPERUSERASSOC', 'LongInt').SetInt( 4);
6345:
6346:
6347:
         ASSOCDATA_MAX','LongInt').SetInt(5);
6348:
         ASSOCDATA', 'DWORD
6350:
         ASSOCENUM_NONE', 'LongInt').SetInt( 0);
6351:
         ASSOCENUM', 'DWORD
         SID_IQueryAssociations','String').SetString('{c46ca590-3c3f-11d2-bee6-0000f805ca57}SHACF_DEFAULT','LongWord').SetUInt($00000000);
6352:
6353:
         SHACF_FILESYSTEM','LongWord').SetUInt( $00000001);
6354:
6355:
         SHACF_URLHISTORY','LongWord').SetUInt( $00000002);
         SHACF_URLMRU', LongWord').SetUInt($0000004);
SHACF_USETAB', LongWord').SetUInt($00000008);
6356:
6357:
          SHACF_FILESYS_ONLY','LongWord').SetUInt( $00000010);
         SHACF_AUTOSUGGEST_FORCE_ON', 'LongWord').SetUInt( $10000000);
SHACF_AUTOSUGGEST_FORCE_OFF', 'LongWord').SetUInt( $20000000);
SHACF_AUTOAPPEND_FORCE_ON', 'LongWord').SetUInt( $40000000);
SHACF_AUTOAPPEND_FORCE_OFF', 'LongWord').SetUInt( DWORD ( $80000000 ));
6359:
6360:
6361:
6362:
6363:
         Function SHAutoComplete( hwndEdit : HWND; dwFlags : DWORD) : HRESULT
6364:
         Procedure SHSetThreadRef( punk : IUnknown)
Procedure SHGetThreadRef( out ppunk : IUnknown)
6365:
         CTF_INSIST', 'LongWord').SetUInt( $0000001);
CTF_THREAD_REF', 'LongWord').SetUInt( $00000002);
CTF_PROCESS_REF', 'LongWord').SetUInt( $00000004);
6366:
6368:
6369:
         CTF_COINIT','LongWord').SetUInt( $00000008);
6370:
         Function SHCreateShellPalette( hdc : HDC) : HPALETTE
         Procedure ColorRGBTOHLS( clrRGB : TColorRef; out pwHue, pwLuminance, pwSaturation : WORD)
Function ColorHLSToRGB( wHue, wLuminance, wSaturation : WORD) : TColorRef
6371:
6372:
6373:
         Function ColorAdjustLuma( clrRGB : TColorRef; n : Integer; fScale : Boolean) : TColorRef
         Function GetSysColorBrush( nIndex : Integer) : HBRUSH
Function DrawFocusRect( hDC : HDC; const lprc : TRect) : BOOL
6374:
6375:
         Function FillRect( hDC: HDC; const lprc: TRect; hbr: HBRUSH): Integer Function FrameRect( hDC: HDC; const lprc: TRect; hbr: HBRUSH): Integer Function InvertRect( hDC: HDC; const lprc: TRect): BOOL
6376:
6377:
6378:
         Function SetRect( var lprc : TRect; xLeft, yTop, xRight, yBottom : Integer) : BOOL Function SetRectEmpty( var lprc : TRect) : BOOL
6379:
6380:
         Function CopyRect( var lprcDst : TRect; const lprcSrc : TRect) : BOOL
6381:
         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
6382:
6383:
6384:
6385:
6386:
         Function InitializeFlatSB( hWnd : HWND) : Bool
         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
6387:
6388:
6389:
         Function GET_APPCOMMAND_LPARAM( lParam : Integer) : Word //of JvWin32
6390:
6391:
         Function GET_DEVICE_LPARAM( lParam : Integer) : Word
6392:
         Function GET_MOUSEORKEY_LPARAM( lParam : Integer) : Integer
         Function GET_FLAGS_LPARAM( lParam : Integer) : Word
6393:
         Function GET_KEYSTATE_LPARAM( lParam : Integer) : Word
6394:
6395:
6396:
6398: Function DragQueryFile( Drop : HDROP; FileIndex : UINT; FileName : PChar; cb : UINT) : UINT
6399: Function DragQueryPoint( Drop : HDROP; var Point : TPoint) : BOOL
6400: Procedure DragFinish( Drop : HDROP)
6401: Procedure DragAcceptFiles( Wnd : HWND; Accept : BOOL)
6402: Function ShellExecute(hWnd:HWND;Operation,FileName,Parameters,Directory:PChar;ShowCmd:Integer):HINST
6403: Function FindExecutable( FileName, Directory : PChar; Result : PChar) : HINST
6404: Function ShelllAbout( Wnd: HWND; szApp, szOtherStuff: PChar; Icon: HICON): Integer
6405: Function DuplicateIcon( hInst: HINST; Icon: HICON): HICON
6406: Function ExtractAssociatedIcon( hInst: HINST; lpIconPath: PChar; var lpiIcon: Word): HICON
6407: Function Extracticon( hInst : HINST; lpszExeFileName : PChar; nIconIndex : UINT) : HICON 6408: Function SHAppBarMessage( dwMessage : DWORD; var pData : TAppBarData) : UINT
6409: Function DoEnvironmentSubst( szString : PChar; cbString : UINT) : DWORD
6410: \textbf{Function} \texttt{ ExtractIconEx(lpszFile:PChar;nIconIndex:Int; \textbf{var} \texttt{ phiconLarge,phiconSmall:HICON;nIcons:UINT):UINT;} \\
6411: Procedure SHFreeNameMappings ( hNameMappings : THandle)
6412:
6413:
         DLLVER_PLATFORM_WINDOWS','LongWord').SetUInt( $00000001);
         DLLVER_PLATFORM_NT','LongWord').SetUInt( $00000002);
DLLVER_MAJOR_MASK','LongWord').SetUInt( Int64 ( $FFFF000000000000 ));
DLLVER_MINOR_MASK','LongWord').SetUInt( Int64 ( $0000FFFF00000000 ));
6414:
6415:
6416:
         DLLVER_BUILD_MASK', 'LongWord').SetUInt( Int64 ( $00000000FFFF0000 ));
         DLLVER_QFE_MASK', 'LongWord').SetUInt( Int64 ( $00000000000FFFF ));
6418:
6419:
         \textbf{Function} \ \ \texttt{MAKEDLLVERULL}(\ \ \texttt{Major}, \ \ \texttt{Minor}, \ \ \texttt{Build}, \ \ \texttt{Qfe} \ : \ \ \texttt{Word}) \ : \ \ \texttt{Int64}
         Function SimpleXMLEncode( const S: string): string

Procedure SimpleXMLDecode( var S: string; TrimBlanks: Boolean)
6420:
6421:
         Function XMLEncode( const S : string) : string
Function XMLDecode( const S : string) : string
6422:
6423:
         Function EntityEncode( const S : string) : string
Function EntityDecode( const S : string) : string
6424:
6425:
```

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6427: procedure RIRegister CPort Routines(S: TPSExec);
6428:
       Procedure EnumComPorts ( Ports : TStrings)
       Procedure ListComPorts( Ports : TStrings)
6430:
       Procedure ComPorts( Ports : TStrings) //Alias to Arduino
6431:
       Function GetComPorts: TStringlist;
       Function StrToBaudRate(Str:string): TBaudRate
Function StrToStopBits(Str:string): TStopBits
6432:
6433:
       Function StrToDataBits( Str : string) : TDataBits
6434:
6435:
       Function StrToParity( Str : string) : TParityBits
       Function StrToFlowControl( Str : string) : TFlowControl
Function BaudRateToStr( BaudRate : TBaudRate) : string
6436:
6437:
       Function StopBitsToStr( StopBits : TStopBits)
6438:
6439:
       Function DataBitsToStr( DataBits : TDataBits) : string
       Function ParityToStr( Parity : TParityBits) : string
Function FlowControlToStr( FlowControl : TFlowControl) : string
6440:
6441:
6442:
       Function ComErrorsToStr( Errors : TComErrors) : String
6443:
6444:
       Function GetMessage( var lpMsg : TMsg; hWnd : HWND; wMsgFilterMin, wMsgFilterMax : UINT) : BOOL
       Function DispatchMessage( const lpMsg: TMsg): Longint
Function TranslateMessage( const lpMsg: TMsg): BOOL
6445:
6446:
       Function SetMessageQueue( cMessagesMax : Integer) : BOOL
6447:
6448:
       Function PeekMessage(var lpMsg:TMsg; hWnd:HWND;wMsgFilterMin,wMsgFilterMax,wRemoveMsg:UINT):BOOL
6449:
       Function GetMessagePos : DWORD
       Function GetMessageTime : Longint
6450:
6451:
       Function GetMessageExtraInfo : Longint
6452:
       Function GetSpecialFolderPath( const FolderName : string; CanCreate : Boolean) : string
6453:
       Procedure JAddToRecentDocs( const Filename : string)
6454:
       Procedure ClearRecentDocs
       Function ExtractIconFromFile( FileName : string; Index : Integer) : HICON
6455:
       Function CreateShellLink( const AppName, Desc : string; Dest : string) : string
6456:
       Procedure GetShellLinkInfo( const LinkFile : WideString; var SLI : TShellLinkInfo)
Procedure SetShellLinkInfo( const LinkFile : WideString; const SLI : TShellLinkInfo)
6457:
6458:
       Function RecycleFile( FileToRecycle : string) : Boolean
Function JCopyFile( FromFile, ToDir : string) : Boolean
6459:
6460:
       Function ShellObjectTypeEnumToConst( ShellObjectType: TShellObjectType): UINT
Function ShellObjectTypeConstToEnum( ShellObjectType: UINT): TShellObjectType
6462:
      Function QueryServiceConfig2A( hService : SC_HANDLE; dwInfoLevel : DWORD; lpBuffer : LPBYTE; cbBufSize : DWORD; var pcbBytesNeeded : DWORD) : BOOL
6463:
6464:
       Function QueryServiceConfig2W( hService : SC_HANDLE; dwInfoLevel : DWORD; lpBuffer : LPBYTE; cbBufSize :
      DWORD; var pcbBytesNeeded : DWORD) : BOOL
6465:
      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;
6467:
      dwServiceState : DWORD; lpServices:LPBYTE; cbBufSize:DWORD; var pcbBytesNeeded,lpServicesReturned,
      lpResumeHandle:DWORD; pszGroupNam
       Function EnumServicesStatusEx( hSCManager : SC_HANDLE; InfoLevel : SC_ENUM_TYPE; dwServiceType : DWORD;
      dwServiceState : DWORD;lpServices :LPBYTE;cbBufSize:DWORD; var pcbBytesNeeded,lpServicesReturned,
      lpResumeHandle:DWORD; pszGroupName
       Function ConvertSidToStringSid( sid : PSID; var stringSid : LPWSTR) : BOOL
6469:
6470:
             6471:
6472:
6473:
       Function IsValidPeFile( const FileName : TFileName) : Boolean
6474:
      // Function PeGetNtHeaders( const FileName : TFileName; var NtHeaders : TImageNtHeaders) : Boolean
       Function PeCreateNameHintTable( const FileName : TFileName) : Boolean
6475:
6476:
       Function PeRebaseImage(const ImageName: TFileName; NewBase : DWORD; TimeStamp : DWORD; MaxNewSize :
      DWORD) : TJclRebaseImageInfo
       Function PeVerifyCheckSum( const FileName : TFileName) : Boolean
6478:
       Function PeClearCheckSum( const FileName : TFileName) : Boolean
6479:
       Function PeUpdateCheckSum( const FileName : TFileName) : Boolean
      Function PeDoesExportFunction(const FileName:TFileName;const
FuncName:string;Options:TJclSmartCompOptions):Bool;
6480:
       Function PelsExportFunctionForwardedEx( const FileName : TFileName; const FunctionName : string; var
      ForwardedName : string; Options : TJclSmartCompOptions) : Boolean
      Function PeIsExportFunctionForwarded( const FileName: TFileName: const FunctionName: string: Options:
6482:
      TJclSmartCompOptions) : Boolean
       Function PeDoesImportFunction( const FileName : TFileName; const FunctionName : string; const LibraryName
6483:
       string; Options : TJclSmartCompOptions) : Boolean
6484: Function PeDoesImportLibrary(const FileName:TFileName;const
      LibraryName: string; Recursive: Boolean): Boolean);
6485: Function PelmportedLibraries (const FileName: TFileName; const LibrariesList: TStrings; Recursive:
      Boolean; FullPathName : Boolean) : Boolean
6486: Function PeImportedFunctions( const FileName : TFileName; const FunctionsList : TStrings; const
      LibraryName : string; IncludeLibNames : Boolean) : Boolean

Function PeExportedFunctions( const FileName : TFileName; const FunctionsList : TStrings) : Boolean
6487:
       Function PeExportedNames( const FileName: TFileName; const FunctionsList: TStrings): Boolean
6488:
6489:
       Function PeExportedVariables( const FileName: TFileName: const FunctionsList :
                                                                                                TStrings) : Boolean
       Function PeResourceKindNames(const FileN:TFileName;ResourceType:TJclPeResourceKind;const
6490:
      NamesList:TStrings):Boolean;
6491:
       Function PeBorFormNames( const FileName : TFileName; const NamesList : TStrings) : Boolean
       Function PeBorDependedPackages(const FileName:TFileName;PackagesList:TStrings;FullPathName,
6492:
      Descript:Bool):Bool;
6493:
       Function PeFindMissingImports( const FileName : TFileName; MissingImportsList : TStrings) : Boolean;
       Function PeFindMissingImports1( RequiredImportsList, MissingImportsList : TStrings) : Boolean;
Function PeCreateRequiredImportList(const FileName: TFileName; RequiredImportsList: TStrings): Boolean;
6494:
6495:
       //Function PeMapImgNtHeaders( const BaseAddress : Pointer) : PImageNtHeaders
```

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6497:
           //Function PeMapImgLibraryName( const BaseAddress : Pointer) : string
           //Function PeMapImgSections( const NtHeaders : PImageNtHeaders) : PImageSectionHeader
6498:
6499:
           //Function PeMapImgFindSection( const NtHeaders : PImageNtHeaders; const SectionName : string) :
         PImageSectionHeader
6500:
          //Function PeMapImgExportedVariables(const Module: HMODULE; const VariablesList:TStrings):Boolean
6501:
          //Function PeMapImgResolvePackageThunk( Address : Pointer) : Pointer
Function PeMapFindResource(const Module:HMODULE;const ResourceType:PChar;const ResourceName:string):
6502:
6503:
            SIRegister_TJclPeSectionStream(CL);
6504:
            SIRegister_TJclPeMapImgHookItem(CL);
SIRegister_TJclPeMapImgHooks(CL);
6505:
6506:
           //Function PeDbgImgNtHeaders(ProcessHandle:THandle;BaseAddress:Pointer;var
         NtHeaders:TImageNtHeaders):Boolean
6507:
           //Function PeDbgImgLibraryName(ProcessHandle:THandle; BaseAddress:Pointer; var Name:string):Boolean
6508:
            6509:
            TJclBorUmSymbolModifiers', 'set of TJclBorUmSymbolModifier
6510:
            TJclBorUmDescription', 'record Kind : TJclBorUmSymbolKind; Modifiers : TJclBorUmSymbolModifiers; end TJclBorUmResult', '( urOk, urNotMangled, urMicrosoft, urError )
TJclPeUmResult', '( umNotMangled, umBorland, umMicrosoft )
6511:
6512:
6513:
          Function PeBorUnmangleName( const Name : string; var Unmangled : string; var Description :
         TJclBorUmDescription; var BasePos : Integer) : TJclBorUmResult;
6515:
         Function PeBorUnmangleName1(const Name:string;var Unmangled:string;var
         Descript: TJclBorUmDescription): TJclBorUmResult;
         Function PeBorUnmangleName2( const Name : string; var Unmangled : string) : TJclBorUmResult;
6517:
          Function PeBorUnmangleName3( const Name : string) : string;
6518:
          Function PeIsNameMangled( const Name : string) : TJclPeUmResult
Function PeUnmangleName( const Name : string; var Unmangled : string) : TJclPeUmResult
6519:
6520:
6521:
Function StCopyFile( const SrcPath, DestPath : AnsiString) : Cardinal
6523:
6524:
          Function CreateTempFile( const aFolder : AnsiString; const aPrefix : AnsiString) : AnsiString
          Function DeleteVolumeLabel( Drive : Char) : Cardinal
6525:
           //Procedure EnumerateDirectories(const
         StartDir:AnsiString;FL:TStrings;SubDirs:Bool;IncludeItem:TIncludeItemFunc);
6527:
           // Procedure \ Enumerate Files (const \ Start Dir: Ansi String; FL: TStrings; SubDirs: Bool \ Start Dir: Ansi String; FL: TStrings; SubDirs: Bool \ Start Dir: Ansi String; FL: TStrings; SubDirs: Bool \ Start Dir: Ansi String; FL: TStrings; SubDirs: Bool \ Start Dir: Ansi String; FL: TStrings; SubDirs: Bool \ Start Dir: Ansi String; FL: TStrings; SubDirs: Bool \ Start Dir: Ansi String; FL: TStrings; SubDirs: Bool \ Start Dir: Ansi String; FL: TStrings; SubDirs: Bool \ Start Dir: Ansi String; SubDirs: SubDirs: Bool \ Start Dir: Ansi String; SubDirs: Su
         IncludeItem:TIncludeItemFunc);
6528: Function FileHandlesLeft( MaxHandles : Cardinal) : Cardinal
          Function FileMatchesMask(const FileName, FileMask: AnsiString): Boolean Function FileTimeToStDateTime(FileTime: LongInt): TStDateTimeRec
6529:
6530:
          Function FindNthSlash( const Path : AnsiString; n : Integer) : Integer
Function FlushOsBuffers( Handle : Integer) : Boolean
6531:
6532:
          Function GetCurrentUser : AnsiString
          \textbf{Function} \ \ \texttt{GetDiskClass}( \ \ \texttt{Drive} \ : \ \ \texttt{Char}) \ : \ \ \texttt{DiskClass}
6534:
          Function GetDiskInfo(Drive:Char; var ClustersAvail, TotalClusters, BytesPerSector,
6535:
         SectorsPerCluster:Cardinal):Bool;
6536: Function GetDiskSpace(Drive:Char; var UserSpaceAvail:Double; var TotalSpaceAvail:Double; var
         DiskSize:Double):Boolean;
6537:
         Function GetDiskSpace(Drive:Char; var UserSpaceAvail:Comp; var TotalSpaceAvail:Comp; var
         DiskSize:Comp):Boolean;
6538:
            { index 0 - FreeBytesAvailable, 1 - TotalNumberOfBytes, 2 - TotalNumberOfFreeBytes }
          Function getDiskSpace2(const path: String; index: integer): int64;
6539:
          Function GetFileCreateDate( const FileName : AnsiString) : TDateTime
6540:
6541:
          Function StGetFileLastAccess( const FileName : AnsiString) : TDateTime
Function GetFileLastModify( const FileName : AnsiString) : TDateTime
6542:
6543:
           Function GetHomeFolder( aForceSlash : Boolean) : AnsiString
          Function GetLongPath( const APath : AnsiString) : AnsiString
6544:
6545:
          Function GetMachineName : AnsiString
          Function GetMediaID( Drive : Char; var MediaIDRec : MediaIDType) : Cardinal
Function GetParentFolder( const APath : AnsiString; aForceSlash : Boolean) : AnsiString
6546:
6547:
           Function GetShortPath( const APath : AnsiString) : AnsiString
6549:
          Function GetSystemFolder( aForceSlash : Boolean) : AnsiString
6550:
          Function GetTempFolder( aForceSlash : boolean) : AnsiString
          Function StGetWindowsFolder(aForceSlash: boolean): AnsiString
Function GetWorkingFolder(aForceSlash: boolean): AnsiString
6551:
6552:
           Function GlobalDateTimeToLocal( const UTC : TStDateTimeRec; MinOffset : Integer) : TStDateTimeRec
6553:
6554:
          \textbf{Function} \  \, \texttt{StIsDirectory}( \  \, \textbf{const} \  \, \texttt{DirName} \  \, : \  \, \texttt{AnsiString}) \  \, : \  \, \texttt{Boolean}
6555:
          \textbf{Function} \  \, \texttt{IsDirectoryEmpty}(\  \, \textbf{const} \  \, \texttt{S} \  \, \texttt{:} \  \, \texttt{AnsiString}) \  \, \texttt{:} \  \, \texttt{Integer}
          Function IsDriveReady( Drive : Char) : Boolean
6556:
          Function IsFile( const FileName : AnsiString) : Boolean
6557:
6558:
          Function IsFileArchive( const S : AnsiString) : Integer
          Function IsFileHidden( const S : AnsiString) : Integer
Function IsFileHedden( const S : AnsiString) : Integer
Function IsFileReadOnly( const S : AnsiString) : Integer
Function IsFileSystem( const S : AnsiString) : Integer
Function LocalDateTimeToGlobal( const DT1 : TStDateTimeRec; MinOffset : Integer) : TStDateTimeRec
6559:
6560:
6561:
6562:
6563:
          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
6564:
6565:
          Procedure SplitPath( const APath : AnsiString; Parts : TStrings)
6567:
          Function StDateTimeToFileTime( const FileTime : TStDateTimeRec) : LongInt
          Function StDateTimeToUnixTime( const DT1 : TStDateTimeRec) : Longint Function UnixTimeToStDateTime( UnixTime : Longint) : TStDateTimeRec
6568:
6569:
6570:
          Function ValidDrive( Drive : Char) : Boolean
          Function WriteVolumeLabel( const VolName : AnsiString; Drive : Char) : Cardinal
6571:
6572:
                   6573: //
6574: Function CreateAccount( const Server, Username, Fullname, Password, Description, Homedir, Script: string; const PasswordNeverExpires: Boolean): Boolean
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6575: Function CreateLocalAccount( const Username, Fullname, Password, Description, Homedir, Script: string;
       const PasswordNeverExpires : Boolean) : Boolean
        Function DeleteAccount( const Servername, Username : string) : Boolean
        \textbf{Function} \  \, \texttt{DeleteLocalAccount} ( \  \, \texttt{Username} \ : \  \, \textbf{string}) \  \, : \  \, \texttt{Boolean}
6577:
6578:
        \textbf{Function} \ \ \texttt{CreateLocalGroup( const} \ \ \texttt{Server, Groupname, Description : string)} \ : \ \ \texttt{Boolean}
        Function CreateGlobalGroup( const Server, Groupname, Description: string): Boolean Function DeleteLocalGroup( const Server, Groupname: string): Boolean
6579:
6580:
        Function GetLocalGroups (const Server : string; const Groups : TStrings) : Boolean
6581:
        Function GetGlobalGroups( const Server : string; const Groups : TStrings) : Boolean
6582:
6583:
        Function LocalGroupExists( const Group : string) : Boolean
        Function GlobalGroupExists( const Server, Group : string) : Boolean
6584:
        Function AddAccountToLocalGroup( const Accountname, Groupname: string): Boolean
        Function LookupGroupName( const Server : string; const RID : TNetWellKnownRID) : string
Procedure ParseAccountName( const QualifiedName : string; var Domain, UserName : string)
6586:
6587:
        Function IsLocalAccount( const AccountName : string) : Boolean
Function TimeStampInterval( StartStamp, EndStamp : TDateTime) : integer
6588:
6589:
        Function GetRandomString( NumChar : cardinal) : string
6591:
Procedure cFilesFromWildcard(Directory, Mask: string; var Files:TStringList; Subdirs, ShowDirs,
       Multitasking:Boolean;
6596:
        Function cExecuteFile( const FileName, Params, DefaultDir: string; ShowCmd: Integer): THandle
        Function cRunAndGetOutput(Cmd, WorkDir:string; ErrFunc:TErrFunc; LineOutputFunc:TLineOutputFunc;
6597:
       CheckAbortFunc : TCheckAbortFunc; ShowReturnValue : Boolean) : string
6598:
        Function cGetShortName( FileName : string) : string
6599:
        Procedure cShowError( Msg : String)
6600:
        Function cCommaStrToStr( s : string; formatstr : string) : string
        Function cIncludeQuoteIfSpaces( s : string) : string
6602:
        Function cIncludeQuoteIfNeeded( s : string) : string
6603:
        Procedure cLoadFilefromResource( const FileName : string; ms : TMemoryStream)
        Function cValidateFile(const FileName:string; const WorkPath:string;const CheckDirs:boolean):string;
6604:
        Function cBuildFilter( var value : string; const FLTStyle : TFILTERSET) : boolean;
Function cBuildFilter( var value : string; const _filters : array of string) : boolean;
6605:
6606:
        Function cCodeInstoStr( s : string) : string
Function cStrtoCodeIns( s : string) : string
6607:
6608:
        Procedure cStrtoAttr( var Attr : TSynHighlighterAttributes; Value : string)
Function cAttrtoStr( const Attr : TSynHighlighterAttributes) : string
6609:
6610:
        Procedure cStrtoPoint( var pt : TPoint; value : string)
6611:
6612:
        Function cPointtoStr( const pt : TPoint) : string
        Function cListtoStr( const List : TStrings) : string
6613:
        Function ListtoStr( const List : TStrings) : string
6614:
        Procedure StrtoList( s : string; const List : TStrings; const delimiter : char)
        Procedure cStrtoList( s : string; const List : TStrings; const delimiter : char)
6616:
6617:
        \textbf{Function} \ \texttt{cGetFileTyp}( \ \textbf{const} \ \texttt{FileName} \ : \ \textbf{string}) \ : \ \texttt{TUnitType}
        Function cGetExTyp( const FileName : string) : TExUnitType
6618:
        Procedure cSetPath( Add : string; const UseOriginal : boolean)
        Function cExpandFileto( const FileName : string; const BasePath : string) : string
Function cFileSamePath( const FileName : string; const TestPath : string) : boolean
Procedure cCloneMenu( const FromMenu : TMenuItem; ToMenu : TMenuItem)
6620:
6621:
6622:
        Function cGetLastPos( const SubStr : string; const S : string) : integer
6623:
        Function cGenMakePath(FileName: String): String;
6624:
6625:
        Function cGenMakePath2( FileName : String) : String
        \textbf{Function} \  \, \texttt{cGenMakePath1}( \  \, \texttt{FileName} \  \, : \  \, \textbf{String}; \  \, \texttt{EscapeSpaces}, \  \, \texttt{EncloseInQuotes} \  \, : \  \, \texttt{Boolean}) \  \, : \  \, \textbf{String}; \\
6626:
        Function cGetRealPath( BrokenFileName : String; Directory : String) : String
6627:
6628:
        Function cCalcMod( Count : Integer) : Integer
        Function cGetVersionString( FileName : string) : string
6629:
6630:
        Function cCheckChangeDir( var Dir : string) : boolean
        Function cGetAssociatedProgram(const Extension:string; var Filename,Description: string):boolean
6631:
6632:
        Function cIsNumeric( s : string) : boolean
        Procedure StrtoAttr( var Attr : TSynHighlighterAttributes; Value : string)
Function AttrtoStr( const Attr : TSynHighlighterAttributes) : string
6634:
6635:
        Function GetFileTyp( const FileName : string) : TUnitType
        Function Atoi(const aStr: string): integer
Function Itoa(const aint: integer): string
6636:
6638:
6639:
6640: procedure SIRegister cHTTPUtils(CL: TPSPascalCompiler);
6641: begin
          FindClass('TOBJECT'), 'EHTTP
6642:
6643:
         FindClass('TOBJECT'),'EHTTPParser
         //AnsiCharSet', 'set of AnsiChar
AnsiStringArray', 'array of AnsiString
THTTPProtocolEnum', '( hpNone, hpCustom, hpHTTP, hpHTTPS)
THTTPVersionEnum', '( hvNone, hvCustom, hvHTTP10, hvHTTP11)
6644:
6645:
6646:
6647:
         THTTPVersion', 'record Version : THTTPVersionEnum; Protocol : TH'
6648:
           +'TTPProtocolEnum; CustomProtocol : AnsiString; CustomMajVersion : Integer; '
6649:
           +'CustomMinVersion : Integer; end
6650:
         THTTPHeaderNameEnum',
                                     '( hntCustom, hntHost, hntContentType, hnt'
           +'ContentLength, hntContentTransferEncoding, hntContentLocation, hntContentL'
6652:
6653:
           +'anguage, hntContentEncoding, hntTransferEncoding, hntDate, hntServer, hntU'
6654:
           +'serAgent, hntLocation, hntConnection, hntExpires, hntCacheControl, hntSetC'
           +'ookie, hntCookie, hntAuthorization, hntVia, hntWarning, hntContentRange, h'
6655:
           +'ntXForwardedFor, hntPragma, hntXFoweredBy, hntWWMAuthenticate, hntLastModi'
+'fied, hntETag, hntProxyAuthorization, hntReferer, hntAge, hntAcceptRanges,'
+'hntAcceptEncoding, hntAcceptLanguage, hntAcceptCharset, hntIfModifiedSinc'
6656:
6657:
6658:
6659:
           +'e, hntIfUnmodifiedSince, hntRetryAfter, hntUpgrade, hntStatus, hntProxyCon'
           +'nection, hntOrigin, hntKeepAlive')
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6661:
            THTTPHeaderName', 'record Value : THTTPHeaderNameEnum; Custom: AnsiString; end
            THTTPCustomHeader', 'record FieldName : AnsiString; FieldValue :
6662:
                  AnsiString; end
6663:
6664 :
             //PHTTPCustomHeader', '^THTTPCustomHeader // will not work
           THITPContentLengthEnum', '(hclNone, hcltByteCount)
THITPContentLength', 'record Value: THITPContentLengthEnum; ByteCount:Int64; end
//PHITPContentLength', '^THITPContentLength // will not work
THITPContentTypeMajor', '(hctmCustom, hctmText, hctmImage)
6665:
6666:
6667:
6668:
            THTTPContentTypeEnum', '( hctNone, hctCustomParts, hctCustomStri'
6669:
             +'ng, hctTextHtml, hctTextAscii, hctTextCss, hctTextPlain, hctTextXml, hctTe'
6670:
             +'xtCustom, hctImageJpeg, hctImageGif, hctImageGustom, hctApplic'+'cationJSON, hctApplicationOctetStream, hctApplicationJavaScript, hctApplic'
6671:
6672:
6673:
              +'ationCustom, hctAudioCustom, hctVideoCustom)
            THTTPContentType', 'record Value : THTTPContentTypeEnum; CustomM'
+'ajor : AnsiString; CustomMinor : AnsiString; Parameters : AnsiStringArray;'
6674:
6675:
6676:
                  CustomStr : AnsiString; end
            THTTPDateFieldEnum', '( hdNone, hdCustom, hdParts, hdDateTime )
6677:
           THTTPDateField', 'record Value : THTTPDateFieldEnum; DayOfWeek :'
+' Integer; Day : integer; Month : integer; Year : Integer; Hour : integer; '
+'Min : integer; Sec : Integer; TimeZoneGMT : Boolean; CustomTimeZone : Ansi'
6678:
6679:
6680:
6681:
              +'String; DateTime : TDateTime; Custom : AnsiString; end
            THTTPTransferEncodingEnum', '( hteNone, hteCustom, hteChunked )
6682:
           THTTPTransferEncodingsnum, 'record Value: THTTPTransferEncodingEnu' +'m; Custom: AnsiString; end
THTTPConnectionFieldEnum', '(hcfNone, hcfCustom, hcfClose, hcfKeepAlive)
THTTPConnectionField', 'record Value: THTTPConnectionFieldEnum;'
6683:
6684:
6685:
6686:
6687:
             +' Custom : AnsiString; end
            THTTPAgeFieldEnum', '( hafNone, hafCustom, hafAge )
THTTPAgeField', 'record Value: THTTPAgeFieldEnum; Age : Int64;Custom:AnsiString; end
THTTPCacheControlFieldEnum', '( hccfNone, hccfDecoded, hccfCustom )
6688:
6689:
6690:
6691:
            {\tt THTTPCacheControlRequestSubField', '( hccsfNoCache, hccsfNoStore')} \\
            +', hccsfMaxAge, hccsfMaxStale, hccsfMinFresh, hccsfNoTransform, hccsfOnlyIfCached )
THTTPCacheControlResponseSubField', '( hccrfPublic, hccrfPrivate'
6692:
6693:
             +', hccrfNoCache, hccrfNoStore, hccrfNoTransform, hccrfMustRevalidate, hccrf'+'ProxyRevalidate, hccrfMaxAge, hccrfSMaxAge)
6694:
6695:
           THTTPCacheControlField', 'record Value : THTTPCacheControlFieldEnum; end THTTPContentEncodingEnum', '( hceNone, hceCustom, hceIdentity, h' +'ceCompress, hceDeflate, hceExi, hceGzip, hcePack200Gzip )
6696:
6697:
6698:
6699:
            THTTPContentEncoding',
                                               'record Value:THTTPContentEncodingEnum;Custom:AnsiString; end;
6700:
            THTTPContentEncodingFieldEnum', '( hcefNone, hcefList )
6701:
            THTTPContentEncodingField', 'record Value : THTTPContentEncoding'
            +'FieldEnum; List: array of THTTPContentEncoding; end
THTTPRetryAfterFieldEnum', '( hrafNone, hrafCustom, harfDate, harfSeconds )
6702:
6703:
            THTTPRetryAfterField', 'record Value : THTTPRetryAfterFieldEnum;'
6704:
           THIPRETYALEFFIELD, 'record value : IHIPRETYALEFFIELDENUM,'
+' Custom : AnsiString; Date : TDateTime; Seconds : Int64; end
THTTPContentRangeFieldEnum', '( horfNone, horfCustom, horfByteRange )
THTTPContentRangeField', 'record Value : THTTPContentRangeFieldE'
+'num; ByteFirst : Int64; ByteLast : Int64; ByteSize : Int64; Custom : AnsiString; end
6705:
6706:
6707:
            THTTPSetCookieFieldEnum', '( hscoNone, hscoDecoded, hscoCustom )
THTTPSetCookieCustomField', 'record Name : AnsiString; Value : AnsiString; end
THTTPSetCookieCustomFieldArray', 'array of THTTPSetCookieCustomField
6709:
6710:
6711:
            THITTPSetCookieField', 'record Value : THITTPSetCookieFieldEnum; D' +'omain : AnsiString; Path : AnsiString; Expires : THITTPDateField; MaxAge : '
6712:
6713:
            +'Int64; HttpOnly: Boolean; Secure: Boolean; CustomFields: THTTPSetCookie'
+'CustomFieldArray; Custom: AnsiString; end
//PHTTPSetCookieField', '^THTTPSetCookieField // will not work
6714:
6715:
6716:
            THTTPSetCookieFieldArray', 'array of THTTPSetCookieField
6717:
           THTTPCookieFieldEnum', '( hcoNone, hcoDecoded, hcoCustom )
THTTPCookieFieldEntry', 'record Name : AnsiString; Value : AnsiString; end
6718:
6719:
            THITPCOOKIEFIEIGENTY', 'PECOTA NAME - ARISISTING, VALUE - ARSIST.

'/PHTTPCOOKIEFieldEntry', 'ATHTTPCookieFieldEntry', will not work

THTTPCookieFieldEntryArray', 'array of THTTPCookieFieldEntry
6720:
6721:
            THTTPCookieField', 'record Value : THTTPCookieFieldEnum; Entries +' : THTTPCookieFieldEntryArray; Custom : AnsiString; end
6722:
6723:
6724:
            {\tt THTTPCommonHeaders', 'record TransferEncoding: THTTPTransferEnc}
             +'oding; ContentType: THTTPContentType; ContentLength: THTTPContentLength;'+' Connection: THTTPConnectionField; ProxyConnection: THTTPConnectionField'
6725:
6727:
              +'; Date : THTTPDateField; ContentEncoding : THTTPContentEncodingField; end
           THTTPCustomHeaders', 'array of THTTPCustomHeader //THTTPFixedHeaders', 'array[THTTPHeaderNameEnum] of AnsiString
6728:
6729:
            THTTPFixedHeaders','array[0.42] of AnsiString
THTTPMethodEnum', '(hmNone,hmCustom,hmGET,hmPUT,hmPOST,hmC'
6730:
6731:
            +'ONNECT, hmHEAD, hmDELETE, hmOPTIONS, hmTRACE )
THTTPMethod', 'record Value : THTTPMethodEnum; Custom : AnsiString; end
6732:
6733:
6734:
            THTTPRequestStartLine'. 'record Method: THTTPMethod; URI: Ansi'
              +'String; Version : THTTPVersion; end
6735:
6736:
            THTTPRequestHeader', 'record CommonHeaders: THTTPCommonHeaders;'
6737:
             +' FixedHeaders: THTTPFixedHeaders; CustomHeaders: THTTPCustomHeaders; Coo' +'kie: THTTPCookieField; IfModifiedSince: THTTPDateField; IfUnmodifiedSinc'
6738:
              +'e: THTTPDateField; end
6739:
             //PHTTPRequestHeader', '^THTTPRequestHeader // will not work
            THTTPRequest', 'record StartLine : THTTPRequestStartLine; Header'
6741:
6742:
             +' : THTTPRequestHeader; HeaderComplete : Boolean; HasContent : Boolean; end
6743:
            THTTPResponseStartLineMessage', '( hslmNone, hslmCustom, hslmOK)
            THTTPResponseStartLine', 'record Version : THTTPVersion; Code :
6744:
6745:
               -'Integer; Msg : THTTPResponseStartLineMessage; CustomMsg : AnsiString; end
            THTTPResponseHeader', 'record CommonHeaders: THTTPCommonHeaders' +'; FixedHeaders: THTTPFixedHeaders; CustomHeaders: THTTPCustomHeaders; Co'
6746:
6747:
             +'okies : THTTPSetCookieFieldArray; Expires : THTTPDateField; LastModified :
6748:
              +' THTTPDateField; Age : THTTPAgeField; end
```

```
//PHTTPResponseHeader', '^THTTPResponseHeader // will not work
6750:
        THTTPResponse', 'record StartLine: THTTPResponseStartLine; Head
6751:
          +'er : THTTPResponseHeader; HeaderComplete : Boolean; HasContent
6752:
                                                                                   : Boolean; end
6753:
       Function HTTPMessageHasContent( const H : THTTPCommonHeaders) : Boolean
       Procedure InitHTTPRequest( var A : THTTPRequest)
Procedure InitHTTPResponse( var A : THTTPResponse)
Procedure ClearHTTPVersion( var A : THTTPVersion)
6754:
6755:
6756:
       Procedure ClearHTTPContentLength( var A : THTTPContentLength)
6757:
6758:
       Procedure ClearHTTPContentType( var A : THTTPContentType)
6759:
       Procedure ClearHTTPDateField( var A : THTTPDateField)
       Procedure ClearHTTPTransferEncoding( var A : THTTPTransferEncoding)
6760:
       Procedure ClearHTTPConnectionField( var A : THTTPConnectionField)

Procedure ClearHTTPAgeField( var A : THTTPAgeField)
6761:
6762:
       Procedure ClearHTTPContentEncoding( var A : THTTPContentEncoding)

Procedure ClearHTTPContentEncodingField( var A : THTTPContentEncodingField)

Procedure ClearHTTPContentRangeField( var A : THTTPContentRangeField)
6763:
6764:
6765:
       Procedure ClearHTTPSetCookieField( var A : THTTPSetCookieField)
6766:
6767:
       Procedure ClearHTTPCommonHeaders( var A : THTTPCommonHeaders)
       //Procedure ClearHTTFFixedHeaders( var A : THTTFFixedHeaders)
Procedure ClearHTTPCustomHeaders( var A : THTTPCustomHeaders)
Procedure ClearHTTPCookieField( var A : THTTPCookieField)
6768:
6769:
6770:
6771:
       Procedure ClearHTTPMethod( var A : THTTPMethod)
       Procedure ClearHTTPRequestStartLine( var A : THTTPRequestStartLine)
Procedure ClearHTTPRequestHeader( var A : THTTPRequestHeader)
Procedure ClearHTTPRequest( var A : THTTPRequest)
6772:
6773:
6775:
       Procedure ClearHTTPResponseStartLine( var A : THTTPResponseStartLine)
6776:
       Procedure ClearHTTPResponseHeader( var A : THTTPResponseHeader)
6777:
       Procedure ClearHTTPResponse( var A : THTTPResponse)
        THTTPStringOption', '( hsoNone )
THTTPStringOptions', 'set of THT
6778:
                                 set of THTTPStringOption
6779:
6780:
        FindClass('TOBJECT'), 'TAnsiStringBuilder
6781:
       Procedure BuildStrHTTPVersion(const A:THTTPVersion; const B:TAnsiStringBuilder; const
6782:
      P:THTTPStringOptions);
       Procedure BuildStrHTTPContentLengthValue( const A : THTTPContentLength; const B : TAnsiStringBuilder;
6783:
      const P : THTTPStringOptions)
6784:
       Procedure BuildStrHTTPContentLength( const A : THTTPContentLength; const B : TAnsiStringBuilder; const P
        THTTPStringOptions)
6785:
       Procedure BuildStrHTTPContentTypeValue( const A : THTTPContentType; const B : TAnsiStringBuilder; const P
        THTTPStringOptions)
6786:
      Procedure BuildStrHTTPContentType(const A:THTTPContentType;const B:TAnsiStringBuilder; const
      P:THTTPStringOptions)
      Procedure BuildStrRFCDateTime( const DOW, Da, Mo, Ye, Ho, Mi, Se : Integer; const TZ : AnsiString; const
      B : TAnsiStringBuilder; const P : THTTPStringOptions)
6788:
       Procedure BuildStrHTTPDateFieldValue( const A : THTTPDateField; const B : TAnsiStringBuilder; const P :
      THTTPStringOptions)
       Procedure BuildStrHTTPDateField(const A:THTTPDateField;const B:TAnsiStringBuilder;const
6789:
      P:THTTPStringOptions);
      Procedure BuildStrHTTPTransferEncodingValue( const A : THTTPTransferEncoding; const B :
TAnsiStringBuilder; const P : THTTPStringOptions)
6791: Procedure BuildStrHTTPTransferEncoding( const A : THTTPTransferEncoding; const B : TAnsiStringBuilder;
      const P : THTTPStringOptions)
6792: Procedure BuildStrHTTPContentRangeField( const A : THTTPContentRangeField; const B : TAnsiStringBuilder;
      const P : THTTPStringOptions)
6793: Procedure BuildStrHTTPConnectionFieldValue( const A : THTTPConnectionField; const B : TAnsiStringBuilder; const P : THTTPStrHTGOptions)
       Procedure BuildStrHTTPConnectionField( const A : THTTPConnectionField; const B : TAnsiStringBuilder;
      const P : THTTPStringOptions)
6795: Procedure BuildStrHTTPAgeField(const A:THTTPAgeField;const B:TAnsiStringBuilder;const
      P:THTTPStringOptions);
6796: Procedure BuildStrHTTPContentEncoding( const A : THTTPContentEncoding; const B : TAnsiStringBuilder;
      const P
               : THTTPStringOptions)
6797:
      Procedure BuildStrHTTPContentEncodingField(const A:THTTPContentEncodingField;const
      B:TAnsiStringBuilder;const P:THTTPStringOptions)
6798: Procedure BuildStrHTTPProxyConnectionField(const A: THTTPConnectionField; const B: TAnsiStringBuilder;
      const P : THTTPStringOptions)
       Procedure BuildStrHTTPCommonHeaders( const A : THTTPCommonHeaders; const B : TAnsiStringBuilder; const P
        THTTPStringOptions)
6800: Procedure BuildStrHTTPFixedHeaders(const A:THTTPFixedHeaders;const B:TAnsiStrBuilder;const
      P:THTTPStringOptions)
6801: Procedure BuildStrHTTPCustomHeaders( const A : THTTPCustomHeaders; const B : TAnsiStringBuilder; const P
        THTTPStringOptions)
6802: Procedure BuildStrHTTPSetCookieFieldValue( const A : THTTPSetCookieField; const B : TAnsiStringBuilder;
      const P : THTTPStringOptions
6803: Procedure BuildStrHTTPCookieFieldValue( const A : THTTPCookieField; const B : TAnsiStringBuilder; const P
        THTTPStringOptions)
6804:
       Procedure BuildStrHTTPCookieField(const A:THTTPCookieField;const B:TAnsiStringBuilder;const
      P:THTTPStringOptions);
      Procedure BuildStrHTTPMethod( const A : THTTPMethod; const B : TAnsiStringBuilder; const P :
6805:
      THTTPStringOptions)
6806: Procedure BuildStrHTTPRequestStartLine( const A : THTTPRequestStartLine; const B : TAnsiStringBuilder;
      const P : THTTPStringOptions)
6807:
       Procedure BuildStrHTTPRequestHeader(const A:THTTPRequestHeader;const B:TAnsiStringBuilder;const
      P:THTTPStringOptions);
      Procedure BuildStrHTTPRequest( const A : THTTPRequest; const B : TAnsiStringBuilder; const P :
      THTTPStringOptions)
      Procedure BuildStrHTTPResponseCookieFieldArray( const A : THTTPSetCookieFieldArray; const B :
6809:
      TAnsiStringBuilder; const P : THTTPStringOptions)
      Procedure BuildStrHTTPResponseStartLine(const A:THTTPResponseStartLine;const B:TAnsiStrBldr;const P
      THTTPStrOptions);
```

```
6811: Procedure BuildStrHTTPResponseHeader(const A:THTTPRespHeader;const B:TAnsiStrBuilder;const
       P:THTTPStringOptions);
        Procedure BuildStrHTTPResponse(const A:THTTPResponse; const B:TAnsiStringBuilder; const
       P:THTTPStringOptions);
       Function HTTPContentTypeValueToStr( const A : THTTPContentType) : AnsiString
6813:
        Function HTTPSetCookieFieldValueToStr( const A : THTTPSetCookieField) : AnsiString
6814:
        Function HTTPCookieFieldValueToStr( const A : THTTPCookieField) : AnsiString
6815:
        Function HTTPMethodToStr( const A : THTTPMethod) : AnsiString
6816:
        Function HTTPRequestToStr( const A : THTTPRequest) : AnsiString
Function HTTPResponseToStr( const A : THTTPResponse) : AnsiString
6817:
6818:
        Procedure PrepareCookie( var A:THTTPCookieField;const B:THTTPSetCookieFieldArray; const
6819:
       Domain: AnsiString; const Secure : Boolean);
6820:
         THTTPParserHeaderParseFunc', 'Function ( const HeaderName : THTT'
           +'PHeaderNameEnum; const HeaderPtr : ____Pointer) : Boolean
6821:
          SIRegister_THTTPParser(CL);
FindClass('TOBJECT'),'THTTPContentDecoder
6822:
6823:
          THTTPContentDecoderProc', 'Procedure ( const Sender : THTTPContentDecoder)
6824:
          THTTPContentDecoderContentType', '( crctFixedSize, crctChunked, crctUnsized ) THTTPContentDecoderChunkState', '( crcsChunkHeader, crcsContent,'
6825:
6826:
6827:
               crcsContentCRLF, crcsTrailer, crcsFinished )
6828:
          THTTPContentDecoderLogEvent', 'Procedure ( const Sender : THTTPContentDecoder; const LogMsg : String)
          SIRegister_THTTPContentDecoder(CL);
6829:
         THTTPContentReaderMechanism', '( hcrmEvent, hcrmString, hcrmStream, hcrmFile ) FindClass('TOBJECT'),'THTTPContentReader
6830:
6831:
          THTTPContentReaderProc', 'Procedure ( const Sender : THTTPContentReader)
6832:
6833:
          THTTPContentReaderLogEvent', Procedure (const Sender:THTTPContentReader; const LogMsg:String; const
       LogLevel:Int;
          SIRegister_THTTPContentReader(CL);
THTTPContentWriterMechanism', '( hctmEvent, hctmString, hctmStream, hctmFile )
FindClass('TOBJECT'),'THTTPContentWriter
6834:
6835:
6836:
6837:
          THTTPContentWriterLogEvent', 'Procedure (const Sender : THTTPContentWriter; const LogMsg:AnsiString);
6838:
         SIRegister THTTPContentWriter(CL);
6839:
        Procedure SelfTestcHTTPUtils
6840:
       end;
6841:
6842:
       procedure SIRegister_cTLSUtils(CL: TPSPascalCompiler);
6843:
6844:
       begin
6845:
          TLSLibraryVersion', 'String').SetString( '1.00
         'TLSError_None', 'LongInt').SetInt( 0);
6846:
6847:
         'TLSError_InvalidBuffer', 'LongInt').SetInt( 1);
         'TLSError_InvalidParameter','LongInt').SetInt( 2);
'TLSError_InvalidCertificate','LongInt').SetInt( 3);
6848:
6849:
6850:
         'TLSError_InvalidState','LongInt').SetInt( 4);
         'TLSError_DecodeError','LongInt').SetInt(5);
'TLSError_BadProtocol','LongInt').SetInt(6);
6851:
6852:
        Function TLSErrorMessage( const TLSError : Integer) : String
6853:
6854:
         SIRegister_ETLSError(CL);
        TTLSProtocolVersion', 'record major : Byte; minor : Byte; end
PTLSProtocolVersion', '^TTLSProtocolVersion // will not work
Procedure InitSSLProtocolVersion30( var A : TTLSProtocolVersion)
6855:
6856:
6857:
        Procedure InitTLSProtocolVersion10( var A : TTLSProtocolVersion)
6858:
         Procedure InitTLSProtocolVersion11( var A
6859:
                                                              : TTLSProtocolVersion)
6860:
        Procedure InitTLSProtocolVersion12( var A : TTLSProtocolVersion)
Function IsTLSProtocolVersion( const A, B : TTLSProtocolVersion) : Boolean
Function IsSSL2( const A : TTLSProtocolVersion) : Boolean
6861:
6862:
         Function IsSSL3( const A : TTLSProtocolVersion) : Boolean
6863:
        Function IsTLS10( const A : TTLSProtocolVersion) : Boolean
6864:
6865:
        Function IsTLS11( const A : TTLSProtocolVersion) : Boolean
Function IsTLS12( const A : TTLSProtocolVersion) : Boolean
6866:
6867:
        Function IsTLS100rLater( const A : TTLSProtocolVersion) : Boolean
6868:
         Function IsTLS110rLater( const A : TTLSProtocolVersion) :
6869:
        Function IsTLS120rLater( const A : TTLSProtocolVersion) : Boolean
        Function IsFutureTLSVersion( const A : TTLSProtocolVersion) : Boolean
Function IsKnownTLSVersion( const A : TTLSProtocolVersion) : Boolean
6870:
6871:
        Function TLSProtocolVersionToStr( const A : TTLSProtocolVersion) : String
6872:
6873:
         Function TLSProtocolVersionName( const A : TTLSProtocolVersion) : String
6874:
         PTLSRandom', '^TTLSRandom // will not work
        Procedure InitTLSRandom( var Random : TTLSRandom)
Function TLSRandomToStr( const Random : TTLSRandom) : AnsiString
6875:
6876:
          TLSSessionIDMaxLen', 'LongInt').SetInt( 32);
6877:
6878:
        Procedure InitTLSSessionID( var SessionID: TTLSSessionID; const A: AnsiString)
6879:
         Function EncodeTLSSessionID(var Buffer:string;const Size:Int;const SessionID:TTLSSessionID):Int;
        Function DecodeTLSSessionID(const Buffer:string;const Size:Int;var SessionID:TTLSSessionID):Int;
6880:
         TTLSSignatureAndHashAlgorithm', 'record Hash: TTLSHashAlgorithm +'; Signature: TTLSSignatureAlgorithm; end
6881:
6882:
6883:
         // PTLSSignatureAndHashAlgorithm', '^TTLSSignatureAndHashAlgorithm +'// will not work
         r, ribsolymatureAmmasmaigorithm +'// Will :
TTLSSignatureAmdHashAlgorithmArray', 'array of TTLSSignatureAmdHashAlgorithm
TTLSKeyExchangeAlgorithm', '( tlskeaNone, tlskeaNULL, tlskeaDHE_'
6884:
6885:
                    tlskeaDHE_RSA, tlskeaDH_Anon, tlskeaRSA, tlskeaDH_DSS, tlskeaDH_RSA)
6886:
6887:
         TTLSMACAlgorithm', '( tlsmaNone, tlsmaNULL, tlsmaHMAC_MD5, tlsma'
6888:
           +'HMAC_SHA1, tlsmaHMAC_SHA256, tlsmaHMAC_SHA384, tlsmaHMAC_SHA512 )
         TTLSMacAlgorithmInfo', 'record Name : AnsiString; DigestSize : I +'nteger; Supported : Boolean; end
6889:
6890:
        PTLSMacAlgorithmInfo', '^TTLSMacAlgorithmInfo // will not work
'TLS_MAC_MAXDIGESTSIZE','LongInt').SetInt( 64);
TTLSPRFAlgorithm', '( tlspaSHA256 )
Function tlsP_MD5( const Secret, Seed : AnsiString; const Size : Integer) : AnsiString
Function tlsP_SHA1( const Secret, Seed : AnsiString; const Size : Integer) : AnsiString
6891:
6892:
6893:
6894:
```

```
Function tlsP_SHA256( const Secret, Seed : AnsiString; const Size : Integer) : AnsiString Function tlsP_SHA512( const Secret, Seed : AnsiString; const Size : Integer) : AnsiString
6896:
6897:
            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
6899:
6900:
            Function TLSPRF(const ProtoVersion: TTLSProtocolVersion; const Secret, ALabel, Seed: AString; const
6901:
          Size:Int):AString;
            Function tls10KeyBlock(const MasterSecret, ServerRandom, ClientRandom: AnsiString; const
          Size:Integer):AnsiString
6903: Function tls12SHA256KeyBlock(const MasterSecret, ServerRandom, ClientRandom: AnsiString; const
          Size:Int):AnsiString;
          Function tls12SHA512KeyBlock(const MasterSecret, ServerRandom, ClientRandom: AnsiString; const
          Size:Int):AnsiString;
6905:
            Function TLSKeyBlock( const ProtocolVersion: TTLSProtocolVersion; const MasterSecret, ServerRandom,
          ClientRandom : AnsiString; const Size : Integer) : AnsiString
            Function tls10MasterSecret(const PreMasterSecret,ClientRandom, ServerRandom:AnsiString) :AnsiString;
            Function tls12SHA256MasterSecret(const PreMasterSecret,ClientRandom,ServerRandom:AnsiString):AnsiString;
6907:
6908.
            \textbf{Function} \ \ \texttt{tls12SHA512MasterSecret}(\textbf{const} \ \ \texttt{PreMasterSecret}, \texttt{ClientRandom}, \texttt{ServerRandom} : \texttt{AnsiString}) : \ \ \texttt{AnsiString}(\textbf{const}) : \ \ \texttt{AnsiString}(\textbf{const}
          Function TLSMasterSecret( const ProtocolVersion: TTLSProtocolVersion; const PreMasterSecret, ClientRandom, ServerRandom:AnsiString) : AnsiString
6909:
6910:
              TTLSKeys', 'record KeyBlock : AnsiString; ClientMACKey : AnsiStr'
            +'ing; ServerMACKey: AnsiString; ClientEncKey: AnsiString; ServerEncKey: '
+'AnsiString; ClientIV: AnsiString; ServerIV: AnsiString; end

Procedure GenerateTLSKeys( const ProtocolVersion: TTLSProtocolVersion; const MACKeyBits, CipherKeyBits,
6911:
6912:
6913:
          IVBits : Integer; const MasterSecret, ServerRandom, ClientRandom : AnsiString; var TLSKeys : TTLSKeys)
6914:
          Procedure GenerateFinalTLSKeys( const ProtocolVersion: TTLSProtocolVersion; const IsExportable
          Boolean; const ExpandedKeyBits: Integer; const ServerRandom, ClientRandom: AnsiString; var TLSKeys:
          TTLSKevs)
            'TLS_PLAINTEXT_FRAGMENT_MAXSIZE','LongInt').SetInt( 16384 - 1);
'TLS_COMPRESSED_FRAGMENT_MAXSIZE','LongInt').SetInt( 16384 + 1024);
6916:
6917:
            Procedure SelfTestcTLSUtils
6918: end;
6919:
6920:
6921:
          procedure SIRegister Reversi(CL: TPSPascalCompiler);
6922: begin
6923:
              sPosData', 'record corner : boolean; square2x2 : boolean; edge : '
                +' boolean; stable : integer; internal : integer; disks : integer; mx : integer; my : integer; end / pBoard', '^tBoard // will not work
6924:
6925:
             // pBoard'.
6926:
            Function rCalculateData( cc : byte; cx, cy : integer) : sPosData
            Function rCheckMove( color : byte; cx, cy : integer) : integer
6927:
            //Function rDoStep( data : pBoard) : word
Function winExecAndWait( const sAppPath : string; wVisible : word) : boolean
6928:
6929:
6930:
          end;
6931:
6932: procedure SIRegister IWDBCommon(CL: TPSPascalCompiler);
6933:
          begin
6934: Function InEditMode( ADataset : TDataset) : Boolean
          Function CheckDataSource( ADataSource : TDataSource) : Boolean;
          Function CheckDataSource1(ADataSource:TDataSource;const AFieldName:string;var VField:TField):boolean;
6936:
6937: Function GetFieldText( AField : TField) : String
6938:
6939:
6940:
          procedure SIRegister_SortGrid(CL: TPSPascalCompiler);
6941:
          begin
              TPrintMode', '( pmPrint, pmPreview, pmPageCount )
TMyPrintRange', '( prAll, prSelected )
6942:
              TMyPrintRange', '( prAll, prSelected )
TSortStyle', '( ssAutomatic, ssNormal, ssNumeric, ssNumericExten'
6943:
6944:
6945:
                +'ded, ssDateTime, ssTime, ssCustom )
              TSortDirection', '(sdAscending, sdDescending)
TSetChecked', 'Procedure (Sender: TObject; ACol, ARow: integer; State: Boolean)
6946:
6947:
6948:
              TGetCombobox', 'Procedure ( Sender : TObject; ACol, ARow : integ'
6949:
                +'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)
6950:
6951:
              SIRegister_TSortOptions(CL);
6952:
6953:
              SIRegister_TPrintOptions(CL);
6954:
              TSortedListEntry', 'record Str : String; RowNum : integer; SortOption : TSortOptions; end
              SIRegister TSortedList(CL);
6955:
6956:
              TCellBevelStyle', '( cbNone, cbRaised, cbLowered )
                                      'record Style: TCellBevelStyle; UpperLeftColor: TColor; LowerRightColor: TColor; end
6957:
              TVertAlignment', '( taTopJustify, taBottomJustify, taMiddle )
TFormatOptions', 'record Brush: TBrush; Font: TFont; Alignment'
+'Horz: TAlignment; AlignmentVert: TVertAlignment; Bevel: TCellBevel; HideText: Boolean; end
6958:
6959:
6960:
6961:
              SIRegister_TFontSetting(CL);
6962:
              SIRegister_TFontList(CL);
6963:
              AddTypeS(TFormatDrawCellEvent', 'Procedure ( Sender : TObject; Col, Row : '
                + integer;State:TGridDrawState; var FormatOptions:TFormatOptions; var CheckBox,Combobox,Ellipsis:Bool);
6964:
              TSetFilterEvent', 'Procedure ( ARows : TStrings; var Accept : Boolean)
6965:
              TSearchEvent', 'Procedure ( ARows : TStrings; var Accept : Boolean)
TUpdateGridEvent', 'Procedure ( Sender : TObject; ARow : integer)
TSizeChangedEvent', 'Procedure ( Sender : TObject; OldColCount, OldRowCount : integer)
TBeginSortEvent', 'Procedure ( Sender : TObject; var Col : integer)
TEndSortEvent', 'Procedure ( Sender : TObject; Col : integer)
6966:
6967:
6968:
6969:
6970:
              TGetSortStyleEvent', 'Procedure ( Sender : TObject; Col : intege
6971:
                +'r; var SortStyle : TSortStyle)
6972:
              TCellValidateEvent', 'Procedure ( Sender : TObject; ACol, ARow :
6973:
                     integer; const OldValue : string; var NewValue : String; var Valid : Boolean)
6974:
              SIRegister_TSortGrid(CL);
```

```
6976:
           Function ExtendedCompare( const Str1, Str2 : String) : Integer
6977:
           Function NormalCompare( const Str1, Str2 : String) : Integer
           Function DateTimeCompare( const Str1, Str2 : String) : Integer
6979:
           Function NumericCompare( const Str1, Str2 : String) : Integer
6980:
           Function TimeCompare( const Str1, Str2 : String) : Integer
6981:
           //Function Compare( Item1, Item2 : Pointer) : Integer
6982:
6983:
6985: Procedure IBAlloc( var P, OldSize, NewSize : Integer)
6986: Procedure IBError( ErrMess : TIBClientError; const Args : array of const)
           Procedure IBDataBaseError
6988:
           Function StatusVector : PISC_STATUS
           Function StatusVectorArray: PStatusVector
Function CheckStatusVector( ErrorCodes: array of ISC_STATUS): Boolean
6989:
6990:
6991:
           Function StatusVectorAsText : string
           Procedure SetIBDataBaseErrorMessages( Value : TIBDataBaseErrorMessages)
6992:
6993:
           Function GetIBDataBaseErrorMessages : TIBDataBaseErrorMessages
6994:
6995:
6997:
           Function CharCount( c : char; const s : string) : integer
6998:
           \textbf{Function} \  \, \texttt{BoldNamesEqual(} \  \, \textbf{const} \  \, \texttt{name1,} \  \, \texttt{name2} \  \, \vdots \  \, \textbf{string)} \  \, \vdots \  \, \texttt{Boolean}
           Procedure BoldAppendToStrings(strings: TStrings; const aString: string; const ForceNewLine:Boolean)
6999:
           Function BoldSeparateStringList(strings:TStringList;const Separator, PreString, PostString: string):String
7000:
7001:
           Function BoldSeparatedAppend( const S1, S2 : string; const Separator : string) : string
7002:
           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
7003:
7004:
7005:
7006:
           Function BoldAnsiEqual( const S1, S2 : string) : Boolean
           Function BoldStrStringEqual( const S1 : string; P2 : PChar; Len : integer) : Boolean
Function BoldCaseIndependentPos( const Substr, S : string) : Integer
7007:
7008:
           Tunction CapitalisedToSpaced(Capitalised: String): Strings: TStrings)
7009:
7010:
7011:
           Function SpacedToCapitalised( Spaced : String) : String
           Function BooleanToString(BoolValue:Boolean): String
Function StringToBoolean(StrValue:String): Boolean
7012:
7013:
7014:
           Function GetUpperLimitForMultiplicity( const Multiplicity : String) : Integer
7015:
           Function GetLowerLimitForMultiplicity( const Multiplicity: String): Integer
7016:
           \textbf{Function} \  \, \texttt{StringListToVarArray}( \  \, \texttt{List} \  \, : \  \, \texttt{TStringList}) \  \, : \  \, \texttt{variant}
           Function IsLocalMachine( const Machinename : WideString) : Boolean
7017:
           Function GetComputerNameStr: string
Function TimeStampComp( const Time1, Time2 : TTimeStamp) : Integer
7018:
           \textbf{Function} \ \ \texttt{BoldStrToDateFmt}(\textbf{const} \ \ \texttt{S:string}; \textbf{const} \ \ \texttt{DateFormat:string}; \textbf{const} \ \ \texttt{DateSeparatorChar:char}): \texttt{TDateTime}(\textbf{const}) = \texttt{TDat
7020:
7021:
           Function BoldDateToStrFmt(const aDate:TDateTime;DateFormat:string;const DateSeparatorChar:char):String;
           Function BoldParseFormattedDateList(const value:String;const formats:TStrings;var Date:TDateTime):Boolean;
7022:
7023:
           Function BoldParseFormattedDate(const value:String;const formats:array of string; var
         Date: TDateTime): Boolean;
7024:
          Procedure EnsureTrailing( var Str : String; ch : char)
7025:
           Function BoldDirectoryExists( const Name : string) : Boolean
           Function BoldForceDirectories( Dir : string) : Boolean
7026:
           Function BoldRootRegistryKey : string
7027:
7028:
           Function GetModuleFileNameAsString( IncludePath : Boolean) : string
           Function BoldVariantToStrings( V : OleVariant; Strings : TStrings) : Integer
7029:
7030:
           Function LogicalAnd( A, B : Integer) : Boolean
7031:
           record TByHandleFileInformation dwFileAttributes : DWORD; '
               +'ftCreationTime : TFileTime; ftLastAccessTime : TFileTime; ftLastWriteTime '
7032:
              +': TFileTime; dwVolumeSerialNumber : DWORD; nFileSizeHigh : DWORD; nFileSiz' +'eLow : DWORD; nNumberOfLinks : DWORD; nFileIndexHigh : DWORD; nFileIndexLow : DWORD; end
7033:
7034:
           Function GetFileInformationByHandle(hFile:THandle; var lpFileInformation:TByHandleFileInformation):BOOL;
7035:
7036:
           Function IsFirstInstance : Boolean
7037:
           Procedure ActivateFirst( AString : PChar)
7038:
           Procedure ActivateFirstCommandLine
           function MakeAckPkt(const BlockNumber: Word): string;
7039:
           procedure SendError(UDPBase:TIdUDPBase;APeerIP:string;const APort:Int;const ErrNumber:Word;ErrorString;
7040:
          procedure SendError(UDPClient: TIdUDPClient; const ErrNumber: Word; ErrorString: string); overload;
7041:
7042:
           procedure SendError(UDPBase: TIdUDPBase; APeerIP: string; const APort: Integer; E: Exception); overload;
           procedure SendError(UDPClient: TIdUDPClient; E: Exception); overload;
7043:
           function IdStrToWord(const Value: String): Word;
7044:
7045:
           function IdWordToStr(const Value: Word): WordStr;
7046:
           Function HasInstructionSet( const InstructionSet: TCPUInstructionSet): Boolean
           Function CPUFeatures : TCPUFeatures
7047:
7048:
7049:
7050:
         procedure SIRegister_xrtl_util_CPUUtils(CL: TPSPascalCompiler);
7051: begin
           AddTypeS('TXRTLBitIndex', 'Integer
7052:
           Function XRTLSwapBits( Data : Cardinal; BitlIndex, Bit2Index : TXRTLBitIndex) : Cardinal
7054:
           Function XRTLBitTest( Data : Cardinal; BitIndex : TXRTLBitIndex) : Boolean
7055:
           Function XRTLBitSet( Data : Cardinal; BitIndex : TXRTLBitIndex) : Cardinal
7056:
           Function XRTLBitReset( Data : Cardinal; BitIndex : TXRTLBitIndex) : Cardinal
7057:
           Function XRTLBitComplement( Data : Cardinal; BitIndex : TXRTLBitIndex) : Cardinal
           Function XRTLSwapHiLo16( X : Word) : Word
7058:
           Function XRTLSwapHiLo32( X : Cardinal) : Cardinal
7059:
           Function XRTLSwapHiLo64( X : Int64) : Int64
Function XRTLROL32( A, S : Cardinal) : Cardinal
7060:
7061:
7062: Function XRTLROR32( A, S : Cardinal) : Cardinal
```

```
7063:
         Function XRTLROL16( A : Word; S : Cardinal) : Word
         Function XRTLROR16( A : Word; S : Cardinal) : Word
7064:
         Function XRTLROL8( A : Byte; S : Cardinal) : Byte
         Function XRTLROR8( A : Byte; S : Cardinal) : Byte
7066:
7067:
         //Procedure XRTLXorBlock( I1, I2, O1 : PByteArray; Len : integer)
         //Procedure XRTLIncBlock( P: PByteArray; Len: integer)
Procedure XRTLUMul64( const A, B: Integer; var MulL, MulH: Integer)
7068:
7069:
         Function XRTLPopulation( A : Cardinal) : Cardinal
7070:
7071: end;
7072:
7073: Function XRTLURLDecode( const ASrc : WideString) : WideString
7074: Function XRTLURLEncode( const ASrc : WideString) : WideString
7075: Function XRTLURINormalize( const AURI : WideString) : WideString
7076: Procedure XRTLURIParse(const AURI:WideString; var VProtocol, VHost, VPath, VDocument, VPort, VBookmark, VUserName,
        VPassword : WideString)
7077: Function XRTLExtractLongPathName(APath: string): string;
7078:
7079 .
        procedure SIRegister_cFundamentUtils(CL: TPSPascalCompiler);
7080: begin
          AddTypeS('Int8', 'ShortInt AddTypeS('Int16', 'SmallInt
7081:
7082:
                                    'LongInt
           AddTypeS('Int32',
7083:
7084:
          AddTypeS('UInt8',
                                    'Bvte
           AddTypeS('UInt16',
7085:
                                      'Word
          AddTypeS('UInt32',
7086:
                                     'LongWord
           AddTypeS('UInt64',
7087:
                                     'Int64
7088:
          AddTypeS('Word8', 'UInt8
AddTypeS('Word16', 'UInt16
AddTypeS('Word32', 'UInt32
7089:
7090:
                                     'UInt32
           AddTypeS('Word64', 'UInt64
7091:
          AddTypeS('LargeInt', 'Int64
AddTypeS('NativeInt', 'Integer
AddTypeS('NativeUInt', 'Cardinal
7092:
7093:
7094:
          Const('BitsPerByte','LongInt').SetInt( 8);
Const('BitsPerWord','LongInt').SetInt( 16);
7095:
7096:
         Const('BitsPerLongWord','LongInt').SetInt( 32);
//Const('BitsPerCardinal','LongInt').SetInt( BytesPerCardinal * 8);
//Const('BitsPerNativeWord','LongInt').SetInt( BytesPerNativeWord * 8);
7097:
7098:
7099:
7100:
         Function MinI( const A, B : Integer) :
                                                                Integer
         Function MaxI( const A, B : Integer) : Integer
7101:
7102:
         Function MinC( const A, B : Cardinal) : Cardinal
         Function MaxC( const A, B : Cardinal) : Cardinal
7103:
         Function SumClipI( const A, I : Integer) : Integer
7104:
         Function SumClipC( const A : Cardinal; const I : Integer) : Cardinal
7105:
         Function InByteRange( const A : Int64) : Boolean Function InWordRange( const A : Int64) : Boolean
7106:
7107:
         Function InLongWordRange( const A : Int64) : Boolean
7108:
         Function InShortIntRange( const A : Int64) :
7109:
                                                                        Boolean
         Function InSmallIntRange( const A : Int64) : Boolean
7110:
7111:
         Function InLongIntRange( const A : Int64) : Boolean
7112:
          AddTypeS('Bool8', 'ByteBool
AddTypeS('Bool16', 'WordBool
AddTypeS('Bool32', 'LongBool
7113:
7114:
         AddTypeS('TCompareResult', '( crLess, crEqual, crGreater, crUndefined )
AddTypeS('TCompareResultSet', 'set of TCompareResult

Function ReverseCompareResult( const C : TCompareResult) : TCompareResult
7115:
7116:
7117:
         Const('MinSingle','Single').setExtended( 1.5E-45);
Const('MaxSingle','Single').setExtended( 3.4E+38);
7118:
7119:
         Const('MinDouble','Double').setExtended( 5.0E-324);
Const('MaxDouble','Double').setExtended( 1.7E+308);
7120:
7121:
         Const('MinExtended','Extended').setExtended(3.4E-4932);
7122:
7123:
         Const('MaxExtended','Extended').setExtended(1.1E+4932);
         Const('MinCurrency','Currency').SetExtended( - 922337203685477.5807);
Const('MaxCurrency','Currency').SetExtended( 922337203685477.5807);
7124:
7125:
         Function MinF( const A, B : Float) : Float
Function MaxF( const A, B : Float) : Float
7126:
         Function ClipF( const Value : Float; const Low, High : Float) : Float
7128:
7129:
         \textbf{Function} \  \, \texttt{InSingleRange( const A : Float) : Boolean}
7130:
         Function InDoubleRange( const A : Float) : Boolean
         Function InCurrencyRange( const A : Float) : Boolean;
Function InCurrencyRangel( const A : Int64) : Boolean;
7131:
7132:
7133:
         \textbf{Function} \  \, \texttt{FloatExponentBase2(} \  \, \textbf{const} \  \, \texttt{A} \  \, \texttt{Extended}; \  \, \textbf{var} \  \, \texttt{Exponent} \  \, \texttt{:} \  \, \texttt{Integer)} \  \, \texttt{:} \  \, \texttt{Boolean}
7134:
         Function FloatExponentBase10( const A : Extended; var Exponent : Integer) : Boolean
7135:
         Function FloatIsInfinity( const A : Extended) : Boolean
7136:
         Function FloatIsNaN( const A : Extended) : Boolean
         Const('SingleCompareDelta','Extended').setExtended( 1.0E-34);
Const('DoubleCompareDelta','Extended').setExtended( 1.0E-280);
7137:
7138:
         Const ( DownletcompareDelta , Extended ) .setExtended ( 1.0E-4400);
Const ('DefaultCompareDelta', 'Extended') .SetExtended ( 1.0E-440);
7139:
7140:
         Function FloatZero( const A : Float; const CompareDelta : Float) : Boolean
7142:
         Function FloatOne( const A : Float; const CompareDelta : Float) : Boolean
         Function FloatsEqual( const A, B : Float; const CompareDelta : Float) : Boolean
Function FloatsCompare( const A, B : Float; const CompareDelta : Float) : TCompareResult
7143:
7144:
         Const('SingleCompareEpsilon','Extended').setExtended( 1.0E-5);
Const('DoubleCompareEpsilon','Extended').setExtended( 1.0E-13);
7145:
7146:
         Const('ExtendedCompareEpsilon', 'Extended').setExtended( 1.0E-17);
Const('DefaultCompareEpsilon', 'Extended').setExtended( 1.0E-10);
Function ApproxEqual( const A, B : Extended; const CompareEpsilon : Double) : Boolean
7147:
7148:
7149:
         Function ApproxCompare( const A, B : Extended; const CompareEpsilon : Double): TCompareResult
```

```
7151:
        Function cClearBit( const Value, BitIndex : LongWord) : LongWord
        Function cSetBit( const Value, BitIndex : LongWord) : LongWord
7152:
         Function cIsBitSet( const Value, BitIndex : LongWord) : Boolean
7154:
        Function cToggleBit( const Value, BitIndex : LongWord) : LongWord
7155:
        Function cIsHighBitSet( const Value : LongWord) : Boolean
        Function SetBitScanForward( const Value : LongWord) : Integer;
7156:
        Function SetBitScanForward1( const Value, BitIndex : LongWord) : Integer;
7157:
         Function SetBitScanReverse( const Value : LongWord) : Integer;
        Function SetBitScanReversel( const Value, BitIndex : LongWord) : Integer;
7159:
        \textbf{Function} \ \texttt{ClearBitScanForward} ( \ \textbf{const} \ \texttt{Value} \ : \ \texttt{LongWord}) \ : \ \texttt{Integer};
7160:
        Function ClearBitScanForward1( const Value, BitIndex : LongWord) : Integer;
7161:
        Function ClearBitScanReverse( const Value : LongWord) : Integer;
7162:
7163:
        Function ClearBitScanReversel( const Value, BitIndex : LongWord) : Integer;
        Function cReverseBits( const Value : LongWord) : LongWord;
Function cReverseBits1( const Value : LongWord; const BitCount : Integer) : LongWord;
7164:
7165:
7166:
        Function cSwapEndian( const Value : LongWord) : LongWord
        Function cTwosComplement( const Value : LongWord) : LongWord
7167:
        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
7168:
7169:
7170:
         Function RotateRightBits32( const Value : LongWord; const Bits : Byte) : LongWord
7171:
7172:
        Function cBitCount( const Value : LongWord) : LongWord
7173:
        Function cIsPowerOfTwo( const Value : LongWord) : Boolean
        Function LowBitMask( const HighBitIndex : LongWord) : LongWord
Function HighBitMask( const LowBitIndex : LongWord) : LongWord
7174:
7175:
7176:
         Function RangeBitMask( const LowBitIndex, HighBitIndex : LongWord) : LongWord
7177:
        Function SetBitRange( const Value: LongWord; const LowBitIndex, HighBitIndex: LongWord) : LongWord
7178:
        Function ClearBitRange(const Value: LongWord; const LowBitIndex, HighBitIndex: LongWord) : LongWord
        Function ToggleBitRange(const Value:LongWord; const LowBitIndex,HighBitIndex: LongWord)
                                                                                                                           : LongWord
7179:
        Function IsBitRangeSet(const Value: LongWord; const LowBitIndex, HighBitIndex : LongWord) : Boolean
        Function IsBitRangeClear(const Value: LongWord; const LowBitIndex, HighBitIndex: LongWord): Boolean
7181:
       // AddTypeS('CharSet', 'set of AnsiChar
AddTypeS('CharSet', 'set of Char
7182:
7183:
         AddTypeS('AnsiCharSet', 'TCharSet
AddTypeS('ByteSet', 'set of Byte
AddTypeS('AnsiChar', 'Char
7184:
7186:
        // Function AsCharSet( const C : array of AnsiChar) : CharSet
Function AsByteSet( const C : array of Byte) : ByteSet
Procedure ComplementChar( var C : CharSet; const Ch : Char)
7187:
7188:
7189:
7190:
        Procedure ClearCharSet( var C : CharSet)
        Procedure FillCharSet( var C : CharSet)
7191:
        Procedure ComplementCharSet( var C : CharSet)
7192:
        Procedure AssignCharSet( var DestSet : CharSet; const SourceSet : CharSet)
7193:
         Procedure Union( var DestSet : CharSet; const SourceSet : CharSet)
7194:
7195:
        Procedure Difference( var DestSet : CharSet; const SourceSet : CharSet)
        Procedure Intersection ( var DestSet : CharSet; const SourceSet : CharSet)
7196:
        Procedure XORCharSet( var DestSet : CharSet; const SourceSet : CharSet)
7197:
        Function IsSubSet( const A, B : CharSet) : Boolean
7198:
        Function IsEqual( const A, B : CharSet) : Boolean
Function IsEmpty( const C : CharSet) : Boolean
7199:
7200:
        Function IsComplete(const C : CharSet): Boolean
Function cCharCount(const C : CharSet): Integer
7201:
7202:
7203:
         Procedure ConvertCaseInsensitive( var C : CharSet)
        Function CaseInsensitiveCharSet( const C : CharSet) : CharSet
Function IntRangeLength( const Low, High : Integer) : Int64
7204:
7205:
        Function IntRangeAdjacent( const Low1, Highl, Low2, High2: Integer): Boolean
Function IntRangeOverlap( const Low1, High1, Low2, High2: Integer): Boolean
7206:
7207:
        Function IntRangeHasElement( const Low, High, Element : Integer) : Boolean
7208:
        Function IntRangeIncludeElement( var Low, High : Integer; const Element : Integer) : Boolean
Function IntRangeIncludeElementRange(var Low, High:Integer; const LowElement, HighElement:Integer):Boolean
Function CardRangeLength( const Low, High : Cardinal) : Int64
7209:
7210:
7211:
7212:
         Function CardRangeAdjacent( const Low1, High1, Low2, High2 : Cardinal) : Boolean
7213:
        Function CardRangeOverlap( const Low1, High1, Low2, High2 : Cardinal) : Boolean
        Function CardRangeHasElement( const Low, High, Element: Cardinal): Boolean
Function CardRangeIncludeElement( var Low, High: Cardinal; const Element: Cardinal): Boolean
Function CardRangeIncludeElementRange(var Low, High: Card; const LowElement, HighElement: Card): Boolean;
7214:
7215:
7216:
          AddTypeS('UnicodeChar', 'WideChar
7217:
        Function Compare( const I1, I2 : Boolean) : TCompareResult;
7218:
        Function Compare1( const I1, I2 : Integer) : TCompareResult;
7219:
        Function Compare2( const I1, I2 : Int64) : TCompareResult;
7220:
         Function Compare3( const I1, I2 : Extended) : TCompareResult;
7221:
7222:
        Function CompareA( const I1, I2 : AnsiString) : TCompareResult
7223:
        Function CompareW( const I1, I2 : WideString) : TCompareResult
        Function cSqn( const A : LongInt) : Integer;
7224:
        Function cSgn1( const A : Int64) : Integer;
7225:
        Function cSgn2( const A : Extended) : Integer;
7226:
7227:
        AddTypeS('TConvertResult', '( convertOK, convertFormatError, convertOverflow )
        Function AnsiCharToInt( const A : AnsiChar) : Integer Function WideCharToInt( const A : WideChar) : Integer
7228:
7229:
         Function CharToInt( const A : Char) : Integer
        Function IntToAnsiChar( const A : Integer) : AnsiChar
Function IntToWideChar( const A : Integer) : WideChar
7231:
7232:
        Function IntToChar( const A : Integer) : Char
7233:
        Function IsHexWideChar( const Ch: WideChar): Boolean
Function IsHexWideChar( const Ch: WideChar): Boolean
7234:
7235:
7236:
        \textbf{Function} \  \, \texttt{IsHexChar}(\  \, \textbf{const} \  \, \texttt{Ch} \  \, : \  \, \texttt{Char}) \  \, : \  \, \texttt{Boolean}
        Function HexAnsiCharToInt( const A : AnsiChar) : Integer
Function HexWideCharToInt( const A : WideChar) : Integer
7237:
7238:
        Function HexCharToInt( const A : Char) : Integer
```

```
Function IntToUpperHexAnsiChar( const A : Integer) : AnsiChar
Function IntToUpperHexWideChar( const A : Integer) : WideChar
7240:
7241:
             Function IntToUpperHexChar( const A : Integer) : Char
7243 .
             Function IntToLowerHexAnsiChar( const A : Integer) : AnsiChar
             Function IntToLowerHexWideChar( const A : Integer) : WideChar
7244:
             Function IntToLowerHexChar( const A : Integer) : Char
7245:
             Function IntToStringA( const A : Int64) : AnsiString
7246:
             Function IntToStringW( const A : Int64) : WideString
7247:
7248:
             Function IntToString( const A : Int64) : String
             Function UIntToStringA( const A : NativeUInt) : AnsiString
Function UIntToStringW( const A : NativeUInt) : WideString
7249:
7250:
             Function UIntToString( const A : NativeUInt) : String
7251:
             Function LongWordToStrA( const A : LongWord; const Digits : Integer) : AnsiString Function LongWordToStrW( const A : LongWord; const Digits : Integer) : WideString
7252:
7253:
             Function LongWordToStrU( const A : LongWord; const Digits : Integer) : UnicodeString
7254:
7255:
             Function LongWordToStr( const A : LongWord; const Digits : Integer) : String
             Function LongWordToHexA(const A:LongWord;const Digits:Integer;const UpperCase:Boolean):AnsiString;
7256:
7257:
             \textbf{Function} \  \, \texttt{LongWordToHexW} (\textbf{const} \  \, \texttt{A:LongWord}; \textbf{const} \  \, \texttt{Digits:Integer}; \textbf{const} \  \, \texttt{UpperCase:Boolean):WideString}; \\ \textbf{const} \  \, \texttt{LongWordToHexW} (\textbf{const} \  \, \texttt{A:LongWord}; \textbf{const} \  \, \texttt{Digits:Integer}; \textbf{const} \  \, \texttt{UpperCase:Boolean):WideString}; \\ \textbf{const} \  \, \texttt{LongWordToHexW} (\textbf{const} \  \, \texttt{A:LongWord}; \textbf{const} \  \, \texttt{Digits:Integer}; \textbf{const} \  \, \texttt{UpperCase:Boolean):WideString}; \\ \textbf{const} \  \, \texttt{LongWordToHexW} (\textbf{const} \  \, \texttt{A:LongWord}; \textbf{const} \  \, \texttt{Digits:Integer}; \textbf{const} \  \, \texttt{UpperCase:Boolean):WideString}; \\ \textbf{const} \  \, \texttt{LongWordToHexW} (\textbf{const} \  \, \texttt{A:LongWord}; \textbf{const} \  \, \texttt{LongWordToHexW} (\textbf{const} \  \, \texttt{A:LongWordToHexW}; \textbf{const} \  \, \texttt{A:LongWordToHexW} (\textbf{const} \  \, \texttt{A:LongWord}; \textbf{const} \  \, \texttt{A:LongWordToHexW} (\textbf{const} \  \, \texttt{A:LongWordToHexW} (\textbf{const
             Function LongWordToHex( const A : LongWord; const Digits : Integer; const UpperCase:Boolean):String
Function LongWordToOctA( const A : LongWord; const Digits : Integer) : AnsiString
7258:
7259:
             Function LongWordToOctW( const A : LongWord; const Digits : Integer) :
             Function LongWordToOct( const A : LongWord; const Digits : Integer) : String
7261:
             Function LongWordToBinA( const A : LongWord; const Digits : Integer) : AnsiString Function LongWordToBinW( const A : LongWord; const Digits : Integer) : WideString
7262:
7263:
             Function LongWordToBin( const A : LongWord; const Digits : Integer) : String
7264:
7265:
             Function TryStringToInt64A( const S : AnsiString; out A : Int64) : Boolean
             Function TryStringToInt64W( const S : WideString; out A : Int64) : Boolean
7266:
             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
7267:
7268:
7270:
             Function StringToInt64Def( const S : String; const Default : Int64) : Int64
             Function StringToInt64A( const S : AnsiString) : Int64
Function StringToInt64W( const S : WideString) : Int64
7271:
7272:
7273:
             Function StringToInt64( const S : String) : Int64
             Function TryStringToIntA( const S : AnsiString; out A : Integer) : Boolean Function TryStringToIntW( const S : WideString; out A : Integer) : Boolean
7274:
7275:
7276:
             Function TryStringToInt( const S : String; out A : Integer) : Boolean
Function StringToIntDefA( const S : AnsiString; const Default : Integer) : Integer
7277:
7278:
             Function StringToIntDefW( const S : WideString; const Default : Integer) : Integer
7279:
             Function StringToIntDef( const S : String; const Default : Integer) : Integer
7280:
             Function StringToIntA( const S : AnsiString) : Integer
Function StringToIntW( const S : WideString) : Integer
7281:
             Function StringToInt( const S : String) : Integer
7282:
             Function TryStringToLongWordA( const S : AnsiString; out A : LongWord) : Boolean
             \textbf{Function} \ \texttt{TryStringToLongWordW} ( \ \textbf{const} \ \texttt{S} \ : \ \texttt{WideString}; \ \textbf{out} \ \texttt{A} \ : \ \texttt{LongWord}) \ : \ \texttt{Boolean}
7284:
             Function TryStringToLongWord( const S : String; out A : LongWord) : Boolean
7285:
             Function StringToLongWordA( const S : AnsiString) : LongWord
7286:
             Function StringToLongWordW( const S : WideString) : LongWord
7287:
7288:
             Function StringToLongWord( const S : String) : LongWord
             Function HexToUIntA( const S : AnsiString) : NativeUInt
Function HexToUIntW( const S : WideString) : NativeUInt
7289:
7290:
             Function HexToUInt( const S : String) : NativeUInt
7291:
             Function TryHexToLongWordA( const S : AnsiString; out A : LongWord) : Boolean
7292:
7293:
             Function TryHexToLongWordW( const S : WideString; out A : LongWord) : Boolean
             Function TryHexToLongWord( const S : String; out A : LongWord) : Boolean Function HexToLongWordA( const S : AnsiString) : LongWord
Function HexToLongWordW( const S : WideString) : LongWord
7294:
7295:
7296:
             Function HexToLongWord( const S : String) : LongWord
7297:
             Function TryOctToLongWordA( const S : AnsiString; out A : LongWord) : Boolean Function TryOctToLongWordW( const S : WideString; out A : LongWord) : Boolean
7298:
7299:
7300:
             Function TryOctToLongWord( const S : String; out A : LongWord) : Boolean
             Function OctToLongWordA( const S : AnsiString) : LongWord
Function OctToLongWordW( const S : WideString) : LongWord
7301:
7302:
7303:
             Function OctToLongWord( const S : String) : LongWord
             Function TryBinToLongWordA( const S : AnsiString; out A : LongWord) : Boolean Function TryBinToLongWordW( const S : WideString; out A : LongWord) : Boolean
7304:
             Function TryBinToLongWord( const S : String; out A : LongWord) : Boolean
7306:
             Function BinToLongWordA( const S : AnsiString) : LongWord
Function BinToLongWordW( const S : WideString) : LongWord
7307:
7308:
             Function BinToLongWord( const S : String): LongWord
Function FloatToStringA( const A : Extended): AnsiString
7309:
7310:
7311:
             Function FloatToStringW( const A : Extended) : WideString
7312:
             Function FloatToString( const A : Extended) : String
             Function TryStringToFloatA( const A : AnsiString; out B : Extended) : Boolean
Function TryStringToFloatW( const A : WideString; out B : Extended) : Boolean
7313:
7314:
             Function TryStringToFloat( const A : String; out B : Extended) : Boolean
7315:
             Function StringToFloatA( const A : AnsiString) : Extended
Function StringToFloatW( const A : WideString) : Extended
7316:
7317:
             Function StringToFloat( const A : String) : Extended
7318:
             Function StringToFloatDefA( const A : AnsiString; const Default : Extended) : Extended Function StringToFloatDefW( const A : WideString; const Default : Extended) : Extended
7320:
            Function StringToFloatDef( const A : String; const Default : Extended) : Extended
Function EncodeBase64(const S,Alphabet:AnsiString; const Pad:Boolean; const PadMultiple:Integer; const
7321:
7322:
           PadChar: AnsiChar) : AnsiString
7323:
             Function DecodeBase64( const S, Alphabet : AnsiString; const PadSet : CharSet) : AnsiString
            unit uPSI_cFundamentUtils;
Const('b64_MIMEBase64','Str').String('ABCDEFGHIJKLMNOPQRSTUVWXYZabcdefghijklmnopqrstuvwxyz0123456789+/
Const('b64_UUEncode','String').String('!"#$%&''()*+,-./0123456789:;<=>?@ABCDEFGHIJKLMNOPQRSTUVWXYZ[\]^-;
Const('b64_XXEncode','String').String('+-0123456789ABCDEFGHIJKLMNOPQRSTUVWXYZabcdefghijklmnopqrstuvwxyz';
7324:
7325:
7326:
```

```
Const('CCHARSET','String').SetString(b64_XXEncode);
7328:
         Const('CHEXSET', 'String').SetString('0123456789ABCDEF
7329:
         Const('CHEXABEL', String').SetString('0123456789ABCDEF
Const('HEXDIGITS','String').SetString('0123456789ABCDEF
StHexDigits : array[0..$F] of Char = '0123456789ABCDEF';
Const('DIGISET','String').SetString('0123456789
Const('LETTERSET','String').SetString('ABCDEFGHIJKLMNOPQRSTUVWXYZ'
Const('DIGISET2','TCharset').SetSet('0123456789'
7331:
7332:
7333:
7334:
          Const('LETTERSET2','TCharset').SetSet('ABCDEFGHIJKLMNOPQRSTUVWXYZ'
7335:
         Const('HEXSET2','TCharset').SetSET('0123456789ABCDEF');
Const('NUMBERSET','TCharset').SetSet('0123456789');
7336:
7337:
         Const('NUMBERS','String').SetString('0123456789');
Const('LETTERS','String').SetString('ABCDEFGHIJKLMNOPQRSTUVWXYZ');
7338:
7339:
         Function CharSetToStr( const C : CharSet) : AnsiString
Function StrToCharSet( const S : AnsiString) : CharSet
7340:
7341:
         Function MIMEBase64Decode( const S : AnsiString) : AnsiString
Function MIMEBase64Encode( const S : AnsiString) : AnsiString
7342:
7343:
         Function UUDecode( const S : AnsiString) : AnsiString
7344:
         Function XXDecode( const S : AnsiString) : AnsiString
7345 .
         Function BytesToHex( const P : array of Byte; const UpperCase : Boolean) : AnsiString
7346:
         Function InterfaceToStrA( const I : IInterface) : AnsiString
Function InterfaceToStrW( const I : IInterface) : WideString
7347:
7348:
         Function InterfaceToStr( const I : IInterface) : String
7349:
         Function ObjectClassName( const 0 : TObject) : String
Function ClassClassName( const C : TClass) : String
7350:
7351:
         Function ObjectToStr( const 0 : TObject) : String
7352:
         Function ObjectToString( const O : TObject) : String
7353:
         Function CharSetToStr( const C : CharSet) : AnsiString
Function StrToCharSet( const S : AnsiString) : CharSet
7354:
7355:
         Function HashStrA( const S : AnsiString; const Index : Integer; const Count : Integer; const
7356:
        AsciiCaseSensitive : Boolean; const Slots : LongWord) : LongWord
7357: Function HashStrW(const S:WideString;const Index:Integer;const Count:Integer;const
AsciiCaseSensitive:Boolean; const Slots:LongWord) : LongWord
7358: Function HashStr( const S : String; const Index : Integer; const Count : Integer; const
        AsciiCaseSensitive : Boolean; const Slots : LongWord) : LongWord
Function HashInteger( const I : Integer; const Slots : LongWord) : LongWord
         Function HashLongWord( const I : LongWord; const Slots : LongWord) : LongWord
7360:
7361:
         Const('Bytes1KB','LongInt').SetInt( 1024);
          SIRegister_IInterface(CL);
7362:
7363:
         Procedure SelfTestCFundamentUtils
7364:
7365: Function CreateSchedule : IJclSchedule
7366: Function NullStamp : TTimeStamp
7367: Function CompareTimeStamps( const Stamp1, Stamp2 : TTimeStamp) : Int64
7368: Function EqualTimeStamps (const Stamp1, Stamp2: TrimeStamp): Boolean 7369: Function IsNullTimeStamp (const Stamp : TrimeStamp): Boolean
7370:
7371: procedure SIRegister uwinplot(CL: TPSPascalCompiler);
7372: begin
7373:
         AddTypeS('TFunc', 'function(X : Float) : Float;
7373: Addrypes ( Francis , Francis , Francis , Francis ) Francis ( Width, Height : Integer) : Boolean 7375: Procedure SetWindow ( Canvas : TCanvas; X1, X2, Y1, Y2 : Integer; GraphBorder : Boolean)
7376: Procedure SetOxScale( Scale : TScale; OxMin, OxMax, OxStep : Float)
7377: Procedure SetOyScale( Scale : TScale; OyMin, OyMax, OyStep : Float)
7378: Procedure GetOxScale( var Scale: TScale; var OxMin, OxMax, OxStep: Float)
7379: Procedure GetOyScale( var Scale: TScale; var OyMin, OyMax, OyStep: Float)
7380: Procedure SetGraphTitle( Title : String)
7381: Procedure SetOxTitle( Title : String
7382: Procedure SetOyTitle( Title : String
7383: Function GetGraphTitle : String
7384: Function GetOxTitle : String 7385: Function GetOyTitle : String
7386: Procedure PlotOxAxis( Canvas : TCanvas)
7387: Procedure PlotOyAxis( Canvas : TCanvas)
7388: Procedure PlotGrid( Canvas : TCanvas; Grid : TGrid) 7389: Procedure WriteGraphTitle( Canvas : TCanvas) 7390: Function SetMaxCurv( NCurv : Byte) : Boolean
7391: Procedure SetPointParam( CurvIndex, Symbol, Size : Integer; Color : TColor)
7392: Procedure SetLineParam( CurvIndex : Integer; Style : TPenStyle; Width : Integer; Color : TColor)
7393: Procedure SetCurvLegend( CurvIndex : Integer; Legend : String)
7394: Procedure SetCurvStep( CurvIndex, Step: Integer) 7395: Function GetMaxCurv: Byte
7396: Procedure GetPointParam( CurvIndex : Integer; var Symbol, Size : Integer; var Color : TColor)
7397: Procedure GetLineParam(CurvIndex:Integer;var Style:TPenStyle;var Width:Integer; var Color:TColor);
7398: Function GetCurvLegend( CurvIndex : Integer) : String
7399: Function GetCurvStep( CurvIndex : Integer) : Integer
7400: Procedure PlotPoint (Canvas: TCanvas; X, Y: Float; CurvIndex: Integer)
7401: Procedure PlotCurve (Canvas: TCanvas; X, Y: TVector; Lb, Ub, CurvIndex: Integer)
7402: Procedure PlotCurveWithErrorBars(Canvas: TCanvas; X,Y,S: TVector; Ns,Lb,Ub,CurvIndex:Integer)
7403: Procedure PlotFunc(Canvas: TCanvas: Func: TFunc; Xmin, Xmax: Float; Npt, CurvIndex: Integer)
7404: Procedure WriteLegend (Canvas: TCanvas; NCurv: Integer; ShowPoints, ShowLines: Boolean 7405: Procedure ConRec (Canvas: TCanvas; Nx, Ny, Nc: Integer; X, Y, Z: TVector; F: TMatrix)
7406: Function Xpixel(X : Float) : Integer 7407: Function Ypixel(Y : Float) : Integer
7408: Function Xuser( X : Integer) : Float
7409: Function Yuser( Y : Integer) : Float
7410: end;
7411:
7412: Procedure FFT( NumSamples : Integer; InArray, OutArray : TCompVector)
7413: Procedure IFFT( NumSamples : Integer; InArray, OutArray : TCompVector)
```

```
7414: Procedure FFT Integer ( NumSamples : Integer; RealIn, ImagIn : TIntVector; OutArray : TCompVector)
7415: Procedure FFT Integer Cleanup
7416: Procedure CalcFrequency(NumSamples,FrequencyIndex: Integer;InArray: TCompVector;var FT : Complex)
7417: //unit uPSI_JclStreams;
7418: Function StreamSeek( Stream : TStream; const Offset : Int64; const Origin : TSeekOrigin) : Int64
7419: Function StreamCopy( Source : TStream; Dest : TStream; BufferSize : Integer) : Int64
7420: Function CompareStreams( A, B : TStream; BufferSize : Integer) : Boolean
7421: Function JCompareFiles( const FileA, FileB: TFileName; BufferSize: Integer): Boolean
7422:
7423: procedure SIRegister FmxUtils(CL: TPSPascalCompiler);
7424: begin
7425: FindClass('TOBJECT'), 'EInvalidDest
7426:
       FindClass('TOBJECT'), 'EFCantMove
       Procedure fmxCopyFile( const FileName, DestName : string)
7427:
       Procedure fmxMoveFile( const FileName, DestName : string
7428:
7429:
       Function fmxGetFileSize( const FileName : string) : LongInt
       Function fmxFileDateTime( const FileName : string) : TDateTime
7430:
7431: Function fmxHasAttr( const FileName : string; Attr : Word) : Boolean
7432: Function fmxExecuteFile( const FileName, Params, DefaultDir : string; ShowCmd : Integer):THandle;
7433: end;
7434:
7435: procedure SIRegister_FindFileIter(CL: TPSPascalCompiler);
7436: begin
      SIRegister IFindFileIterator(CL);
7437:
7438:
       Function CreateFindFile(const Path:string; IncludeAttr:Integer;out iffi:IFindFileIterator):Bool;
7439: end;
7440:
7441: procedure SIRegister PCharUtils(CL: TPSPascalCompiler);
7442: begin
7443: Function SkipWhite(cp: PChar): PChar
7444:
       \textbf{Function} \ \ \textbf{ReadStringDoubleQuotedMaybe} ( \ \textbf{cp} \ : \ \textbf{PChar}; \ \textbf{var} \ \textbf{AStr} \ : \ \textbf{string}) \ : \ \textbf{PChar}
7445:
       Function ReadStringSingleQuotedMaybe( cp : PChar; var AStr : string) : PChar
       Function ReadIdent( cp : PChar; var ident : string) : PChar
7446:
7447: end;
7448:
7449:
      procedure SIRegister JclStrHashMap(CL: TPSPascalCompiler);
7450: begin
        SIRegister TStringHashMapTraits(CL);
7451:
7452:
       Function CaseSensitiveTraits : TStringHashMapTraits
       Function CaseInsensitiveTraits : TStringHashMapTraits
7453:
        THashNode', 'record Str : string; Ptr : Pointer; Left : PHashNod' +'e; Right : PHashNode; end //PHashArray', '^THashArray // will not work
7454:
7455:
7456:
        SIRegister_TStringHashMap(CL);
7457:
7458:
       THashValue', 'Cardinal
7459:
       Function StrHash( const s : string) : THashValue
       Function TextHash( const s : string) : THashValue
7460:
       Function DataHash( var AValue, ASize : Cardinal) : THashValue
7461:
7462:
       Function Iterate_FreeObjects( AUserData : Pointer; const AStr : string; var AData : Pointer) : Boolean
       Function Iterate_Dispose( AUserData : Pointer; const AStr : string; var AData : Pointer) : Boolean

Function Iterate_FreeMem( AUserData : Pointer; const AStr : string; var AData : Pointer) : Boolean
7463:
7464:
        SIRegister_TCaseSensitiveTraits(CL);
7465:
        SIRegister_TCaseInsensitiveTraits(CL);
7466:
7467:
7468:
Function uExpo( X : Float) : Float
       Function uExp2( X : Float) : Float
7471:
7472:
       Function uExp10( X : Float) : Float
       Function uLog( X : Float) : Float
Function uLog2( X : Float) : Float
7473:
7474:
7475:
       Function uLog10( X : Float) : Float
7476:
       Function uLogA( X, A : Float) : Float
7477:
       Function uIntPower( X : Float; N : Integer): Float
7478:
       Function uPower( X, Y : Float) : Float
       Function SgnGamma( X : Float) : Integer
7479:
       Function Stirling( X : Float) : Float
7480:
7481:
       Function StirLog( X : Float) : Float
7482:
       Function Gamma( X : Float) : Float
       Function LnGamma( X : Float) : Float
7483:
7484: Function DiGamma( X : Float) : Float
7485: Function TriGamma( X : Float) : Float
7486:
       Function IGamma( X : Float) : Float
Function JGamma( X : Float) : Float
7487:
7488: Function InvGamma( X : Float) : Float
       Function Erf(X : Float) : Float
7489:
       \textbf{Function} \ \texttt{Erfc}(\ \texttt{X}\ :\ \texttt{Float})\ :\ \texttt{Float}
7490:
7491: Function Correl(X, Y : TVector; Lb, Ub : Integer) : Float;
7492: { Correlation coefficient between samples X and Y }
7493: function DBeta(A, B, X : Float) : Float;
7494: { Density of Beta distribution with parameters A and B }
7495: Function LambertW( X : Float; UBranch, Offset : Boolean) : Float
7496: Function Beta(X, Y : Float) : Float
7497: Function Binomial(N, K : Integer) : Float
7498: Function PBinom( N : Integer; P : Float; K : Integer) : Float
7499: Procedure Cholesky( A, L : TMatrix; Lb, Ub : Integer)
7500: Procedure LU_Decomp( A : TMatrix; Lb, Ub : Integer)
7501: Procedure LU_Solve( A : TMatrix; B : TVector; Lb, Ub : Integer; X : TVector)
7502: Function DNorm( X : Float) : Float
```

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7503:
7504: function DGamma(A, B, X : Float) : Float;
7505: { Density of Gamma distribution with parameters A and B }
7506: function DKhi2(Nu : Integer; X : Float) : Float;
7507: { Density of Khi-2 distribution with Nu d.o.f. }
7508: function DStudent(Nu : Integer; X : Float) : Float;
7509: { Density of Student distribution with Nu d.o.f. }
7510: function DSnedecor(Nul, Nu2: Integer; X: Float): Float;
7511: { Density of Fisher-Snedecor distribution with Nu1 and Nu2 d.o.f. }
7512: function IBeta(A, B, X : Float) : Float;
7513:
       { Incomplete Beta function}
      function Correl(X, Y : TVector; Lb, Ub : Integer) : Float;
7515:
7516: procedure SIRegister_unlfit(CL: TPSPascalCompiler);
7517: begin
7518:
      Procedure SetOptAlgo( Algo : TOptAlgo)
7519: procedure SetOptAlgo(Algo: TOptAlgo);
7520: {
7521:
        Sets the optimization algorithm according to Algo, which must be
7522:
        NL_MARQ, NL_SIMP, NL_BFGS, NL_SA, NL_GA. Default is NL_MARQ
7523:
       Function GetOptAlgo : TOptAlgo
7524:
7525:
        \begin{tabular}{ll} \textbf{Procedure} & \texttt{SetMaxParam(N:Byte)} \end{tabular}
7526:
       Function GetMaxParam : Byte
       Procedure SetParamBounds( I : Byte; ParamMin, ParamMax : Float)
7527:
7528:
       Procedure GetParamBounds( I : Byte; var ParamMin, ParamMax : Float)
       Function NullParam( B : TVector; Lb, Ub : Integer) : Boolean
7529:
      Procedure NLFit( RegFunc : TRegFunc; DerivProc : TDerivProc; X, Y : TVector; Lb, Ub : Integer; MaxIter :
Integer; Tol : Float; B : TVector; FirstPar, LastPar : Integer; V : TMatrix)
7530:
7531: Procedure WNLFit( RegFunc : TRegFunc; DerivProc : TDerivProc; X, Y, S : TVector; Lb, Ub:Integer;
MaxIter:Integer;Tol : Float; B : TVector; FirstPar, LastPar : Integer; V : TMatrix)
7532: Procedure SetMCFile( FileName : String)
       Procedure SimFit(RegFunc:TRegFunc;X,Y:TVector;Lb,Ub:Integer;B:TVector;FirstPar,LastPar:Integer;V:TMatrix;
7533:
7534:
       Procedure WSimFit(RegFunc:TRegFunc; X,Y,S:TVector;Lb,Ub:Integer;B:TVector;FirstPar,
      LastPar:Integer;V:TMatrix)
7535: end;
7536:
7537: (
7538: procedure SIRegister_usimplex(CL: TPSPascalCompiler);
7539: begin
7540: Procedure SaveSimplex(FileName: string)
       Procedure Simplex(Func:TFuncNVar; X:TVector;Lb,Ub:Integer; MaxIter:Integer;Tol:Float; var F min:Float);
7541:
7542: end;
7543: (*---
7544:
      procedure SIRegister_uregtest(CL: TPSPascalCompiler);
7545: begin
       Procedure RegTest(Y,Ycalc: TVector;LbY,UbY:Integer;V:TMatrix;LbV,UbV:Integer;var Test:TRegTest)
7546:
7547:
       Procedure WRegTest(Y,Ycalc,S:TVector;LbY,UbY:Integer;V:TMatrix;LbV,UbV:Integer;var Test:TRegTest);
7548: end;
7549:
7550: procedure SIRegister_ustrings(CL: TPSPascalCompiler);
7551: begin
      Function LTrim( S : String) : String
7552:
7553:
       Function RTrim( S : String) : String
7554:
       Function uTrim( S : String) : String
       Function StrChar( N : Byte; C : Char)
                                                 : String
7555:
       Function RFill( S : String; L : Byte) : String
7556:
       Function LFill( S : String; L : Byte) : String
7557:
7558:
       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
7559:
7560:
7561:
       Procedure Parse( S : String; Delim : Char; Field : TStrVector; var N : Byte)
7562:
       Procedure SetFormat( NumLength, MaxDec : Integer; FloatPoint, NSZero : Boolean)
       Function FloatStr( X : Float) : String
Function IntStr( N : LongInt) : String
7563:
7564:
       Function uCompStr( Z : Complex) : String
7565:
7566:
7567:
7568: procedure SIRegister_uhyper(CL: TPSPascalCompiler);
7569: begin
      Function uSinh( X : Float) : Float
7570:
7571:
       Function uCosh( X : Float) : Float
7572:
       Function uTanh( X : Float) : Float
7573:
       Function uArcSinh( X : Float) : Float
       Function uArcCosh( X : Float) : Float
7575:
       Function ArcTanh( X : Float) : Float
7576:
       Procedure SinhCosh( X : Float; var SinhX, CoshX : Float)
7577: end;
7578:
7579:
      procedure SIRegister_urandom(CL: TPSPascalCompiler);
7580: begin
7581: type RNG_Type =
         (RNG_MWC,
                       { Multiply-With-Carry }
{ Mersenne Twister }
{ Universal Virtual Array Generator }
7582:
7583:
         RNG MT.
7584:
         RNG_UVAG);
7585: Procedure SetRNG( RNG : RNG_Type)
7586: Procedure InitGen( Seed : RNG_IntType)
7587: Procedure SRand( Seed : RNG_IntType)
7588: Function IRanGen : RNG_IntType
```

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7589:
       Function IRanGen31 : RNG IntType
7590:
       Function RanGen1 : Float
       Function RanGen2 : Float
       Function RanGen3 : Float
7592:
7593:
       Function RanGen53 : Float
7594: end;
7595:
7596: // Optimization by Simulated Annealing
7597: procedure SIRegister_usimann(CL: TPSPascalCompiler);
7598: begin
       Procedure InitSAParams( NT, NS, NCycles : Integer; RT : Float)
7599:
       Procedure SA_CreateLogFile( FileName : String)
7601:
       Procedure SimAnn(Func: TFuncNVar; X, Xmin, Xmax: TVector; Lb, Ub: Integer; var F_min: Float);
7602: end;
7603:
7604: procedure SIRegister_uranuvag(CL: TPSPascalCompiler);
7606:
      Procedure InitUVAGbyString( KeyPhrase : string)
       Procedure InitUVAG( Seed : RNG_IntType)
Function IRanUVAG : RNG_IntType
7607:
7608:
7609: end
7610:
7611: procedure SIRegister_ugenalg(CL: TPSPascalCompiler);
7612: begin
7613: Procedure InitGAParams( NP, NG : Integer; SR, MR, HR : Float)
7614:
       Procedure GA_CreateLogFile( LogFileName : String)
7615: Procedure GenAlg(Func: TFuncNVar; X, Xmin, Xmax: TVector; Lb, Ub: Integer; var F_min: Float);
7616: end;
7617:
7618: TVector', 'array of Float
7619: procedure SIRegister_uqsort(CL: TPSPascalCompiler);
7620: begin
7621: Procedure QSort( X : TVector; Lb, Ub : Integer)
7622: Procedure DQSort( X : TVector; Lb, Ub : Integer)
7623: end;
7624:
7625: procedure SIRegister uinterv(CL: TPSPascalCompiler);
7626: begin
7627: 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)
7628:
7629: end:
7630:
7631: procedure SIRegister_D2XXUnit(CL: TPSPascalCompiler);
7632: begin
        FT_Result', 'Integer
//TDWordptr', '^DWord // will not work
TFT_Program_Data', 'record Signaturel : DWord; Signature2 : DWor'
7633:
7634:
7635:
         d; Version : DWord; VendorID : Word; ProductID : Word; Manufacturer : PCha
7636:
7637:
          r; ManufacturerID : PChar; Description : PChar; SerialNumber : PChar; MaxP
          ower: Word; PnP: Word; SelfPowered: Word; RemoteWakeup: Word; Rev4: Byte; IsoIn: Byte; IsoOut: Byte; PullDownEnable: Byte; SerNumEnable: By
7638:
7639:
          te; USBVersionEnable : Byte; USBVersion : Word; Rev5 : Byte; IsoInA : Byte
7640:
          ; IsoInB : Byte; IsoOutA : Byte; IsoOutB : Byte; PullDownEnable5 : Byte;
7641:
          erNumEnable5 : Byte; USBVersionEnable5 : Byte; USBVersion5 : Word; AIsHigh'
Current : Byte; BIsHighCurrent : Byte; IFAIsFifo : Byte; IFAIsFifoTar : By'
te; IFAIsFastSer : Byte; AIsVCP : Byte; IFBIsFifo : Byte; IFBIsFifoTar : B'
7642:
7643:
7644:
          yte; IFBIsFastSer : Byte; BIsVCP : Byte; UseExtOsc : Byte; HighDriveIOs :
7645:
          Byte; EndpointSize : Byte; PullDownEnableR : Byte; SerNumEnableR : Byte; I'
7646:
          nvertTXD : Byte; InvertRXD : Byte; InvertRTS : Byte; InvertCTS : Byte; InvertDTR : Byte; InvertDSR : Byte; InvertDCD : Byte; InvertRI : Byte; Cbus0 '
: Byte; Cbus1 : Byte; Cbus2 : Byte; Cbus3 : Byte; Cbus4 : Byte; RIsVCP : B'
7647:
7648:
7649:
7650:
          yte; end
7651: end:
7652:
7653:
7655: procedure SIRegister_TJvPaintFX(CL: TPSPascalCompiler);
7656: begin
         //with RegClassS(CL,'TComponent', 'TJvPaintFX') do
7657:
         with AddClassN(FindClass('TComponent'), 'TJvPaintFX') do begin
7658:
           Procedure Solarize ( const Src : TBitmap; var Dst : TBitmap; Amount : Integer)
7659:
7660:
           Procedure Posterize( const Src : TBitmap; var Dst : TBitmap; Amount : Integer)
7661:
           Procedure Blend( const Src1, Src2 : TBitmap; var Dst : TBitmap; Amount : Single)
Procedure Blend2( const Src1, Src2 : TBitmap; var Dst : TBitmap; Amount : Single)
7662:
           Procedure ExtractColor( const Dst : TBitmap; AColor : TColor)
7663:
           Procedure ExcludeColor( const Dst : TBitmap; AColor : TColor)
7664:
7665:
           Procedure Turn( Src, Dst : TBitmap)
           Procedure TurnRight( Src, Dst : TBitmap)
Procedure HeightMap( const Dst : TBitmap; Amount : Integer)
7666:
7667:
           Procedure TexturizeTile( const Dst : TBitmap; Amount : Integer)
7668:
7669:
           Procedure TexturizeOverlap( const Dst : TBitmap; Amount : Integer)
           Procedure RippleRandom( const Dst : TBitmap; Amount : Integer)
Procedure RippleTooth( const Dst : TBitmap; Amount : Integer)
7670:
7671:
7672:
           Procedure RippleTriangle( const Dst : TBitmap; Amount : Integer)
7673:
           Procedure Triangles( const Dst : TBitmap; Amount : Integer)
           Procedure DrawMandelJulia(const Dst: TBitmap; x0,y0,x1,y1:Single; Niter:Integer; Mandel:Boolean)
7674:
7675:
           Procedure FilterXBlue( const Dst : TBitmap; Min, Max : Integer)
Procedure FilterXGreen( const Dst : TBitmap; Min, Max : Integer)
7676:
           Procedure FilterXRed( const Dst : TBitmap; Min, Max : Integer)
```

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7678:
            Procedure FilterBlue ( const Dst : TBitmap; Min, Max : Integer)
7679:
            Procedure FilterGreen( const Dst : TBitmap; Min, Max : Integer)
            Procedure FilterRed( const Dst : TBitmap; Min, Max : Integer)
7681:
            Procedure Emboss( var Bmp : TBitmap)
            Procedure Plasma( Src1, Src2, Dst : TBitmap; Scale, Turbulence : Single)
7682:
            Procedure Shake( Src, Dst : TBitmap; Factor : Single)
Procedure ShakeDown( Src, Dst : TBitmap; Factor : Single)
Procedure KeepBlue( const Dst : TBitmap; Factor : Single)
7683:
7684:
7685:
7686:
            Procedure KeepGreen( const Dst : TBitmap; Factor : Single)
7687:
            Procedure KeepRed( const Dst : TBitmap; Factor : Single)
7688:
            Procedure Mandelbrot ( const Dst : TBitmap; Factor : Integer)
            Procedure MaskMandelbrot( const Dst : TBitmap; Factor : Integer)
7690:
            Procedure FoldRight( Src1, Src2, Dst : TBitmap; Amount : Single)
            Procedure QuartoOpaque(Src, Dst: TBitmap)
Procedure SemiOpaque(Src, Dst: TBitmap)
Procedure ShadowDownLeft(const Dst: TBitmap)
7691:
7692:
7693:
            Procedure ShadowDownRight( const Dst : TBitmap)
7694:
            Procedure ShadowUpLeft( const Dst : TBitmap)
Procedure ShadowUpRight( const Dst : TBitmap)
Procedure Darkness( const Dst : TBitmap; Amount : Integer)
7695 .
7696:
7697:
            Procedure Trace( const Dst : TBitmap; Intensity : Integer)
7698:
            Procedure FlipRight( const Dst : TBitmap)
7699:
7700:
            Procedure FlipDown( const Dst : TBitmap)
            Procedure SpotLight( const Dst : TBitmap; Amount : Integer; Spot : TRect)

Procedure SplitLight( const Dst : TBitmap; Amount : Integer)
7701:
7703:
            Procedure MakeSeamlessClip( var Dst : TBitmap; Seam : Integer)
            Procedure Wave( const Dst : TBitmap; Amount, Inference, Style : Integer)

Procedure Mosaic( const Bm : TBitmap; Amount, Inference, Style : Integer)

Procedure SmoothRotate( var Src, Dst : TBitmap; CX, CY : Integer; Angle : Single)

Procedure SmoothResize( var Src, Dst : TBitmap)
7704:
7705:
7706:
7707:
7708:
            Procedure Twist( var Bmp, Dst : TBitmap; Amount : Integer)
            Procedure SplitBlur( const Dst : TBitmap; Amount : Integer)
7709:
7710:
            Procedure GaussianBlur( const Dst : TBitmap; Amount : Integer)
            Procedure Smooth( const Dst : TBitmap; Weight : Integer)
Procedure GrayScale( const Dst : TBitmap)
7711:
7712:
7713:
            Procedure AddColorNoise( const Dst : TBitmap; Amount : Integer)
            Procedure AddMonoNoise( const Dst : TBitmap; Amount : Integer)
7714:
7715:
            Procedure Contrast( const Dst : TBitmap; Amount : Integer)
7716:
            Procedure Lightness( const Dst : TBitmap; Amount : Integer
7717:
            Procedure Saturation( const Dst : TBitmap; Amount : Integer)
7718:
            Procedure Spray( const Dst : TBitmap; Amount : Integer)
            Procedure AntiAlias( const Dst : TBitmap)
7719:
            Procedure AntiAliasRect( const Dst : TBitmap; XOrigin, YOrigin, XFinal, YFinal : Integer)
7720:
            Procedure SmoothPoint( const Dst: TBitmap; XK, YK: Integer)
Procedure FishEye( var Bmp, Dst: TBitmap; Amount: Single)
7721:
7722:
7723:
            Procedure Marble( const Src : TBitmap; var Dst : TBitmap; Scale : Single; Turbulence : Integer)
            Procedure Marble2( const Src : TBitmap; var Dst : TBitmap; Scale : Single; Turbulence: Integer)
7724:
            Procedure Marble3( const Src : TBitmap; var Dst : TBitmap; Scale : Single; Turbulence: Integer)
            Procedure Marble4( const Src : TBitmap; var Dst : TBitmap; Scale : Single; Turbulence:
7726:
7727:
            Procedure Marble5( const Src : TBitmap; var Dst : TBitmap; Scale : Single; Turbulence: Integer)
7728:
            Procedure Marble6 ( const Src : TBitmap; var Dst : TBitmap; Scale : Single; Turbulence: Integer)
            Procedure Marble7( const Src : TBitmap; var Dst : TBitmap; Scale : Single; Turbulence:
7729:
7730:
            Procedure Marble8( const Src : TBitmap; var Dst : TBitmap; Scale : Single; Turbulence: Integer)
            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)
7731:
7732:
7733:
            Procedure Stretch( Src, Dst : TBitmap; Filter : TFilterProc; AWidth : Single)
7734:
7735:
            Procedure Grow( Src1, Src2, Dst : TBitmap; Amount : Single; X, Y : Integer)
            Procedure Invert( Src : TBitmap)
Procedure MirrorRight( Src : TBitmap)
Procedure MirrorDown( Src : TBitmap)
7736:
7737:
7738:
7739:
7740: end:
7741:
7742:
       procedure SIRegister_JvPaintFX(CL: TPSPascalCompiler);
7744:
7745:
         AddTypeS('TLightBrush', '( lbBrightness, lbContrast, lbSaturation, lbFishe'
          +'ye, lbrotate, lbtwist, lbrimple, mbHor, mbTop, mbBottom, mbDiamond, mbWast' +'e, mbRound, mbRound2, mbSplitRound, mbSplitWaste)
7746:
7747:
         SIRegister_TJvPaintFX(CL);
7748:
7749:
        Function SplineFilter( Value : Single) : Single
        Function BellFilter( Value : Single) : Single
7750:
        Function TriangleFilter( Value : Single) : Single
7751:
7752:
        Function BoxFilter( Value : Single) : Single
7753:
        Function HermiteFilter( Value : Single) : Single
        Function Lanczos3Filter( Value : Single) : Single
Function MitchellFilter( Value : Single) : Single
7754:
7755:
7756:
       end;
7758:
7759: (*----
7760: procedure SIRegister Chart(CL: TPSPascalCompiler);
7761:
       begin
         'TeeMsg_DefaultFunctionName','String').SetString( 'TeeFunction
        TeeMsg_DefaultSeriesName', 'String').SetString( 'Series TeeMsg_DefaultToolName', 'String').SetString( 'ChartTool ChartComponentPalette', 'String').SetString( 'TeeChart TeeMaxLegendColumns',LongInt').SetInt( 2);
7763:
7764:
7765:
```

```
TeeDefaultLegendSymbolWidth','LongInt').SetInt( 20);
TeeTitleFootDistance,LongInt).SetInt( 5);
7767:
7768:
7769:
                    SIRegister_TCustomChartWall(CL);
7770:
                    SIRegister_TChartWall(CL);
7771:
                   SIRegister_TChartLegendGradient(CL);
                   TLegendStyle', '( lsAuto, lsSeries, lsValues, lsLastValues, lsSeriesGroups )
TLegendAlignment', '( laLeft, laRight, laTop, laBottom )
FindClass('TOBJECT'),'LegendException
7772:
7773:
7774:
                   TOnGetLegendText', 'Procedure ( Sender : TCustomAxisPanel; Legen'
7775:
                      +'dStyle : TLegendStyle; Index : Integer; var LegendText : String)
7776:
                   FindClass('TOBJECT'), 'TCustomChartLegend
TLegendSymbolSize', '( lcsPercent, lcsPixels )
7777:
7778:
7779:
                    TLegendSymbolPosition', '( spLeft, spRight )
                   TSymbolDrawEvent', 'Procedure(Sender:TObject;Series:TChartSeries;ValueIndex:Integer;R:TRect);
TSymbolCalcHeight', 'Function : Integer
7780:
7781:
7782:
                    SIRegister_TLegendSymbol(CL);
                    SIRegister_TTeeCustomShapePosition(CL);
7783:
                   TCheckBoxesStyle', '( cbsCheck, cbsRadio )
SIRegister_TLegendTitle(CL);
7784:
7785:
7786:
                    SIRegister_TLegendItem(CL);
7787:
                    SIRegister_TLegendItems(CL);
                   TLegendCalcSize', 'Procedure ( Sender : TCustomChartLegend; var ASize : Integer) FindClass('TOBJECT'), 'TCustomChart
7788:
7789:
                    SIRegister_TCustomChartLegend(CL);
7790:
7791:
                    SIRegister_TChartLegend(CL);
7792:
                    SIRegister_TChartTitle(CL);
7793:
                    SIRegister_TChartFootTitle(CL);
                   TChartClick', 'Procedure ( Sender : TCustomChart; Button : TMous'
    +'eButton; Shift : TShiftState; X, Y : Integer)
7794:
7795:
7796:
                    TChartClickAxis', 'Procedure ( Sender : TCustomChart; Axis : TCh
                   +'artAxis; Button : TMouseButton; Shift : TShiftState; X, Y : Integer)
TChartClickSeries', 'Procedure ( Sender : TCustomChart; Series :'
7797:
7798:
7799:
                       +TChartSeries; ValueIndex : Integer; Button: TMouseButton; Shift:TShiftState; X, Y:Integer)
                   TChartClickTitle', 'Procedure ( Sender : TCustomChart; ATitle : ' +'TChartTitle; Button : TMouseButton; Shift : TShiftState; X, Y : Integer)
7800:
7801:
                   TOnGetLegendPos', 'Procedure (Sender: TCustomChart; Index: Integer; var X,Y,XColor:Integer)
TOnGetLegendRect', 'Procedure (Sender: TCustomChart; var Rect: TRect)
TAxisSavedScales', 'record Auto: Boolean; AutoMin: Boolean; Au'
7802:
7803:
                                                                    'record Auto : Boolean; AutoMin : Boolean; Au
7804:
7805:
                           toMax : Boolean; Min : Double; Max : Double; end
7806:
                    TAllAxisSavedScales',
                                                                          'array of TAxisSavedScales
7807:
                    SIRegister_TChartBackWall(CL);
                    SIRegister_TChartRightWall(CL);
7808:
7809:
                    SIRegister_TChartBottomWall(CL);
7810:
                    SIRegister_TChartLeftWall(CL);
7811:
                    SIRegister_TChartWalls(CL);
                    TChartAllowScrollEvent'. 'Procedure(Sender:TChartAxis:var AMin.AMax:Double:var AllowScroll:Boolean);
7812:
                    SIRegister_TCustomChart(CL);
7813:
                    SIRegister_TChart(CL);
                    SIRegister_TTeeSeriesTypes(CL);
7815:
7816:
                    SIRegister_TTeeToolTypes(CL);
7817:
                   SIRegister TTeeDragObject(CL);
                   SIRegister_TColorPalettes(CL);
7818:
                Procedure RegisterTeeSeries(ASeriesClass:TChartSeriesClass;ADescription,
7819:
              AGalleryPage:PString;ANumGallerySeries:Integer;

Procedure RegisterTeeSeries1( ASeriesClass : TChartSeriesClass; ADescription : PString);

Procedure RegisterTeeFunction(AFunctClass:TTeeFunctionClass;ADescription,
7820:
7821:
              AGalleryPage:PString;ANumGallerySeries: Int;
7822:
              Procedure RegisterTeeBasicFunction( AFunctionClass : TTeeFunctionClass; ADescription : PString)
7823:
                 \textbf{Procedure} \ \texttt{RegisterTeeSeriesFunction} (\texttt{ASeriesClass}: \ \texttt{TChartSeriesClass}; \texttt{AFunctionClass}: \ \texttt{TTeeFunctionClass}; \texttt
7823: Procedure RegisterTeeSeriesFunction(ASeriesClass: IchartserTesClass:ArunctionClass:Tee
ADescription, AGalleryPage: PString: ANumGallerySeries: Integer: ASubIndex: Integer)
7824: Procedure UnRegisterTeeSeries( const ASeriesList: array of TChartSeriesClass)
7825:
                 Procedure UnRegisterTeeFunctions( const AFunctionList : array of TTeeFunctionClass)
                Procedure AssignSeries( var OldSeries, NewSeries : TChartSeries)
Function CreateNewTeeFunction( ASeries : TChartSeries; AClass : TTeeFunctionClass) : TTeeFunction
7826 .
7827:
              Function CreateNewSeries (AOwner: TComponent; AChart: TCustomAxisPanel; AClass: TChartSeriesClass; AFunctionClass: TTeeFunctionClass): TChartSeries
7828:
7829:
                Function CloneChartSeries( ASeries : TChartSeries) : TChartSeries;
7830:
                \textbf{Function} \ \texttt{CloneChartSeries1} ( \ \texttt{ASeries} \ : \ \texttt{TChartSeries}; \ \texttt{AChart} \ : \ \texttt{TCustomAxisPanel}) \ : \ \texttt{TChartSeries}; \\
7831:
                 \textbf{Function} \ \texttt{CloneChartSeries} : \texttt{AChartSeries} : \texttt{AChartSe
                 Function CloneChartTool( ATool : TTeeCustomTool; AOwner : TComponent) : TTeeCustomTool
7832:
                 Function ChangeSeriesType( var ASeries : TChartSeries; NewType : TChartSeriesClass) : TChartSeries
7833:
7834:
                 Procedure ChangeAllSeriesType( AChart : TCustomChart; AClass : TChartSeriesClass)
                Function GetNewSeriesName( AOwner: TComponent): TComponentName

Procedure RegisterTeeTools( const ATools: array of TTeeCustomToolClass)

Procedure UnRegisterTeeTools( const ATools: array of TTeeCustomToolClass)

Function GetGallerySeriesName( ASeries: TChartSeries): String
7835:
7836:
7837:
7838:
7839:
                Procedure PaintSeriesLegend(ASeries:TChartSeries; ACanvas:TCanvas; const R:TRect;ReferenceChart:
              TCustomChart);
7840:
                  SIRegister_TChartTheme(CL);
                    //TChartThemeClass', 'class of TChartTheme
                    //TCanvasClass', 'class of TCanvas3D
7842:
                Function SeriesNameOrIndex( ASeries : TCustomChartSeries) : String
Function SeriesTitleOrName( ASeries : TCustomChartSeries) : String
7843:
7844:
                 Procedure FillSeriesItems ( AItems : TStrings; AList : TCustomSeriesList; UseTitles : Boolean)
7845:
                 Procedure ShowMessageUser( const S : String)
7846:
7847:
                Function HasNoMandatoryValues( ASeries : TChartSeries) : Boolean
                Function HasLabels( ASeries : TChartSeries) : Boolean
Function HasColors( ASeries : TChartSeries) : Boolean
7848:
7849:
                Function SeriesGuessContents( ASeries : TChartSeries) : TeeFormatFlag
```

```
7851: Procedure TeeDrawBitmapEditor( Canyas : TCanyas; Element : TCustomChartElement; Left, Top : Integer)
7852: end;
7854 .
7855: procedure SIRegister TeeProcs(CL: TPSPascalCompiler);
7856: begin
       //'TeeFormBorderStyle','').SetString( bsNone);
7857:
          SIRegister_TMetafile(CL);
7858:
7859:
        'TeeDefVerticalMargin', 'LongInt').SetInt(4);
7860:
         'TeeDefHorizMargin','LongInt').SetInt( 3);
'crTeeHand','LongInt').SetInt( TCursor ( 2020 ));
7861:
        'TeeMsg_TeeHand', 'String').SetString( 'crTeeHand
        'TeeNormalPrintDetail','LongInt').SetInt( 0);
'TeeHighPrintDetail','LongInt').SetInt( - 100);
7863:
7864:
         'TeeDefault_PrintMargin', 'LongInt').SetInt( 15);
7865:
         'MaxDefaultColors','LongInt').SetInt( 19);
'TeeTabDelimiter','Char').SetString( #9);
7866:
7867:
7868:
         TDateTimeStep', '( dtOneMicroSecond, dtOneMillisecond, dtOneSeco'
          +'nd, dtFiveSeconds, dtTenSeconds, dtFifteenSeconds, dtThirtySeconds, dtOneM'
+'inute, dtFiveMinutes, dtTenMinutes, dtFifteenMinutes, dtThirtyMinutes, dtO'
7869:
7870:
7871:
           +'neHour, dtTwoHours, dtSixHours, dtTwelveHours, dtOneDay, dtTwoDays, dtThre'
7872:
           +'eDays, dtOneWeek, dtHalfMonth, dtOneMonth, dtTwoMonths, dtThreeMonths, dtF'
         +'ourMonths, dtSixMonths, dtOneYear, dtNone )
SIRegister_TCustomPanelNoCaption(CL);
7873:
7874:
          FindClass('TOBJECT'),'TCustomTeePanel
7876:
          SIRegister_TZoomPanning(CL);
7877:
          SIRegister_TTeeEvent(CL);
7878:
          //SIRegister_TTeeEventListeners(CL);
7879:
          TTeeMouseEventKind', '( meDown, meUp, meMove )
          SIRegister_TTeeMouseEvent(CL);
7880:
7881:
          SIRegister_TCustomTeePanel(CL);
7882:
          //TChartGradient', 'TTeeGradient
          //TChartGradientClass', 'class of TChartGradient
7883:
         TPanningMode', '( pmNone, pmHorizontal, pmVertical, pmBoth )
SIRegister_TTeeZoomPen(CL);
7884:
7885:
          SIRegister_TTeeZoomBrush(CL);
7886:
         TTeeZoomDirection', '( tzdHorizontal, tzdVertical, tzdBoth )
SIRegister_TTeeZoom(CL);
7887:
7888:
         FindClass('TOBJECT'),'TCustomTeePanelExtended
TTeeBackImageMode','(pbmStretch, pbmTile, pbmCenter, pbmCustom)
7889:
7890:
7891:
          SIRegister_TBackImage(CL);
         SIRegister TCustomTeePanelExtended(CL);
7892:
7893:
          //TChartBrushClass', 'class of TChartBrush
          SIRegister_TTeeCustomShapeBrushPen(CL);
7894:
         TChartObjectShapeStyle', '( fosRectangle, fosRoundRectangle, fosEllipse ) TTextFormat', '( ttfNormal, ttfHtml )
7895:
7896:
         SIRegister_TTeeCustomShape(CL);
7897:
          SIRegister_TTeeShape(CL);
7899:
         SIRegister_TTeeExportData(CL);
7900:
        Function TeeStr( const Num : Integer) : String
        Function DateTimeDefaultFormat( const AStep : Double) : String
Function TEEDaysInMonth( Year, Month : Word) : Word
7901:
7902:
        Function FindDateTimeStep( const StepValue : Double) : TDateTimeStep
7903:
        Function NextDateTimeStep( const AStep: Double): Double
Function PointInLine( const P: TPoint; const px, py, qx, qy : Integer): Boolean;
Function PointInLinel( const P, FromPoint, ToPoint : TPoint): Boolean;
7904:
7905:
7906:
        Function PointInLine2(const P, FromPoint, ToPoint: TPoint; const TolerancePixels: Integer): Boolean;
7907:
        Function PointInLine3( const P : TPoint; const px, py, qx, qy, TolerancePixels:Integer):Boolean;
7908:
7909:
        Function PointInPolygon( const P : TPoint; const Poly : array of TPoint) : Boolean Function PointInTriangle( const P, P0, P1, P2 : TPoint) : Boolean;
7910:
7911:
7912:
        Function PointInTriangle1( const P : TPoint; X0, X1, Y0, Y1 : Integer) : Boolean;
        Function PointInHorizTriangle( const P : TPoint; Y0, Y1, X0, X1 : Integer) : Boolean
Function PointInEllipse( const P : TPoint; const Rect : TRect) : Boolean;
Function PointInEllipsel( const P: TPoint; Left, Top, Right, Bottom : Integer) : Boolean;
7913:
7914:
7915:
        Function DelphiToLocalFormat( const Format : String) : String
Function LocalToDelphiFormat( const Format : String) : String
7916:
7917:
7918:
        Procedure TEEEnableControls(Enable: Boolean; const ControlArray : array of TControl)
        Function TeeRoundDate(const ADate : TDateTime; AStep : TDateTimeStep) : TDateTime
7919:
        Procedure TeeDateTimeIncrement(IsDateTime:Boolean;Increment:Boolean;var Value:Double;const
7920:
       AnIncrement:Double; tmpWhichDateTime:TDateTimeStep)
         TTeeSortCompare', 'Function ( a, b : Integer) : TTeeSortSwap', 'Procedure ( a, b : Integer)
7921:
                                                                    -
Integer
7922:
7923:
        Procedure TeeSort(StartIndex.EndIndex:Integer;CompareFunc:TTeeSortCompare;SwapFunc:TTeeSortSwap);
7924:
        Function TeeGetUniqueName( AOwner : TComponent; const AStartName : String) : string
7925:
        Function TeeExtractField( St : String; Index : Integer) : String;
        Function TeeExtractField1( St : String; Index : Integer; const Separator : String) : String;
7926:
        Function TeeNumFields( St : String) : Integer;
Function TeeNumFields( const St, Separator : String) : Integer;
7927:
7928:
        Procedure TeeGetBitmapEditor( AObject: TObject; var Bitmap: TBitmap)

Procedure TeeLoadBitmap( Bitmap: TBitmap; const Name1, Name2: String)
7930:
7931:
        // TColorArray', 'array of TColor
        Function GetDefaultColor( const Index : Integer) : TColor
7932:
7933:
        Procedure SetDefaultColorPalette;
        Procedure SetDefaultColorPalette1( const Palette : array of TColor);
7934:
        'TeeCheckBoxSize','LongInt').SetInt( 11);

Procedure TeeDrawCheckBox(x,y:Integer;Canvas:TCanvas;Checked:Boolean;ABackColor:TColor;CheckBox:Boolean);
7935:
7936:
7937:
        Function TEEStrToFloatDef( const S : string; const Default : Extended) : Extended
        Function TryStrToFloat( const S : String; var Value : Double) : Boolean
```

```
Function CrossingLines( const X1, Y1, X2, Y2, X3, Y3, X4, Y4 : Double; out x, y : Double) : Boolean Procedure TeeTranslateControl( AControl : TControl);
7939:
7940:
        Procedure TeeTranslateControl( AControl: TControl; const ExcludeChilds: array of TControl);
7942.
        Function ReplaceChar( const AString : String; const Search : Char; const Replace : Char) : String
7943:
        //Procedure RectToFourPoints( const ARect : TRect; const Angle : Double; var P : TFourPoints)
        Function TeeAntiAlias( Panel : TCustomTeePanel; ChartRect : Boolean) : TBitmap
7944:
        //Procedure DrawBevel(Canvas:TTeeCanvas;Bevel:TPanelBevel;var R:TRect;Width:Integer;Round:Integer);
7945:
        //Function ScreenRatio( ACanvas : TCanvas3D) : Double
7946:
        Function TeeReadBoolOption( const AKey : String; DefaultValue : Boolean) : Boolean
7947:
       Procedure TeeSaveBoolOption( const AKey : String; Value : Boolean)
Function TeeReadIntegerOption( const AKey : String; DefaultValue : Integer) : Integer
7948:
7949:
        Procedure TeeSaveIntegerOption( const AKey : String; Value : Integer)
7951:
        Function TeeReadStringOption( const AKey, DefaultValue : String) : String
7952:
        Procedure TeeSaveStringOption( const AKey, Value : String)
        Function TeeDefaultXMLEncoding : String
7953:
7954:
        Procedure ConvertTextToXML( Stream : TStream; XMLHeader : Boolean)
7955:
         TeeWindowHandle', 'Integer
       Procedure TeeGotoURL( Handle : TeeWindowHandle; const URL : String)
7956
         \textbf{Procedure} \ \ \texttt{HtmlTextOut} \ ( \ \ \texttt{ACanvas} \ : \ \ \texttt{TCanvas}; \ \ \texttt{x, y} \ : \ \ \texttt{Integer}; \ \ \texttt{Text} \ : \ \ \textbf{String}) 
7957:
7958:
       Function HtmlTextExtent( ACanvas : TCanvas; const Text : String) : TSize
7959:
7960:
7961:
7962: using mXBDEUtils
                         7963:
7964: Procedure SetAlias( aAlias, aDirectory : String)
       Procedure CheckRegistryEntry(Reg:TRegistry;const Path,Value:String;const Default,
7965:
      Desired: Variant; Size: Byte);
       Function GetFileVersionNumber( const FileName : String) : TVersionNo
7967:
       Procedure SetBDE( aPath, aNode, aValue : String)
        function RestartDialog(Wnd: HWnd; Reason: PChar; Flags: Integer): Integer; stdcall;
7968:
       Function GetSystemDirectory( lpBuffer : string; uSize : UINT) : UINT Function GetSystemDirectoryW( lpBuffer : pchar; uSize : UINT) : UINT
7969:
7970:
        Function GetTempPath( nBufferLength : DWORD; lpBuffer : string) : DWORD
7971:
        Function GetWindowsDirectoryW( nBufferLength : DWORD; lpBuffer : string) : DWORD
7972:
7973:
       Function GetTempFileName(lpPathName,lpPrefixString:string;uUnique:UINT;lpTempFileName:string):UINT;
7974:
7975:
7976: procedure SIRegister_cDateTime(CL: TPSPascalCompiler);
7977: begin
7978: AddClassN(FindClass('TOBJECT'),'EDateTime
7979: Function DatePart( const D : TDateTime) : Integer 7980: Function TimePart( const D : TDateTime) : Double
7981: Function Century( const D : TDateTime)
7982: Function Year( const D : TDateTime) : Word
7983: Function Month ( const D : TDateTime) : Word
7984: Function Day( const D : TDateTime) : Word
7985: Function Hour( const D : TDateTime) : Word
7986: Function Minute( const D : TDateTime) : Word 7987: Function Second( const D : TDateTime) : Word
7988: Function Millisecond( const D : TDateTime) : Word
7989: ('OneDay', 'Extended').setExtended( 1.0);
7990: ('OneHour', 'Extended').SetExtended( OneDay / 24);
7991:
       ('OneMinute', 'Extended').SetExtended(OneHour / 60);
7992: ('OneSecond', 'Extended').SetExtended( OneMinute / 60);
        'OneMillisecond', 'Extended').SetExtended( OneSecond / 1000);
7993:
7994: (
        'OneWeek', 'Extended').SetExtended( OneDay *
7995: ('HoursPerDay', 'Extended').SetExtended( 24);
7996: ('MinutesPerHour','Extended').SetExtended( 60);
7997: ('SecondsPerMinute','Extended').SetExtended( 60);
7998: Procedure SetYear( var D : TDateTime; const Year : Word)
7999: Procedure SetMonth( var D : TDateTime; const Month : Word)
8000: Procedure SetDay( var D : TDateTime; const Day : Word) 8001: Procedure SetHour( var D : TDateTime; const Hour : Word)
8002: Procedure SetMinute( var D : TDateTime; const Minute : Word)
8003: Procedure SetSecond( var D : TDateTime; const Second : Word)
8004: Procedure SetMillisecond( var D : TDateTime; const Milliseconds : Word)
8005: Function IsEqual( const D1, D2 : TDateTime) : Boolean;
8006: Function IsEqual1( const D1 : TDateTime; const Ye, Mo, Da : Word):Boolean; 8007: Function IsEqual2( const D1 : TDateTime; const Ho, Mi, Se, ms : Word):Boolean;
8008: Function IsAM( const D : TDateTime) : Boolean
8009: Function IsPM( const D : TDateTime) : Boolean
8010: Function IsMidnight( const D : TDateTime) : Boolean
8011: Function IsNoon( const D : TDateTime) : Boolean
8012: Function IsSunday( const D : TDateTime) : Boolean
8013: Function IsMonday( const D : TDateTime) : Boolean
8014: Function IsTuesday( const D : TDateTime) : Boolean
8015: Function IsWedneday( const D: TDateTime) : Boolean
8016: Function IsThursday( const D: TDateTime) : Boolean
8017: Function IsFriday( const D : TDateTime) : Boolean
8018: Function IsSaturday( const D : TDateTime) : Boolean
8019: Function IsWeekend( const D : TDateTime) : Boolean
8020: Function Noon( const D : TDateTime) : TDateTime
8021: Function Midnight( const D : TDateTime) : TDateTime
8022: Function FirstDayOfMonth( const D : TDateTime) : TDateTime
8023: Function LastDayOfMonth( const D : TDateTime) : TDateTime
8024: Function NextWorkday( const D : TDateTime) : TDateTime
8025: Function PreviousWorkday( const D : TDateTime) : TDateTime
8026: Function FirstDayOfYear( const D : TDateTime) : TDateTime
```

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8027: Function LastDayOfYear( const D : TDateTime) : TDateTime
8028: Function EasterSunday( const Year : Word) : TDateTime
8029: Function GoodFriday( const Year : Word) : TDateTime
8030: Function AddMilliseconds( const D : TDateTime; const N : Int64) : TDateTime
8031: Function AddSeconds( const D : TDateTime; const N : Int64) : TDateTime 8032: Function AddMinutes( const D : TDateTime; const N : Integer) : TDateTime
8033: Function AddHours( const D : TDateTime; const N : Integer) :
8034: Function AddDays( const D : TDateTime; const N : Integer) : TDateTime
8035: Function AddWeeks( const D : TDateTime; const N : Integer) : TDateTime 8036: Function AddMonths( const D : TDateTime; const N : Integer) : TDateTime
8037: Function AddYears( const D : TDateTime; const N : Integer) : TDateTime
8038: Function DayOfYear( const Ye, Mo, Da : Word) : Integer
8039: Function DayOfYear( const D : TDateTime) : Integer
8040: Function DaysInMonth( const Ye, Mo : Word) : Integer 8041: Function DaysInMonth( const D : TDateTime) : Integer
8042: Function DaysInYear( const Ye : Word) : Integer
8043: Function DaysInYearDate( const D : TDateTime) : Integer
8044: Function WeekNumber( const D : TDateTime) : Integer
8045: Function ISOFirstWeekOfYear(const Ye: Word): TDateTime
8046: Procedure ISOWeekNumber(const D: TDateTime; var WeekNumber, WeekYear: Word)
8047: Function DiffMilliseconds( const D1, D2 : TDateTime) : Int64
8048: Function DiffSeconds( const D1, D2 : TDateTime) : Integer
8049: Function DiffMinutes( const D1, D2 : TDateTime) : Integer
8050: Function DiffHours( const D1, D2 : TDateTime) : Integer 8051: Function DiffDays( const D1, D2 : TDateTime) : Integer
8052: Function DiffWeeks( const D1, D2 : TDateTime) : Integer
8053: Function DiffMonths( const D1, D2 : TDateTime) : Integer
8054: Function DiffYears( const D1, D2: TDateTime): Integer 8055: Function GMTBias: Integer
8056: Function GMTTimeToLocalTime( const D : TDateTime) : TDateTime
8057: Function LocalTimeToGMTTime( const D : TDateTime) : TDateTime
8058: Function NowAsGMTTime : TDateTime
8059: Function DateTimeToISO8601String( const D : TDateTime) : AnsiString
8060: Function ISO8601StringToTime( const D : AnsiString) : TDateTime
8061: Function ISO8601StringAsDateTime( const D : AnsiString) : TDateTime
8062: Function DateTimeToANSI( const D : TDateTime) : Integer
8063: Function ANSIToDateTime( const Julian : Integer) : TDateTime
8064: Function DateTimeToISOInteger( const D : TDateTime) : Integer
8065: Function DateTimeToISOString( const D : TDateTime) : AnsiString
8066: Function ISOIntegerToDateTime( const ISOInteger : Integer) : TDateTime
8067: Function TwoDigitRadix2000YearToYear( const Y : Integer) : Integer
8068: Function DateTimeAsElapsedTime(const D:TDateTime; const IncludeMilliseconds:Boolean):AnsiString
8069: Function UnixTimeToDateTime( const UnixTime : LongWord) : TDateTime
8070: Function DateTimeToUnixTime( const D : TDateTime) : LongWord
8071: Function EnglishShortDayOfWeekStrA( const DayOfWeek: Integer): AnsiString 8072: Function EnglishShortDayOfWeekStrU( const DayOfWeek: Integer): UnicodeString
8073: Function EnglishLongDayOfWeekStrA( const DayOfWeek : Integer) : AnsiString
8074: Function EnglishLongDayOfWeekStrU( const DayOfWeek: Integer): UnicodeString
8075: Function EnglishShortMonthStrA( const Month: Integer): AnsiString 8076: Function EnglishShortMonthStrU( const Month: Integer): UnicodeString
8077: Function EnglishLongMonthStrA( const Month : Integer) : AnsiString
8078: Function EnglishLongMonthStrU( const Month : Integer) : UnicodeString
8079: Function EnglishShortDayOfWeekA( const S : AnsiString) : Integer
8080: Function EnglishShortDayOfWeekU( const S : UnicodeString) : Integer
8081: Function EnglishLongDayOfWeekA( const S : AnsiString) : Integer 8082: Function EnglishLongDayOfWeekU( const S : UnicodeString) : Integer
8083: Function EnglishShortMonthA( const S : AnsiString) : Integer
8084: Function EnglishShortMonthU( const S : UnicodeString) : Integer
8085: Function EnglishLongMonthA( const S : AnsiString) : Integer 8086: Function EnglishLongMonthU( const S : UnicodeString) : Integer
8087: Function RFC850DayOfWeekA( const S : AnsiString) : Integer
8088: Function RFC850DayOfWeekU( const S : UnicodeString) : Integer
8089: Function RFC1123DayOfWeekA( const S : AnsiString) : Integer 8090: Function RFC1123DayOfWeekU( const S : UnicodeString) : Integer
8091: Function RFCMonthA( const S : AnsiString) : Word 8092: Function RFCMonthU( const S : UnicodeString) : Word
8093: Function GMTTimeToRFC1123TimeA( const D: TDateTime; const IncludeSeconds:Boolean): AnsiString 8094: Function GMTTimeToRFC1123TimeU( const D: TDateTime; const IncludeSeconds:Boolean): UnicodeString
8095: Function GMTDateTimeToRFC1123DateTimeA(const D: TDateTime; const IncludeDayOfWeek:Bool):AnsiString;
8096: Function GMTDateTimeToRFC1123DateTimeU(const D:TDateTime;const IncludeDayOfWeek:Bool):UnicodeString;
8097: Function DateTimeToRFCDateTimeA( const D : TDateTime) : AnsiString
8098: Function DateTimeToRFCDateTimeU( const D : TDateTime) : UnicodeString
8099: Function NowAsRFCDateTimeA : AnsiString 8100: Function NowAsRFCDateTimeU : UnicodeString
8101: Function RFCDateTimeToGMTDateTime( const S : AnsiString)
8102: Function RFCDateTimeToDateTime( const S : AnsiString) : TDateTime
8103: Function RFCTimeZoneToGMTBias( const Zone : AnsiString) : Integer 8104: Function TimePeriodStr( const D : TDateTime) : AnsiString
8105: Procedure SelfTest
8106: end;
8108: Function PathHasDriveLetterA( const Path : AnsiString) : Boolean
8109: Function PathHasDriveLetter( const Path : String) : Boolean
8110: Function PathIsDriveLetterA( const Path : AnsiString) : Boolean
8111: Function PathIsDriveLetter( const Path : String) : Boolean
8112: Function PathIsDriveRootA( const Path : AnsiString) : Boolean 8113: Function PathIsDriveRoot( const Path : String) : Boolean
8114: Function PathIsRootA( const Path : AnsiString) : Boolean
8115: Function PathIsRoot( const Path : String) : Boolean
```

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8116: Function PathIsUNCPathA( const Path : AnsiString) : Boolean
8117: Function PathIsUNCPath( const Path : String) : Boolean
8118: Function PathIsAbsoluteA( const Path : AnsiString) : Boolean
8119: Function PathIsAbsolute( const Path : String) : Boolean
8120: Function PathIsDirectoryA( const Path : AnsiString) : Boolean
8121: Function PathIsDirectory( const Path : String) : Boolean
8122: Function PathInclSuffixA( const Path : AnsiString; const PathSep : Char) : AnsiString
8123: Function PathInclSuffix( const Path: String; const PathSep: Char): String
8124: Function PathExclSuffixA( const Path: AnsiString; const PathSep: Char): AnsiString
8125: Function PathExclSuffix( const Path: String; const PathSep: Char): String
8126: Procedure PathEnsureSuffixA( var Path : AnsiString; const PathSep : Char)
8127: Procedure PathEnsureSuffix( var Path : String; const PathSep : Char)
8128: Procedure PathEnsureNoSuffixA( var Path : AnsiString; const PathSep : Char)
8129: Procedure PathEnsureNoSuffix( var Path : String; const PathSep : Char)
8130: //Function PathCanonicalA( const Path : AnsiString; const PathSep : Char) : AnsiString 8131: Function PathCanonical( const Path : String; const PathSep : Char) : String
8132: Function PathExpandA(const Path:AnsiString;const BasePath:AnsiString;const PathSep:Char):AnsiString
8133: Function PathExpand( const Path : String; const BasePath : String; const PathSep : Char) : String
8134: Function PathLeftElementA( const Path : AnsiString; const PathSep : Char) : AnsiString 8135: Function PathLeftElement( const Path : String; const PathSep : Char) : String
8136: Procedure PathSplitLeftElementA(const Path:AString; var LeftElement, RightPath:AString; const PathSep:Char);
8137: Procedure PathSplitLeftElement(const Path:String; var LeftElement,RightPath: String;const PathSep:Char);
8138: Procedure DecodeFilePathA(const FilePath:AnsiString; var Path,FileName:AnsiString;const PathSep:Char;
8139: Procedure DecodeFilePath( const FilePath: String; var Path, FileName: String; const PathSep: Char) 8140: Function FileNameValidA( const FileName: AnsiString): AnsiString
8141: Function FileNameValid( const FileName : String) : String
8142: \textbf{Function} \ \ \texttt{FilePathA} (\textbf{const} \ \ \texttt{FileName,Path:AnsiString}; \\ \textbf{const} \ \ \ \\ \textbf{BasePath:AnsiStr}; \\ \textbf{const} \ \ \ \texttt{PathSep:Char}): \\ \textbf{AnsiString}; \\ \textbf{const} \ \ \ \\ \textbf{Char}): \\ \textbf{AnsiString}; \\ \textbf{const} \ \ \ \\ \textbf{Char}): \\ \textbf{Char} : \\ \textbf{Char} :
8143: Function FilePath(const FileName, Path: String;const BasePath: String;const PathSep : Char) : String
8144: Function DirectoryExpandA(const Path:AnsiString;const BasePath:AnsiString;const PathSep:Char):AnsiString
8145: Function DirectoryExpand(const Path: String; const BasePath: String; const PathSep : Char) : String
8146: Function UnixPathToWinPath( const Path : AnsiString) : AnsiString 8147: Function WinPathToUnixPath( const Path : AnsiString) : AnsiString
8148: Procedure CCopyFile( const FileName, DestName : String)
8149: Procedure CMoveFile( const FileName, DestName : String)
8150: Function CDeleteFiles( const FileMask : String) : Boolean
8151: Function FileSeekEx(const FHandle:TFileHandle;const FileOffset:Int64; const FilePos:TFileSeekPos):Int64;
8152: Procedure FileCloseEx( const FileHandle : TFileHandle)
8153: Function FileExistsA( const FileName : AnsiString) : Boolean
8154: Function CFileExists( const FileName : String) : Boolean
8155: Function CFileGetSize( const FileName : String) : Int64
8156: Function FileGetDateTime( const FileName : String) : TDateTime
8157: Function FileGetDateTime2( const FileName : String) : TDateTime
8158: Function FileIsReadOnly( const FileName : String) : Boolean
8159: Procedure FileDeleteEx( const FileName : String)
8160: Procedure FileRenameEx( const OldFileName, NewFileName : String)
8161: Function ReadFileStrA( const FileName:AnsiString; const FileSharing; const FileSharing; const FileCreationMode
           : TFileCreationMode; const FileOpenWait : PFileOpenWait) : AnsiString
8162: Function DirectoryEntryExists( const Name : String) : Boolean
8163: Function DirectoryEntrySize( const Name : String) : Int64
8164: Function CDirectoryExists( const DirectoryName : String) : Boolean
8165: Function DirectoryGetDateTime( const DirectoryName : String) : TDateTime
8166: Procedure CDirectoryCreate( const DirectoryName : String)
8167: Function GetFirstFileNameMatching( const FileMask : String) : String
8168: Function DirEntryGetAttr( const FileName : AnsiString) : Integer
8169: Function DirEntryIsDirectory( const FileName : AnsiString) : Boolean 8170: Function FileHasAttr( const FileName : String; const Attr : Word) : Boolean
             AddTypeS('TLogicalDriveType', '( DriveRemovable, DriveFixed, DriveRemote,
               +'DriveCDRom, DriveRamDisk, DriveTypeUnknown )
8172:
8173: Function DriveIsValid( const Drive : Char) : Boolean
8174: Function DriveGetType( const Path : AnsiString) : TLogicalDriveType
8175: Function DriveFreeSpace( const Path : AnsiString) : Int64
8177: procedure SIRegister_cTimers(CL: TPSPascalCompiler);
8178: begin
8179: AddClassN(FindClass('TOBJECT'), 'ETimers 8180: Const('TickFrequency', 'LongInt') SetInt
           Const('TickFrequency','LongInt').SetInt( 1000);Function GetTick : LongWord
8181: Function TickDelta( const D1, D2 : LongWord) : Integer
8182: Function TickDeltaW( const D1, D2 : LongWord) : LongWord
8183: AddTypeS('THPTimer', 'Int64
8184: Procedure StartTimer( var Timer : THPTimer)
8185: Procedure StopTimer( var Timer : THPTimer)
8186: Procedure ResumeTimer( var StoppedTimer: THPTimer)
8187: Procedure InitStoppedTimer( var Timer : THPTimer)
8188: Procedure InitElapsedTimer( var Timer : THPTimer; const Milliseconds : Integer)
8189: Function MillisecondsElapsed( const Timer: THPTimer; const TimerRunning : Boolean) : Integer
8190: Function MicrosecondsElapsed( const Timer: THPTimer; const TimerRunning : Boolean) : Int64
8191: Procedure WaitMicroseconds ( const MicroSeconds : Integer)
8192: Function GetHighPrecisionFrequency: Int64
8193: Function GetHighPrecisionTimerOverhead : Int64
8194: Procedure AdjustTimerForOverhead( var StoppedTimer : THPTimer; const Overhead : Int64)
8195: Procedure SelfTestCTimer
8196: end;
8197:
8198: procedure SIRegister_cRandom(CL: TPSPascalCompiler);
8199: begin
8200: Function RandomSeed : LongWord
8201:
           Procedure AddEntropy( const Value : LongWord)
8202: Function RandomUniform : LongWord;
8203: Function RandomUniform1( const N : Integer) : Integer;
```

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8204:
            Function RandomBoolean : Boolean
            Function RandomByte : Byte
8205:
8206:
             Function RandomByteNonZero : Byte
8207:
             Function RandomWord : Word
            Function RandomInt64 : Int64;
8208:
            Function RandomInt641( const N : Int64) : Int64;
8209:
            Function RandomHex( const Digits : Integer) : String
8210:
8211:
             Function RandomFloat : Extended
8212:
             Function RandomAlphaStr( const Length : Integer) : AnsiString
8213:
            Function RandomPseudoWord( const Length : Integer) : AnsiString
            Function RandomPassword(const MinL, MaxLength: Int; const CaseSens, UseSymbols, UseNumbers: Bool): AnsiString;
8214:
             Function mwcRandomLongWord : LongWord
8216:
            Function urnRandomLongWord : LongWord
            Function moaRandomFloat : Extended
Function mwcRandomFloat : Extended
8217:
8218:
8219:
            Function RandomNormalF : Extended
8220:
            Procedure SelfTestCRandom
8221 •
           end;
8222:
8223: procedure SIRegister SynEditMiscProcs(CL: TPSPascalCompiler);
           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):
8225:
8226:
8227:
           AnsiString
8228:
            Function synMax( x, y : integer) : integer
8229:
            Function synMin( x, y : integer) : integer
            Function synMinMax( x, mi, ma : integer) : integer
Procedure synSwapInt( var 1, r : integer)
Function synMaxPoint( const P1, P2 : TPoint) : TPoint
8230:
8231:
8232:
             Function synMinPoint( const P1, P2 : TPoint) : TPoint
8233:
            //Function synGetIntArray( Count : Cardinal; InitialValue : integer) : PIntArray
Procedure synInternalFillRect( dc : HDC; const rcPaint : TRect)
Function synGetBestConvertTabsProc( TabWidth : integer) : TConvertTabsProc
8234:
8235:
8236:
            Function synConvertTabs( const Line : AnsiString; TabWidth : integer) : AnsiString
Function synGetBestConvertTabsProcEx( TabWidth : integer) : TConvertTabsProcEx
8237:
8238:
            Function synConvertTabsEx(const Line:AnsiString;TabWidth:integer; var HasTabs:boolean):AnsiString;
8239:
            Function synGetExpandedLength( const aStr : string; aTabWidth : integer) : integer
Function synCharIndex2CaretPos( Index, TabWidth : integer; const Line : string) : :
8240:
8241:
8242:
             Function synCaretPos2CharIndex(Position, TabWidth:int; const Line: string; var InsideTabChar:boolean):int;
8243:
             \textbf{Function} \  \, \texttt{synStrScanForCharInSet}(\textbf{const} \  \, \texttt{Line:string}; \texttt{Start:integer}; \texttt{AChars:TSynIdentChars}): \texttt{integer}; \texttt{AChars:TSynIdentChars}): \texttt{AChars:TSynIdentChars} : \texttt{AChars:TSynIdentChars}): \texttt{AChars:TSynIdentChars} : \texttt{AChars:TSynIdentChars}): \texttt{AChars:TSynIdentChars} : \texttt{AChars:TSynIdentChars}
             8244:
8245:
              TStringType', '( stNone, stHalfNumAlpha, stHalfSymbol, stHalfKat'
                 +'akana,stWideNumAlpha,stWideSymbol,stWideKatakana,stHiragana,stIdeograph,stControl,stKashida )
8246:
             ('C3_NONSPACING','LongInt').SetInt( 1);
'C3_DIACRITIC','LongInt').SetInt( 2);
'C3_VOWELMARK','LongInt').SetInt( 4);
8247:
8248:
8249:
             ('C3_SYMBOL','LongInt').SetInt( 8);
8250:
8251:
               'C3_KATAKANA', 'LongWord').SetUInt( $0010);
              ('C3_HALFWIDTH','LongWord').SetUInt($0020);
('C3_HALFWIDTH','LongWord').SetUInt($0040);
('C3_FULLWIDTH','LongWord').SetUInt($0080);
8252:
8253:
8254:
               'C3_IDEOGRAPH','LongWord').SetUInt( $0100);
8255:
             ('C3_KASHIDA','LongWord').SetUInt($0200);
('C3_LEXICAL','LongWord').SetUInt($0400);
('C3_ALPHA','LongWord').SetUInt($8000);
8256:
8257:
8258:
               'C3_NOTAPPLICABLE', 'LongInt').SetInt( 0);
8259:
            Function synStrScanForMultiByteChar( const Line : string; Start : Integer) : Integer
8260:
             Function synStrRScanForMultiByteChar( const Line : string; Start : Integer) : Integer
8261:
            Function synIsStringType( Value : Word) : TStringType
Function synGetEOL( Line : PChar) : PChar
8262:
8263:
8264:
             Function synEncodeString( s : string) : string
8265:
            Function synDecodeString( s : string) : string
8266:
            Procedure synFreeAndNil( var Obj: TObject)
            Procedure synFreeAmonif (val 65): 105ject/
Procedure synEasert( Expr : Boolean)
Function synLastDelimiter( const Delimiters, S : string) : Integer
8267:
8268:
               TReplaceFlag', '( rfReplaceAll, rfIgnoreCase )
8269:
8270:
              TReplaceFlags', 'set of TReplaceFlag )
            Function synStringReplace(const S, OldPattern, NewPattern : string; Flags: TReplaceFlags) : string
Function synGetRValue( RGBValue : TColor) : byte
Function synGetGValue( RGBValue : TColor) : byte
8271:
8272:
8273:
8274:
             Function synGetBValue( RGBValue : TColor) : byte
8275: Function synRGB( r, g, b : Byte) : Cardinal 8276: // THighlighterAttriProc', 'Function ( Highlighter : TSynCustomHigh'
               // +'lighter; Attri:TSynHighlighterAttributes;UniqueAttriName:string;Params array of Pointer):Boolean;
            //Function synEnumHighlighterAttris( Highlighter : TSynCustomHighlighter; SkipDuplicates : Boolean;
8278:
           HighlighterAttriProc: THighlighterAttriProc; Params: array of Pointer): Boolean Function synCalcFCS( const ABuf, ABufSize: Cardinal): Word
8279:
8280:
            Procedure synSynDrawGradient(const ACanvas:TCanvas;const AStartColor,
           AEndColor:TColor;ASteps:integer;const ARect : TRect; const AHorizontal : boolean)
8281: end;
8282:
8283:
            Function GET APPCOMMAND LPARAM( lParam : LPARAM) : WORD
8284:
             Function GET_DEVICE_LPARAM( lParam : LPARAM) : WORD
             Function GET_KEYSTATE_LPARAM( lParam : LPARAM) : WORD
8285:
8286:
           procedure SIRegister synautil(CL: TPSPascalCompiler);
8287:
8288: begin
8289: Function STimeZoneBias : integer
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8290:
        Function TimeZone : string
8291:
        Function Rfc822DateTime( t : TDateTime) : string
        Function CDateTime( t : TDateTime) : string
        Function SimpleDateTime( t : TDateTime) : string
Function AnsiCDateTime( t : TDateTime) : string
8293:
8294:
        Function GetMonthNumber( Value : String) : integer
8295:
        Function GetTimeFromStr( Value : string) : TDateTime
8296:
        Function GetDateMDYFromStr( Value : string) : TDateTime
8297:
        Function DecodeRfcDateTime( Value : string) : TDateTime
8298:
8299:
        Function GetUTTime : TDateTime
        Function SetUTTime( Newdt : TDateTime) : Boolean
8300:
        Function SGetTick : LongWord
8302:
        Function STickDelta( TickOld, TickNew : LongWord) : LongWord
        Function CodeInt( Value : Word) : Ansistring
Function DecodeInt( const Value : Ansistring; Index : Integer) : Word
8303:
8304:
8305:
        Function CodeLongInt( Value : LongInt) : Ansistring
        Function DecodeLongInt( const Value : Ansistring; Index : Integer) : LongInt
8306:
        Function DumpStr( const Buffer : Ansistring) : string
Function DumpExStr( const Buffer : Ansistring) : string
8307:
8308:
        Procedure Dump( const Buffer : AnsiString; DumpFile : string)
8309:
        Procedure DumpEx( const Buffer : AnsiString; DumpFile : string)
8310:
        Function TrimSPLeft( const S : string) : string
8311:
        Function TrimSPRight( const S : string) : string
8312:
        Function TrimSP( const S : string) : string
Function SeparateLeft( const Value, Delimiter : string) : string
8313:
8314:
8315:
        Function SeparateRight( const Value, Delimiter : string) : string
8316:
        Function SGetParameter( const Value, Parameter : string) : string
Procedure ParseParametersEx( Value, Delimiter : string; const Parameters : TStrings)
8317:
8318:
        Procedure ParseParameters (Value : string; const Parameters : TStrings)
8319:
        Function IndexByBegin( Value : string; const List : TStrings) : integer
        Function GetEmailAddr( const Value : string) : string
8320:
8321:
        \textbf{Function} \ \ \texttt{GetEmailDesc}(\ \ \texttt{Value} \ : \ \textbf{string}) \ : \ \textbf{string}
        Function CStrToHex( const Value : Ansistring) : string
Function CIntToBin( Value : Integer; Digits : Byte) : string
Function CBinToInt( const Value : string) : Integer
8322:
8323:
8325:
        Function ParseURL( URL : string; var Prot, User, Pass, Host, Port, Path, Para:string):string
        Function CReplaceString( Value, Search, Replace: AnsiString): AnsiString
Function CRPosEx( const Sub, Value: string; From: integer): Integer
Function CRPos( const Sub, Value: String): Integer
8326:
8327:
8328:
        Function FetchBin( var Value : string; const Delimiter : string) : string
8329:
8330:
        Function CFetch( var Value : string; const Delimiter : string) : string
        Function FetchEx( var Value : string; const Delimiter, Quotation : string) : string
Function IsBinaryString( const Value : AnsiString) : Boolean
8331:
8332:
        Function PosCRLF( const Value : AnsiString; var Terminator : AnsiString) : integer
8333:
        Procedure StringsTrim( const value : TStrings)
8334:
        Function PosFrom( const SubStr, Value : String; From : integer) : integer
8335:
        Function IncPoint( const p: _pointer; Value : integer) : _pointer
Function GetBetween( const PairBegin, PairEnd, Value : string) : string
8336:
8337:
8338:
        Function CCountOfChar( const Value : string; aChr : char) : integer
        Function UnquoteStr( const Value : string; Quote : Char) : string
Function QuoteStr( const Value : string; Quote : Char) : string
8339:
8340:
        Procedure HeadersToList( const Value : TStrings)
Procedure ListToHeaders( const Value : TStrings)
8341:
8342:
8343:
        Function SwapBytes( Value : integer) : integer
        Function ReadStrFromStream( const Stream : TStream; len : integer) : AnsiString
Procedure WriteStrToStream( const Stream : TStream; Value : AnsiString)
8344:
8345:
        Function GetTempFile( const Dir, prefix : AnsiString) : AnsiString
Function CPadString( const Value : AnsiString; len : integer; Pad : AnsiChar): AnsiString
8347:
8348:
        Function CXorString( Indata1, Indata2 : AnsiString) : AnsiString
Function NormalizeHeader( Value : TStrings; var Index : Integer) : string
8349:
8350:
       end;
8351:
8352: procedure SIRegister_StCRC(CL: TPSPascalCompiler);
8353: begin
        ('CrcBufSize','LongInt').SetInt( 2048);
8354:
        Function Adler32Prim( var Data, DataSize : Cardinal; CurCrc : LongInt) : LongInt
        Function Adler32OfStream( Stream : TStream; CurCrc : LongInt) : LongInt
8356:
        Function Adler320fFile(FileName : AnsiString) : LongInt
8357:
8358:
        Function Crc16Prim( var Data, DataSize, CurCrc : Cardinal)
                                                                                    : Cardinal
        Function Crc16OfStream( Stream: TStream; CurCrc: Cardinal): Cardinal Function Crc16OfFile( FileName: AnsiString): Cardinal
8359:
8360:
8361:
        Function Crc32Prim( var Data, DataSize : Cardinal; CurCrc : LongInt) : LongInt
8362:
        Function Crc32OfStream( Stream : TStream; CurCrc : LongInt) : LongInt
Function Crc32OfFile( FileName : AnsiString) : LongInt
8363:
8364:
        Function InternetSumPrim( var Data, DataSize, CurCrc : Cardinal)
        Function InternetSumOfStream( Stream: TStream; CurCrc: Cardinal): Cardinal Function InternetSumOfFile(FileName: AnsiString): Cardinal Function Kermitl6Prim( var Data, DataSize, CurCrc: Cardinal): Cardinal
8365:
8366:
8367:
        Function Kermit160fStream( Stream : TStream; CurCrc : Cardinal) : Cardinal
8368:
        Function Kermit16OfFile(FileName : AnsiString) : Cardinal
8369:
8370: end;
8371:
8372: procedure SIRegister ComObj(cl: TPSPascalCompiler);
8373: begin
8374: function CreateOleObject(const ClassName: String): IDispatch;
8375:
        function GetActiveOleObject(const ClassName: String): IDispatch;
        function ProgIDToClassID(const ProgID: string): TGUID;
8376:
        function ClassIDToProgID(const ClassID: TGUID): string;
8378: function CreateClassID: string;
```

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8379:
       function CreateGUIDString: string;
        function CreateGUIDID: string;
8380:
8381:
       procedure OleError(ErrorCode: longint)
8382:
       procedure OleCheck(Result: HResult);
8383:
      end;
8384:
8385:
        Function xCreateOleObject( const ClassName : string) : Variant //or IDispatch
        Function xGetActiveOleObject( const ClassName : string) : Variant
8386:
        //Function DllGetClassObject( const CLSID : TCLSID; const IID : TIID; var Obj) : HResult
8387:
8388:
        Function DllCanUnloadNow : HResult
       Function DllRegisterServer : HResult
8389:
        Function DllUnregisterServer : HResult
8390:
8391:
        Function VarFromInterface( Unknown : IUnknown) : Variant
       Function VarToInterface( const V : Variant) : IDispatch
Function VarToAutoObject( const V : Variant) : TAutoObject
8392:
8393:
8394:
        //Procedure
      DispInvoke(Dispatch:IDispatch;CallDesc:PCallDesc;DispIDs:PDispIDList;Params:Pointer;Res:PVariant);\\
       //Procedure DispInvokeError( Status : HResult; const ExcepInfo : TExcepInfo)
Procedure OleError( ErrorCode : HResult)
8395 .
8396:
       Procedure OleCheck( Result : HResult)
8397:
8398:
        Function StringToClassID( const S : string) : TCLSID
8399:
        Function ClassIDToString( const ClassID : TCLSID) : string
       Function xProgIDToClassID( const ProgID: string): TCLSID
Function xClassIDToProgID( const ClassID: TCLSID): string
Function xWideCompareStr( const S1, S2: WideString): Integer
8400:
8401:
8402:
8403:
        Function xWideSameStr( const S1, S2 : WideString) : Boolean
8404:
       Function xGUIDToString( const ClassID : TGUID) : string
       Function xStringToGUID( const S : string) : TGUID
Function xGetModuleName( Module : HMODULE) : string
8405:
8406:
       Function xAcquireExceptionObject : TObject
8408:
       Function xIfThen( AValue : Boolean; const ATrue : Integer; const AFalse : Integer) : Integer
       Function \texttt{xUtf8Encode}( const \texttt{WS}: \texttt{WideString}): \texttt{UTF8String} Function \texttt{xUtf8Decode}( const \texttt{S}: \texttt{UTF8String}): \texttt{WideString}
8409:
8410:
        Function xExcludeTrailingPathDelimiter( const S : string) : string
8411:
        Function xIncludeTrailingPathDelimiter( const S : string) : string
8412:
8413:
       Function XRTLHandleCOMException : HResult
8414:
       Procedure XRTLCheckArgument( Flag : Boolean)
//Procedure XRTLCheckOutArgument( out Arg)
8415:
        Procedure XRTLInterfaceConnect(const Source:IUnknown; const IID:TIID; const Sink:IUnknown; var
8416:
      Connection:Longint);
8417:
      Procedure XRTLInterfaceDisconnect(const Source: IUnknown; const IID:TIID; var Connection : Longint)
       Function XRTLRegisterActiveObject(const Unk:IUnknown;ClassID:TCLSID;Flags:DWORD;var
8418:
      RegisterCookie:Int):HResult
      Function XRTLUnRegisterActiveObject( var RegisterCookie : Integer) : HResult
       //Function XRTLGetActiveObject( ClassID : TCLSID; RIID : TIID; out Obj) : HResult Procedure XRTLEnumActiveObjects( Strings : TStrings)
8420:
8421:
8422: function XRTLDefaultCategoryManager: IUnknown;
                   XRTLIsCategoryEmpty(CatID: TGUID; const CategoryManager: IUnknown = nil): Boolean;
8423: function
      // ICatRegister helper functions
8425: function XRTLCreateComponentCategory(CatID: TGUID; CatDescription: WideString;
                                                   LocaleID: TLCID = LOCALE_USER_DEFAULT;
8426:
8427:
                                                   const CategoryManager: IUnknown = nil): HResult;
8428: function XRTLRemoveComponentCategory(CatID: TGUID; CatDescription: WideString;
8429:
                                                   LocaleID: TLCID = LOCALE_USER_DEFAULT;
8430: const CategoryManager: IUnknown = nil): HResult; 8431: function XRTLRegisterCLSIDInCategory(ClassID: TGUID; CatID: TGUID;
                                                   const CategoryManager: IUnknown = nil): HResult;
8432:
                 XRTLUnRegisterCLSIDInCategory(ClassID: TGUID; CatID: TGUID;
8433: function
8434:
                                                     const CategoryManager: IUnknown = nil): HResult;
8435: // TCatInformation beloer functions
8436: function
                  XRTLGetCategoryDescription(CatID: TGUID; var CatDescription: WideString;
                                                  LocaleID: TLCID = LOCALE_USER_DEFAULT;
8438:
                                                  const CategoryManager: IUnknown = nil): HResult;
8439: function XRTLGetCategoryList(Strings: TStrings; LocaleID: TLCID = LOCALE_USER_DEFAULT;
                                          const CategoryManager: IUnknown = nil): HResult;
8440:
8441: function XRTLGetCategoryCLSIDList(CatID: TGUID; Strings: TStrings;
                                                const CategoryManager: IUnknown = nil): HResult;
8442:
8443: function XRTLGetCategoryProgIDList(CatID: TGUID; Strings: TStrings;
                                                const CategoryManager: IUnknown = nil): HResult;
8444:
8445: function XRTLFetch(var AInput: WideString; const ADelim: WideString = 'const ADelete: Boolean = True): WideString;
8447: function XRTLRPos(const ASub, AIn: WideString; AStart: Integer = -1): Integer;
8448: Function XRTLGetVariantAsString( const Value : Variant) : string
8449: Function XRTLDateTimeToTimeZoneTime( DT : TDateTime; TimeZone : TXRTLTimeZone) : TDateTime
8450: Function XRTLGetTimeZones : TXRTLTimeZones
8451: Function XFileTimeToDateTime( FileTime : TFileTime) : TDateTime
8452: Function DateTimeToFileTime( DateTime : TDateTime) : TFileTime
8453: Function GMTNow : TDateTime
8454: Function GMTToLocalTime( GMT : TDateTime) : TDateTime
8455: Function LocalTimeToGMT( LocalTime : TDateTime) : TDateTime
8456: Procedure XRTLNotImplemented
8457: Procedure XRTLRaiseError( E : Exception)
8458: Procedure XRTLInvalidOperation( ClassName:string; OperationName:string; Description: string)
8459:
8460:
8461: procedure SIRegister_xrtl_util_Value(CL: TPSPascalCompiler);
8462: begin
8463:
         SIRegister_IXRTLValue(CL);
8464:
         SIRegister_TXRTLValue(CL);
```

```
//AddTypeS('PXRTLValueArray', '^TXRTLValueArray // will not work AddTypeS('TXRTLValueArray', 'array of IXRTLValue
8465:
8466:
8467: Function XRTLValue( const AValue : Cardinal) : IXRTLValue;
8468: Function XRTLSetValue( const IValue : IXRTLValue; const AValue : Cardinal) : Cardinal;
8469: Function XRTLGetAsCardinal( const IValue : IXRTLValue) : Cardinal
8470: Function XRTLGetAsCardinalDef( const IValue : IXRTLValue; const DefValue : Cardinal) : Cardinal 8471: Function XRTLValue( const AValue : Integer) : IXRTLValue;
8472: Function XRTLSetValue1( const IValue : IXRTLValue; const AValue : Integer) : Integer;
8473: Function XRTLGetAsInteger( const IValue : IXRTLValue) : Integer
8474: Function XRTLGetAsIntegerDef( const IValue : IXRTLValue; const DefValue : Integer) : Integer 8475: Function XRTLValue2( const AValue : Int64) : IXRTLValue;
8476: Function XRTLSetValue2( const IValue : IXRTLValue; const AValue : Int64) : Int64;
8477: Function XRTLGetAsInt64( const IValue : IXRTLValue) : Int64
8478: Function XRTLGetAsInt64Def( const IValue : IXRTLValue; const DefValue : Int64) : Int64 8479: Function XRTLValue3( const AValue : Single) : IXRTLValue;
8480: Function XRTLSetValue3( const IValue : IXRTLValue; const AValue : Single; Single;
8481: Function XRTLGetAsSingle( const IValue : IXRTLValue) : Single
8482: Function XRTLGetAsSingleDef( const IValue : IXRTLValue; const DefValue : Single) : Single 8483: Function XRTLValue4( const AValue : Double) : IXRTLValue;
8484: Function XRTLSetValue4( const IValue : IXRTLValue; const AValue : Double) : Double;
8485: Function XRTLGetAsDouble( const IValue : IXRTLValue) : Double
8486: Function XRTLGetAsDoubleDef( const IValue : IXRTLValue; const DefValue : Double) : Double
8487: Function XRTLValue5( const AValue : Extended) : IXRTLValue;
8488: Function XRTLSetValue: const IValue: IXRTLValue: const AValue: Extended: 8489: Function XRTLGetAsExtended( const IValue: IXRTLValue): Extended
8490: Function XRTLGetAsExtendedDef( const IValue : IXRTLValue; const DefValue : Extended) : Extended
8491: Function XRTLValue6( const AValue : IInterface) : IXRTLValue; 8492: Function XRTLSetValue6( const IValue : IXRTLValue; const AValue : IInterface;
8493: Function XRTLGetAsInterface( const IValue : IXRTLValue) : IInterface;
       //Function XRTLGetAsInterface1( const IValue : IXRTLValue; out Obj) : IInterface;
8495: Function XRTLGetAsInterfaceDef( const IValue: IXRTLValue; const DefValue: IInterface): IInterface;
8496: Function XRTLValue7( const AValue : WideString) : IXRTLValue; 8497: Function XRTLSetValue7( const IValue : IXRTLValue; const AValue : WideString) : WideString;
8498: Function XRTLGetAsWideString( const IValue : IXRTLValue) : WideString
8499: Function XRTLGetAsWideStringDef( const IValue : IXRTLValue; const DefValue : WideString) : WideString
8500: Function XRTLValue8( const AValue : TObject; const AOwnValue : Boolean) : IXRTLValue;
8501: Function XRTLSetValue8 (const IValue: IXRTLValue; const AValue: TObject): TObject;
8502: Function XRTLGetAsObject(const IValue: IXRTLValue; const ADetachOwnership: Boolean): TObject;
8503: Function XRTLGetAsObjectDef(const IValue:IXRTLValue;const DefValue:TObject;const
       ADetachOwnership:Boolean):TObject;
8504: //Function XRTLValue9( const AValue : __Pointer) : IXRTLValue;
8505: //Function XRTLSetValue9( const IValue : IXRTLValue; const AValue : __Pointer) : __Pointer; 8506: //Function XRTLGetAsPointer( const IValue : IXRTLValue) : __Pointer
8507: //Function XRTLGetAsPointerDef( const IValue : IXRTLValue; const DefValue : __Pointer) : __Pointer 8508: Function XRTLValueV( const AValue : Variant) : IXRTLValue;
8509: Function XRTLSetValueV( const IValue : IXRTLValue; const AValue : Variant) : Variant;
8510: Function XRTLGetAsVariant( const IValue : IXRTLValue) : Variant
8511: Function XRTLGetAsVariantDef( const IValue: IXRTLValue; const DefValue: Variant) : Variant
8512: Function XRTLValue10( const AValue : Currency) : IXRTLValue;
8513: Function XRTLSetValue10( const IValue : IXRTLValue; const AValue : Currency) : Currency; 8514: Function XRTLGetAsCurrency( const IValue : IXRTLValue) : Currency
8515: Function XRTLGetAsCurrencyDef( const IValue : IXRTLValue; const DefValue : Currency) : Currency 8516: Function XRTLValue11( const AValue : Comp) : IXRTLValue;
8517: Function XRTLSetValue11( const IValue : IXRTLValue; const AValue : Comp; : Comp;
8518: Function XRTLGetAsComp( const IValue : IXRTLValue) : Comp
8519: Function XRTLGetAsCompDef( const IValue : IXRTLValue; const DefValue : Comp) : Comp
8520: Function XRTLValue12( const AValue : TClass) : IXRTLValue;
8521: Function XRTLSetValue12( const IValue : IXRTLValue; const AValue : TClass) : TClass;
8522: Function XRTLGetAsClass( const IValue : IXRTLValue) : TClass
8523: Function XRTLGetAsClassDef( const IValue : IXRTLValue; const DefValue : TClass) : TClass
8524: Function XRTLValuel3( const AValue : TGUID) : IXRTLValue;
8525: Function XRTLSetValue13( const IValue : IXRTLValue; const AValue : TGUID) : TGUID;
8526: Function XRTLGetAsGUID( const IValue : IXRTLValue) : TGUID
8527: Function XRTLGetAsGUIDDef( const IValue : IXRTLValue; const DefValue : TGUID) : TGUID
8528: Function XRTLValue14( const AValue : Boolean) : IXRTLValue;
       Function XRTLSetValue14( const IValue : IXRTLValue; const AValue : Boolean) : Boolean;
8530: Function XRTLGetAsBoolean( const IValue : IXRTLValue) : Boolean
8531: Function XRTLGetAsBooleanDef( const IValue : IXRTLValue; const DefValue : Boolean) : Boolean
8532: end;
8533:
8535:
8536:
        Function Color32( WinColor : TColor) : TColor32;
        Function Color321( R, G, B : Byte; A : Byte) : TColor32;
Function Color322( Index : Byte; var Palette : TPalette32)
8537:
8538:
                                                                                   : TColor32;
        Function Gray32( Intensity : Byte; Alpha : Byte) : TColor32
Function WinColor( Color32 : TColor32) : TColor
8539:
8540:
        Function ArrayOfColor32 (Colors : array of TColor32) : TArrayOfColor32

Procedure Color32ToRGB(Color32 : TColor32; var R, G, B : Byte)
8541:
8542:
        Procedure Color32ToRGBA( Color32 : TColor32; var R, G, B, A : Byte)
        Function Color32Components(R, G, B, A : Boolean) : TColor32Components
Function RedComponent(Color32 : TColor32) : Integer
8544:
8545:
        Function GreenComponent(Color32 : TColor32) : Integer
8546:
        Function BlueComponent( Color32 : TColor32) : Integer
8547:
        Function AlphaComponent (Color32 : TColor32) : Integer
        Function Intensity(Color32: TColor32): Integer
Function SetAlpha(Color32: TColor32): Integer
Function SetAlpha(Color32: TColor32; NewAlpha: Integer): TColor32
Function HSLtoRGB(H, S, L: Single): TColor32;
Procedure RGBtoHSL(RGB: TColor32; out H, S, L: Single);
8549:
8550:
8551:
```

```
8553:
         Function HSLtoRGB1( H, S, L : Integer) : TColor32;
         Procedure RGBtoHSL1( RGB : TColor32; out H, S, L : Byte);
8554:
         Function WinPalette( const P : TPalette32) :
8556
         Function FloatPoint( X, Y : Single) : TFloatPoint;
         Function FloatPoint1( const P : TPoint) : TFloatPoint;
Function FloatPoint2( const FXP : TFixedPoint) : TFloatPoint;
8557:
8558:
         Function FixedPoint( X, Y : Integer) : TFixedPoint;
8559:
         Function FixedPoint1( X, Y : Single) : TFixedPoint;
8560:
         Function FixedPoint2( const P: TPoint): TFixedPoint;
Function FixedPoint3( const FP: TFloatPoint): TFixedPoint;
8561:
8562:
         AddTypeS('TRectRounding', '( rrClosest, rrOutside, rrInside )

Function MakeRect( const L, T, R, B : Integer) : TRect;

Function MakeRectl( const FR : TFloatRect; Rounding : TRectRounding) : TRect;
8563:
8565:
         Function MakeRect2 (const FXR : TRect; Rounding : TRectRounding) : TRect;
Function GFixedRect( const L, T, R, B : TFixed) : TRect;
8566:
8567:
8568:
         Function FixedRect1( const ARect : TRect) : TRect;
         Function FixedRect2( const FR : TFloatRect) : TRect;
         Function GFloatRect( const L, T, R, B : TFloat) : TFloatRect;
Function FloatRect1( const ARect : TRect) : TFloatRect;
Function FloatRect2( const FXR : TRect) : TFloatRect;
8570:
8571:
8572:
         Function GIntersectRect( out Dst : TRect; const R1, R2 : TRect) : Boolean;
Function IntersectRect1( out Dst : TFloatRect; const R1, FR2 : TFloatRect) : Boolean;
8573:
8574:
         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;
8575:
8576:
8578:
         Function EqualRect1( const R1, R2 : TFloatRect) : Boolean;
8579:
         Procedure GInflateRect( var R : TRect; Dx, Dy : Integer);
8580:
         Procedure InflateRect1( var FR : TFloatRect; Dx, Dy : TFloat);
         Procedure GoffsetRect( var R: TRioatrect; Dx, Dy: Integr);

Procedure OffsetRect1( var FR: TRioatrect; Dx, Dy: Trioat);
8581:
         Function IsRectEmpty( const R : TRect) : Boolean;
8583:
         Function IsRectEmpty( const FR : TRect; boolean;
Function GPtInRect( const R : TRect; const P : TPoint) : Boolean;
Function PtInRect1( const R : TRect; const P : TPoint) : Boolean;
Function PtInRect2( const R : TRect; const P : TPoint) : Boolean;
Function PtInRect3( const R : TRect; const P : TFloatPoint) : Boolean;
Function PtInRect3( const R : TFloatRect; const P : TFloatPoint) : Boolean;
8584:
8585:
8586:
8588:
         Function EqualRectSize( const R1, R2 : TRect) : Boolean;
Function EqualRectSize1( const R1, R2 : TFloatRect) : Boolean;
8589:
8590:
8591:
         Function MessageBeep( uType : UINT) : BOOL
         Function ShowCursor( bShow : BOOL) : Integer
8592:
         Function SetCursorPos( X, Y : Integer) : BOOL
8593:
         Function SetCursor( hCursor : HICON) : HCURSOR
8594:
         Function GetCursorPos( var lpPoint : TPoint) : BOOL

//Function ClipCursor( lpRect : PRect) : BOOL
8595:
8596:
8597:
         Function GetClipCursor( var lpRect : TRect) : BOOL
8598:
         Function GetCursor : HCURSOR
         Function CreateCaret( hWnd : HWND; hBitmap : HBITMAP; nWidth, nHeight : Integer) : BOOL
8599:
         Function GetCaretBlinkTime : UINT
8601:
         Function SetCaretBlinkTime( uMSeconds : UINT) : BOOL
8602:
         Function DestroyCaret : BOOL
         Function HideCaret( hWnd : HWND) : BOOL
Function ShowCaret( hWnd : HWND) : BOOL
8603:
8604:
         Function SetCaretPos( X, Y : Integer) : BOOL
8605:
         Function GetCaretPos( var lpPoint : TPoint) : BOOL
Function ClientToScreen( hWnd : HWND; var lpPoint : TPoint) : BOOL
Function ScreenToClient( hWnd : HWND; var lpPoint : TPoint) : BOOL
8606:
8607:
8608:
         Function MapWindowPoints(hWndFrom,hWndTo:HWND; var lpPoints, cPoints : UINT) : Integer
         Function WindowFromPoint( Point : TPoint) : HWND
8610:
8611:
         Function ChildWindowFromPoint( hWndParent : HWND; Point : TPoint) : HWND
8612:
8613:
8614: procedure SIRegister_GR32_Math(CL: TPSPascalCompiler);
8615: begin
8616:
        Function FixedFloor( A : TFixed) : Integer
         Function FixedCeil( A : TFixed) : Integer
8617:
         Function FixedMul( A, B : TFixed) : TFixed
         Function FixedDiv( A, B : TFixed) : TFixed
8619:
8620:
         Function OneOver( Value : TFixed) : TFixed
8621:
         Function FixedRound( A : TFixed) : Integer
         Function FixedSqr( Value : TFixed) : TFixed
8622:
         Function FixedSqrtLP( Value : TFixed) : TFixed
8623:
8624:
         Function FixedSqrtHP( Value : TFixed) : TFixed
         Function FixedCombine( W, X, Y : TFixed) : TFixed

Procedure GRSinCos( const Theta : TFloat; out Sin, Cos : TFloat);
8625:
8626:
8627:
         Procedure GRSinCos1( const Theta, Radius : Single; out Sin, Cos : Single);
         Function GRHypot( const X, Y : TFloat) : TFloat;
Function Hypot1( const X, Y : Integer) : Integer;
Function FastSqrt( const Value : TFloat) : TFloat
8628:
8629:
8630:
         Function FastSqrtBabl( const Value : TFloat) : TFloat
8631:
         Function FastSqrtBab2( const Value : TFloat) : TFloat
8633:
         Function FastInvSqrt( const Value : Single) : Single;
8634:
         Function MulDiv( Multiplicand, Multiplier, Divisor : Integer) : Integer
         Function GRIsPowerOf2( Value : Integer) : Boolean
Function PrevPowerOf2( Value : Integer) : Integer
8635:
8636:
         Function NextPowerOf2( Value : Integer) : Integer
         Function Average(A, B: Integer): Integer
Function GRSign(Value: Integer): Integer
8638:
8639:
8640: Function FloatMod(x, y : Double) : Double
```

```
8642:
8643: procedure SIRegister_GR32_LowLevel(CL: TPSPascalCompiler);
       begin
8645:
        Function Clamp( const Value : Integer) : Integer;
        Procedure GRFillWord( var X, Count : Cardinal; Value : Longword)
Function StackAlloc( Size : Integer) : Pointer
8646:
8647:
        Procedure StackFree( P : Pointer)
8648:
         Procedure Swap( var A, B : Pointer);
8649:
8650:
        Procedure Swap1( var A, B : Integer);
        Procedure Swap2( var A, B : TFixed);
8651:
8652:
        Procedure Swap3( var A, B : TColor32);
        Procedure TestSwap( var A, B : Integer);
8654:
        Procedure TestSwap1( var A, B : TFixed);
        Function TestClip( var A, B : Integer; const Size : Integer) : Boolean;
Function TestClip( var A, B : Integer; const Start, Stop : Integer) : Boolean;
8655:
8656:
8657:
        Function GRConstrain( const Value, Lo, Hi : Integer) : Integer;
        Function Constrain1( const Value, Lo, Hi : Single) : Single;
8658:
        Function SwapConstrain( const Value:Integer; Constrain1,Constrain2:Integer) : Integer
Function GRMin( const A, B, C : Integer) : Integer;
Function GRMax( const A, B, C : Integer) : Integer;
8659 .
8660:
8661:
         Function Clamp( Value, Max : Integer) : Integer
        Function Clamp1( Value, Min, Max : Integer) : Integer;
8663:
8664:
        Function Wrap( Value, Max : Integer) : Integer;
        Function Wrap1( Value, Min, Max : Integer) : Integer;
8665:
        Function Wrap3( Value, Max : Single) : Single;;
8666:
8667:
         Function WrapPow2( Value, Max : Integer) : Integer;
8668:
        Function WrapPow21( Value, Min, Max : Integer) : Integer;
        Function Mirror( Value, Max : Integer) : Integer;
Function Mirror1( Value, Min, Max : Integer) : Integer;
8669:
8670:
        Function MirrorPow2( Value, Max : Integer) : Integer;
8671:
        Function MirrorPow21( Value, Min, Max : Integer) : Integer;
Function GetOptimalWrap( Max : Integer) : TWrapProc;
Function GetOptimalWrap1( Min, Max : Integer) : TWrapProcEx;
8672:
8673:
8674:
        Function GetOptimalMirror( Max : Integer) : TWrapProc;
Function GetOptimalMirror1( Min, Max : Integer) : TWrapProcEx;
8675:
8676:
8677:
        Function GetWrapProc( WrapMode : TWrapMode) : TWrapProc;
        Function GetWrapProc1( WrapMode : TWrapMode; Max : Integer) : TWrapProc;
Function GetWrapProcEx( WrapMode : TWrapMode) : TWrapProcEx;
8678:
8679:
8680:
        Function GetWrapProcEx1( WrapMode: TWrapMode; Min, Max: Integer):TWrapProcEx;
        Function Div255( Value : Cardinal) : Cardinal
8681:
8682:
        Function SAR_4( Value : Integer) : Integer
        Function SAR_8( Value : Integer) : Integer
8683:
8684:
        Function SAR_9( Value : Integer)
                                                      Integer
8685:
        Function SAR_11( Value : Integer) : Integer
8686:
        Function SAR_12( Value : Integer) : Integer
8687:
        Function SAR 13( Value : Integer) : Integer
        Function SAR_14( Value : Integer) : Integer
8688:
8689:
        Function SAR_15( Value : Integer) : Integer
        Function SAR_16( Value : Integer) : Integer
8690:
8691:
        Function ColorSwap( WinColor : TColor) : TColor32
8692:
       end;
8693:
       procedure SIRegister_GR32_Filters(CL: TPSPascalCompiler);
8694:
8695: begin
8696:
       AddTypeS('TLogicalOperator', '( loXOR, loAND, loOR )
        Procedure CopyComponents( Dst, Src : TCustomBitmap32; Components : TColor32Components);
8697:
        Procedure CopyComponents1(Dst:TCustomBmap32;DstX,
8698:
       DstY:Int;Src:TCustomBmap32;SrcRect:TRect;Components:TColor32Comp;
       Procedure AlphaToGrayscale( Dst, Src : TCustomBitmap32)
Procedure ColorToGrayscale( Dst, Src : TCustomBitmap32; PreserveAlpha : Boolean)
Procedure IntensityToAlpha( Dst, Src : TCustomBitmap32)
8699:
8700:
8702:
         Procedure Invert( Dst, Src : TCustomBitmap32; Components : TColor32Components)
8703:
        Procedure InvertRGB( Dst, Src : TCustomBitmap32)
        Procedure ApplyLUT( Dst, Src : TcustomBitmap32; const LUT : TLUT8; PreserveAlpha : Boolean)
Procedure ChromaKey( ABitmap : TcustomBitmap32; TrColor : TColor32)
Function CreateBitmask( Components : TColor32Components) : TColor32
Procedure ApplyBitmask(Dst: TCustomBitmap32; DstX,DstY:Integer; Src:TCustomBitmap32; SrcRect : TRect;
8704:
8705:
8707:
       Bitmask : TColor32; LogicalOperator : TLogicalOperator);
       Procedure
       ApplyBitmask1(ABitmap:TCustomBitmap32;ARect:TRect;Bitmask:TColor32;LogicalOperator:TLogicalOperator);

Procedure CheckParams( Dst, Src : TCustomBitmap32; ResizeDst : Boolean)
8709:
8710: end;
8711:
8712:
8713:
       procedure SIRegister_JclNTFS(CL: TPSPascalCompiler);
8714:
       begin
8715:
          AddClassN(FindClass('TOBJECT'),'EJclNtfsError
        AddTypeS('TFileCompressionState', '(fcNoCompression, fcDefaultCompression, fcLZNT1Compression)
Function NtfsGetCompression(const FileName: string; var State: Short): Boolean;
8716:
8717:
         Function NtfsGetCompression1( const FileName : string) : TFileCompressionState;
8719:
        Function NtfsSetCompression( const FileName : string; const State : Short) : Boolean
8720:
        Procedure NtfsSetFileCompression( const FileName : string; const State : TFileCompressionState)
        Procedure NtfsSetDirectoryTreeCompression(const Directory: string; const State: TFileCompressionState)

Procedure NtfsSetDefaultFileCompression(const Directory: string; const State:TFileCompressionState)
8721:
8722:
8723:
        Procedure NtfsSetPathCompression(const Path:string;const State:TFileCompressionState;Recursive:Boolean;
        //AddTypeS('TNtfsAllocRanges', 'record Entries : Integer; Data : PFileAlloca'
//+'tedRangeBuffer; MoreData : Boolean; end
Function NtfsSetSparse( const FileName : string) : Boolean
8724:
8725:
8726:
        Function NtfsZeroDataByHandle( const Handle: THandle; const First, Last: Int64): Boolean
```

```
8728:
        Function NtfsZeroDataByName( const FileName : string; const First, Last : Int64) : Boolean
        //Function NtfsOueryAllocRanges(const FileName:string;Offset,Count:Int64;var
8729:
       Ranges:TNtfsAllocRanges):Boolean;
8730 .
        //Function NtfsGetAllocRangeEntry( const Ranges : TNtfsAllocRanges;
       Index:Integer):TFileAllocatedRangeBuffer
8731:
        Function NtfsSparseStreamsSupported( const Volume : string) : Boolean
        Function NtfsGetSparse( const FileName : string) : Boolean
Function NtfsDeleteReparsePoint( const FileName : string; ReparseTag : DWORD) : Boolean
8732:
8733:
8734:
        Function NtfsSetReparsePoint( const FileName : string; var ReparseData, Size : Longword) : Boolean
8735:
        //Function NtfsGetReparsePoint(const FileName:string; var ReparseData:TReparseGuidDataBuffer):Boolean Function NtfsGetReparseTag( const Path : string; var Tag : DWORD) : Boolean
8736:
        Function NtfsReparsePointsSupported( const Volume : string) : Boolean
8738:
        Function NtfsFileHasReparsePoint( const Path : string) : Boolean
        Function NtfsIsFolderMountPoint( const Path : string) : Boolean
8739:
8740:
        Function NtfsMountDeviceAsDrive(const Device: string; Drive: Char): Boolean
8741:
        Function NtfsMountVolume( const Volume : Char; const MountPoint : string) : Boolean
         AddTypeS('TOpLock', '( olExclusive, olReadOnly, olBatch, olFilter )
8742:
8743:
        Function NtfsOpLockAckClosePending( Handle : THandle; Overlapped : TOverlapped) : Boolean
8744:
        Function NtfsOpLockBreakAckNo2( Handle : THandle; Overlapped : TOverlapped) : Boolean
8745:
        Function NtfsOpLockBreakAcknowledge( Handle : THandle; Overlapped : TOverlapped) : Boolean
        Function NtfsOpLockBreakNotify( Handle: Thandle; Overlapped: TOverlapped: Boolean
Function NtfsRequestOpLock( Handle: THandle; Kind: TOpLock; Overlapped: TOverlapped): Boolean
8746:
8747:
8748:
        \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
8749:
8750:
8751:
          AddTypeS('TStreamId', '( siInvalid, siStandard, siExtendedAttribute, siSec
8752:
           +'urity, siAlternate, siHardLink, siProperty, siObjectIdentifier, siReparsePoints, siSparseFile )
         AddTypeS('TStreamIds', 'set of TStreamId AddTypeS('TInternalFindStreamData', 'record FileHandle : THandle; Context
8753:
8754:
               ___Pointer; StreamIds : TStreamIds; end
8755:
          AddTypeS('TFindStreamData', 'record internal : TInternalFindStreamData; At'
8756:
           +'tributes : DWORD; StreamID : TStreamId; Name : WideString; Size : Int64; end
8757:
8758:
        Function NtfsFindFirstStream(const FileName:string;StreamIds:TStreamIds;var Data:TFindStreamData):Boolean;
        Function NtfsFindNextStream( var Data : TFindStreamData) : Boolean Function NtfsFindStreamClose( var Data : TFindStreamData) : Boolean
8759:
8760:
8761:
        Function NtfsCreateHardLink( const LinkFileName, ExistingFileName: string) : Boolean
8762:
        AddTypeS('TNtfsHardLinkInfo', 'record LinkCount : Cardinal; FileIndex : Int64; end
Function NtfsGetHardLinkInfo( const FileName : string; var Info : TNtfsHardLinkInfo) : Boolean
8763:
8764:
        Function NtfsFindHardLinks(const Path:string;const FileIndexHigh,FileIndexLow:Cardinal;const
       List:TStrings):Bool;
8765:
       Function NtfsDeleteHardLinks( const FileName : string) : Boolean
        Function JclAppInstances : TJclAppInstances;
Function JclAppInstances1( const UniqueAppIdGuidStr : string) : TJclAppInstances;
8766:
8767:
        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)
8769:
8770:
8771:
8772:
8773:
8774:
                                                                          _____*)
8775:
       procedure SIRegister_JclGraphics(CL: TPSPascalCompiler);
8776:
       begin
          FindClass('TOBJECT'), 'EJclGraphicsError
8777:
          TDynDynIntegerArrayArray', 'array of TDynIntegerArray TDynPointArray', 'array of TPoint
8778:
8779:
         TDynPointArrayArray', 'array of TDynPointArray
TPointF', 'record X : Single; Y : Single; end
8780:
8781:
8782:
          TDynPointArrayF', 'array of TPointF
         TDrawMode2', '( dmOpaque, dmBlend )
TStretchFilter2', '( sfNearest, sfLinear, sfSpline )
TConversionKind', '( ckRed, ckGreen, ckBlue, ckAlpha, ckUniformRGB, ckWeightedRGB )
8783:
8784:
8785:
8786:
          TResamplingFilter',
                                   '( rfBox, rfTriangle, rfHermite, rfBell, rfSpline, rfLanczos3, rfMitchell )
          TMatrix3d', 'record array[0..2,0..2] of extended end
8787:
         TDynDynPointArrayArrayF', 'array of TDynPointArrayF TScanLine', 'array of Integer TScanLines', 'array of TScanLine TColorChannel', '( ccRed, ccGreen, ccBlue, ccAlpha )
8788:
8789:
8790:
8791:
          TGradientDirection', '( gdVertical, gdHorizontal )
8792:
8793:
          TPolyFillMode', '( fmAlternate, fmWinding )
          TJclRegionCombineOperator', '( coAnd, coDiff, coOr, coXor )
TJclRegionBitmapMode', '( rmInclude, rmExclude )
8794:
8795:
8796:
          TJclRegionKind', '( rkNull, rkSimple, rkComplex, rkError )
          SIRegister_TJclDesktopCanvas(CL);
FindClass('TOBJECT'),'TJclRegion
8797:
8798:
8799:
          SIRegister_TJclRegionInfo(CL);
8800:
          SIRegister_TJclRegion(CL);
8801:
          SIRegister_TJclThreadPersistent(CL);
          SIRegister_TJclCustomMap(CL);
8802:
          SIRegister_TJclBitmap32(CL);
8803:
8804:
          SIRegister_TJclByteMap(CL);
8805:
          SIRegister_TJclTransformation(CL);
8806:
         SIRegister TJclLinearTransformation(CL);
8807:
        Procedure Stretch(NewWidth,
       NewHeight:Card;Filter:TResamplingFilter;Radius:Single;Source:TGraphic;Target:TBitmap);
8808:
        Procedure Stretch1(NewWidth,NewHeight:Cardinal;Filter:TResamplingFilter;Radius:Single;Bitmap:TBitmap);
8809:
        Procedure DrawBitmap( DC : HDC; Bitmap : HBitMap; X, Y, Width, Height : Integer)
        Function GetAntialiasedBitmap( const Bitmap : TBitmap) : TBitmap

Procedure BitmapToJPeg( const FileName : string)

Procedure JPegToBitmap( const FileName : string)
8810:
```

```
Function ExtractIconCount( const FileName : string) : Integer
8813:
         Function BitmapToIconJ(Bitmap: HBITMAP; cx, cy: Integer): HICON
8814:
        Procedure BlockTransfer( Dst : TJclBitmap32; DstX : Integer; DstY : Integer; Src : TJclBitmap32; SrcRect
8816:
        : TRect; CombineOp : TDrawMode)
8817:
        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 : TGradientDirection) : Boolean;
8818:
8819:
8820:
       Function CreateRegionFromBitmap(Bitmap: TBitmap; RegionColor:TColor;
        RegionBitmapMode:TJclRegionBitmapMode): HRGN
        Procedure ScreenShot( bm : TBitmap; Left, Top, Width, Height : Integer; Window : HWND);
Procedure ScreenShot1( bm : TBitmap);
8822:
8823:
         Procedure PolyLineTS( Bitmap : TJclBitmap32; const Points : TDynPointArray; Color : TColor32)
         Procedure PolyLineAS( Bitmap : TJclBitmap32; const Points : TDynPointArray; Color : TColor32)
8825:
        Procedure PolyLineFS( Bitmap : TJclBitmap32; const Points : TDynPointArrayF; Color : TColor32)

Procedure PolygonTS( Bitmap : TJclBitmap32; const Points : TDynPointArrayF; Color : TColor32)

Procedure PolygonAS( Bitmap : TJclBitmap32; const Points : TDynPointArray; Color : TColor32)
8826:
8827:
8828:
         Procedure PolygonFS( Bitmap : TJclBitmap32; const Points : TDynPointArrayF; Color :
         Procedure PolyPolygonTS(Bitmap:TJclBitmap32;const Points:TDynDynPointArrayArray;Color:TColor32);
8830:
8831:
        Procedure PolyPolygonAS(Bitmap:TJclBitmap32;const Points:TDynDynPointArrayArray;Color:TColor32);
         Procedure PolyPolygonFS(Bitmap:TJclBitmap32;const Points:TDynDynPointArrayArrayF;Color:TColor32);
8832:
        Procedure AlphaToGrayscale(Dst, Src : TJclBitmap32)
Procedure IntensityToAlpha(Dst, Src : TJclBitmap32)
8833:
8834:
8835:
         Procedure Invert( Dst, Src : TJclBitmap32)
        Procedure InvertRGB( Dst, Src : TJclBitmap32)
Procedure ColorToGrayscale( Dst, Src : TJclBitmap32)
8836:
8837:
         Procedure ApplyLUT( Dst, Src : TJclBitmap32; const LUT : TLUT8)
8839:
        Procedure SetGamma( Gamma : Single)
8840:
       end;
8841:
8842:
       procedure SIRegister_JclSynch(CL: TPSPascalCompiler);
8843:
8844: begin
8845:
        Function LockedAdd( var Target : Integer; Value : Integer) : Integer
         Function LockedCompareExchange( var Target : Integer; Exch, Comp : Integer) : Integer;
8846:
         Function LockedCompareExchangel( var Target : ___Pointer; Exch, Comp : _
8847:
         Function LockedDec( var Target : Integer) : Integer
8848:
        Function LockedExchange( var Target : Integer; Value : Integer) : Integer
Function LockedExchangeAdd( var Target : Integer; Value : Integer) : Integer
Function LockedExchangeDec( var Target : Integer) : Integer
8849:
8850:
8851:
         Function LockedExchangeInc( var Target : Integer) : Integer
8852:
8853:
         \textbf{Function} \  \, \texttt{LockedExchangeSub}(\  \, \textbf{var} \  \, \texttt{Target} \  \, : \  \, \texttt{Integer}; \  \, \texttt{Value} \  \, : \  \, \texttt{Integer}) \  \, : \  \, \texttt{Integer}
8854:
         \textbf{Function} \  \, \texttt{LockedInc} \, ( \  \, \textbf{var} \  \, \texttt{Target} \, : \, \, \texttt{Integer}) \, : \, \, \texttt{Integer}
         Function LockedSub( var Target : Integer; Value : Integer) : Integer
8855:
          TJclWaitResult', '( wrAbandoned, wrError, wrIoCompletion, wrSignaled, wrTimeout )
8857:
          SIRegister_TJclDispatcherObject(CL);
8858:
        Function WaitForMultipleObjects(const Objects:array of
        TJclDispatcherObject; WaitAll: Bool; TimeOut: Cardinal): Cardinal;
        Function WaitAlertableForMultipleObjects(const Objects: array of TJclDispatcherObject; WaitAll:Bool;
8859:
        TimeOut : Cardinal):Cardinal
8860:
          SIRegister_TJclCriticalSection(CL);
8861:
          SIRegister_TJclCriticalSectionEx(CL);
          SIRegister_TJclEvent(CL);
8862:
8863:
          SIRegister_TJclWaitableTimer(CL);
          SIRegister_TJclSemaphore(CL);
8864:
8865:
          SIRegister_TJclMutex(CL);
          POptexSharedInfo', ''TOptexSharedInfo // will not work
TOptexSharedInfo', 'record SpinCount:Int; LockCount: Int; ThreadId:Longword; RecursionCount:Int; end
8866:
8867:
8868:
          SIRegister_TJclOptex(CL);
          TMrewPreferred', '( mpReaders, mpWriters, mpEqual )
TMrewThreadInfo', 'record ThreadId : Longword; RecursionCount: Integer; Reader : Boolean; end
8869:
8870:
8871:
          TMrewThreadInfoArray', 'array of TMrewThreadInfo
          SIRegister_TJclMultiReadExclusiveWrite(CL);
8872:
          PMetSectSharedInfo', '^TMetSectSharedInfo // will not work
TMetSectSharedInfo', 'record Initialized : LongBool; SpinLock : '
8873:
8874:
          +'Longint; ThreadsWaiting : Longint; AvailableCount : Longint; MaximumCount : Longint; end
PMeteredSection', '^TMeteredSection // will not work
TMeteredSection', 'record Event : THandle; FileMap : THandle; SharedInfo : PMetSectSharedInfo; end
8875:
8876:
8877:
8878:
          SIRegister_TJclMeteredSection(CL);
8879:
          TEventInfo', 'record EventType : Longint; Signaled : LongBool; end
TMutexInfo', 'record SignalState : Longint; Owned : Boolean; Abandoned : Boolean; end
8880:
8881:
          TSemaphoreCounts', 'record CurrentCount : Longint; MaximumCount: Longint; end
          TTimerInfo', 'record Remaining : TLargeInteger; Signaled : LongBool; end
8882:
        Function QueryCriticalSection( CS : TJclCriticalSection; var Info : TRTLCriticalSection) : Boolean Function QueryEvent( Handle : THandle; var Info : TEventInfo) : Boolean Function QueryMutex( Handle : THandle; var Info : TMutexInfo) : Boolean
8883:
8884:
8885:
         Function QuerySemaphore( Handle : THandle; var Info : TSemaphoreCounts) : Boolean
8887:
         Function QueryTimer( Handle : THandle; var Info : TTimerInfo) : Boolean
          FindClass('TOBJECT'),'EJclWin32HandleObjectError
FindClass('TOBJECT'),'EJclDispatcherObjectError
8888:
8889:
          FindClass('TOBJECT'), 'EJclCriticalSectionError
8890:
          FindClass('TOBJECT'),'EJclEventError
8891:
          FindClass('TOBJECT'),'EJclWaitableTimerError
8892:
          FindClass('TOBJECT'), EJclSemaphoreError
FindClass('TOBJECT'), 'EJclSemaphoreError
FindClass('TOBJECT'), 'EJclMutexError
8893:
8894:
          FindClass('TOBJECT'), 'EJclMeteredSectionError
```

```
8896: end;
8897:
8899:
       8900: Procedure SetCurrentPrinterAsDefault
8901: Function CurrentPrinterName : string
8902: Function mCurrentPrinterPaperSize : string
8903: Procedure UseDefaultPrinter
8904:
8905: procedure SIRegisterTSTREAM(Cl: TPSPascalCompiler);
8906: begin
8907:
         with FindClass('TOBJECT'), 'TStream') do begin
8908:
           IsAbstract := True;
          //RegisterMethod('Function Read( var Buffer, Count : Longint) : Longint
// RegisterMethod('Function Write( const Buffer, Count : Longint) : Longint
function Read(Buffer:String;Count:LongInt):LongInt
8909:
8910:
8911:
            function Write(Buffer:String;Count:LongInt):LongInt
8912:
           procedure ReadAB(Buffer: TByteArray;Count:LongInt)
procedure WriteAB(Buffer: TByteArray;Count:LongInt)
8913 .
8914:
           procedure ReadABD(Buffer: TByteDynArray;Count:LongInt)
8915:
           procedure WriteABD(Buffer: TByteDynArray;Count:LongInt)
8916:
8917:
           procedure ReadAC(Buffer: TCharArray;Count:LongInt)
           procedure WriteAc(Buffer: TcharArray;Count:LongInt)
procedure ReadAcD(Buffer: TcharDynArray;Count:LongInt)
8918:
8919:
           procedure WriteACD(Buffer: TCharDynArray;Count:LongInt)
8920:
8921:
8922:
           function Seek(Offset:LongInt;Origin:Word):LongInt
8923:
           procedure ReadBuffer(Buffer:String;Count:LongInt)
8924:
           procedure WriteBuffer(Buffer:String;Count:LongInt)
           procedure ReadBufferAB(Buffer: TByteArray;Count:LongInt)
8925:
8926:
           procedure WriteBufferAB(Buffer: TByteArray;Count:LongInt)
           procedure ReadBufferABD(Buffer: TByteDynArray;Count:LongInt)
procedure WriteBufferABD(Buffer: TByteDynArray;Count:LongInt)
8927:
8928:
           procedure ReadBufferAW(Buffer: TWordArray;Count:LongInt)
procedure WriteBufferAW(Buffer: TWordArray;Count:LongInt)
8929:
8930:
8931:
            procedure ReadBufferAWD(Buffer: TWordDynArray;Count:LongInt)
8932:
           procedure WriteBufferAWD(Buffer: TWordDynArray;Count:LongInt)
           procedure ReadBufferAW(Buffer: TWordArray;Count:LongInt)
8933:
8934:
           procedure WriteBufferAW(Buffer: TWordArray;Count:LongInt)
8935:
           procedure ReadBufferAC(Buffer: TCharArray;Count:LongInt)
8936:
            procedure WriteBufferAC(Buffer: TCharArray;Count:LongInt)
           procedure ReadBufferACD(Buffer: TCharDynArray;Count:LongInt)
8937:
           procedure WriteBufferACD(Buffer: TCharDynArray;Count:LongInt)
8938:
8939:
8940:
           procedure ReadBufferP(Buffer: PChar;Count:LongInt)
procedure WriteBufferP(Buffer: PChar;Count:LongInt)
8941:
           procedure ReadBufferO(Buffer: TObject;Count:LongInt)');
8942:
           procedure WriteBufferO(Buffer: TObject;Count:LongInt)');
8944:
            //READBUFFERAC
8945:
            function InstanceSize: Longint
8946:
           Procedure FixupResourceHeader( FixupInfo : Integer)
8947:
           Procedure ReadResHeader
8948:
8949:
8950:
            function CopyFrom(Source:TStream;Count:Int64):LongInt
8951:
8952:
            function CopyFrom(Source:TStream;Count:Integer):LongInt
8953:
            { $ENDIF }
           RegisterProperty('Position', 'LongInt', iptrw);
RegisterProperty('Size', 'LongInt', iptrw);
8954:
8955:
8956:
         end;
8957:
8958:
8959:
8960: {
8961:
        Unit DMATH - Interface for DMATH.DLL
8962:
8963: // see more docs/dmath_manual.pdf
8964:
8965: Function InitEval : Integer
8966: Procedure SetVariable( VarName : Char; Value : Float)
8967: Procedure SetFunction(FuncName: String; Wrapper: TWrapper)
8968: Function Eval(ExpressionString: String): Float
8969:
8970: unit dmath; //types are in built, others are external in DLL
8971: interface
8972: {$IFDEF DELPHI}
8973: uses
8974:
        StdCtrls, Graphics;
8974: Scace.
8975: <mark>{$ENDIF}</mark>
         Types and constants
8977:
8978:
8979: {$i types.inc}
8980: {
       Error handling
8981:
8982:
8983: procedure SetErrCode(ErrCode : Integer); external 'dmath';
8984: { Sets the error code }
```

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8985: function DefaultVal(ErrCode: Integer; DefVal: Float): Float; external 'dmath';
8986: { Sets error code and default function value }
8987: function MathErr : Integer; external 'dmath';
       { Returns the error code }
8988:
8989: {
8990:
        Dynamic arrays
8991:
8992: procedure SetAutoInit(AutoInit : Boolean); external 'dmath';
8993: { Sets the auto-initialization of arrays }
8994: procedure DimVector(var V : TVector; Ub : Integer); external 'dmath';
8995: { Creates floating point vector V[0..Ub] }
8996: procedure DimIntVector(var V: TintVector; Ub: Integer); external 'dmath';
8997: { Creates integer vector V[0..Ub] }
8998: procedure DimCompVector(var V : TCompVector; Ub : Integer); external 'dmath';
8999: { Creates complex vector V[0..Ub] }
9000: procedure DimBoolVector(var V : TBoolVector; Ub : Integer); external 'dmath';
9001: { Creates boolean vector V[0..Ub] }
9002: procedure DimStrVector(var V : TStrVector; Ub : Integer); external 'dmath';
9003: { Creates string vector V[0..Ub] }
9004: procedure DimMatrix(var A : TMatrix; Ub1, Ub2 : Integer); external 'dmath';
9005: { Creates floating point matrix A[0..Ub1, 0..Ub2] }
9006: procedure DimIntMatrix(var A : TIntMatrix; Ub1, Ub2 : Integer); external 'dmath';
9007: { Creates integer matrix A[0..Ub1, 0..Ub2] }
9008: procedure DimCompMatrix(var A : TCompMatrix; Ub1, Ub2 : Integer); external 'dmath';
9009: { Creates complex matrix A[0..Ub1, 0..Ub2] }
9010: procedure DimBoolMatrix(var A : TBoolMatrix; Ub1, Ub2 : Integer); external 'dmath';
9011: { Creates boolean matrix A[0..Ub1, 0..Ub2] } 9012: procedure DimStrMatrix(var A : TStrMatrix; Ub1, Ub2 : Integer); external 'dmath';
9013:
       { Creates string matrix A[0..Ub1, 0..Ub2] }
9014: {
9015:
         Minimum, maximum, sign and exchange
9016:
9017: function FMin(X, Y : Float) : Float; external 'dmath';
9018: { Minimum of 2 reals }
9019: function FMax(X, Y : Float) : Float; external 'dmath';
9020: { Maximum of 2 reals }
9021: function IMin(X, Y : Integer) : Integer; external 'dmath';
9022: { Minimum of 2 integers }
9023: function IMax(X, Y : Integer) : Integer; external 'dmath';
9024: { Maximum of 2 integers }
9025: function Sgn(X : Float) : Integer; external 'dmath';
9026: { Sign (returns 1 if X = 0) }
9027: function Sgn0(X : Float) : Integer; external 'dmath';
9028: { Sign (returns 0 if X = 0) }
9029: function DSgn(A, B: Float) : Float; external 'dmath';
9030: { Sqn(B) * |A| }
9031: procedure FSwap(var X, Y : Float); external 'dmath';
9032: { Exchange 2 reals }
9033: procedure ISwap(var X, Y : Integer); external 'dmath';
       { Exchange 2 integers }
9034:
9035: {
9036:
         Rounding functions
9037:
9038: function RoundN(X : Float; N : Integer) : Float; external 'dmath';
9039: { Rounds X to N decimal places }
9040: function Ceil(X : Float) : Integer; external 'dmath';
9041:
       { Ceiling function }
9042: function Floor(X : Float) : Integer; external 'dmath';
9043: { Floor function }
9044: {
9045:
        Logarithms, exponentials and power
9046:
9047: function Expo(X : Float) : Float; external 'dmath';
9048: { Exponential }
9049: function Exp2(X : Float) : Float; external 'dmath';
9051: function Exp10(X : Float) : Float; external 'dmath';
9052:
       { 10^X }
9053: function Log(X : Float) : Float; external 'dmath';
9054: { Natural log }
9055: function Log2(X : Float) : Float; external 'dmath';
9056: { Log, base 2 }
9057: function Log10(X : Float) : Float; external 'dmath';
9058: { Decimal log
9059: function LogA(X, A : Float) : Float; external 'dmath';
9060: { Log, base A }
9061: function IntPower(X : Float; N : Integer) : Float; external 'dmath';
9062: { X^N }
9063: function Power(X, Y : Float) : Float; external 'dmath';
9064: { X^Y, X >= 0 }
9065: { -----
9066:
        Trigonometric functions
9067:
9068: function Pythag(X, Y : Float) : Float; external 'dmath';
9070: function FixAngle(Theta : Float) : Float; external 'dmath';
9071: { Set Theta in -Pi..Pi }
9072: function Tan(X : Float) : Float; external 'dmath';
9073: { Tangent }
```

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9074: function ArcSin(X : Float) : Float; external 'dmath';
9075: { Arc sinus }
9076: function ArcCos(X : Float) : Float; external 'dmath';
9077.
       { Arc cosinus }
9078: function ArcTan2(Y, X : Float) : Float; external 'dmath';
9079: { Angle (Ox, OM) with M(X,Y) }
9080: {
9081:
         Hyperbolic functions
9082:
9083: function Sinh(X : Float) : Float; external 'dmath';
9084: { Hyperbolic sine } 9085: function Cosh(X : Float) : Float; external 'dmath';
9086: { Hyperbolic cosine }
9087: function Tanh(X : Float) : Float; external 'dmath';
9088: { Hyperbolic tangent } 9089: function ArcSinh(X : Float) : Float; external 'dmath';
9090: { Inverse hyperbolic sine }
9091: function ArcCosh(X : Float) : Float; external 'dmath';
9092: { Inverse hyperbolic cosine }
9093: function ArcTanh(X : Float) : Float; external 'dmath';
9094: { Inverse hyperbolic tangent }
9095: procedure SinhCosh(X : Float; var SinhX, CoshX : Float); external 'dmath';
9096: { Sinh & Cosh }
9097: {
9098:
        Gamma function and related functions
9099:
9100: function Fact(N : Integer) : Float; external 'dmath';
9101: { Factorial }
9102: function SgnGamma(X : Float) : Integer; external 'dmath';
9103: { Sign of Gamma function }
9104: function Gamma(X : Float) : Float; external 'dmath';
9105: { Gamma function }
9106: function LnGamma(X : Float) : Float; external 'dmath';
9107: { Logarithm of Gamma function }
9108: function Stirling(X : Float) : Float; external 'dmath';
9109: { Stirling's formula for the Gamma function }
9110: function StirLog(X : Float) : Float; external 'dmath';
9111: { Approximate Ln(Gamma) by Stirling's formula, for X >= 13 }
9112: { Digamma function }

(Total ) : Float; external 'dmath';

9113: { Digamma function }
9114: function TriGamma(X : Float ) : Float; external 'dmath';
9115: { Trigamma function }
9116: function IGamma(A, X : Float) : Float; external 'dmath';
9117: { Incomplete Gamma function}
9118: function JGamma(A, X : Float) : Float; external 'dmath';
9119: { Complement of incomplete Gamma function }
9120: function InvGamma(A, P : Float) : Float; external 'dmath';
9121: { Inverse of incomplete Gamma function }
9122: function Erf(X : Float) : Float; external 'dmath';
9123: { Error function }
9124: function Erfc(X : Float) : Float; external 'dmath';
       { Complement of error function }
9125:
9126: {
9127:
         Beta function and related functions
9128:
9129: function Beta(X, Y : Float) : Float; external 'dmath';
9130:
       { Beta function }
9131: function IBeta(A, B, X : Float) : Float; external 'dmath';
9132: { Incomplete Beta function }
9133: function InvBeta(A, B, Y : Float) : Float; external 'dmath';
9134: { Inverse of incomplete Beta function }
9135: {
9136:
         Lambert's function
9137:
9138: function LambertW(X : Float; UBranch, Offset : Boolean) : Float; external 'dmath';
9139:
9140:
         Binomial distribution
9141:
9142: function Binomial(N, K : Integer) : Float; external 'dmath';
9143: { Binomial coefficient C(N,K) }
9144: function PBinom(N : Integer; P : Float; K : Integer) : Float; external 'dmath';
9145: { Probability of binomial distribution }
9146: function FBinom(N : Integer; P : Float; K : Integer) : Float; external 'dmath';
9147: { Cumulative probability for binomial distrib. } 9148: {
9149:
        Poisson distribution
9150:
9151: function PPoisson(Mu : Float; K : Integer) : Float; external 'dmath';
9152: { Probability of Poisson distribution }
9153: function FPoisson(Mu : Float; K : Integer) : Float; external 'dmath';
9154: { Cumulative probability for Poisson distrib. } 9155: { ------
9156:
        Exponential distribution
9157:
9158: function DExpo(A, X : Float) : Float; external 'dmath';
9159: { Density of exponential distribution with parameter A }
9160: function FExpo(A, X : Float) : Float; external 'dmath';
9161: { Cumulative probability function for exponential dist. with parameter A } 9162: { ------
```

```
9163:
         Standard normal distribution
9164:
9165: function DNorm(X : Float) : Float; external 'dmath';
       { Density of standard normal distribution }
9166
9167: function FNorm(X : Float) : Float; external 'dmath';
9168: { Cumulative probability for standard normal distrib. } 9169: function PNorm(X : Float) : Float; external 'dmath';
9170: { Prob(|U| > X) for standard normal distrib. }
9171: function InvNorm(P : Float) : Float; external 'dmath';
9172: { Inverse of standard normal distribution }
9173:
9174:
        Student's distribution
9175:
9176: function DStudent(Nu : Integer; X : Float) : Float; external 'dmath';
9177: { Density of Student distribution with Nu d.o.f. }
9178: function FStudent(Nu : Integer; X : Float) : Float; external 'dmath';
9179: { Cumulative probability for Student distrib. with Nu d.o.f. }
9180: function PStudent(Nu : Integer; X : Float) : Float; external 'dmath';
9181: { Prob(|t| > X) for Student distrib. with Nu d.o.f. } 9182: function InvStudent(Nu : Integer; P : Float) : Float; external 'dmath';
9183: { Inverse of Student's t-distribution function } 9184: { ------
9185:
        Khi-2 distribution
9186:
9187: function DKhi2(Nu : Integer; X : Float) : Float; external 'dmath';
9188: { Density of Khi-2 distribution with Nu d.o.f. }
9189: function FKhi2(Nu : Integer; X : Float) : Float; external 'dmath'; 9190: { Cumulative prob. for Khi-2 distrib. with Nu d.o.f. } 9191: function PKhi2(Nu : Integer; X : Float) : Float; external 'dmath';
9192: { Prob(Khi2 > X) for Khi-2 distrib. with Nu d.o.f. }
9193: function InvKhi2(Nu : Integer; P : Float) : Float; external 'dmath';
9194: { Inverse of Khi-2 distribution function }
9195: {
        Fisher-Snedecor distribution
9196:
9198: function DSnedecor(Nu1, Nu2 : Integer; X : Float) : Float; external 'dmath';
9199: { Density of Fisher-Snedecor distribution with Nu1 and Nu2 d.o.f. } 9200: function FSnedecor(Nu1, Nu2 : Integer; X : Float) : Float; external 'dmath';
9201: { Cumulative prob. for Fisher-Snedecor distrib. with Nu1 and Nu2 d.o.f.
9202: function PSnedecor(Nul, Nu2 : Integer; X : Float) : Float; external 'dmath';
9203: { Prob(F > X) for Fisher-Snedecor distrib. with Nu1 and Nu2 d.o.f. }
9204: function InvSnedecor(Nul, Nu2: Integer; P: Float): Float; external 'dmath'; 9205: { Inverse of Snedecor's F-distribution function }
9206: {
9207:
         Beta distribution
9208:
9209: function DBeta(A, B, X : Float) : Float; external 'dmath';
9210: { Density of Beta distribution with parameters A and B }
       function FBeta(A, B, X : Float) : Float; external 'dmath';
9212:
       { Cumulative probability for Beta distrib. with param. A and B } \,
9213: {
9214:
         Gamma distribution
9215:
9216: function DGamma(A, B, X : Float) : Float; external 'dmath';
9217:
       { Density of Gamma distribution with parameters A and B }
9218: function FGamma(A, B, X : Float) : Float; external 'dmath';
9219: { Cumulative probability for Gamma distrib. with param. A and B } 9220: {
9221:
         Expression evaluation
9222:
9223: function InitEval : Integer; external 'dmath';
9224: { Initializes built-in functions and returns their number }
9225: function Eval(ExpressionString : String) : Float; external 'dmath';
9226: { Evaluates an expression at run-time } 9227: procedure SetVariable(VarName : Char; Value : Float); external 'dmath';
9228: { Assigns a value to a variable }
9229: procedure SetFunction(FuncName: String; Wrapper: TWrapper); external 'dmath';
       { Adds a function to the parser }
9230:
9231: {
9232:
        Matrices and linear equations
9233:
9234: procedure GaussJordan(A
                                               : TMatrix;
                          Lb, Ub1, Ub2 : Integer;
var Det : Float);
9235:
                                           : Float); external 'dmath';
9236:
9237: { Transforms a matrix according to the Gauss-Jordan method }
9238: procedure LinEq(A : TMatrix; 9239: B : TVector;
                   В
                         Lb, Ub : Integer;
9240:
                         var Det : Float); external 'dmath';
9241:
9242: { Solves a linear system according to the Gauss-Jordan method } 9243: procedure Cholesky(A, L : TMatrix; Lb, Ub : Integer); external 'dmath';
9244: { Cholesky factorization of a positive definite symmetric matrix }
9245: procedure LU_Decomp(A : TMatrix; Lb, Ub : Integer); external 'dmath';
9246: { LU decomposition }
         cocedure LU_Solve(A

B : TVector,

Lb, Ub : Integer;

X : TVector); external 'dmath';
9247: procedure LU_Solve(A
9248:
9249:
9250:
9251: { Solution of linear system from LU decomposition }
```

```
9252: procedure QR_Decomp(A
                                       : TMatrix;
9253:
                          Lb, Ub1, Ub2 : Integer;
9254:
                          R
                                       : TMatrix); external 'dmath';
9255: { QR decomposition
                                  : TMatrix;
9256: procedure QR_Solve(Q, R
                                      : TVector;
9257:
                         В
                         Lb, Ub1, Ub2 : Integer;
9258:
                                      : TVector); external 'dmath';
9259:
9260: { Solution of linear system from QR decomposition }
9261: procedure SV_Decomp(A
                                        : TMatrix;
                          Lb, Ub1, Ub2 : Integer;
9262:
9263:
                          S
                                         TVector;
9264:
                          V
                                        : TMatrix); external 'dmath';
9265: { Singular value decomposition }
9266: procedure SV_SetZero(S
                                  : TVector;
9267:
                          Lb, Ub : Integer;
9268:
                           Tol : Float); external 'dmath';
9269: { Set lowest singular values to zero
9270: procedure SV_Solve(U
                                      : TMatrix;
                                      : TVector;
9271:
                         S
9272:
                                      : TMatrix;
9273:
                                      : TVector;
                         В
9274:
                         Lb, Ub1, Ub2 : Integer;
9275:
                                      : TVector); external 'dmath';
                         X
9276: { Solution of linear system from SVD }
9277: procedure SV_Approx(U
                                     : TMatrix;
9278:
                          S
                                        : TVector;
9279:
                          V
                                        : TMatrix;
9280:
                          Lb, Ub1, Ub2 : Integer;
                                    : TMatrix); external 'dmath';
9281:
                          A
9282: { Matrix approximation from SVD }
9283: procedure EigenVals(A : TMatrix; 9284: Lb, Ub : Integer;
9285:
                          Lambda : TCompVector); external 'dmath';
9286: { Eigenvalues of a general square matrix }
9287: procedure EigenVect(A : TMatrix; 9288: Lb, Ub : Integer;
9289:
                          Lambda : TCompVector;
9290:
                                  : TMatrix); external 'dmath';
9291: { Eigenvalues and eigenvectors of a general square matrix }
9292: procedure EigenSym(A : TMatrix; 9293: Lb, Ub : Integer;
9294:
                         Lambda : TVector;
                         V : TMatrix); external 'dmath';
9295:
9296: { Eigenvalues and eigenvectors of a symmetric matrix (SVD method) }
9297: procedure Jacobi(A
                                       : TMatrix;
                       Lb, Ub, MaxIter : Integer;
9298:
                                     : Float;
                       Tol
9300:
                       Lambda
                                       : TVector;
9301:
                                        : TMatrix); external 'dmath';
9302: { Eigenvalues and eigenvectors of a symmetric matrix (Jacobi method) }
9303: {
9304:
9305:
9306: procedure MinBrack(Func
                                                 : TFunc;
                       var A, B, C, Fa, Fb, Fc : Float); external 'dmath';
9309: procedure GoldSearch(Func
                                          : Float;
: Integer;
9310:
                           A, B
9311:
                           MaxIter
                                         : Float;
9312:
                           Tol
9313:
                           var Xmin, Ymin : Float); external 'dmath';
9314: { Minimization of a function of one variable (golden search) }
9315: procedure LinMin(Func : TFuncNVa
9316: X, DeltaX : TVector;
                                   TFuncNVar;
                       Lb, Ub : Integer;
var R : Float;
9317:
9318:
9319:
                       MaxIter
                                 : Integer;
9320:
                       Tol
                                 : Float;
                       var F_min : Float); external 'dmath';
9321:
9322: { Minimization of a function of several variables along a line }
9323: procedure Newton (Func
                                   TFuncNVar;
                       HessGrad : THessGrad;
9324:
9325:
                                   TVector;
                       X
9326:
                       Lb, Ub
                                 : Integer;
                       MaxIter
9327:
                                : Integer;
9328:
                       Tol
                                 : Float;
                       var F_min : Float;
9329:
                               : TVector;
: TMatrix;
9330:
                       G
9331:
                       H_inv
9332:
                       var Det
                                : Float); external 'dmath';
9333: { Minimization of a function of several variables (Newton's method) }
9334: procedure SaveNewton(FileName : string); external 'dmath';
9335: { Save Newton iterations in a file }
9336: procedure Marquardt(Func
                                    : TFuncNVar;
                          HessGrad : THessGrad;
9337:
9338:
                          X
                                    : TVector;
                          Lb, Ub
                                     : Integer;
9339:
9340:
                          MaxIter
                                   : Integer;
```

```
9341:
                                        : Float;
                             Tol
9342:
                             var F_min : Float;
                                     : TVector;
: TMatrix;
9343:
                             H inv
9344 .
                                       : Float); external 'dmath';
9345:
                             var Det
9346: { Minimization of a function of several variables (Marquardt's method) }
9347: procedure SaveMarquardt(FileName : string); external 'dmath';
      { Save Marquardt iterations in a file }
9348:
9349: procedure BFGS(Func : TFuncNVar;
                       Gradient
9350:
                                  : TGradient;
9351:
                       Х
                                  : TVector;
                       Lb, Ub
9352:
                                   : Integer;
                       MaxIter
9353:
                                  : Integer;
9354:
                       Tol
                                  : Float;
                       var F_min : Float;
9355:
                                : TVector;
: TMatrix); external 'dmath';
9356:
                       G
                       H_inv
9357:
9358: { Minimization of a function of several variables (BFGS method) } 9359: procedure SaveBFGS(FileName : string); external 'dmath';
9360: { Save BFGS iterations in a file }
                                    : TFuncNVar;
: TVector;
9361: procedure Simplex(Func
9362:
                          X
9363:
                           Lb. IIb
                                      : Integer;
                           MaxIter : Integer;
9364:
                                      : Float;
9365:
                           Tol
9366:
                           var F_min : Float); external 'dmath';
9367: { Minimization of a function of several variables (Simplex) } 9368: procedure SaveSimplex(FileName : string); external 'dmath';
       { Save Simplex iterations in a file }
9369:
9370: {
9371:
        Nonlinear equations
9372:
9373: procedure RootBrack(Func
                                              : TFunc;
                            var X, Y, FX, FY : Float); external 'dmath';
9374:
9375: { Brackets a root of function Func between X and Y }
9376: procedure Bisect(Func : TFunc;
9377: var X, Y : Float;
                         MaxIter : Integer;
Tol : Float;
9378:
9379:
9380:
                         \mathbf{var}\ \mathbb{F}
                                  : Float); external 'dmath';
9381: { Bisection method }
                                   : TFunc;
9382: procedure Secant(Func
9383:
                         var X, Y : Float;
                         MaxIter : Integer;
Tol : Float;
9384:
9385:
                                : Float; external 'dmath';
                         var F
9386:
9387: { Secant method }
9388: procedure NewtEq(Func, Deriv : TFunc;
9389:
                          var X
9390:
                         MaxIter
                                       : Integer;
9391:
                                       : Float;
                         Tol
                         var F
                                       : Float); external 'dmath';
9392:
9393: { Newton-Raphson method for a single nonlinear equation }
9394: procedure NewtEqs(Equations: TEquations;
                          Jacobian : TJacobian;
9395:
9396:
                                      : TVector;
                           X, F
                                    : Integer;
                           Lb, Ub
9397:
                           MaxIter : Integer;
9398:
9399:
                          Tol
                                      : Float); external 'dmath';
9400: { Newton-Raphson method for a system of nonlinear equations }
                                        TEquations;
9401: procedure Broyden(Equations :
                          X, F
                                      : TVector;
9403:
                           Lb. IIb
                                      : Integer;
                           MaxIter : Integer;
9404:
                                      : Float); external 'dmath';
9405:
                           Tol
9406: { Broyden's method for a system of nonlinear equations }
9407: {
9408:
        Polynomials and rational fractions
9409:
         and an Delay was a District
9410: function Poly(X
                           : Float;
9411:
                      Coef : TVector;
9412:
                      Deg : Integer) : Float; external 'dmath';
9413: { Evaluates a polynomial } 9414: function RFrac(X : Float; 9415: Coef : TVector;
9416:
                      Deg1, Deg2 : Integer) : Float; external 'dmath';
9417:
       { Evaluates a rational fraction }
9418: function RootPol1(A, B : Float; 9419: var X : Float) : Integer; external 'dmath';
9420: { Solves the linear equation A + B * X = 0 }
9421: function RootPol2(Coef : TVector;
9422:
                         Z : TCompVector) : Integer; external 'dmath';
9423: { Solves a quadratic equation }
9424: function RootPol3(Coef: TVector;
9425: Z : TCompVector) : Integer; external 'dmath';
9426: { Solves a cubic equation }
9427: function RootPol4(Coef : TVector; 9428: Z : TCompVector) : Integer; external 'dmath';
9429: { Solves a quartic equation }
```

```
9430: function RootPol(Coef : TVector;
                         Deg : Integer;
9431:
9432:
                          Z
                               : TCompVector) : Integer; external 'dmath';
9433:
      { Solves a polynomial equation }
9434: function SetRealRoots(Deg : Integer;
9435: Z : TCompVector;
9436: Tol : Float) : Integer; external 'dmath';
9437: { Set the imaginary part of a root to zero }
9438: procedure SortRoots(Deg : Integer;
9439:
                            Z : TCompVector); external 'dmath';
      { Sorts the roots of a polynomial }
9440:
9441: {
9442:
        Numerical integration and differential equations
9443:
9444: function TrapInt(X, Y : TVector; N : Integer) : Float; external 'dmath';
9445: { Integration by trapezoidal rule }
9446: function GausLeg(Func : TFunc; A, B : Float) : Float; external 'dmath';
9447: { Integral from A to B }
9448: function GausLeg0(Func : TFunc; B : Float) : Float; external 'dmath';
9449: { Integral from 0 to B
9450: function Convol(Func1, Func2 : TFunc; T : Float) : Float; external 'dmath';
9451: { Convolution product at time T }
9452: procedure ConvTrap(Func1,Func2:TFunc; T,Y:TVector; N:Integer);external 'dmath';
9453: { Convolution by trapezoidal rule } 9454: procedure RKF45(F
                                                 : TDiffEas;
9455:
                        Neqn
                                                 : Integer;
9456:
                        Y, Yp
                                                 : TVector;
9457:
                         var T
                                                 : Float;
                         Tout, RelErr, AbsErr : Float;
9458:
                         var Flag
                                                 : Integer); external 'dmath';
9460:
      { Integration of a system of differential equations }
9461: {
        Fast Fourier Transform
9462:
9463:
                      (NumSamples : Integer;
InArray, OutArray : TCompVector); external 'dmath';
9464: procedure FFT(NumSamples
9465:
9466: { Fast Fourier Transform }
9467: procedure IFFT(NumSamples
                                           : Integer;
9468:
                       InArray, OutArray : TCompVector); external 'dmath';
9469: { Inverse Fast Fourier Transform }
                                                : Integer;
9470: procedure FFT_Integer(NumSamples
                               RealIn, ImagIn : TIntVector;
9471:
                               OutArray : TCompVector); external 'dmath';
9472:
9473: { Fast Fourier Transform for integer data }
9474: procedure FFT_Integer_Cleanup; external 'dmath';
9475: { Clear memory after a call to FFT_Integer }
9476: procedure CalcFrequency(NumSamples,
                                  FrequencyIndex : Integer;
                                  InArray : TCompVector;
var FFT : Complex); external 'dmath';
9478:
9479:
9480: { Direct computation of Fourier transform }
9481: {
9482:
9483:
9484: procedure SetRNG(RNG : RNG_Type); external 'dmath';
9485: { Select generator }
9486: procedure InitGen(Seed : RNG_IntType); external 'dmath';
9487: { Initialize generator }
9488: function IRanGen : RNG_IntType; external 'dmath';
9489: { 32-bit random integer in [-2^31 .. 2^31 - 1] }
9490: { muction IRangen31 : RNG_IntType; external 'dmath';
9491: { 31-bit random integer in [0 .. 2^31 - 1] }
9492: function RanGen1 : Float; external 'dmath';
9493: { 32-bit random real in [0,1] }
9494: function RanGen2 : Float; external 'dmath';
9495: { 32-bit random real in [0,1) }
9496: function RanGen3 : Float; external 'dmath';
9497: { 32-bit random real in (0,1) }
9498: function RanGen53: Float; external 'dmath';
9499: { 53-bit random real in [0,1) }
9500: procedure InitMWC(Seed : RNG_IntType); external 'dmath';
      { Initializes the 'Multiply with carry' random number generator }
9501:
9502: function IRanMWC: RNG_IntType; external 'dmath';
9503: { Returns a 32 bit random number in [-2^31; 2^31-1] }
9504: procedure InitMT(Seed : RNG_IntType); external 'dmath
9505: { Initializes Mersenne Twister generator with a seed }
                                 /(InitKey : array of RNG_LongType;
KeyLength : Word); external 'dmath';
9506: procedure InitMTbyArray(InitKey
9507:
9508: { Initialize MT generator with an array InitKey[0..(KeyLength - 1)] } 9509: function IRanMT: RNG_IntType; external 'dmath';
9510: { Random integer from MT generator }
9511: procedure InitUVAGbyString(KeyPhrase : string); external 'dmath';
9512: { Initializes the UVAG generator with a string } 9513: procedure InitUVAG(Seed : RNG_IntType); external 'dmath';
9514: { Initializes the UVAG generator with an integer }
9515: function IRanUVAG : RNG_IntType; external 'dmath';
9516: { Random integer from UVAG generator }
9517: function RanGaussStd : Float; external 'dmath';
9518: { Random number from standard normal distribution }
```

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9519: function RanGauss(Mu, Sigma : Float) : Float; external 'dmath';
9520: { Random number from normal distrib. with mean Mu and S. D. Sigma }
9521: procedure RanMult(M
                                 : TVector; L
                          Lb, Ub : Integer;
9522:
9523:
                          X
                               : TVector); external 'dmath';
9524: { Random vector from multinormal distribution (correlated) }
9525: procedure RanMultIndep(M, S : TVector;
                              Lb, Ub : Integer;
X : TVector)
9526:
9527:
                                      : TVector); external 'dmath';
9528: { Random vector from multinormal distribution (uncorrelated) }
9529: procedure InitMHParams(NCycles, MaxSim, SavedSim: Integer); external 'dmath';
9530: { Initializes Metropolis-Hastings parameters }
9531: procedure GetMHParams(var NCycles, MaxSim, SavedSim:Integer); external 'dmath';
9532: { Returns Metropolis-Hastings parameters }
9533: procedure Hastings(Func
                                        TFuncNVar;
9534:
                                      : Float;
                           Т
9535:
                                       : TVector
9536:
                           ٦,7
                                       : TMatrix;
                           Lb. Ub
                                      : Integer;
9537:
9538:
                                      : TMatrix;
                           Xmat
9539:
                           X min
                                       : TVector;
9540:
                           var F_min : Float); external 'dmath';
9541: { Simulation of a probability density function by Metropolis-Hastings } 9542: procedure InitSAParams(NT, NS, NCycles: Integer; RT: Float); external 'dmath';
9543: { Initializes Simulated Annealing parameters }
9544: procedure SA_CreateLogFile(FileName : String); external 'dmath';
9545: { Initializes log file }
                                        : TFuncNVar;
9546: procedure SimAnn(Func
9547:
                         X, Xmin, Xmax : TVector;
                         Lb, Ub
                                   : Integer;
1 : Float); external 'dmath';
9548:
9549:
                         var F_min
9550: { Minimization of a function of several var. by simulated annealing } 9551: procedure InitGAParams(NP, NG: Integer; SR, MR, HR: Float); external 'dmath';
9552: { Initializes Genetic Algorithm parameters }
9553: procedure GA_CreateLogFile(FileName : String); external 'dmath';
9554: { Initializes log file }
9555: procedure GenAlg(Func
                                         : TFuncNVar;
                         X, Xmin, Xmax : TVector;
9556:
                                    : Integer;
: Float); external 'dmath';
9557:
                         Lb, Ub
                         var F_min
9558:
9559: { Minimization of a function of several var. by genetic algorithm }
9560: {
9561:
        Statistics
9562:
9563: function Mean(X : TVector; Lb, Ub : Integer) : Float; external 'dmath';
9564: { Mean of sample X } 9565: function Min(X : TVector; Lb, Ub : Integer) : Float; external 'dmath';
9566: { Minimum of sample X }
      function Max(X: TVector; Lb, Ub: Integer): Float; external 'dmath';
9568: { Maximum of sample X }
9569: function Median(X: TVector; Lb, Ub: Integer; Sorted: Boolean): Float; external 'dmath';
9570: { Median of sample X }
9571: function StDev(X : TVector; Lb, Ub : Integer; M : Float) : Float; external 'dmath';
9572: { Standard deviation estimated from sample X }
9573: function StDevP(X : TVector; Lb, Ub : Integer; M : Float) : Float; external 'dmath';
9574: { Standard deviation of population }
9575: function Correl(X, Y : TVector; Lb, Ub : Integer) : Float; external 'dmath';
9576: { Correlation coefficient }
9577: function Skewness(X: TVector; Lb, Ub: Integer; M,Sigma: Float): Float; external 'dmath'; 9578: { Skewness of sample X }
9579: function Kurtosis(X : TVector; Lb, Ub : Integer; M,Sigma: Float): Float; external 'dmath';
9580: { Kurtosis of sample X }
9581: procedure QSort(X : TVector; Lb, Ub : Integer); external 'dmath';
9582: { Quick sort (ascending order) }
9583: procedure DQSort(X : TVector; Lb, Ub : Integer); external 'dmath';
9584: { Quick sort (descending order) }
9585: procedure Interval(X1,
                                X2
9586:
                          MinDiv, MaxDiv
                                                : Integer;
                           var Min, Max, Step : Float); external 'dmath';
9587:
9588: { Determines an interval for a set of values }
9589: procedure AutoScale(X : TVector; Lb, Ub : Integer; Scale : TScale;
9590:
                            var XMin, XMax, XStep : Float); external 'dmath';
9591: { Finds an appropriate scale for plotting the data in X[Lb..Ub] }
9592: procedure StudIndep(N1, N2
                                            : Integer;
                            M1, M2, S1, S2 : Float;
9593:
                                      : Float;
9594:
                            var T
9595:
                            var DoF
                                             : Integer); external 'dmath';
9596: { Student t-test for independent samples }
9597: procedure StudPaired(X, Y : TVector; 9598: Lb, Ub : Integer;
9599:
                              var T
                                      : Float;
                             var DoF : Integer); external 'dmath';
9600:
9600: 9601: { Student t-test for paired samples }
0000: procedure %noVal(Ns : Integer;
                                            : TIntVector;
9603:
                         N
9604:
                         M. S
                                            : TVector;
                         var V_f, V_r, F : Float;
var DoF_f, DoF_r : Integer); external 'dmath';
9605:
9606:
9607: { One-way analysis of variance }
```

```
9608: procedure AnOVa2(NA, NB, Nobs : Integer;
                                       : TMatrix;
: TVector;
9609:
                         M, S
                          V. F
9611:
                          DOF
                                        : TIntVector); external 'dmath';
9612: { Two-way analysis of variance } 9613: procedure Snedecor(N1, N2
                                             : Integer;
                          S1, S2
                                             : Float;
9614:
9615:
                            var F
                            var DoF1, DoF2 : Integer); external 'dmath';
9616:
9617: { Snedecor's F-test (comparison of two variances) }
                                : Integer;
: TIntVector;
9618: procedure Bartlett(Ns
                           N
S
9619:
9620:
                                      : TVector;
                            var Khi2 : Float;
9621:
                            var DoF : Integer); external 'dmath';
9622:
9623: { Bartlett's test (comparison of several variances) }
9624: procedure Mann_Whitney(N1, N2 : Integer; 9625: X1, X2 : TVector;
                                var U, Eps : Float); external 'dmath';
9626:
9627: { Mann-Whitney test}
                                      : TVector;
9628: procedure Wilcoxon(X, Y
                            Lb, Ub : Integer;
var Ndiff : Integer;
9629:
                           Lb, Ub
9630:
                            var T, Eps : Float); external 'dmath';
9631:
9632: { Wilcoxon test }
9633: procedure Kruskal_Wallis(Ns
9634:
                                   N
                                          : TIntVector;
9635:
                                   X
                                           : TMatrix;
                                   var H
                                            : Float;
9636:
                                   var DoF : Integer); external 'dmath';
9637:
9638: { Kruskal-Wallis test }
9639: procedure Khi2_Conform(N_cls
                                           : Integer;
                                 N_estim : Integer;
9640:
                                       : TIntVector;
9641:
                                 Obs
                                 Calc
9642:
9643:
                                 var Khi2 : Float;
9644:
                                 var DoF : Integer); external 'dmath';
9645: { Khi-2 test for conformity }
9646: procedure Khi2_Indep(N_lin
                                        : Integer;
9647:
                               N_col
                                        : Integer;
9648:
                              Obs
                                        : TIntMatrix;
                              var Khi2 : Float;
9649:
                              var DoF : Integer); external 'dmath';
9650:
9651: { Khi-2 test for independence }
                                           : Integer;
9652: procedure Woolf_Conform(N_cls
                                 N_estim : Integer;
9653:
                                  Obs : TIntVector;
Calc : TVector;
9654:
                                           : TVector;
9656:
                                  var G
                                           : Float;
9657: 
9658: { Woolf's test for conformity }
9659: procedure Woolf_Indep(N_lin : Integer;
N_col : Integer;
                                  var DoF : Integer); external 'dmath';
9661:
                               Obs
                                         : TIntMatrix;
                               var G
9662:
                                        : Float;
                               var DoF : Integer); external 'dmath';
9663:
9664: { Woolf's test for independence }
9665: procedure DimStatClassVector(var C : TStatClassVector;
9666:
                               Ub : Integer); external 'dmath';
9667: { Allocates an array of statistical classes: C[0..Ub] }
9668: procedure Distrib(X : TVector; 9669: Lb, Ub : Integer;
9670:
                           A, B, H : Float;
                                   : TStatClassVector); external 'dmath';
9671:
                           C
      { Distributes an array X[Lb..Ub] into statistical classes }
9672:
9674:
        Linear / polynomial regression
9675:
9676: procedure LinFit(X, Y
                                 : TVector;
                         Lb, Ub : Integer;
9677:
                          B : TVector;
V : TMatrix); external 'dmath';
9678:
9679:
9680: { Linear regression : Y = B(0) + B(1) * X } 9681: procedure WLinFit(X, Y, S : TVector; 9682: Lb, Ub : Integer;
                           B : TVector;
9683:
9684:
                           7.7
                                    : TMatrix); external 'dmath';
9685: { Weighted linear regression : Y = B(0) + B(1) * X } 9686: procedure SVDLinFit(X, Y : TVector; 9687: Lb, Ub : Integer;
9688:
                             SVDTol : Float;
                                   : TVector;
9689:
                             В
                                      : TMatrix); external 'dmath';
9690:
                             V
9691: { Unweighted linear regression by singular value decomposition }
9692: procedure WSVDLinFit(X, Y, S : TVector; 9693: Lb, Ub : Integer; 9694: SVDTol : Float;
9695:
                                       : TVector;
                               В
9696:
                                        : TMatrix); external 'dmath';
```

```
9697: { Weighted linear regression by singular value decomposition }
9698: procedure MulFit(X
                              : TMatrix;
                                        : TVector;
                         T.b. Ub. Nvar : Integer;
9700:
                                       : Boolean;
                         ConsTerm
9701:
9702:
                                        : TVector;
                         В
9703:
                                         : TMatrix); external 'dmath';
9704: { Multiple linear regression by Gauss-Jordan method }
9705: procedure WMulFit(X : TMatrix; 9706: Y, S : TVector;
9707:
                          Lb, Ub, Nvar
ConsTerm : Boolean;
: TVector;
                           Lb, Ub, Nvar : Integer;
9709:
9710:
                           V
                                         : TMatrix); external 'dmath';
9711: { Weighted multiple linear regression by Gauss-Jordan method }
9712: procedure SVDFit(X : TMatrix; 9713: Y : TVector;
9714 .
                         Lb, Ub, Nvar : Integer;
                                     : Boolean;
9715:
                          ConsTerm
9716:
                         SVDTol
                                        : Float;
9717:
                                        : TVector;
9718:
                         V
                                        : TMatrix); external 'dmath';
9719: { Multiple linear regression by singular value decomposition }
9719: { Multiple lineal legal : 9720: procedure WSVDFit(X : 9721: Y, S :
                                            TMatrix;
                                            TVector
9722:
                           Lb, Ub, Nvar : Integer
9723:
                           ConsTerm : Boolean;
SVDTol : Float;
9724:
9725:
                                         : TVector;
                           В
                                         : TMatrix); external 'dmath';
9726:
9727: { Weighted multiple linear regression by singular value decomposition }
                         (X, Y : TVector;
Lb, Ub, Deg : Integer;
9728: procedure PolFit(X, Y
9729:
                                     : TVector;
: TMatrix); external 'dmath';
9730:
                         В
9731:
9732: { Polynomial regression by Gauss-Jordan method }
9733: procedure WPolFit(X, Y, S : TVector; 9734: Lb, Ub, Deg : Integer;
                                 : TVector;
: TMatrix); external 'dmath';
9735:
                           В
9736:
                           V
9737: { Weighted polynomial regression by Gauss-Jordan method }
9738: procedure SVDPolFit(X, Y : TVector; 9739: Lb, Ub, Deg : Integer;
                             SVDTol : Float;
B : TVector;
9740:
9741:
                                          : TMatrix); external 'dmath';
9742:
                             V
9743: { Unweighted polynomial regression by singular value decomposition }
9744: procedure WSVDPolFit(X, Y, S : TVector;
9745:
                              Lb, Ub, Deg : Integer;
                              SVDTol
9746:
                                        : Float;
: TVector;
9747:
                              В
9748:
                                            : TMatrix); external 'dmath';
9749: { Weighted polynomial regression by singular value decomposition }
9750: procedure RegTest(Y, Ycalc : TVector; 9751: LbY, UbY : Integer;
9752:
                                       TMatrix;
                          LbV, UbV : Integer;
9753:
9754:
                           var Test : TRegTest); external 'dmath';
9755: { Test of unweighted regression }
9756: procedure WRegTest(Y, Ycalc, S : TVector;
                            LbY, UbY
                                       : Integer;
9757:
9758:
                            7.7
                                          : TMatrix;
9759 .
                            LbV, UbV
                                         : Integer;
9760:
                            var Test
                                         : TRegTest); external 'dmath';
       { Test of weighted regression }
9761:
9762: {
9763:
        Nonlinear regression
9764:
9765: procedure SetOptAlgo(Algo : TOptAlgo); external 'dmath';
       { Sets the optimization algorithm for nonlinear regression }
9766:
9767: function GetOptAlgo: TOptAlgo: external 'dmath';
9768: { Returns the optimization algorithm }
9769: procedure SetMaxParam(N : Byte); external 'dmath';
9770: { Sets the maximum number of regression parameters for nonlinear regression }
9771: function GetMaxParam : Byte; external 'dmath';
9772: { Returns the maximum number of regression parameters for nonlinear regression }
9773: procedure SetParamBounds(I : Byte; ParamMin, ParamMax : Float); external 'dmath';
9774: { Sets the bounds on the I-th regression parameter }
9775: procedure GetParamBounds(I : Byte; var ParamMin,ParamMax:Float); external 'dmath';
9776: { Returns the bounds on the I-th regression parameter }
9777: procedure NLFit(RegFunc : TRegFunc;
                        DerivProc : TDerivProc;
9778:
                                   : TVector;
9779:
                        X, Y
Lb, Ub
9780:
                                    : Integer;
9781:
                        MaxIter
                                    : Integer:
                        Tol
9782:
                                   : Float;
9783:
                        В
                                    : TVector:
                        FirstPar,
9784:
9785:
                        LastPar
                                   : Integer;
```

```
9786:
                                  : TMatrix); external 'dmath';
9787: { Unweighted nonlinear regression }
9788: procedure WNLFit(RegFunc
                                     TRegFunc;
                        DerivProc :
9789 .
                                     TDerivProc;
9790:
                        X, Y, S
                                     TVector;
9791:
                        Lb, Ub
                                   : Integer;
9792:
                        MaxIter
                                     Integer
9793:
                         Tol
9794:
                        В
                                   : TVector;
                        FirstPar,
9795:
                                   : Integer;
9796:
                         LastPar
                         V
                                   : TMatrix); external 'dmath';
9798: { Weighted nonlinear regression }
9800: { Set file for saving MCMC simulations }
9801: procedure SimFit(RegFunc
                                      TRegFunc;
                        X, Y
                                     TVector;
9803:
                        Lb, Ub
                                    : Integer;
                                    : TVector;
9804:
                        В
9805:
                        FirstPar,
                                   : Integer;
9806:
                         LastPar
9807:
                        V
                                    : TMatrix); external 'dmath';
9808: { Simulation of unweighted nonlinear regression by MCMC }
9809: procedure WSimFit(RegFunc
                                      TRegFunc;
9810:
                          X, Y, S
                                      TVector;
9811:
                          Lb, Ub
                                     : Integer;
9812:
                          В
                                     : TVector;
9813:
                          FirstPar,
                         Firstwar,
LastPar : Integer;
V : TMatrix); external 'dmath';
9814:
9815:
9816:
        Simulation of weighted nonlinear regression by MCMC }
9817:
9818:
        Nonlinear regression models
9819:
9820: procedure FracFit(X, Y
                                      : TVector;
9821:
                         Lb. Ub
                                      : Integer;
                         Deg1, Deg2 : Integer;
ConsTerm : Boolean;
9822:
9823:
9824:
                          MaxIter
                                       Integer;
9825:
                          Tol
                                      : Float;
9826:
                          В
                                      : TVector;
                          V
                                      : TMatrix); external 'dmath';
9827:
9828: { Unweighted fit of rational fraction }
9829: procedure WFracFit(X, Y, S
9830:
                           Lb, Ub
                                         Integer;
                           Degl, Deg2 : Integer;
9831:
                           ConsTerm
                                     : Boolean;
9832:
                                       : Integer;
9833:
                           MaxIter
9834:
                           Tol
                                       : Float;
9835:
                           В
                                       : TVector;
                                      : TMatrix); external 'dmath';
9836:
                           V
9837: { Weighted fit of rational fraction }
9839: function FracFit_Func(X : Float; B : TVector) : Float; external 'dmath';
9840: { Returns the value of the rational fraction at point X } 9841: procedure ExpFit(X, Y : TVector;
                        Lb, Ub, Nexp : Integer;
9842:
9843:
                         ConsTerm
                                         Boolean
9844:
                        MaxIter
                                       : Integer;
9845:
                         Tol
                                       : Float;
9846:
                         В
                                       : TVector;
9847:
                        V
                                       : TMatrix); external 'dmath';
9848: { Unweighted fit of sum of exponentials }
9849: procedure WExpFit(X, Y, S
                                          TVector;
                         Lb, Ub, Nexp:
9850:
                                          Integer;
                          ConsTerm
                                          Boolean;
9852:
                          MaxIter
                                        : Integer;
9853:
                          Tol
                                        : Float;
9854:
                         В
                                        : TVector;
                          7.7
                                        : TMatrix); external 'dmath';
9855:
9856: { Weighted fit of sum of exponentials }
9857: function ExpFit_Func(X : Float; B : TVector) : Float; external 'dmath';
9858: { Returns the value of the regression function at point X }
9859: procedure IncExpFit(X, Y 9860: Lb, Ub
                                      : TVector;
                                      : Integer;
9861:
                            ConsTerm : Boolean;
9862:
                            MaxIter : Integer;
                                      : Float;
9863:
                            Tol
                                       TVector;
9864:
                            В
                                       TMatrix); external 'dmath';
9866: { Unweighted fit of model of increasing exponential }
9867: procedure WIncExpFit(X, Y, S : TVector; 9868: Lb, Ub : Integer;
9869:
                             ConsTerm :
                                         Boolean
9870:
                             MaxIter :
                                         Integer
9871:
                             Tol
                                       : Float;
9872:
                             В
                                       : TVector;
9873:
                                       : TMatrix); external 'dmath';
9874: { Weighted fit of increasing exponential }
```

```
9875: function IncExpFit_Func(X : Float; B : TVector) : Float; external 'dmath';
9876: { Returns the value of the regression function at point X }
9877: procedure ExpLinFit(X, Y
                                      : TVector;
                             Lb, Uh
9878 .
                                      : Integer;
9879:
                             MaxIter : Integer;
9880:
                                      : Float;
                             Tol
9881:
                                        TVector;
                             В
                                      : TMatrix); external 'dmath';
9882:
9883:
      { Unweighted fit of the "exponential + linear" model }
9884: procedure WExpLinFit(X, Y, S : TVector; 9885: Lb, Ub : Integer;
                              MaxIter
                                       : Integer;
9887:
                              Tol
                                       : Float;
9888:
                              B
                                       : TVector:
                                       : TMatrix); external 'dmath';
9889:
9890: { Weighted fit of the "exponential + linear" model }
9892: function ExpLinFit_Func(X : Float; B : TVector) : Float; external 'dmath';
9893: { Returns the value of the regression function at point X } 9894: procedure MichFit(X, Y : TVector;
                           (X, Y : TVector;
Lb, Ub : Integer;
9895:
9896:
                           MaxIter : Integer;
9897:
                           Tol
                                   : Float;
9898:
                                    : TVector;
                           В
9899:
                                    : TMatrix); external 'dmath';
9900: { Unweighted fit of Michaelis equation }
9901: procedure WMichFit(X, Y, S : TVector; 9902: Lb, Ub : Integer;
9903:
                            MaxIter :
                                       Integer
9904:
                            Tol
                                       Float;
9905:
                            В
                                     : TVector;
9906:
                            7.7
                                     : TMatrix); external 'dmath';
9907: { Weighted fit of Michaelis equation }
9908: function MichFit_Func(X: Float; B: TVector): Float; external 'dmath';
      { Returns the value of the Michaelis equation at point X }
9910: procedure MintFit(X, Y
                                 : TVector;
                          Lb, Ub : Integer;
9911:
9912:
                           MintVar : TMintVar;
9913:
                           Fit_S0
                                      Boolean;
9914:
                           MaxIter : Integer;
9915:
                           Tol
                                    : Float;
                                      TVector;
9916:
                           В
9917:
                                      TMatrix); external 'dmath';
9918: { Unweighted fit of the integrated Michaelis equation }
      procedure WMintFit(X, Y, S : TVector;
    Lb, Ub : Integer;
9919:
9920:
                            MintVar :
9921:
                                       TMintVar;
                            Fit_S0
                                       Boolean;
9923:
                            MaxIter :
                                       Integer
9924:
                            Tol
                                     : Float;
9925:
                                       TVector;
                            В
                                     : TMatrix); external 'dmath';
9926:
9927: { Weighted fit of the integrated Michaelis equation }
9928: function MintFit_Func(X : Float; B : TVector) : Float; external 'dmath';
9929: { Returns the value of the integrated Michaelis equation at point X } 9930: procedure HillFit(X, Y): TVector;
                          (X, Y : TVector;
Lb, Ub : Integer;
9932:
                           MaxIter : Integer;
9933:
                           Tol
                                   : Float;
                                    : TVector;
9934:
                           В
                                   : TMatrix); external 'dmath';
9935:
                           V
9936: { Unweighted fit of Hill equation }
9937: procedure WHillFit(X, Y, S: TVector; 9938: Lb, Ub : Integer;
                            MaxIter :
9939:
                                       Integer;
9940:
                            Tol
                                       Float;
9941:
                                     : TVector;
                            В
9942:
                            V
                                     : TMatrix); external 'dmath';
9943: { Weighted fit of Hill equation }
9944: function HillFit_Func(X: Float; B: TVector): Float; external 'dmath';
9945: { Returns the value of the Hill equation at point X }
                                   : TVector;
9946: procedure LogiFit(X, Y
                           Lb, Ub
9947:
                                     : Integer;
9948:
                           ConsTerm :
                                       Boolean;
9949:
                           General :
                                       Boolean;
9950:
                           MaxIter
                                       Integer;
9951:
                           Tol
                                       Float;
                                       TVector;
9952:
                           В
                                       TMatrix); external 'dmath';
9953:
                           V
9954: { Unweighted fit of logistic function }
9955: procedure WLogiFit(X, Y, S : TVector;
9956:
                           Lb. Ub
                                      : Integer;
9957:
                            ConsTerm : Boolean;
9958:
                            General : Boolean;
9959:
                            MaxIter
                                      : Integer;
9960:
                            Tol
                                      : Float;
9961:
                            В
                                      : TVector;
9962:
                                       : TMatrix); external 'dmath';
9963: { Weighted fit of logistic function }
```

```
9964: function LogiFit Func(X : Float; B : TVector) : Float; external 'dmath';
 9965: { Returns the value of the logistic function at point X }
                                 : TVector;
 9966: procedure PKFit(X, Y
                         Lb. Uh
                                  : Integer;
 9967 .
 9968:
                         MaxIter : Integer;
                               : Float;
 9969:
                         Tol
 9970:
                                  : TVector;
                         В
 9971:
                                  : TMatrix); external 'dmath';
 9972: { Unweighted fit of the acid-base titration curve }
9973: procedure WPKFit(X, Y, S : TVector;
9974: Lb, Ub : Integer;
                          MaxIter : Integer;
 9975:
 9976:
                          Tol
                                   : Float;
                          В
                                   : TVector;
 9977:
 9978:
                          V
                                   : TMatrix); external 'dmath';
 9979: { Weighted fit of the acid-base titration curve }
9980: function PKFit_Func(X : Float; B : TVector) : Float; external 'dmath';
 9981: { Returns the value of the acid-base titration function at point X }
 9982: procedure PowFit(X, Y : TVector; 9983: Lb, Ub : Integer;
 9984:
                          MaxIter : Integer;
 9985:
                          Tol
                                  : Float;
                          В
                                  : TVector;
 9986:
 9987:
                          V
                                  : TMatrix); external 'dmath';
 9988: { Unweighted fit of power function } 9989: procedure WPowFit(X, Y, S: TVector;
 9990:
                           Lb, Ub : Integer;
 9991:
                           MaxIter : Integer;
                                 : Integer;
: Float;
: TVector;
 9992:
                           Tol
                           В
 9993:
 9994:
                           V
                                   : TMatrix); external 'dmath';
 9995: { Weighted fit of power function }
 9996:
 9997: function PowFit_Func(X : Float; B : TVector) : Float; external 'dmath';
 9998: { Returns the value of the power function at point X }
 9999: procedure GammaFit(X, Y
                                     : TVector;
                            Lb, Ub : Integer;
10000:
10001:
                            MaxIter : Integer;
10002:
                            Tol
                                    : Float;
10003:
                            В
                                     : TVector;
10004:
                            V
                                    : TMatrix); external 'dmath';
10005: { Unweighted fit of gamma distribution function } 10006: procedure WGammaFit(X, Y, S : TVector;
                             Lb, Ub : Integer;
10007:
10008:
                             MaxIter : Integer;
                                   : Float;
                             Tol
10009:
                                      : TVector;
10010:
                             В
                                      : TMatrix); external 'dmath';
10011:
                             V
10012: { Weighted fit of gamma distribution function } 10013: function GammaFit_Func(X : Float; B : TVector) : Float; external 'dmath';
10014: { Returns the value of the gamma distribution function at point X }
10015: {
10016:
         Principal component analysis
10017:
10018: procedure VecMean(X
                                         : TMatrix;
                        Lb, Ub, Nvar : Integer;
10019:
                                          : TVector); external 'dmath';
10020:
                           M
10021: { Computes the mean vector M from matrix X }
                        (X : TMatrix;
Lb, Ub, Nvar : Integer;
10022: procedure VecSD(X
10023:
                                     : TVector); external 'dmath';
10024:
                         M, S
10025: { Computes the vector of standard deviations S from matrix X }
                                           : TMatrix;
10026: procedure MatVarCov(X
10027:
                             Lb, Ub, Nvar : Integer;
                                          : TVector;
: TMatrix); external 'dmath';
10028:
                             M
10030: { Computes the variance-covariance matrix V from matrix X }
10031: procedure MatCorrel(V : TMatrix;
                          Nvar : Integer;
10032:
                             R
                                  : TMatrix); external 'dmath';
10033:
10034: { Computes the correlation matrix R from the var-cov matrix V }
10035: procedure PCA(R : TMatrix; 10036: Nvar : Integer;
                     Nvar
10037:
                      Lambda : TVector;
10038:
                      C, Rc : TMatrix); external 'dmath';
10039: { Performs a principal component analysis of the correlation matrix R }
                          r(X : TMatrix;
Lb, Ub, Nvar : Integer;
10040: procedure ScaleVar(X
10041:
10042:
                            M, S : TVector;
                                           : TMatrix); external 'dmath';
10043:
10044: { Scales a set of variables by subtracting means and dividing by SD's }
10045: procedure PrinFac(Z
                                         : TMatrix;
                           Lb, Ub, Nvar : Integer;
10046:
10047:
                           C, F
                                          : TMatrix); external 'dmath';
       { Computes principal factors }
10048:
10049: {
         Strings
10050:
10051:
10052: function LTrim(S : String) : String; external 'dmath';
```

```
10053: { Removes leading blanks }
10054: function RTrim(S : String) : String; external 'dmath';
10055: { Removes trailing blanks } 10056: function Trim(S: String): String; external 'dmath';
10057: { Removes leading and trailing blanks }
10058: function StrChar(N : Byte; C : Char) : String; external 'dmath';
10059: { Returns a string made of character C repeated N times }
10060: function RFill(S : String; L : Byte) : String; external 'dmath';
10061: { Completes string S with trailing blanks for a total length L } 10062: function LFill(S: String; L: Byte): String; external 'dmath';
10063: { Completes string S with leading blanks for a total length L } 10064: function CFill(S: String; L: Byte): String; external 'dmath'
10065: { Centers string S on a total length L }
10066: function Replace(S : String; C1, C2 : Char) : String; external 'dmath';
10067: { Replaces in string S all the occurences of C1 by C2 }
10068: function Extract(S: String; var Index: Byte; Delim: Char): String; external 'dmath';
10069: { Extracts a field from a string }
10070: procedure Parse(S : String; Delim:Char; Field:TStrVector; var N:Byte); external 'dmath';
10071: { Parses a string into its constitutive fields }
10072: procedure SetFormat(NumLength, MaxDec:Integer;FloatPoint,NSZero:Bool); external 'dmath';
             { Sets the numeric format }
10074: function FloatStr(X : Float) : String; external 'dmath';
10075: { Converts a real to a string according to the numeric format }
10076: function IntStr(N : LongInt) : String; external 'dmath';
10077: { Converts an integer to a string }
10078: function CompStr(Z : Complex) : String; external 'dmath';
10079: { Converts a complex number to a string }
10080: {SIFDEF DELPHI}
10081: function StrDec(S: String): String; external 'dmath';
10082: { Set decimal separator to the symbol defined in SysUtils }
10083: function IsNumeric(var S : String; var X : Float) : Boolean; external 'dmath';
10084: { Test if a string represents a number and returns it in X } 10085: function ReadNumFromEdit(Edit : TEdit) : Float; external 'dmath';
10086: { Reads a floating point number from an Edit control }
10087: procedure WriteNumToFile(var F : Text; X : Float); external 'dmath';
10088:
             { Writes a floating point number in a text file }
10089: { $ENDIF }
10090: { -----
10091:
               BGI / Delphi graphics
10092:
10093: function InitGraphics
10094: {$IFDEF DELPHI}
10095: (Width, Height: Integer): Boolean;
10097: (Pilot, Mode : Integer; BGIPath : String) : Boolean; [ $ENDIF ] external 'dmath';
10098: { Enters graphic mode }
10099: procedure SetWindow([SIFDEF DELPHI]Canvas: TCanvas;[SENDIF]
10100: X1, X2, Y1, Y2: Integer; GraphBorder:Boolean); external 'dmath';
10101: { Sets the graphic window }
10102: procedure SetOxScale(Scale
                                                                                          : TScale;
                                                  OxMin, OxMax, OxStep : Float); external 'dmath';
10103:
10104: { Sets the scale on the Ox axis }
10105: procedure SetOyScale(Scale
                                                                                           : TScale;
                                                   OyMin, OyMax, OyStep : Float); external 'dmath';
10106:
10107: { Sets the scale on the Oy axis }
10108: procedure GetOxScale(var Scale
                                                                                                  : TScale;
                                                   var OxMin, OxMax, OxStep : Float); external 'dmath';
10109:
10110: { Returns the scale on the Ox axis }
10111: procedure GetOyScale(var Scale
                                                                                                   : TScale;
                                                   var OyMin, OyMax, OyStep : Float); external 'dmath';
10112:
10113: { Returns the scale on the Oy axis }
10114: procedure SetGraphTitle(Title: String); external 'dmath'; { Sets the title for the graph }
10115: procedure SetOxTitle(Title: String); external 'dmath'; { Sets the title for the Ox axis } 10116: procedure SetOyTitle(Title: String); external 'dmath'; { Sets the title for the Oy axis }
10117: function GetGraphTitle: String; external 'dmath'; { Returns the title for the graph } 10118: function GetGvaphTitle: String; external 'dmath'; { Returns the title for the Ox axis } 10119: function GetOyTitle: String; external 'dmath'; { Returns the title for the Oy axis }
10120: { $IFNDEF DELPHI }
10121: procedure SetTitleFont(FontIndex, Width, Height: Integer); external 'dmath';
10122: { Sets the font for the main graph title }
10123: procedure SetOxFont(FontIndex, Width, Height : Integer); external 'dmath';
10124: { Sets the font for the Ox axis (title and labels) }
10125: procedure SetOyFont(FontIndex, Width, Height : Integer); external 'dmath';
10126: { Sets the font for the Oy axis (title and labels) }
10127: procedure SetLgdFont(FontIndex, Width, Height : Integer); external 'dmath';
10128: { Sets the font for the legends
10129: procedure SetClipping(Clip : Boolean); external 'dmath'
10130: { Determines whether drawings are clipped at the current viewport 10131: boundaries, according to the value of the Boolean parameter Clip }
10133: procedure PlotOxAxis{\( \frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\fir}{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac
10135: procedure PlotGrid(\(\frac{\$iFDEF}{\$iFDEF}\) DELPHI\(\}\) (Canvas: TCanvas)\(\frac{\$ENDIF}{\$iENDIF}\); external 'dmath';

10136: \{\ \text{Plots the vertical axis }\}\)

10137: procedure PlotGrid(\(\frac{\$iFDEF}{\$iFDEF}\) DELPHI\(\}\) Canvas: TCanvas;\(\{\$iENDIF}\) Grid: TGrid); external 'dmath';
10138: { Plots a grid on the graph }
10138: { Plots a grid on the graph }
10139: procedure WriteGraphTitle($IFDEF DELPHI)(Canvas : TCanvas)($ENDIF); external 'dmath';
10140: { Writes the title of the graph }
10141: procedure SetMaxCurv(NCurv : Byte); external 'dmath';
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10142: { Sets the maximum number of curves and re-initializes their parameters }
10143: procedure SetPointParam
10144: {$IFDEF DELPHI}
10145: (CurvIndex, Symbol, Size : Integer; Color : TColor);
10146: { $ELSE }
10147: (CurvIndex, Symbol, Size, Color: Integer); (SENDIF) external 'dmath';
10148: { Sets the point parameters for curve # CurvIndex
10149: procedure SetLineParam
10150: {SIFDEF DELPHI}
10151: (CurvIndex : Integer; Style : TPenStyle; Width : Integer; Color : TColor);
10152: { $ELSE }
            (CurvIndex, Style, Width, Color : Integer); {$ENDIF} external 'dmath';
10154: { Sets the line parameters for curve # CurvIndex
10155: procedure SetCurvLegend(CurvIndex : Integer; Legend : String); external 'dmath';
10156: { Sets the legend for curve # CurvIndex }
10157: procedure SetCurvStep(CurvIndex, Step : Integer); external 'dmath';
10158: { Sets the step for curve # CurvIndex }
10159: function GetMaxCurv : Byte; external 'dmath'; { Returns the maximum number of curves }
10160: procedure GetPointParam
10161: [SIFDEF DELPHI]
10162: (CurvIndex : Integer; var Symbol, Size : Integer; var Color : TColor);
10163: {$ELSE}
10164: (CurvIndex: Integer; var Symbol, Size, Color: Integer); {\$ENDIF} external 'dmath';
10165: { Returns the point parameters for curve # CurvIndex }
10166: procedure GetLineParam
10167: { $IFDEF DELPHI }
10168: (CurvIndex : Integer; var Style : TPenStyle; var Width : Integer; var Color : TColor);
10169: {$ELSE}
10170: (CurvIndex : Integer; var Style, Width, Color : Integer); {$ENDIF} external 'dmath';
10171: { Returns the line parameters for curve # CurvIndex }
10172: function GetCurvLegend(CurvIndex : Integer) : String; external 'dmath';
10173: { Returns the legend for curve # CurvIndex }
10174: function GetCurvStep(CurvIndex : Integer) : Integer; external 'dmath';
10175: { Returns the step for curve # CurvIndex } 10176: { $\( \frac{\psi \in \text{IFDEF DELPHI}}{\psi} \)}
10177: procedure PlotPoint(Canvas
                                                             : TCanvas;
10178:
                                              X, Y
                                                              : Float; CurvIndex : Integer); external 'dmath';
10179: {$ELSE}
10180: procedure PlotPoint(Xp, Yp, CurvIndex : Integer); external 'dmath';
10181: [$ENDIF]
10182: { Plots a point on the screen }
10183: procedure PlotCurve([$IFDEF DELPHI]Canvas : TCanvas; [$ENDIF]
10184:
                                                                                    : TVector
                                                                               : Integer); external 'dmath';
                                            Lb, Ub, CurvIndex
10185:
10186: { Plots a curve }
10187: procedure PlotCurveWithErrorBars({$iFDEF DELPHI}Canvas : TCanvas;{$ENDIF}
                                                                     X, Y, S
                                                                                                           : TVector;
10188:
                                                                   Ns, Lb, Ub, CurvIndex : Integer); external 'dmath';
10189:
10190: { Plots a curve with error bars }
10191: procedure PlotFunc([$!FDEF DELPHI]|Canvas: TCanvas; [$ENDIF]
                                                                                 : TFunc;
: Float;
10192:
                                             Func
                                             Xmin, Xmax
10193:
                                             {
sinteger; {$ENDIF}
CurvIndex

integer; {$ENDIF}
character
integer
i
10194:
10195:
10196: { Plots a function }
10197: procedure WriteLegend({$IFDEF DELPHI}Canvas : TCanvas;{$ENDIF}
10198:
                                                 NCurv
                                                                                        : Integer;
                                                  ShowPoints, ShowLines : Boolean); external 'dmath';
10199:
10200: { Writes the legends for the plotted curves }
X, Y, Z
10204:
                                                                              : TMatrix); external 'dmath';
                                         F
10205: { Contour plot }
10205: { Contour Plot }
10206: function Xpixel(X : Float):Integer; external 'dmath'; {Converts user abscissa X to screen coordinate }
10207: function Ypixel(Y : Float):Integer; external 'dmath'; {Converts user ordinate Y to screen coordinate }
10208: function Xuser(X : Integer):Float; external 'dmath'; {Converts screen coordinate X to user abscissa }
10209: function Yuser(Y : Integer):Float; external 'dmath'; {Converts screen coordinate Y to user ordinate }
10210: {$IFNDEF DELPHI}
10211: procedure LeaveGraphics; external 'dmath';
10212: { Quits graphic mode }
10213: {$ENDIF}
10214: {
10215:
              LaTeX graphics
10216:
10217: function TeX_InitGraphics(FileName : string; PgWidth, PgHeight : Integer; 10218: Header : Boolean; external 'dmath';
10219: { Initializes the LaTeX file }
10220: procedure TeX_SetWindow(X1, X2, Y1, Y2 : Integer; GraphBorder : Boolean); external 'dmath'; 10221: { Sets the graphic window }
10222: procedure TeX_LeaveGraphics(Footer : Boolean); external 'dmath'; { Close the LaTeX file } 10223: procedure TeX_SetOxScale(Scale : TScale; OxMin, OxMax, OxStep : Float); external 'dmath';
10224: { Sets the scale on the Ox axis }
10225: procedure TeX_SetOyScale(Scale: TScale; OyMin, OyMax, OyStep: Float); external 'dmath';
10226: { Sets the scale on the Oy axis }
10227: procedure TeX_SetGraphTitle(Title: String); external 'dmath'; { Sets the title for the graph }
10228: procedure TeX_SetOxTitle(Title: String); external 'dmath'; { Sets the title for the Ox axis } 10229: procedure TeX_SetOyTitle(Title: String); external 'dmath'; { Sets the title for the Oy axis }
10230: procedure TeX_PlotOxAxis; external 'dmath'; { Plots the horizontal axis }
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10231: procedure TeX_PlotOyAxis; external 'dmath'; { Plots the vertical axis } 10232: procedure TeX_PlotGrid(Grid : TGrid); external 'dmath'; { Plots a grid on the graph } 10233: procedure TeX_WriteGraphTitle; external 'dmath'; Writes the title of the graph }
10234: procedure TeX_SetMaxCurv(NCurv : Byte); external 'dmath';
10235:
        { Sets the maximum number of curves and re-initializes their parameters }
10236: procedure TeX_SetPointParam(CurvIndex, Symbol, Size : Integer); external 'dmath';
10237: { Sets the point parameters for curve # CurvIndex }
10238: procedure TeX_SetLineParam(CurvIndex, Style : Integer;
10239:
                                         Width : Float; Smooth : Boolean); external 'dmath';
10240: { Sets the line parameters for curve # CurvIndex } 10241: procedure TeX_SetCurvLegend(CurvIndex : Integer; Legend : String); external 'dmath';
10242: { Sets the legend for curve # CurvIndex }
10243: procedure TeX_SetCurvStep(CurvIndex, Step : Integer); external 'dmath';
10244: { Sets the step for curve # CurvIndex }
10245: procedure TeX_PlotCurve(X, Y : TVector; Lb, Ub, CurvIndex : Integer); external 'dmath';
10246: { Plots a curve }
10247: procedure TeX_PlotCurveWithErrorBars(X, Y, S : TVector;
10248 •
                                                      Ns, Lb, Ub, CurvIndex : Integer); external 'dmath';
10249: { Plots a curve with error bars }
10250: procedure TeX_PlotFunc(Func: TFunc; X1, X2: Float; 10251: Npt: Integer; CurvIndex: Integer); external 'dmath';
10252: { Plots a function }
10253: procedure TeX_WriteLegend(NCurv : Integer; ShowPoints, ShowLines : Boolean); external 'dmath';
10254: { Writes the legends for the plotted curves }
10255: procedure TeX_ConRec(Nx, Ny, Nc : Integer; X, Y, Z : TVector; F : TMatrix); external 'dmath';
10256: { Contour plot }
10257: function Xcm(X : Float) : Float; external 'dmath'; { Converts user coordinate X to cm }
10258: function Ycm(Y : Float) : Float; external 'dmath'; { Converts user coordinate Y to cm }
10259:
10260: /
10261: Function RawUTF8ToPDFString( const Value : RawUTF8) : PDFString
10262: Function _DateTimeToPdfDate( ADate : TDateTime) : TPdfDate
10263:
         Function PdfDateToDateTime( const AText : TPdfDate) : TDateTime
         Function PdfRect( Left, Top, Right, Bottom : Single) : TPdfRect;
Function PdfRect1( const Box : TPdfBox) : TPdfRect;
10264:
10266:
         Function PdfBox( Left, Top, Width, Height : Single) : TPdfBox
10267:
         //Function _GetCharCount( Text : PAnsiChar) : integer
//Procedure L2R( W : PWideChar; L : integer)
10268:
10269:
         Function PdfCoord( MM : single) : integer
10270:
         Function CurrentPrinterPaperSize : TPDFPaperSize
10271:
         Function CurrentPrinterRes : TPoint
Procedure GDICommentBookmark( MetaHandle : HDC; const aBookmarkName : RawUTF8)
10272:
         Procedure GDICommentOutline( MetaHandle : HDC; const aTitle : RawUTF8; aLevel : Integer)
10273:
         Procedure GDICommentLink( MetaHandle:HDC; const aBookmarkName:RawUTF8; const aRect : TRect)
10274:
         Const('Usp10','String').SetString( 'usp10.dll
AddTypeS('TScriptState_enum', '( r0, r1, r2, r3, r4, fOverrideDirection, fInhibitSymSwap,
   'fCharShape, fDigitSubstitute,fInhibitLigate,fDisplayZWG, fArabicNumContext, fGcpClusters )
10275:
10276:
10277:
           AddTypeS('TScriptState_set', 'set of TScriptState_enum
10279:
10280:
10281: procedure SIRegister_PMrand(CL: TPSPascalCompiler); //ParkMiller
10282: begin
        Procedure PMrandomize( I : word)
10283:
10284:
         Function PMrandom : longint
10285:
         Function Rrand : extended
         Function Irand( N : word) :
10286:
                                            word
         Function Brand( P : extended) : boolean
10287:
10288: Function Nrand : extended
10289: end;
10290:
10291: procedure SIRegister_Spring_Cryptography_Utils(CL: TPSPascalCompiler);
10292: begin
10293:
          Function Endian(x:LongWord):LongWord
10294:
           \textbf{Function} \ \texttt{Endian64} ( \ \texttt{x} \ : \ \texttt{Int64}) \ : \ \texttt{Int64}
          Function spRol(x: LongWord; y: Byte): LongWord
Function spRor(x: LongWord; y: Byte): LongWord
10295:
10296:
10297:
           Function Ror64(x: Int64; y: Byte): Int64
10298: end;
10299:
10300: procedure SIRegister_MapReader(CL: TPSPascalCompiler);
10301: begin
10302: Procedure ClearModules
10303:
         Procedure ReadMapFile( Fname : string)
10304:
         Function AddressInfo( Address : dword) : string
10305: end
10306:
10307: procedure SIRegister_LibTar(CL: TPSPascalCompiler);
10308: begin
          TTarPermission', '( tpReadByOwner, tpWriteByOwner, tpExecuteByOw
10309:
            +'ner, tpReadByGroup, tpWriteByGroup, tpExecuteByGroup, tpReadByOther, tpWri'+'teByOther, tpExecuteByOther)
10310:
10311:
10312:
           TTarPermissions', 'set of TTarPermission
           TFileType', '(ftNormal, ftLink, ftSymbolicLink, ftCharacter, ft' +'Block, ftDirectory, ftFifo, ftContiguous, ftDumpDir, ftMultiVolume, ftVolumeHeader;
10313:
10314:
           TTarMode', '( tmSetUid, tmSetGid, tmSaveText )
10315:
           TTarModes', 'set of TTarMode
10316:
           TTarDirRec', 'record Name : STRING; Size : INT64; DateTime : TDa
10317:
            +'teTime; Permissions : TTarPermissions; FileType : TFileType; LinkName : ST'
10318:
            +'RING; UID : INTEGER; GID : INTEGER; UserName : STRING; GroupName : STRING;
```

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10320:
            +' ChecksumOK : BOOLEAN; Mode : TTarModes; Magic : STRING; MajorDevNo : INTE'
10321:
            +'GER; MinorDevNo : INTEGER; FilePos : INT64; end
           SIRegister_TTarArchive(CL);
10323:
           SIRegister_TTarWriter(CL);
10324:
         \textbf{Function} \ \texttt{PermissionString} ( \ \texttt{Permissions} \ : \ \texttt{TTarPermissions}) \ : \ \textbf{STRING}
         Function ConvertFilename( Filename : STRING) : STRING
10325:
          Function FileTimeGMT( FileName : STRING) : TDateTime;
10326:
          Function FileTimeGMT1( SearchRec : TSearchRec) : TDateTime;
10327:
10328:
         Procedure ClearDirRec( var DirRec : TTarDirRec)
10329:
        end;
10330:
         //*******unit uPSI_TlHelp32;
10332:
10333:
        procedure SIRegister_TlHelp32(CL: TPSPascalCompiler);
10334: begin
10335:
         Const('MAX_MODULE_NAME32','LongInt').SetInt( 255);
          Function CreateToolhelp32Snapshot( dwFlags, th32ProcessID : DWORD) : THandle
10336:
         Const('TH32CS_SNAPHEAPLIST','LongWord').SetUInt($00000001);
Const('TH32CS_SNAPHEAPLIST','LongWord').SetUInt($00000002);
Const('TH32CS_SNAPPROCESS','LongWord').SetUInt($00000004);
Const('TH32CS_SNAPTHREAD','LongWord').SetUInt($00000008);
10337:
10338:
10339:
10340:
10341:
          Const('TH32CS_INHERIT','LongWord').SetUInt( $80000000);
10342:
           tagHEAPLIST32','record dwSize:DWORD;th32ProcessID:DWORD;th32PeapID:DWORD;dwFlags:DWORD;end';
           AddTypeS('HEAPLIST32', 'tagHEAPLIST32' AddTypeS('THeapList32', 'tagHEAPLIST32')
10343:
10344:
         Const('HF32_DEFAULT','LongInt').SetInt( 1);
Const('HF32_SHARED','LongInt').SetInt( 2);
10345:
10346:
         Function Heap32ListFirst( hSnapshot : THandle; var lphl : THeapList32) : BOOL
Function Heap32ListNext( hSnapshot : THandle; var lphl : THeapList32) : BOOL
10347:
10348:
          AddTypeS('tagHEAPENTRY32', 'record dwSize : DWORD; hHandle : THandle; dwAd'
10349:
10350:
            +'dress : DWORD; dwBlockSize : DWORD; dwFlags : DWORD; dwLockCount : DWORD; '
             +'dwResvd : DWORD; th32ProcessID : DWORD; th32HeapID : DWORD; end
10351:
           AddTypeS('HEAPENTRY32', 'tagHEAPENTRY32
AddTypeS('TheapEntry32', 'tagHEAPENTRY32
10352:
10353:
         Addrypes('HeapEntry32', 'LagHBAPENIR'32'
Const('LF32_FIXED','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
10355:
10356:
10357:
10358:
10359:
          DWORD; var lpNumberOfBytesRead : DWORD) : BOOL
10360:
           AddTypeS('tagTHREADENTRY32', 'record dwSize : DWORD; cntUsage : DWORD; th3'
            +'2ThreadID : DWORD; th320wnerProcessID : DWORD; tpBasePri : Longint; tpDelt'
10361:
             +'aPri : Longint; dwFlags : DWORD; end
10362:
           AddTypeS('THREADENTRY32', 'tagTHREADENTRY32 AddTypeS('TThreadEntry32', 'tagTHREADENTRY32')
10363:
10364:
         Function Thread32First( hSnapshot : THandle; var lpte : TThreadEntry32) : BOOL
Function Thread32Next( hSnapshot : THandle; var lpte : TThreadEntry32) : BOOL
10365:
10366:
10367:
10368:
         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));
10369:
10370:
10371:
10372:
          Const('EWX_LOGOFF','LongInt').SetInt( 0);
10373:
          Const('EWX_SHUTDOWN','LongInt').SetInt( 1);
         Const('EWX_REBOOT','LongInt').SetInt( 2);
Const('EWX_FORCE','LongInt').SetInt( 4);
10374:
10375:
          Const('EWX_POWEROFF','LongInt').SetInt( 8);
10376:
10377:
          Const('EWX_FORCEIFHUNG','LongWord').SetUInt( $10);
10378:
         Function GET_APPCOMMAND_LPARAM( const lParam : LongInt) : Shortint
         Function GET_DEVICE_LPARAM( const lParam : LongInt) : Word
10379:
         Function GET_MOUSEORKEY_LPARAM( const lParam : LongInt) : Word
10380:
10381:
          Function GET_FLAGS_LPARAM( const lParam : LongInt) : Word
         Function GET_KEYSTATE_LPARAM( const lParam : LongInt) : Word
Function GetWindowWord( hWnd : HWND; nIndex : Integer) : Word
Function SetWindowWord( hWnd : HWND; nIndex : Integer; wNewWord : Word) : Word
10382:
10383:
10384:
         Function GetWindowLong( hWnd : HWND; nIndex : Integer) : Longint
10385:
10386:
          Function SetWindowLong( hWnd : HWND; nIndex : Integer; dwNewLong : Longint) : Longint
10387:
         Function GetClassWord( hWnd : HWND; nIndex : Integer) : Word
10388:
         Function SetClassWord( hWnd : HWND; nIndex : Integer; wNewWord : Word) : Word
         Function GetClassLong( hWnd : HWND; nIndex : Integer) : DWORD
10389:
         Function SetClassLong( hWnd : HWND; nIndex : Integer; dwNewLong : Longint) : DWORD
10390:
10391:
         Function GetDesktopWindow : HWND
         Function GetParent( hWnd : HWND) : HWND
Function SetParent( hWndChild, hWndNewParent : HWND) : HWND
10392:
10393:
         Function GetTopWindow( hWnd : HWND) : HWND
Function GetNextWindow( hWnd : HWND; uCmd : UINT) : HWND
10394:
10395:
10396:
         Function GetWindow( hWnd : HWND; uCmd : UINT) : HWND
10397:
          //Delphi DFM
         Function LoadDFMFile2Strings(const AFile:string; AStrings:TStrings; var WasText:boolean):integer
10398:
          Function SaveStrings2DFMFile( AStrings: TStrings; const AFile: string): integer
10400:
         procedure GetHighlighters(AOwner: TComponent; AHighlighters: TStringList; AppendToList: boolean);
10401:
          function GetHighlightersFilter(AHighlighters: TStringList): string;
10402:
          function GetHighlighterFromFileExt(AHighlighters: TStringList;Extension: string):TSynCustomHighlighter;
10403:
          Function ShowOwnedPopups( hWnd : HWND; fShow : BOOL) : BOOL
         Function OpenIcon( hWnd : HWND) : BOOL
10404:
         Function CloseWindow( hWnd : HWND) : BOOL
Function MoveWindow( hWnd : HWND; X, Y, nWidth, nHeight : Integer; bRepaint : BOOL) : BOOL
Function SetWindowPos(hWnd: HWND; hWndInsertAfter:HWND; X,Y,cx,cy : Integer; uFlags : UINT) : BOOL
10405:
10406:
10407:
10408: Function IsWindowVisible( hWnd : HWND) : BOOL
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10409:
         Function IsIconic( hWnd : HWND) : BOOL
10410:
         Function AnyPopup : BOOL
          Function BringWindowToTop( hWnd : HWND) : BOOL
10412:
         Function IsZoomed( hWnd : HWND) : BOOL
         Function IsWindow( hWnd : HWND) : BOOL
10413:
         Function IsMenu( hMenu : HMENU) : BOOL
10414:
         Function Ischild (hWndParent, hWnd: HWND): BOOL
Function DestroyWindow(hWnd: HWND): BOOL
10415:
10416:
10417:
         Function ShowWindow( hWnd : HWND; nCmdShow : Integer) : BOOL
10418:
         Function AnimateWindow( hWnd : HWND; dwTime : DWORD; dwFlags : DWORD) : BOOL
         Function ShowWindowAsync( hWnd : HWND; nCmdShow : Integer) : BOOL
10419:
         Function FlashWindow( hWnd : HWND; bInvert : BOOL) : BOOL
10421:
         Function IsWindowUnicode( hWnd : HWND) : BOOL
         Function EnableWindow( hWnd : HWND; bEnable : BOOL) : BOOL
10422:
         Function IsWindowEnabled( hWnd : HWND) : BOOL
10423:
10424:
10425: procedure SIRegister_IDECmdLine(CL: TPSPascalCompiler);
10426: begin
         const('ShowSetupDialogOptLong','String').SetString('--setup
10427:
         PrimaryConfPathOptLong', 'String').SetString( '--primary-config-path=PrimaryConfPathOptShort', 'String').SetString( '--pcp=
10428:
10429:
         SecondaryConfPathOptLong', 'String').SetString( '--secondary-config-path=
SecondaryConfPathOptShort', 'String').SetString( '--scp=
10430:
10431:
         NoSplashScreenOptLong', 'String').SetString('--no-splash-screen NoSplashScreenOptShort', 'String').SetString('--nsc
10432:
10433:
10434:
          StartedByStartLazarusOpt', 'String').SetString( '--started-by-startlazarus
10435:
         SkipLastProjectOpt','String').SetString( '--skip-last-project
         DebugLogOpt','String').SetString( '--debug-log=
DebugLogOptEnable','String').SetString( '--debug-enable=
10436:
10437:
         LanguageOpt','String').SetString('--language=
10439:
         LazarusDirOpt', 'String').SetString( '--lazarusdir=
10440:
         Procedure ParseCommandLine(aCmdLineParams:TStrings;out IDEPid:Int;out ShowSplashScreen:boolean);
         Function GetCommandLineParameters(aCmdLineParams: TStrings; isStartLazarus:Boolean): string
Function ExtractPrimaryConfigPath(aCmdLineParams: TStrings): string
10441:
10442:
         Function IsHelpRequested : Boolean
10443:
10444:
         Function IsVersionRequested : boolean
         Function GetLanguageSpecified : string
10445:
10446:
         Function ParamIsOption( ParamIndex : integer; const Option : string) : boolean
10447:
         Function ParamIsOptionPlusValue(ParamIndex:integer; const Option: string; out AValue: string):bool;
10448:
         Procedure ParseNoGuiCmdLineParams
         Function ExtractCmdLineFilenames : TStrings
10449:
10450:
10451:
10452:
10453:
        procedure SIRegister_LazFileUtils(CL: TPSPascalCompiler);
10454: begin
         Function CompareFilenames (const Filename1, Filename2 : string) : integer
10455:
         Function CompareFilenamesIgnoreCase( const Filename1, Filename2 : string) : integer
10457:
         Function CompareFileExt( const Filename, Ext : string; CaseSensitive : boolean) : integer;
         Function CompareFileExt1( const Filename, Ext : string) : integer;
Function CompareFilenameStarts( const Filename1, Filename2 : string) : integer
10458:
10459:
10460:
         Function CompareFilenames(Filename1:PChar;Len1:integer; Filename2:PChar;Len2:integer):integer
         Function CompareFilenamesP( Filename1, Filename2 : PChar; IgnoreCase : boolean) : integer
10461:
10462:
         Function DirPathExists( DirectoryName : string) : boolean
         Function DirectoryIsWritable( const DirectoryName : string) : boolean Function ExtractFileNameOnly( const AFilename : string) : string Function FilenameIsAbsolute( const TheFilename : string) : boolean
10463:
10464:
10465:
         Function FilenameIsWinAbsolute( const TheFilename : string) : boolean
10466:
10467:
         Function FilenameIsUnixAbsolute( const TheFilename : string) : boolean
         Function ForceDirectory( DirectoryName : string)

Procedure CheckIfFileIsExecutable( const AFilename : string)
10468:
10469:
10470:
          Procedure CheckIfFileIsSymlink( const AFilename : string)
         Function FileIsText( const AFilename : string) : boolean
Function FileIsText2( const AFilename : string; out FileReadable : boolean
Function FilenameIsTrimmed( const TheFilename : string) : boolean
Function FilenameIsTrimmed2( StartPos : PChar; NameLen : integer) : boolean
10471:
10472:
10473:
10475:
         Function TrimFilename( const AFilename : string) : string
10476:
         Function ResolveDots( const AFilename : string) : string
10477:
         Procedure ForcePathDelims( var FileName : string)
         Function GetForcedPathDelims( const FileName : string) : String
10478:
10479:
          Function CleanAndExpandFilename( const Filename : string) : string
10480:
         Function CleanAndExpandDirectory( const Filename : string) : string
10481:
         Function TrimAndExpandFilename( const Filename: string; const BaseDir: string): string
Function TrimAndExpandDirectory( const Filename: string; const BaseDir: string): string
10482:
10483:
          Function TryCreateRelativePath(const Dest,Source:String; UsePointDirectory:bool;
        AlwaysRequireSharedBaseFolder : Boolean; out RelPath : String) : Boolean
10484:
        Function CreateRelativePath( const Filename, BaseDirectory: string; UsePointDirectory: boolean;
        AlwaysRequireSharedBaseFolder: Boolean) : string
10485:
        Function FileIsInPath( const Filename, Path : string) : boolean
         Function AppendPathDelim( const Path : string) : string
Function ChompPathDelim( const Path : string) : string
10487:
10488:
         \textbf{Function} \ \texttt{CreateAbsoluteSearchPath} ( \ \textbf{const} \ \ \texttt{SearchPath}, \ \ \texttt{BaseDirectory} \ : \ \textbf{string}) \ : \ \textbf{string}) \ : \ \textbf{string})
10489:
         Function CreateRelativeSearchPath( const SearchPath, BaseDirectory : string) : string
         Function MinimizeSearchPath( const SearchPath: string): string
10490:
         Function FindPathInSearchPath(APath:PChar;APathLen:int;SearchPath:PChar;SearchPathLen:int):PChar;
10491:
10492:
         (*Function FileExistsUTF8( const Filename : string) : boolean
10493: Function FileAgeUTF8( const FileName : string) : Longint
10494: Function DirectoryExistsUTF8( const Directory : string) : Boolean
10495: Function ExpandFileNameUTF8( const FileName : string; BaseDir : string) : string
```

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10496:
         Function FindFirstUTF8(const Path:string; Attr: Longint; out Rslt : TSearchRec) : Longint Function FindNextUTF8( var Rslt : TSearchRec) : Longint
10497:
         Procedure FindCloseUTF8( var F : TSearchrec)
10499:
         Function FileSetDateUTF8( const FileName : String; Age : Longint) : Longint
10500:
         Function FileGetAttrUTF8( const FileName : String) : Longint
         Function FileSetAttrUTF8( const Filename : String; Attr : longint) : Longint Function DeleteFileUTF8( const FileName : String) : Boolean
10501:
10502:
         Function RenameFileUTF8( const OldName, NewName : String) : Boolean
10503:
10504:
         Function FileSearchUTF8( const Name, DirList : String; ImplicitCurrentDir : Boolean) : String
10505:
         Function FileIsReadOnlyUTF8( const FileName : String) : Boolean
         Function GetCurrentDirUTF8 : String
Function SetCurrentDirUTF8 (const NewDir : String) : Boolean
10506:
10508:
         Function CreateDirUTF8( const NewDir : String) : Boolean
10509:
         {\tt Function\ RemoveDirUTF8(\ const\ Dir\ :\ String)\ :\ Boolean}
10510:
         Function ForceDirectoriesUTF8( const Dir : string) : Boolean
         Function FileOpenUTF8( const FileName : string; Mode : Integer) : THandle Function FileCreateUTF8( const FileName : string) : THandle;
10512:
10513:
         Function\ File Create UTF 81 (\ const\ File Name\ :\ string;\ Rights\ :\ Cardinal)\ :\ TH and le;
10514:
         Function FileCreateUtf82( const FileName : String; ShareMode : Integer; Rights : Cardinal) : THandle;
10515:
         Function FileSizeUtf8( const Filename : string) : int64
10516:
         Function GetFileDescription( const AFilename : string) : string
         Function GetAppConfigDirUTF8( Global : Boolean; Create : boolean) : string
Function GetAppConfigFileUTF8( Global : Boolean; SubDir : boolean; CreateDir : boolean) : string
10517:
10518:
         Function GetTempFileNameUTF8( const Dir, Prefix : String) : String*)
Function IsUNCPath( const Path : String) : Boolean
Function ExtractUNCVolume( const Path : String) : String
10519:
10520:
10521:
10522:
         Function ExtractFileRoot( FileName : String) : String
Function GetDarwinSystemFilename( Filename : string) : string
Procedure SplitCmdLineParams( const Params : string; ParamList : TStrings; ReadBackslash : boolean)
10523:
10524:
         Function StrToCmdLineParam( const Param : string) : string
10525:
10526:
         Function MergeCmdLineParams( ParamList : TStrings) : string
10527:
         Procedure InvalidateFileStateCache( const Filename : string)
         Function FindAllFiles(const SearchPath:String;SearchMask:String;SearchSubDirs:Boolean):TStringList);
10528:
10529:
         Function FindAllDirectories (const SearchPath : string; SearchSubDirs : Boolean) : TStringList
         Function ReadFileToString( const Filename : string) : string
10530:
10531:
         type
10532:
          TCopyFileFlag = ( cffOverwriteFile,
           cffCreateDestDirectory, cffPreserveTime );
TCopyFileFlags = set of TCopyFileFlag;*)
10533:
10534:
10535:
          TCopyFileFlag', '(cffOverwriteFile, cffCreateDestDirectory, cffPreserveTime)
10536:
          TCopyFileFlags', 'set of TCopyFileFlag
10537:
          Function CopyDirTree( const SourceDir, TargetDir: string; Flags: TCopyFileFlags): Boolean
10538: end;
10539:
10540:
        procedure SIRegister_lazMasks(CL: TPSPascalCompiler);
10541: begin
          TMaskCharType', '( mcChar, mcCharSet, mcAnyChar, mcAnyText )
10542:
           SIRegister_TMask(CL);
10544:
           SIRegister_TParseStringList(CL);
10545:
          SIRegister_TMaskList(CL);
         Function MatchesMask (const FileName, Mask: String; const CaseSensitive: Boolean): Boolean
Function MatchesWindowsMask (const FileName, Mask: String; const CaseSensitive: Boolean): Bool;
10546:
10547:
         Function MatchesMaskList(const FileName,Mask:String;Separator:Char;const CaseSensitive:Boolean):Bool;
10548:
10549:
         Function MatchesWindowsMaskList(const FileName, Mask:String;Separat:Char;const CaseSensitive:Bool):Bool;
10550: end;
10551:
10552: procedure SIRegister_JvShellHook(CL: TPSPascalCompiler);
10553: begin
           gin
//PShellHookInfo', '^TShellHookInfo // will not work
TShellHookInfo', 'record hwnd : THandle; rc : TRect; end
10554:
          TShellHookInfo', 'record hwnd: SHELLHOOKINFO', 'TShellHookInfo
10555:
10556:
10557:
          LPSHELLHOOKINFO', 'PShellHookInfo
10558:
          TJvShellHookEvent', 'Procedure ( Sender : TObject; var Msg : TMessage)
10559:
          SIRegister TJvShellHook(CL);
10560:
         Function InitJvShellHooks : Boolean
         Procedure UnInitJvShellHooks
10561:
10562:
10563:
10564: procedure SIRegister JvExControls(CL: TPSPascalCompiler);
10565: begin
          TDlgCode', '( dcWantAllKeys, dcWantArrows, dcWantChars, dcButton'
10566:
10567:
            +', dcHasSetSel, dcWantTab, dcNative )
10568:
          {\tt TDlgCodes', 'set\ of\ TDlgCode}
          'dcWantMessage','').SetString( dcWantAllKeys);
10569:
          SIRegister_IJvExControl(CL);
10570:
10571:
          SIRegister_IJvDenySubClassing(CL);
10572:
          SIRegister_TStructPtrMessage(CL);
         Procedure SetDotNetFrameColors( FocusedColor, UnfocusedColor: TColor)
10573:
10574:
         Procedure DrawDotNetControl( Control: TWinControl; AColor: TColor; InControl: Boolean);
Procedure DrawDotNetControl1( DC: HDC; R: TRect; AColor: TColor; UseFocusedColor: Boolean);
         Procedure HandleDotNetHighlighting(Control:TWinControl;const Msg:TMessage;MouseOver:Boolean;Color:TColor);
10576:
         Function CreateWMMessage( Msg : Integer; WParam : Integer; LParam : Longint) : TMessage; Function CreateWMMessagel( Msg : Integer; WParam : Integer; LParam : TControl) : TMessage;
10577:
10578:
         Function SmallPointToLong( const Pt : TSmallPoint) : Longint
10579:
         Function ShiftStateToKeyData( Shift : TShiftState) : Longint
10580:
10581:
         Function GetFocusedControl( AControl: TControl): TWinControl
10582:
         Function DlgcToDlgCodes( Value : Longint) : TDlgCodes
Function DlgCodesToDlgc( Value : TDlgCodes) : Longint
10583:
         Procedure GetHintColor( var HintInfo: THintInfo; AControl: TControl; HintColor: TColor)
```

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10585:
              Function DispatchIsDesignMsg( Control : TControl; var Msg : TMessage) : Boolean
10586:
                SIRegister_TJvExControl(CL);
                SIRegister_TJvExWinControl(CL);
10588:
                SIRegister_TJvExCustomControl(CL);
10589:
                SIRegister_TJvExGraphicControl(CL);
10590:
                SIRegister TJvExHintWindow(CL);
10591:
                SIRegister_TJvExPubGraphicControl(CL);
10592: end;
10593:
10594:
10595: procedure SIRegister_EncdDecd(CL: TPSPascalCompiler);
10596: begin
10597: Procedure EncodeStream( Input, Output : TStream
10598:
              Procedure DecodeStream( Input, Output : TStream)
10599:
              Function EncodeString1( const Input : string) : string
10600:
              Function DecodeString1( const Input : string) : string
10601: end;
10602:
10603: (*----
                                                                                                                   · - - - - - · * )
10604: procedure SIRegister_SockAppReg(CL: TPSPascalCompiler);
10605: begin
                SIRegister_TWebAppRegInfo(CL);
10606:
10607:
                SIRegister_TWebAppRegList(CL);
10608:
              Procedure GetRegisteredWebApps( AList : TWebAppRegList)
              Procedure RegisterWebApp( const AFileName, AProgID : string)
10609:
10610:
              Procedure UnregisterWebApp( const AProgID : string)
10611:
              Function FindRegisteredWebApp( const AProgID : string) : string
              Function CreateRegistry( InitializeNewFile : Boolean) : TCustomIniFile
10612:
10613:
               'sUDPPort', 'String').SetString( 'UDPPort
10614: end;
10615:
10616: procedure SIRegister_PJEnvVars(CL: TPSPascalCompiler);
10617: begin
10618:
              // TStringDynArray', 'array of string
              Function GetEnvVarValue( const VarName : string) : string
10620:
              Function SetEnvVarValue( const VarName, VarValue : string) : Integer
10621:
              Function DeleteEnvVar( const VarName : string) : Integer
              Function CreateEnvBlock(const NewEnv:TStrings;const IncludeCurrent:Bool;const Buffer:string;const
10622:
            BufSize:Int):Int;
10623:
            Function ExpandEnvVars( const Str : string) : string
10624:
              Function GetAllEnvVars( const Vars : TStrings) : Integer
              Procedure GetAllEnvVarNames( const Names : TStrings);
Function GetAllEnvVarNames1 : TStringDynArray;
10625:
10626:
10627:
              Function EnvBlockSize : Integer
10628:
                TPJEnvVarsEnum', 'Procedure ( const VarName : string; Data : TObject)
                SIRegister_TPJEnvVarsEnumerator(CL);
10629:
                SIRegister_TPJEnvVars(CL);
10630:
                FindClass('TOBJECT'), 'EPJEnvVars
10631:
                FindClass('TOBJECT'), 'EPJEnvVars
10632:
10633:
              //Procedure Register
10634: end;
10635:
10636:
10637: procedure SIRegister_PJConsoleApp(CL: TPSPascalCompiler);
10638: begin
             'cOneSecInMS','LongInt').SetInt( 1000);
10639:
              //'cDefTimeSlice','LongInt').SetInt( 50);
//'cDefMaxExecTime','').SetString( cOneMinInMS);
10640:
10641:
             'cAppErrorMask', 'LongInt').SetInt( 1 shl 29);
Function IsApplicationError( const ErrCode : LongWord) : Boolean
10642:
10643:
               TBJConsoleAppPriority', '( cpDefault, cpHigh, cpNormal, cpIdle, cpRealTime )
TPJConsoleColors', 'record Foreground: TPJConsoleColor; Background: TPJConsoleColor; end;
10644:
10645:
10646:
              \textbf{Function} \ \texttt{MakeConsoleColors} ( \ \textbf{const} \ \texttt{AForeground}, \ \texttt{ABackground} : \ \texttt{TPJConsoleColor}) : \texttt{TPJConsoleColors} ( \ \textbf{const} \ \texttt{AForeground}, \ \texttt{ABackground} : \ \texttt{TPJConsoleColor}) : \texttt{TPJConsoleColors} ( \ \textbf{const} \ \texttt{AForeground}, \ \texttt{ABackground} : \ \texttt{TPJConsoleColors}) : \texttt{TPJConsoleColors} ( \ \textbf{const} \ \texttt{AForeground}, \ \textbf{const} \ \texttt{AForeground}, \ \textbf{const} \ \texttt{AForeground} ) : \texttt{TPJConsoleColors} ( \ \textbf{const} \ \texttt{AForeground}, \ \textbf{const} \ \texttt{AForeground}, \ \textbf{const} \ \texttt{AForeground} ) : \texttt{TPJConsoleColors} ( \ \textbf{const} \ \texttt{AForeground}, \ \textbf{const} \ \texttt{AForeground}, \ \textbf{const} \ \texttt{AForeground} ) : \texttt{TPJConsoleColors} ( \ \textbf{const} \ \texttt{AForeground}, \ \textbf{const} \ \texttt{AForeground}, \ \textbf{const} \ \texttt{AForeground} ) : \texttt{TPJConsoleColors} ( \ \textbf{const} \ \texttt{AForeground}, \ \textbf{const} \ \texttt{AForeground}, \ \textbf{const} \ \texttt{AForeground} ) : \texttt{TPJConsoleColors} ( \ \textbf{const} \ \texttt{AForeground}, \ \textbf{const} \ \texttt{AForeground}, \ \textbf{const} \ \texttt{AForeground} ) : \texttt{TPJConsoleColors} ( \ \textbf{const} \ \texttt{AForeground}, \ \textbf{const} \ \texttt{AForeground}, \ \textbf{const} \ \texttt{AForeground} ) : \texttt{TPJConsoleColors} ( \ \textbf{const} \ \texttt{AForeground}, \ \textbf{const} \ \texttt{AForeground}, \ \textbf{const} \ \texttt{AForeground} ) : \texttt{TPJConsoleColors} ( \ \textbf{const} \ \texttt{AForeground}, \ \textbf{const} \ \texttt{AForeground}, \ \textbf{const} \ \texttt{AForeground} ) : \texttt{TPJConsoleColors} ( \ \textbf{const} \ \texttt{AForeground}, \ \textbf{const} \ \texttt{AForeground}, \ \textbf{const} \ \texttt{AForeground} ) : \texttt{TPJConsoleColors} ( \ \textbf{const} \ \texttt{AForeground}, \ \textbf{const} \ \texttt{AForeground}, \ \textbf{const} \ \texttt{AForeground} ) : \texttt{TPJConsoleColors} ( \ \textbf{const} \ \texttt{AForeground}, \ \textbf{const} \ \texttt{AForeground}, \ \textbf{const} \ \texttt{AForeground} ) : \texttt{TPJConsoleColors} ( \ \textbf{const} \ \texttt{AForeground}, \ \textbf{const} \ \texttt{AForeground}, \ \textbf{const} \ \texttt{AForeground} ) : \texttt{TPJConsoleColors} ( \ \textbf{const} \ \texttt{AForeground}, \ \textbf{const} \ \texttt{AForeground}, \ \textbf{const} \ \texttt{AForeground} ) : \texttt{TPJConsoleColors} ( \ \textbf{const} \ \texttt{AForeground}, \ \textbf{const} \ \texttt{AForeground}, \ \textbf{const} \ \texttt{AForeground} ) : \texttt{TPJConsoleColors} ( \ \textbf{const} \ \texttt{AForeground}, \ \textbf{const} \ \texttt{
              Function MakeConsoleColors1( const AForeground, ABackground : TColor) : TPJConsoleColors;
Function MakeConsoleColors2( const AForeground, ABackground : TAlphaColor) : TPJConsoleColors;
Function MakeSize( const ACX, ACY : LongInt) : TSize
10647:
10648:
10649:
10650:
                SIRegister_TPJCustomConsoleApp(CL);
10651:
               SIRegister_TPJConsoleApp(CL);
10652: end;
10653:
10654: procedure SIRegister_ip_misc(CL: TPSPascalCompiler);
10655: begin
10656:
             INVALID IP ADDRESS', 'LongWord'), SetUInt( $ffffffff);
10657:
                t encoding', '( uuencode, base64, mime )
10658:
              Function internet_date( date : TDateTime) : string
10659:
              Function lookup_hostname( const hostname : string) : longint
10660:
              Function my_hostname : string
              Function my_ip_address : longint
10661:
              Function ip2string( ip_address : longint) : string
10662:
              Function resolve_hostname( ip : longint) : string
10663:
              Function address_from( const s : string; count : integ
Function encode_base64( data : TStream) : TStringList
10664:
                                                                                                        integer) : string
10665:
10666:
              Function decode base64( source : TStringList) : TMemoryStream
10667:
              Function posn( const s, t : string; count : integer) : integer
              Function poscn( c : char; const s : string; n : integer) : integer
10668:
10669:
              Function filename_of( const s : string) : string
10670: //Function trim( const s : string) : string
10671: //Procedure setlength( var s : string; 1 : byte)
10672: Function TimeZoneBias : longint
```

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10673:
          Function eight2seven_quoteprint( const s : string) : string
10674:
          Function eight2seven_german( const s : string) : string
          Function seven2eight_quoteprint( const s : string) : string end;
10676:
            type in_addr', 'record s_bytes : array[1..4] of byte; end;
10677:
          Function socketerror : cint
10678:
          Function fpsocket( domain : cint; xtype : cint; protocol : cint) : cint
          Function fprecv( s : cint; buf : __pointer; len : size_t; flags : cint) : ssize_t
Function fpsend( s : cint; msg : __pointer; len : size_t; flags : cint) : ssize_t
10679:
10680:
          //Function fpbind( s : cint; addrx : psockaddr; addrlen : tsocklen) : cint Function fplisten( s : cint; backlog : cint) : cint
10681:
10682:
          //Function fpaccept( s : cint; addrx : psockaddr; addrlen : plongint) : cint
//Function fpconnect( s : cint; name : psockaddr; namelen : tsocklen) : cint
10683:
10685:
           //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
10686:
10687:
10688:
          Function StrToNetAddr( IP : String)
                                                            : in_addr
10689:
10690:
          SOL_SOCKET','LongWord').SetUInt( $ffff);
           cint8', 'shortint
10691:
            cuint8', 'byte cchar', 'cint8
10692:
10693:
10694:
            cschar', 'cint8
10695:
            cuchar!
                        'cuint8
            cint16'
10696:
                        'smallint
10697:
            cuint16', 'word
10698:
            cshort',
                         'cint16
10699:
            csshort', 'cint16
           cushort', 'cuint1
cint32', 'longint
10700:
                          'cuint16
10701:
            cuint32', 'longword
10702:
           cint', 'cint32
csint', 'cint32
cuint', 'cuint32
10703:
10704:
10705:
            csigned', 'cint
cunsigned', 'cuint
10706:
10707:
            cint64', 'int64
10708:
           clonglong', 'cint64 cslonglong', 'cint64
10709:
10710:
            cbool', 'longbool
cfloat', 'single
10711:
10712:
10713:
            cdouble' 'double
            clongdouble', 'extended
10714:
10715:
10716: procedure SIRegister uLkJSON(CL: TPSPascalCompiler);
10717: begin
            TlkJSONtypes','(jsBase,jsNumber,jsString,jsBoolean,jsNull,jsList,jsObject)
10718:
            SIRegister_TlkJSONdotnetclass(CL);
10719:
            SIRegister_TlkJSONbase(CL);
            SIRegister_TlkJSONnumber(CL);
10721:
10722:
            SIRegister TlkJSONstring(CL);
10723:
            SIRegister TlkJSONboolean(CL);
10724:
            SIRegister_TlkJSONnull(CL);
10725:
            TlkJSONFuncEnum', 'Procedure ( ElName : string; Elem : TlkJSONba'
10726:
            +'se; data : TObject; var Continue : Boolean)
SIRegister_TlkJSONcustomlist(CL);
SIRegister_TlkJSONlist(CL);
10727:
10728:
10729:
            SIRegister_TlkJSONobjectmethod(CL);
10730:
            TlkHashItem', 'record hash : cardinal; index : Integer; end
10731:
            TlkHashFunction', 'Function ( const ws : WideString) : cardinal
            SIRegister_TlkHashTable(CL);
SIRegister_TlkBalTree(CL);
10732:
10733:
10734:
            SIRegister_TlkJSONobject(CL);
10735:
            SIRegister_TlkJSON(CL);
10736:
            SIRegister TlkJSONstreamed(CL);
10737:
          Function GenerateReadableText( vObj : TlkJSONbase; var vLevel : Integer): string
10738:
10739:
10740: procedure SIRegister_ZSysUtils(CL: TPSPascalCompiler);
10741: begin
10742:
                                       'Function (Item1, Item2 : TObject): Integer
            TZListSortCompare',
10743:
            SIRegister_TZSortedList(CL);
10744:
          Function zFirstDelimiter( const Delimiters, Str : string) : Integer
          Function zLastDelimiter( const Delimiters, Str : string) : Integer //Function MemLCompUnicode( P1, P2 : PWideChar; Len : Integer) : Boolean //Function MemLCompAnsi( P1, P2 : PAnsiChar; Len : Integer) : Boolean
10745:
10746:
10747:
10748:
          Function zStartsWith( const Str, SubStr : WideString) : Boolean;
10749:
          Function StartsWith1( const Str, SubStr : RawByteString) : Boolean;
          Function EndsWith( const Str, SubStr : WideString) : Boolean;
Function EndsWith( const Str, SubStr : RawByteString) : Boolean;
Function EndsWith1( const Str, SubStr : RawByteString) : Boolean;
Function SQLStrToFloatDef( Str : RawByteString; Def : Extended) : Extended;
Function SQLStrToFloatDef1( Str : String; Def : Extended) : Extended;
Function SQLStrToFloat( const Str : AnsiString) : Extended

((Extended) : Extended)
10750:
10751:
10753:
10754:
          //Function BufferToStr( Buffer : PWideChar; Length : LongInt) : string;
//Function BufferToStr1( Buffer : PAnsiChar; Length : LongInt) : string;
10755:
10756:
          Function BufferToBytes( Buffer : TObject; Length : LongInt) : TByteDynArray
10757:
10758: Function StrToBoolEx(Str:string): Boolean
10759: Function BoolToStrEx(Bool:Boolean): String
10760: Function IsIpAddr(const Str:string): Boolean
10761: Function zSplitString( const Str, Delimiters : string) : TStrings
```

```
10762:
                 Procedure PutSplitString( List : TStrings; const Str, Delimiters : string)
                 Procedure AppendSplitString( List : TStrings; const Str, Delimiters : string)
10763:
                  Function ComposeString( List : TStrings; const Delimiter : string) : string
                 Function FloatToSQLStr( Value : Extended) : string
10765:
10766:
                 Procedure PutSplitStringEx( List : TStrings; const Str, Delimiter : string)
                 Function SplitStringEx( const Str, Delimiter : string) : TStrings
Procedure AppendSplitStringEx( List : TStrings; const Str, Delimiter : string)
10767:
10768:
                 Function zBytesToStr( const Value : TByteDynArray) : AnsiString
10769:
                 Function zStrToBytes( const Value : AnsiString) : TByteDynArray;
Function StrToBytes1( const Value : UTF8String) : TByteDynArray;
10770:
10771:
10772:
                 Function StrToBytes2( const Value : RawByteString) : TByteDynArray;
                 Function StrToBytes3( const Value : WideString) : TByteDynArray;
10773:
10774:
                 Function StrToBytes4( const Value : UnicodeString) : TByteDynArray;
                 Function BytesToVar( const Value : TByteDynArray) : Variant
Function VarToBytes( const Value : Variant) : TByteDynArray
10775:
10776:
                 Function AnsiSQLDateToDateTime( const Value : string) : TDateTime
10778:
                 Function TimestampStrToDateTime( const Value : string) : TDateTime
10779 .
                 \textbf{Function} \ \ \texttt{DateTimeToAnsiSQLDate(} \ \ \texttt{Value} \ : \ \ \texttt{TDateTime;} \ \ \texttt{WithMMSec} \ : \ \ \texttt{Boolean)} \ : \ \ \textbf{string}
                 Function EncodeCString( const Value : string) : string
Function DecodeCString( const Value : string) : string
Function DecodeCString( const Value : string) : string
Function zReplaceChar( const Source, Target : Char; const Str : string) : string
10780:
10781:
10782:
                 Function MemPas( Buffer : PChar; Length : LongInt) : string
10783:
10784:
                 Procedure DecodeSQLVersioning(const FullVersion:Int;out MajorVersion:Int;out MinorVersion:Int;out
               SubVersion:Int);
               Function EncodeSQLVersioning(const MajorVersion:Integer;const MinorVersion:Integer;const
               SubVersion:Integer):Int;
10786:
                 Function FormatSQLVersion( const SQLVersion : Integer) : String
                 Function ZStrToFloat( Value : AnsiChar) : Extended;
Function ZStrToFloat1( Value : AnsiString) : Extended;
10787:
10788:
                 Procedure ZSetString( const Src : AnsiChar; var Dest : AnsiString);
10790:
                 Procedure ZSetString1( const Src : AnsiChar; const Len : Cardinal; var Dest : AnsiString);
10791:
                 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);
10792:
10793:
                 Procedure ZSetString5( const Src :
                                                                                                AnsiChar; var Dest : RawByteString);
10794:
10795:
                 Procedure ZSetString6( const Src : AnsiChar; const Len : Cardinal; var Dest : RawByteString);
10796: end;
10797:
10798:
               unit uPST ZEncoding;
10799:
               Function StringToAnsiEx( const s : String; const FromCP, ToCP : Word) : RawByteString
10800:
                 \textbf{Function} \  \, \texttt{AnsiToStringEx}( \  \, \textbf{const} \  \, s \  \, : \  \, \texttt{RawByteString}; \  \, \textbf{const} \  \, \texttt{FromCP}, \  \, \texttt{ToCP} \, : \, \texttt{Word}) \, : \, \textbf{String}
                 Function ZRawToUnicode( const S : RawByteString; const CP : Word) : WideString
10801:
                 Function ZUnicodeToRaw( const US: WideString; CP: Word): RawByteString
Function ZConvertAnsiToRaw( const US: AnsiString; const RawCP: Word): RawByteString
10802:
10803:
                 Function ZConvertRawToAnsi( const Src : RawByteString; const RawCP : Word) : AnsiString Function ZConvertAnsiToUTF8( const Src : AnsiString) : UTF8String Function ZConvertUTF8ToAnsi( const Src : UTF8String) : AnsiString
10804:
10805:
10806:
                 Function ZConvertRawToUTF8( const Src : RawByteString; const CP : Word) : UTF8String
10808:
                 Function ZConvertUTF8ToRaw( const Src : UTF8String; const CP : Word) : RawByteString
                 Function ZConvertRawToString( const Src : RawByteString; const RawCP, StringCP : Word) : String
Function ZConvertStringToRaw( const Src : String; const StringCP, RawCP : Word) : RawByteString
Function ZConvertStringToRawWithAutoEncode(const Src:String; const StringCP, RawCP:Word):RawByteString;
10809:
10810:
10811:
                 Function ZConvertUTF8ToString( const Src : UTF8String; const StringCP : Word) : String
10812:
10813:
                 Function ZConvertStringToUTF8( const Src : String; const StringCP : Word) : UTF8String
                 \textbf{Function} \ \ \textbf{ZConvertStringToUTF8WithAutoEncode} ( \ \ \textbf{const} \ \ \textbf{Str} : \ \ \textbf{String}; \ \ \textbf{const} \ \ \textbf{StringCP: Word}) : \ \ \textbf{UTF8StringToUTF8StringToUTF8StringToUTF8StringToUTF8StringToUTF8StringToUTF8StringToUTF8StringToUTF8StringToUTF8StringToUTF8StringToUTF8StringToUTF8StringToUTF8StringToUTF8StringToUTF8StringToUTF8StringToUTF8StringToUTF8StringToUTF8StringToUTF8StringToUTF8StringToUTF8StringToUTF8StringToUTF8StringToUTF8StringToUTF8StringToUTF8StringToUTF8StringToUTF8StringToUTF8StringToUTF8StringToUTF8StringToUTF8StringToUTF8StringToUTF8StringToUTF8StringToUTF8StringToUTF8StringToUTF8StringToUTF8StringToUTF8StringToUTF8StringToUTF8StringToUTF8StringToUTF8StringToUTF8StringToUTF8StringToUTF8StringToUTF8StringToUTF8StringToUTF8StringToUTF8StringToUTF8StringToUTF8StringToUTF8StringToUTF8StringToUTF8StringToUTF8StringToUTF8StringToUTF8StringToUTF8StringToUTF8StringToUTF8StringToUTF8StringToUTF8StringToUTF8StringToUTF8StringToUTF8StringToUTF8StringToUTF8StringToUTF8StringToUTF8StringToUTF8StringToUTF8StringToUTF8StringToUTF8StringToUTF8StringToUTF8StringToUTF8StringToUTF8StringToUTF8StringToUTF8StringToUTF8StringToUTF8StringToUTF8StringToUTF8StringToUTF8StringToUTF8StringToUTF8StringToUTF8StringToUTF8StringToUTF8StringToUTF8StringToUTF8StringToUTF8StringToUTF8StringToUTF8StringToUTF8StringToUTF8StringToUTF8StringToUTF8StringToUTF8StringToUTF8StringToUTF8StringToUTF8StringToUTF8StringToUTF8StringToUTF8StringToUTF8StringToUTF8StringToUTF8StringToUTF8StringToUTF8StringToUTF8StringToUTF8StringToUTF8StringToUTF8StringToUTF8StringToUTF8StringToUTF8StringToUTF8StringToUTF8StringToUTF8StringToUTF8StringToUTF8StringToUTF8StringToUTF8StringToUTF8StringToUTF8StringToUTF8StringToUTF8StringToUTF8StringToUTF8StringToUTF8StringToUTF8StringToUTF8StringToUTF8StringToUTF8StringToUTF8StringToUTF8StringToUTF8StringToUTF8StringToUTF8StringToUTF8StringToUTF8StringToUTF8StringToUTF8StringToUTF8StringToUTF8StringToUTF8StringToUTF8StringToUTF8StringToUTF8StringToUTF8StringToUTF8StringToUTF8StringToUTF8StringToUTF8Str
10814:
                 Function ZConvertStringToAnsi( const Src : String; const StringCP : Word) : AnsiString
10815:
                  Function ZConvertStringToAnsiWithAutoEncode( const Src : String; const StringCP: Word): AnsiString
                 Function ZConvertAnsiToString( const Src : AnsiString; const StringCP : Word) : String
10817:
                Function ZConvertUnicodeToString( const Src : WideString; const StringCP : Word) : String
Function ZConvertUnicodeToString( const Src : WideString; const StringCP : Word) : String
Function ZConvertUnicodeToString_CPUTF8( const Src : WideString; const StringCP : Word) : String
Function ZConvertStringToUnicode( const Src : String; const StringCP : Word) : WideString
Function ZConvertString_CPUTF8ToUnicode( const Src : String; const StringCP : Word) : WideString
10818:
10819:
10820:
10821:
10822:
                 \textbf{Function} \ \ \texttt{ZConvertStringToUnicodeWithAutoEncode} ( \ \textbf{const} \ \ \texttt{String}; \ \textbf{const} \ \ \texttt{StringCP:Word}) : \texttt{WideStringToUnicodeWithAutoEncode} ( \ \textbf{const} \ \ \texttt{String}; \ \ \textbf{const} \ \ \texttt{StringCP:Word}) : \texttt{WideStringToUnicodeWithAutoEncode} ( \ \textbf{const} \ \ \texttt{String}; \ \textbf{const} \ \ \texttt{StringCP:Word}) : \texttt{WideStringToUnicodeWithAutoEncode} ( \ \textbf{const} \ \ \texttt{StringCP:Word}) : \texttt{WideStringToUnicodeWithAutoEncodeWithAutoEncodeWithAutoEncodeWithAutoEncodeWithAutoEncodeWithAutoEncodeWithAutoEncodeWithAutoEncodeWithAutoEncodeWithAutoEncodeWithAutoEncodeWithAutoEncodeWithAutoEncodeWithAutoEncodeWithAutoEncodeWithAutoEnc
                 Function ZMoveAnsiToRaw( const Src : AnsiString; const RawCP : Word) : RawByteString Function ZMoveRawToAnsi( const Src : RawByteString; const RawCP : Word) : AnsiString Function ZMoveAnsiToUTF8( const Src : AnsiString) : UTF8String
10823:
10824:
10826:
                 Function ZMoveUTF8ToAnsi( const Src : UTF8String) : AnsiString
10827:
                 Function ZMoveRawToUTF8( const Src : RawByteString; const CP : Word) : UTF8String
                 Function ZMoveUTF8ToRaw( const Src : UTF8String; const CP : Word) : RawByteString Function ZMoveStringToAnsi( const Src : String; const StringCP : Word) : AnsiString Function ZMoveAnsiToString( const Src : AnsiString; const StringCP : Word) : String
10828:
10829:
10830:
10831:
                 Function ZMoveRawToString( const Src : RawByteString; const RawCP, StringCP : Word)
                 Function ZMoveStringToRaw( const Src : String; const StringCP, RawCP : Word) : RawByteString
Function ZMoveUTF8ToString( const Src : UTF8String; StringCP : Word) : String
10832:
10833:
                 Function ZMoveStringToUTF8( const Src : String; const StringCP : Word) : UTF8String
10834:
                 Function ZUnknownRawToUnicode( const S : RawByteString; const CP : Word) : WideString
10835:
                 10836:
                 Function ZUnicodeToUnknownRaw( const US : WideString; CP : Word) : RawByteString
10837:
                 Function ZDefaultSystemCodePage : Word
10838:
                 Function ZCompatibleCodePages( const CP1, CP2 : Word) : Boolean
10840:
10841:
10842: procedure SIRegister BoldComUtils(CL: TPSPascalCompiler);
10843:
               begin
                  'RPC_C_AUTHN_LEVEL_DEFAULT', 'LongInt').SetInt( 0);
10844:
                 ('RPC_C_AUTHN_LEVEL_NONE', 'LongInt').SetInt( 1);
('RPC_C_AUTHN_LEVEL_CONNECT', 'LongInt').SetInt( 2);
('RPC_C_AUTHN_LEVEL_CALL', 'LongInt').SetInt( 3);
('RPC_C_AUTHN_LEVEL_PKT', 'LongInt').SetInt( 4);
10845:
10846:
10847:
```

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('RPC_C_AUTHN_LEVEL_PKT_INTEGRITY','LongInt').SetInt( 5);
('RPC_C_AUTHN_LEVEL_PKT_PRIVACY','LongInt').SetInt( 6);
10849:
10850:
                {('alDefault','1').SetString( RPC_C_AUTHN_LEVEL_DEFAULT);
10852:
                  'alNone','2').SetString( RPC_C_AUTHN_LEVEL_NONE);
10853:
                  'alConnect','3').SetString( RPC_C_AUTHN_LEVEL_CONNECT);
                  alconnect, 3).setString(RPC_C_AUTHN_LEVEL_COMN
'alCall','4').SetString(RPC_C_AUTHN_LEVEL_PKI);
'alPacket','5').SetString(RPC_C_AUTHN_LEVEL_PKI);
10854:
10855:
                  'alPacketIntegrity','6').SetString( RPC_C_AUTHN_LEVEL_PKT_INTEGRITY);
'alPacketIntegrity','6').SetString( RPC_C_AUTHN_LEVEL_PKT_INTEGRITY);
'alPacketPrivacy','7').SetString( RPC_C_AUTHN_LEVEL_PKT_PRIVACY);}
'RPC_C_IMP_LEVEL_DEFAULT','LongInt').SetInt( 0);
'RPC_C_IMP_LEVEL_ANONYMOUS','LongInt').SetInt( 1);
'RPC_C_IMP_LEVEL_IDENTIFY','LongInt').SetInt( 2);
 10856:
10857:
10858:
 10859:
 10860:
                 'RPC_C_IMP_LEVEL_IMPERSONATE','LongInt').SetInt( 3);
'RPC_C_IMP_LEVEL_DELEGATE','LongInt').SetInt( 4);
'('ilDefault','0').SetString( RPC_C_IMP_LEVEL_DEFAULT);
10861:
10862:
10863:
                  'ilAnonymous','1').SetString( RPC_C_IMP_LEVEL_ANONYMOUS);
'ilIdentiry','2').SetString( RPC_C_IMP_LEVEL_IDENTIFY);
 10864:
 10865:
10866
                  'ilImpersonate','3').SetString( RPC_C_IMP_LEVEL_IMPERSONATE);
                  'ilDelegate','4').SetString( RPC_C_IMP_LEVEL_DELEGATE);}
'EOAC_NONE','LongWord').SetUInt( $0);
10867:
10868:
                   'EOAC_DEFAULT','LongWord').SetUInt( $800);
 10869:
10870:
                  'EOAC_MUTUAL_AUTH', 'LongWord').SetUInt( $1);
                  'EOAC_STATIC_CLOACKING','LongWord').SetUInt( $20);
'EOAC_DYNAMIC_CLOAKING','LongWord').SetUInt( $40);
10871:
10872:
                   'EOAC_ANY_AUTHORITY','LongWord').SetUInt( $80);
10873:
10874:
                  'RPC_C_AUTHN_WINNT', 'LongInt').SetInt( 10);
10875:
                  'RPC_C_AUTHNZ_NONE','LongInt').SetInt( 0);
               ('RPC_C_AUTHNZ_NAME','LongInt').SetInt( 1);
('RPC_C_AUTHNZ_DCE','LongInt').SetInt( 2);
FindClass('TOBJECT'),'EBoldCom
10876:
 10877:
10878:
10879:
               \textbf{Function} \  \, \texttt{BoldVariantIsType} ( \  \, \texttt{V} \  \, \texttt{:} \  \, \texttt{OleVariant}; \  \, \texttt{TypeCode} \, : \, \texttt{Integer}) \, \, : \, \, \texttt{Boolean}
10880:
               \textbf{Function} \ \ \texttt{BoldMemoryToVariant} ( \ \ \textbf{const} \ \ \texttt{Buffer}, \ \ \texttt{BufSize} \ : \ \ \texttt{Integer}) \ : \ \ \texttt{OleVariant}
               Function BoldStreamToVariant(Stream: TStream): OleVariant
Function BoldStringsToVariant(Strings: TStrings): OleVariant
10881:
10882:
              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
 10883:
10884:
10885:
10886:
 10887:
               Function BoldCreateNamedValues(const Names:array of string;const Values:array of OleVariant):OleVariant;
               Function BoldGetNamedValue( Data : OleVariant; const Name : string; Value : OleVariant)

Procedure BoldSetNamedValue( Data : OleVariant; const Name : string; Value : OleVariant)
 10888:
10889:
10890:
               Function BoldCreateGUID : TGUID
               Function BoldCreateComObject( const ClsId, IId : TGUID; out Obj : variant; out Res : HResult) : Boolean
10891:
               Function BoldCreateRemoteComObject(const HostName:string;const ClsId,IId:TGUID;out Obj:variant;out
10892:
             Res:HRes):Bool;
10893: Procedure BoldInitializeComSecurity( AuthenticationLevel, ImpersonationLevel : longint)
10894: Procedure BoldSetSecurityForInterface(AuthenticationLevel,ImpersonationLevel:longint;Unk:IUnknown);
 10895: end;
 10896:
10897:
10898: procedure SIRegister_BoldIsoDateTime(CL: TPSPascalCompiler);
10899: begin
 10900:
             Function ParseISODate( s : string) : TDateTime
10901:
               Function ParseISODateTime( s : string) : TDateTime
10902: Function ParseISOTime( str : string) : TDateTime
 10903: end;
10904:
10905: (*-----
10906: procedure SIRegister_BoldGUIDUtils(CL: TPSPascalCompiler);
 10907: begin
 10908:
             Function BoldCreateGUIDAsString( StripBrackets : Boolean) : string
 10909:
               Function BoldCreateGUIDWithBracketsAsString : string
 10910: end;
10911:
             procedure SIRegister_BoldFileHandler(CL: TPSPascalCompiler);
10912:
 10913:
             begin
 10914:
                  FindClass('TOBJECT'),'TBoldFileHandler
                 FindClass('TOBJECT'),'TBoldDiskFileHandler
10915:
                 //TBoldFileHandlerClass', 'class of TBoldFileHandler
TBoldInitializeFileContents', 'Procedure ( StringList : TStringList)
SIRegister_TBoldFileHandler(CL);
10916:
 10917:
10918:
10919:
                 SIRegister_TBoldDiskFileHandler(CL);
10920:
               Procedure BoldCloseAllFilehandlers
10921:
               Procedure BoldRemoveUnchangedFilesFromEditor
10922:
               Function BoldFileHandlerList : TBoldObjectArray
               \textbf{Function} \ \ \texttt{BoldFileHandlerForFile(path,FileName:String:} \ \ \texttt{ModuleType:TBoldModuleType:ShowInEditor:Booling:Booling:TableModuleType:TboldModuleType:ShowInEditor:Booling:TableModuleType:TboldModuleType:TboldModuleType:TboldModuleType:TboldModuleType:TboldModuleType:TboldModuleType:TboldModuleType:TboldModuleType:TboldModuleType:TboldModuleType:TboldModuleType:TboldModuleType:TboldModuleType:TboldModuleType:TboldModuleType:TboldModuleType:TboldModuleType:TboldModuleType:TboldModuleType:TboldModuleType:TboldModuleType:TboldModuleType:TboldModuleType:TboldModuleType:TboldModuleType:TboldModuleType:TboldModuleType:TboldModuleType:TboldModuleType:TboldModuleType:TboldModuleType:TboldModuleType:TboldModuleType:TboldModuleType:TboldModuleType:TboldModuleType:TboldModuleType:TboldModuleType:TboldModuleType:TboldModuleType:TboldModuleType:TboldModuleType:TboldModuleType:TboldModuleType:TboldModuleType:TboldModuleType:TboldModuleType:TboldModuleType:TboldModuleType:TboldModuleType:TboldModuleType:TboldModuleType:TboldModuleType:TboldModuleType:TboldModuleType:TboldModuleType:TboldModuleType:TboldModuleType:TboldModuleType:TboldModuleType:TboldModuleType:TboldModuleType:TboldModuleType:TboldModuleType:TboldModuleType:TboldModuleType:TboldModuleType:TboldModuleType:TboldModuleType:TboldModuleType:TboldModuleType:TboldModuleType:TboldModuleType:TboldModuleType:TboldModuleType:TboldModuleType:TboldModuleType:TboldModuleType:TboldModuleType:TboldModuleType:TboldModuleType:TboldModuleType:TboldModuleType:TboldModuleType:TboldModuleType:TboldModuleType:TboldModuleType:TboldModuleType:TboldModuleType:TboldModuleType:TboldModuleType:TboldModuleType:TboldModuleType:TboldModuleType:TboldModuleType:TboldModuleType:TboldModuleType:TboldModuleType:TboldModuleType:TboldModuleType:TboldModuleType:TboldModuleType:TboldModuleType:TboldModuleType:TboldModuleType:TboldModuleType:TboldModuleType:TboldModuleType:TboldModuleType:TboldModuleType:TboldModuleType:TboldModuleType:TboldModuleType:TboldModuleType:TboldModuleType:TboldModu
10923:
             OnInitializeFileContents : TBoldInitializeFileContents) : TBoldFileHandler
10924: end;
10925:
 10926: procedure SIRegister_BoldWinINet(CL: TPSPascalCompiler);
10927: begin
10928: PCharArr', 'array of PChar
10929: Function BoldInternetOpen(Agent:String;
             AccessType:integer;Proxy:string;ProxyByPass:String;Flags:integer):ptr);
10930: Function BoldInternetOpenUrl(iNet:Pointer;Buff:Ptr;NumberOfBytesToRead:Card;var

10931: Function BoldInternetReadFile(hFile:Pointer;Buff:Ptr;NumberOfBytesToRead:Card;var
             NumberOfBytesRead:Card):LongBool;
10932: Function BoldInternetCloseHandle( HINet : Pointer) : LongBool
10933: Function BoldHttpQueryInfo( hRequest : Pointer; InfoLevel : Cardinal; Buffer : Pointer; BufferLength :
             Cardinal; Reserved : Cardinal) : LongBool
```

```
10934: Function BoldInternetOuervDataAvailable( hFile : Pointer; var NumberOfBvtesAvailable : Cardinal; flags :
        Cardinal; Context : Cardinal) : LongBool
10935: Function BoldHttpOpenRequest(hConnect: Pointer; Verb, ObjectName, Version, Referrer: String; AcceptTypes
          PCharArr; Flags, Context : Cardinal) : Pointer
10936: Function BoldHttpSendRequest(hRequest:Pointer;Headers:string; Optional:Pointer;OptionalLength:Cardinal):
        LongBool
10937: Function BoldInternetErrorDlg(hWnd:HWND;hRequest:HINTERNET;dwError,dwFlags:DWORD; var lppvData:Pointer):
        DWORD
10938: 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
10939:
10940: Function BoldInternetCrackUrl(Url:PChar;UrlLength,dwFlags:DWORD; var lpUrlComponents:TURLComponents):BOOL;
10941: end;
10942:
10943:
        procedure SIRegister BoldOuervUserDlg(CL: TPSPascalCompiler);
10944: begin
           TBoldQueryResult', '( qrYesAll, qrYes, qrNo, qrNoAll )
10945:
10046
           SIRegister_TfrmBoldQueryUser(CL);
        Function QueryUser( const Title, Query : string) : TBoldQueryResult
10947:
10948: end;
10949:
10950: (*---
10951: procedure SIRegister_BoldQueue(CL: TPSPascalCompiler);
10952: begin
         //('befIsInDisplayList','').SetString( BoldElementFlag0);
10953:
10954:
          //('befStronglyDependedOfPrioritized','').SetString( BoldElementFlag1);
10955:
         //('befFollowerSelected','').SetString( BoldElementFlag2);
          FindClass('TOBJECT'),'TBoldQueue
FindClass('TOBJECT'),'TBoldQueueable
10956:
10957:
           TBoldQueueDisplayMode', '( dmDisplayOne, dmDisplayAll )
10958:
10959:
           SIRegister_TBoldQueueable(CL);
10960:
           SIRegister TBoldQueue(CL);
10961:
         Function BoldOueueFinalized : Boolean
10962:
         Function BoldInstalledQueue : TBoldQueue
10963:
10964:
10965: procedure SIRegister Barcode(CL: TPSPascalCompiler);
10966: begin
10967:
         const mmPerInch','Extended').setExtended( 25.4);
10968:
           TBarcodeType',
                              '( bcCode_2_5_interleaved, bcCode_2_5_industrial,'
10969:
            +' bcCode_2_5_matrix, bcCode39, bcCode39Extended, bcCode128A, bcCode128B, bc'
            +'Code128C, bcCode93, bcCode93Extended, bcCodeMSI, bcCodePostNet, bcCodeCoda'
+'bar, bcCodeEAN8, bcCodeEAN13, bcCodeUPC_A, bcCodeUPC_E0, bcCodeUPC_E1, bcC'
10970:
10971:
            +'odeUPC_Supp2, bcCodeUPC_Supp5, bcCodeEAN128A, bcCodeEAN128B, bcCodeEAN128C
10972:
           TBarLineType', '( white, black, black_half )
TBarcodeOption', '( bcoNone, bcoCode, bcoTyp, bcoBoth )
10973:
10974:
           TShowTextPosition', '(stpTopLeft, stpTopRight, stpTopCenter, st'+'pBottomLeft, stpBottomRight, stpBottomCenter)
10975:
                                  '( csmNone, csmModulo10 )
10977:
           TCheckSumMethod',
           SIRegister_TAsBarcode(CL);
10978:
10979:
         Function CheckSumModulo10( const data : string) : string
         Function ConvertMmToPixelsX( const Value : Double) : Integer Function ConvertMmToPixelsY( const Value : Double) : Integer
10980:
10981:
10982:
         Function ConvertInchToPixelsX( const Value : Double) : Integer
         Function ConvertInchToPixelsY( const Value : Double) : Integer
10983:
10984:
        end;
10985:
        procedure SIRegister_Geometry(CL: TPSPascalCompiler); //OpenGL
10986:
10987:
        begin
            THomogeneousByteVector', 'array[0..3] of Byte
10988:
           ThomogeneousWordVector', 'array[0..3] of Word
ThomogeneousIntVector', 'array[0..3] of Integer
10989:
10990:
10991:
           THomogeneousFltVector', 'array[0...
                                                      3] of single
           THomogeneousDblVector', 'array[0..3] of double THomogeneousExtVector', 'array[0..3] of extended
10992:
10993:
           TAffineByteVector', 'array[0..2] of Byte TAffineWordVector', 'array[0..2] of Word TAffineIntVector', 'array[0..2] of Integer
10994:
10995:
10996:
           TAffineFltVector', 'array[0..2] of single TAffineDblVector', 'array[0..2] of double TAffineExtVector', 'array[0..2] of extended
10997:
10998:
10999:
           ThomogeneousByteMatrix', 'array[0..3] of ThomogeneousByteVector ThomogeneousWordMatrix', 'array[0..3] of ThomogeneousWordVector
11000:
11001:
           THomogeneousIntMatrix', 'array[0..3] of THomogeneousIntVector ThomogeneousFltMatrix', 'array[0..3] of ThomogeneousFltVector
11002:
11003:
           THomogeneousDblMatrix', 'array[0..3] of THomogeneousDblVector THomogeneousExtMatrix', 'array[0..3] of THomogeneousExtVector
11004:
11005:
           TAffineByteMatrix', 'array[0..2] of TAffineByteVector TAffineWordMatrix', 'array[0..2] of TAffineWordVector
11006:
11007:
           TAffineIntMatrix', 'array[0..2] of TAffineIntVector
11008:
11009:
           {\tt TAffineFltMatrix', 'array[0..3] \ of \ TAffineFltVector}
11010:
           TAffineDblMatrix',
                                   'array[0..3] of TAffineDblVector
           TAffineExtMatrix', 'array[0..3] of TAffineExtVector
11011:
11012:
           TMatrix4b', 'THomogeneousByteMatrix
                          'THomogeneousWordMatrix
11013:
           TMatrix4w',
                          'THomogeneousIntMatrix
11014:
           TMatrix4i',
           TMatrix4f', 'THomogeneousFltMatrix
TMatrix4d', 'THomogeneousDblMatrix
TMatrix4e', 'THomogeneousExtMatrix
11015:
11016:
```

```
11018:
             TMatrix3b', 'TAffineByteMatrix
             TMatrix3w', 'TAffineWordMatrix
11019:
             TMatrix3i', 'TAffineIntMatrix
11020:
                              'TAffineFltMatrix
11021 •
             TMatrix3f',
             TMatrix3d', 'TAffineDblMatrix
11022:
             TMatrix3e', 'TAffineExtMatrix
//'PMatrix', '^TMatrix // will not work
TMatrixGL', 'THomogeneousFltMatrix
11023:
11024:
11025:
            THOMOGENEOUSFILMATIX
THOMOGENEOUSFILMATIX
TAffineMatrix', 'THOMOGENEOUSFILMATIX
TQuaternion', 'record Vector : TVector4f; end
TRectangle', 'record Left : integer; Top : integer; Width : inte'
11026:
11027:
11028:
11029:
             +'ger; Height: Integer; end
TTransType', '( ttScaleX, ttScaleY, ttScaleZ, ttShearY, ttShear'
11030:
11031:
              +'XZ, ttShearYZ, ttRotateX, ttRotateY, ttRotateZ, ttTranslateX, ttTranslateY
11032:
11033:
                    ttTranslateZ, ttPerspectiveX, ttPerspectiveY, ttPerspectiveZ, ttPerspectiveW )
           'EPSILON', 'Extended').setExtended( 1E-100);

'EPSILON2', 'Extended').setExtended( 1E-50);

Function VectorAddGL( V1, V2 : TVectorGL) : TVectorGL

Function VectorAffineAdd( V1, V2 : TAffineVector) : TAffineVector
11034:
11035
11036:
11037:
           Function VectorAffineCombine(V1,V2:TAffineVector; F1, F2 : Single) : TAffineVector
11038:
11039:
           Function VectorAffineDotProduct( V1, V2 : TAffineVector) : Single
           Function VectorAffineLerp( V1, V2 : TAffineVector; t : Single) : TAffineVector
Function VectorAffineSubtract( V1, V2 : TAffineVector) : TAffineVector
11040:
11041:
           Function VectorAngle( V1, V2 : TAffineVector) : Single
11042:
11043:
           Function VectorCombine( V1, V2 : TVectorGL; F1, F2 : Single) : TVectorGL
           Function VectorConsProduct( V1, V2 : TVectorGL F1, F2 : Single) : TVectorFunction VectorDotProduct( V1, V2 : TAffineVector) : TAffineVector Function VectorDotProduct( V1, V2 : TVectorGL) : Single
Function VectorLength( V : array of Single) : Single
Function VectorLength( V1, V2 : TVectorGL; t : Single) : TVectorGL
11044:
11045:
11046:
11047:
11048:
           Procedure VectorNegate( V : array of Single)
           Function VectorNorm( V : array of Single) : Single
11049:
           Function VectorNormalize( V : array of Single) : Single
Function VectorPerpendicular( V, N : TAffineVector) : TAffineVector
Function VectorReflect( V, N : TAffineVector) : TAffineVector
Procedure VectorRotate( var Vector : TVector4f; Axis : TVector3f; Angle : Single)
11050:
11051:
11052:
11053:
           Procedure VectorScale( V : array of Single; Factor : Single)
Function VectorSubtractGL( V1, V2 : TVectorGL) : TVectorGL
11054:
11055:
11056:
           Function CreateRotationMatrixX( Sine, Cosine : Single) :
11057:
           Function CreateRotationMatrixY( Sine, Cosine : Single) : TMatrixGL
11058:
           Function CreateRotationMatrixZ( Sine, Cosine : Single) : TMatrixGL
            \begin{array}{lll} \textbf{Function} & \texttt{CreateScaleMatrix}( \ V : \texttt{TAffineVector}) : \texttt{TMatrixGL} \\ \textbf{Function} & \texttt{CreateTranslationMatrix}( \ V : \texttt{TVectorGL}) : \texttt{TMatrixGL} \\ \end{array} 
11059:
11060:
           Procedure MatrixAdjoint( var M : TMatrixGL)
11061:
           Function MatrixAffineDeterminant( M : TAffineMatrix) : Single Procedure MatrixAffineTranspose( var M : TAffineMatrix)
11062:
11063:
           Function MatrixDeterminant( M : TMatrixGL) : Single
11064:
           Procedure MatrixInvert( var M : TMatrixGL)
11065:
           Function MatrixMultiply( M1, M2 : TMatrixGL) : TMatrixGL
Procedure MatrixScale( var M : TMatrixGL; Factor : Single)
11066:
11067:
11068:
           Procedure MatrixTranspose( var M : TMatrixGL)
           Function QuaternionConjugate( Q : TQuaternion) : TQuaternion
11069:
           Function QuaternionFromPoints( V1, V2 : TAffineVector) : TQuaternion
11070:
11071:
           Function QuaternionMultiply( qL, qR : TQuaternion) : TQuaternion
           Function QuaternionSlerp( QStart,QEnd:TQuaternion; Figure Fin:Integer; t:Single):TQuaternion Function QuaternionToMatrix( Q : TQuaternion) : TMatrixGL
11072:
11073:
           Procedure QuaternionToPoints( Q : TQuaternion; var ArcFrom, ArcTo : TAffineVector)
11074:
11075:
           Function ConvertRotation( Angles : TAffineVector) : TVectorGL
11076:
           \textbf{Function} \ \ \texttt{CreateRotationMatrix}( \ \texttt{Axis} \ : \ \texttt{TVector3f}; \ \texttt{Angle} \ : \ \texttt{Single}) \ : \ \texttt{TMatrixGL}
           //Function MatrixDecompose( M : TMatrixGL; var Tran : TTransformations) : Boolean
Function VectorAffineTransform( V : TAffineVector; M : TAffineMatrix) : TAffineVector
11077:
11078:
11079:
           \textbf{Function} \ \ \texttt{VectorTransform}(\ \ \texttt{V} \ : \ \ \texttt{TVector4f}; \ \texttt{M} \ : \ \ \texttt{TMatrixGL}) \ : \ \ \texttt{TVector4f};
           Function VectorTransform1( V : TVector3f; M : TMatrixGL) : TVector3f; Function MakeAffineDblVector( V : array of Double) : TAffineDblVector
11080:
11081:
           Function MakeDblVector( V : array of Double) : THomogeneousDblVector
Function MakeAffineVector( V : array of Single) : TAffineVector
Function MakeQuaternion( Imag : array of Single; Real : Single) : TQuaternion
11082:
11084:
11085:
           \textbf{Function} \ \ \texttt{MakeVector}(\ \ \texttt{V} \ : \ \textbf{array of} \ \ \texttt{Single}) \ : \ \ \texttt{TVectorGL}
           Function PointInPolygonGL( xp, yp : array of Single; x, y : Single) : Boolean
Function VectorAffineDblToFlt( V : TAffineDblVector) : TAffineVector
11086:
11087:
           Function VectorDblToFlt( V : THomogeneousDblVector) : THomogeneousVector
11088:
11089:
           Function VectorAffineFltToDbl( V : TAffineVector) : TAffineDblVector
           Function VectorFltToDbl( V : TVectorGL) : THomogeneousDblVector
11090:
           Function ArcCosGL( X : Extended) : Extended
11091:
           Function ArcSinGL( X : Extended) : Extended
11092:
11093:
           Function ArcTan2GL( Y, X : Extended) : Extended
11094:
           Function CoTanGL( X : Extended) : Extended
           Function DegToRadGL( Degrees : Extended) : Extended Function RadToDegGL( Radians : Extended) : Extended
11095:
11096:
           Procedure SinCosGL( Theta : Extended; var Sin, Cos : Extended)
11098:
           Function TanGL( X : Extended) : Extended
           Function Turn( Matrix : TMatrixGL; Angle : Single) : TMatrixGL;
11099:
           Function Turn1( Matrix : TMatrixGL; MasterUp : TAffineVector; Angle: Single): TMatrixGL;
Function Pitch( Matrix : TMatrixGL; Angle : Single) : TMatrixGL;
11100:
11101:
           Function Pitch1( Matrix : TMatrixGL; MasterRight:TAffineVector;Angle:Single):TMatrixGL;
11102:
11103:
           Function Roll( Matrix : TMatrixGL; Angle : Single) : TMatrixGL;
11104: Function Roll1( Matrix:TMatrixGL; MasterDirection:TAffineVector;Angle:Single):TMatrixGL;
11105: end;
11106:
```

```
11107:
11108: procedure SIRegister JclRegistry(CL: TPSPascalCompiler);
         begin
          Function RegCreateKey( const RootKey: HKEY; const Key, Value: string): Longint Function RegDeleteEntry( const RootKey: HKEY; const Key, Name: string): Boolean
11110:
11111:
           Function RegDeleteKeyTree( const RootKey : HKEY; const Key : string) : Boolean
11112:
           Function RegReadBool( const RootKey : HKEY; const Key, Name : string) : Boolean
11113:
          Function RegReadBoolDef( const RootKey: HKEY; const Key, Name: string; Def: Boolean): Boolean Function RegReadInteger( const RootKey: HKEY; const Key, Name: string): Integer
11114:
11115:
11116:
          Function RegReadIntegerDef ( const RootKey : HKEY; const Key, Name : string; Def : Integer) : Integer
           Function RegReadString( const RootKey: HKEY; const Key, Name: string): string
11117:
           Function RegReadStringDef( const RootKey : HKEY; const Key, Name, Def : string) : string
11118:
          Function RegReadDWORD( const RootKey: HKEY; const Key, Name: string): Int64
Function RegReadDWORDDef( const RootKey: HKEY; const Key, Name: string; Def: Int64): Int64
Procedure RegWriteBool( const RootKey: HKEY; const Key, Name: string; Value: Boolean)
11119:
11120:
11121:
          Procedure RegWriteBool( const RootKey: HKEY; const Key, Name: string; Value: Boolean)

Procedure RegWriteInteger( const RootKey: HKEY; const Key, Name: string; Value: Integer)

Procedure RegWriteBool( const RootKey: HKEY; const Key, Name, Value: string)

Procedure RegWriteDWORD( const RootKey: HKEY; const Key, Name: string; Value: Int64)

Function RegGetValueNames( const RootKey: HKEY; const Key: string; const List: TStrings): Boolean

Function RegGetKeyNames( const RootKey: HKEY; const Key: string; const List: TStrings): Boolean

Function RegKeyExists( const RootKey: HKEY; const Key: string): Boolean

Function RegKeyExists( const RootKey: HKEY; const Key: string): Boolean

Function RegKeyExists( const RootKey: HKEY; const Key: string): Boolean
11123:
11124 .
11125:
11126:
11127:
11128:
11129:
           AddTypeS('TExecKind',
                                          '( ekMachineRun, ekMachineRunOnce, ekUserRun, ekUser'
              +'RunOnce, ekServiceRun, ekServiceRunOnce)
11130:
            AddClassN(FindClass('TOBJECT'),'EJclRegistryError
11131:
11132:
          Function UnregisterAutoExec( ExecKind: TExecKind; const Name: string): Boolean
          Function RegisterAutoExec( ExecKind: TExecKind: const Name, Cmdline: string): Boolean
11133:
11134:
          Function RegSaveList(const RootKey: HKEY; const Key: string; const ListName: string; const
         Items:TStrings):Bool;
11135: Function RegLoadList(const RootKey:HKEY; const Key:string; const ListName:string;const
         SaveTo:TStrings):Bool;
11136: Function ReqDelList( const RootKey: HKEY; const Key: string; const ListName: string): Boolean
11137: end;
11138:
         procedure SIRegister JclCOM(CL: TPSPascalCompiler);
11140: begin
          CLSID_StdComponentCategoriesMgr','TGUID').SetString( '{0002E005-0000-0000-0000-00000000046}
11141:
          CATID_SafeForInitializing', 'TGUID').SetString( '{TDD95802-9882-11CF-9FA9-00AA006C42C4})
CATID_SafeForScripting', 'TGUID').SetString( '{TDD95801-9882-11CF-9FA9-00AA006C42C4})
icMAX_CATEGORY_DESC_LEN', 'LongInt').SetInt( 128);
11142:
11143:
11144:
11145:
           FindClass('TOBJECT'),'EInvalidParam
          Function IsDCOMInstalled : Boolean
11146:
11147:
          Function IsDCOMEnabled : Boolean
           Function GetDCOMVersion : string
11149:
          Function GetMDACVersion : string
11150:
          Function MarshalInterThreadInterfaceInVarArray(const iid:TIID:unk:TUnknown; var
         VarArray:OleVariant):HResult;
11151: Function MarshalInterProcessInterfaceInStream(const iid:TIID;unk:IUnknown;var stm:IStream):HResult;
11152:
          Function MarshalInterProcessInterfaceInVarArray(const iid:TIID;unk:IUnknown;var
         VarArray:OleVariant):HResult;
11153: Function MarshalInterMachineInterfaceInStream( const iid:TIID;unk:IUnknown;var stm:IStream):HResult;
          Function MarshalInterMachineInterfaceInVarArray(const iid:TIID;unk:IUnknown;var
11154:
         VarArray:OleVariant):HResult;
          Function CreateComponentCategory( const CatID : TGUID; const sDescription : string) : HResult
11155:
          Function RegisterCLSIDInCategory( const ClassID : TGUID; const CatID : TGUID) : HResult Function UnRegisterCLSIDInCategory( const ClassID : TGUID; const CatID : TGUID) : HResult
11156:
11157:
           Function ResetIStreamToStart( Stream : IStream) : Boolean
          Function SizeOfIStreamContents( Stream : IStream) : Largeint
11159:
          Function StreamToVariantArray( Stream : TStream) : OleVariant;
Function StreamToVariantArray1( Stream : IStream) : OleVariant;
Procedure VariantArrayToStream( VarArray : OleVariant; var Stream : TStream);
11160:
11161:
11162:
          Procedure VariantArrayToStream1( VarArray : OleVariant; var Stream : IStream);
11163:
11164: end;
11165:
11166:
         procedure SIRegister_JclUnitConv_mX2(CL: TPSPascalCompiler);
11167:
11168:
11169:
          Const('CelsiusFreezingPoint','Extended').setExtended( 0.0);
11170:
          FahrenheitFreezingPoint','Extended').setExtended( 32.0);
          KelvinFreezingPoint', 'Extended').setExtended( 273.15);
CelsiusAbsoluteZero', 'Extended').setExtended( - 273.15);
11171:
11172:
11173:
          FahrenheitAbsoluteZero','Extended').setExtended( - 459.67);
          DegPerCycle', 'Extended').setExtended( 0.0);
DegPerGrad', 'Extended').setExtended( 360.0);
DegPerGrad', 'Extended').setExtended( 0.9);
DegPerRad', 'Extended').setExtended( 57.295779513082320876798154814105);
11174:
11175:
11176:
11177:
11178:
          GradPerCycle','Extended').setExtended( 400.0);
          GradPerDeg', Extended').setExtended( 1.1111111111111111111111111111111);
GradPerRad','Extended').setExtended( 63.661977236758134307553505349006);
11179:
11180:
           RadPerCycle', 'Extended').setExtended( 6.283185307179586476925286766559)
11181:
          11182:
11183:
11184:
11185:
           CyclePerRad', 'Extended').setExtended( 0.15915494309189533576888376337251);
11186:
11187:
          ArcMinutesPerDeg','Extended').setExtended( 60.0);
          ArcSecondsPerArcMinute','Extended').setExtended( 60.0);
11188:
          Function HowAOneLinerCanBiteYou( const Step, Max : Longint) : Longint Function MakePercentage( const Step, Max : Longint) : Longint
11189:
```

```
11191:
        Function CelsiusToKelvin( const T : double) : double
        Function CelsiusToFahrenheit( const T : double) : double
11192:
         Function KelvinToCelsius( const T : double) : double
        Function KelvinToFahrenheit( const T : double) : double
Function FahrenheitToCelsius( const T : double) : double
11104 .
11195:
        Function FahrenheitToKelvin( const T : double) : double
11196:
11197:
        Function CycleToDeg( const Cycles : double) : double
         Function CycleToGrad( const Cycles : double) : double
11198:
11199:
        Function CycleToRad( const Cycles : double) : double
        Function DegToCycle( const Degrees : double) : double
11200:
        Function DegToGrad( const Degrees : double) : double
11201:
         Function DegToRad( const Degrees : double) : double
11202:
11203:
        Function GradToCycle( const Grads : double) : double
        Function GradToDeg( const Grads : double) : double
Function GradToRad( const Grads : double) : double
11204:
11205:
11206:
        Function RadToCycle( const Radians : double) : double
        Function RadToDeg( const Radians : double) : double
11207:
11208:
        Function RadToGrad( const Radians : double) : double
        Function DmsToDeg( const D, M : Integer; const S : double) : double
Function DmsToRad( const D, M : Integer; const S : double) : double
11209:
11210:
11211:
         Procedure DegToDms( const Degrees : double; out D, M : Integer; out S : double)
11212:
        Function DegToDmsStr( const Degrees : double; const SecondPrecision : Cardinal) : string
        Procedure CartesianToPolar( const X, Y : double; out R, Phi : double)
Procedure PolarToCartesian( const R, Phi : double; out X, Y : double)
11213:
11214:
        Procedure CartesianToCylinder( const X, Y, Z : double; out R, Phi, Zeta : double)
11215:
11216:
         Procedure CartesianToSpheric( const X, Y, Z : double; out Rho, Phi, Theta : double)
11217:
        Procedure CylinderToCartesian( const R, Phi, Zeta : double; out X, Y, Z : double)
        Procedure SphericToCartesian( const Rho, Theta, Phi : double; out X, Y, Z : double)
Function CmToInch( const Cm : double) : double
11218:
11219:
        Function InchToCm( const Inch : double) : double
11220:
        Function FeetToMetre( const Feet : double) : double
11221:
11222:
        Function MetreToFeet( const Metre : double) : double
        Function YardToMetre( const Yard : double) : double
11223:
11224:
        Function MetreToYard( const Metre : double) : double
         Function NmToKm( const Nm : double) : double
11225:
11226:
        Function KmToNm( const Km : double) : double
11227:
        Function KmToSm( const Km : double) : double
11228:
        Function SmToKm( const Sm : double) : double
11229:
        Function LitreToGalUs( const Litre : double) :
                                                              double
11230:
        Function GalUsToLitre( const GalUs : double) : double
11231:
        Function GalUsToGalCan( const GalUs : double) : double
        Function GalCanToGalUs( const GalCan : double) : double
11232:
11233:
        Function GalUsToGalUk( const GalUs : double) :
                                                              double
        Function GalUkToGalUs( const GalUk : double) : double
11234:
11235:
        Function LitreToGalCan( const Litre : double) : double
11236:
        Function GalCanToLitre( const GalCan : double) : double
11237:
        Function LitreToGalUk( const Litre : double) : double
        Function GalUkToLitre( const GalUk : double) : double
11239:
        Function KgToLb( const Kg : double) : double
Function LbToKg( const Lb : double) : double
11240:
        Function KgToOz( const Kg : double) : double
11241:
        Function OzToKg( const Oz : double) : double
11242:
        Function CwtUsToKg( const Cwt : double) : double
11243:
        Function CwtUkToKg( const Cwt : double) : double
11244:
11245:
        Function KaratToKq( const Karat : double) : double
        Function KgToCwtUs( const Kg : double) : double
11246:
         Function KgToCwtUk( const Kg : double)
                                                     : double
11247:
        Function KgToKarat( const Kg : double) : double
11248:
        Function KgToSton( const Kg : double) : double
Function KgToLton( const Kg : double) : double
11249:
11250:
11251:
        Function StonToKg( const STon : double) : double
11252:
         Function LtonToKg( const Lton : double) : double
11253:
        Function QrUsToKg( const Qr : double) : double
        Function QrUkToKg( const Qr : double) : double
11254:
        Function KgToQrUs( const Kg : double) : double
11255:
        Function KgToQrUk( const Kg : double) : double
         Function PascalToBar( const Pa : double) : double
11257:
11258:
        Function PascalToAt( const Pa : double) : double
11259:
        Function PascalToTorr( const Pa : double) : double
Function BarToPascal( const Bar : double) : double
11260:
         Function AtToPascal( const At : double) : double
11261:
11262:
        Function TorrToPascal( const Torr : double) : double
11263:
        Function KnotToMs( const Knot : double) : double
Function HpElectricToWatt( const HpE : double) : double
11264:
11265:
        Function HpMetricToWatt( const HpM : double) : double
         Function MsToKnot( const ms : double) : double
11266:
        Function WattToHpElectric( const\ W : double) : double Function WattToHpMetric( const\ W : double) : double
11267:
11268:
                                          //PI of 1000 numbers
11269:
        function getBigPI: string;
11271: procedure SIRegister_devcutils(CL: TPSPascalCompiler);
11272: begin
11273:
        Function CDExecuteFile( const FileName, Params, DefaultDir : string; ShowCmd : Integer) : THandle
11274:
        Procedure CDCopyFile( const FileName, DestName : string)
         Procedure CDMoveFile( const FileName, DestName : string)
11275:
11276:
        \textbf{Function} \ \ \texttt{MakeCommaTextToColor}( \ \texttt{Text} \ : \ \textbf{string}; \ \ \texttt{Index} \ : \ \ \texttt{Integer}; \ \ \texttt{DefaultColor} \ : \ \ \texttt{TColor}) \ : \ \ \texttt{TColor})
11277:
        Procedure CDDeleteFiles (Sender: TObject; s: string)
        Function CDGetTempDir : string
11279: Function CDGetFileSize(FileName: string): longint
```

```
11280:
         Function GetFileTime( FileName : string) : longint
         Function GetShortName( FileName : string) : string
11281:
         Function GetFullName( FileName : string) : string
11283:
         Function WinReboot : boolean
11284:
         Function WinDir : String
         Function RunFile(FileToRun: string; Params: string; Dir: string; Wait: boolean): cardinal Function RunFile_(Cmd, WorkDir: string; Wait: boolean): Boolean
11285:
11286:
         Function devExecutor : TdevExecutor
11287:
11288: end;
11289:
11290: procedure SIRegister_FileAssocs(CL: TPSPascalCompiler);
11291:
        begin
        Procedure CheckAssociations // AssociationsCount','LongInt').SetInt( 7);
11292:
11293:
         Procedure Associate( Index : integer)
11294:
         Procedure UnAssociate (Index: integer)
11295:
         Function IsAssociated( Index : integer) : boolean
         Function CheckFiletype( const extension, filetype, description, verb, serverapp : string) : boolean
11296:
11207 .
         Procedure RegisterFiletype( const extension, filetype, description, verb, serverapp, IcoNum: string)
11298: Procedure RegisterDDEServer( const filetype, verb, topic, servername, macro : string)
11299:
         procedure RefreshIcons;
11300: function GetShadeColor(ACanvas: TCanvas; clr: TColor; Value: integer): TColor;
11301: function MergColor(Colors: Array of TColor): TColor;
11302: function NewColor(ACanvas: TCanvas; clr: TColor; Value: integer): TColor;
11303: procedure DimBitmap(ABitmap: TBitmap; Value: integer);
11304: function GrayColor(ACanvas: TCanvas; clr: TColor; Value: integer): TColor;
11305: function GetInverseColor(AColor: TColor): TColor;
11306: procedure GrayBitmap(ABitmap: TBitmap; Value: integer);
11307: procedure DrawBitmapShadow(B: TBitmap; ACanvas: TCanvas; X,Y: integer; ShadowColor: TColor);
11308: procedure DrawCheckMark(ACanvas: TCanvas; X, Y: integer);
11309: Procedure GetSystemMenuFont(Font: TFont);
11310: end;
11311:
11313: function IsStringConstant(const St: string): Boolean;
11314: function IsIntConstant(const St: string): Boolean;
11315: function IsRealConstant(const St: string): Boolean;
11316: function IsIdentifier(const ID: string): Boolean; 11317: function GetStringValue(const St: string): string;
11318: procedure ParseString(const S: string; Ss: TStrings);
11319: function IsStringConstantW(const St: WideString): Boolean;
11320: function IsIntConstantW(\textbf{const} St: WideString): Boolean;
11321: function IsRealConstantW(const St: WideString): Boolean;
11322: function IsIdentifierW(const ID: WideString): Boolean;
11323: function GetStringValueW(const St: WideString): WideString;
11324: procedure ParseStringW(const S: WideString; Ss: TStrings)
11325:
11326:
11327:
           11328:
11329: Function JclSimpleSendMail( const ARecipient, AName, ASubject, ABody: string; const AAttachment:
        TFileName; ShowDialog : Boolean; AParentWND : HWND) : Boolean
11330: Function JclSimpleSendFax( const ARecipient, AName, ASubject, ABody: string; const AAttachment: TFileName; ShowDialog: Boolean; AParentWND: HWND): Boolean
11331: Function JclSimpleBringUpSendMailDialog(const ASubject,ABody:string;const
AAttach:TFileName;AParentWND:HWND):Bool;
11332: Function MapiCheck( const Res : DWORD; IgnoreUserAbort : Boolean) : DWORD
        Function MapiErrorMessage( const ErrorCode : DWORD) : string
11334:
11335: procedure SIRegister_IdNTLM(CL: TPSPascalCompiler);
11336: begin
11337: //'Pdes_key_schedule', '^des_key_schedule // will not work
11338: Function BuildTypelMessage( ADomain, AHost : String) : Stri
                                                                         : String
11339:
         \textbf{Function} \ \texttt{BuildType3Message(ADomain,AHost,AUsername:WideString;APassword,ANonce:String):String(ADomain,AHost,AUsername):\\
11340:
         Procedure RegisterAuthenticationMethod( MethodName : String; AuthClass : TIdAuthenticationClass)
11341: Function FindAuthClass (AuthName: String): TIdAuthenticationClass
11342: GBase64CodeTable', 'string').SetString('ABCDEFGHIJKLMNOPQRSTUVWXYZabcdefghijklmnopqrstuvwxyz0123456789+/
11343: GXXECodeTable', 'string').SetString('\-0123456789ABCDEFGHIJKLMNOPQRSTUVWXYZabcdefghijklmnopqrstuvwxyz 11344: GUUECodeTable', 'string').SetString('\'!"#5\%\''()*+,-./0123456789:;<=>?@ABCDEFGHIJKLMNOPQRSTUVWXYZ[\]^_
11345: end;
11346:
11347: procedure SIRegister_WDosSocketUtils(CL: TPSPascalCompiler);
11348: begin
11349: ('IpAny','LongWord').SetUInt( $00000000);
         IpLoopBack','LongWord').SetUInt( $7F000001);
IpBroadcast','LongWord').SetUInt( $FFFFFFFF);
11350:
11351:
         IpNone','LongWord').SetUInt( $FFFFFFF);
PortAny','LongWord').SetUInt( $0000);
11352:
11353:
         SocketMaxConnections','LongInt').SetInt( 5);
11354:
         TIpAddr', 'LongWord
TIpRec', 'record IpB1: byte; IpB2: byte; IpB3: byte; IpB4: Byte; end
11355:
11357:
         Function HostToNetLong( HostLong : LongWord) : LongWord
11358:
         Function HostToNetShort( HostShort: Word): Word
         Function NetToHostLong( NetLong : LongWord) : LongWord
Function NetToHostShort( NetShort : Word) : Word
11359:
11360:
11361: Function StrToIp( Ip : string) : TIpAddr
11362: Function IpToStr( Ip : TIpAddr) : string
11363: end;
11364:
```

```
11366: procedure SIRegister ALSMTPClient(CL: TPSPascalCompiler);
11367: begin
               TAlSmtpClientAuthType', '( AlsmtpClientAuthNone, alsmtpClientAut'
11369:
                 +'hPlain, AlsmtpClientAuthLogin, AlsmtpClientAuthCramMD5, AlsmtpClientAuthCr'
                 +'amShal, AlsmtpClientAuthAutoSelect )
11370:
11371:
               TAlSmtpClientAuthTypeSet', 'set of TAlSmtpClientAuthType
11372:
               SIRegister_TAlSmtpClient(CL);
11373: end;
11374:
11375: procedure SIRegister WDosPlcUtils(CL: TPSPascalCompiler);
11376: begin
11377: 'TBitNo', 'Integer
11378: TStByteNo', 'Integer 11379: TStationNo', 'Integer
11379: TStationNo', 'Integer 11380: TInOutNo', 'Integer
11381: TIO', '( EE, AA, NE, NA )
11382: TBitSet', 'set of TBitNo
11383: TAddrKind', 'set of ( akBit0, akBit1, akBit2, akOut, akNot, akBus )
11384: TBitAddrRec', 'record Kind: TAddrKind; InOutNo: TInOutNo; ByteNo: Byte; end
11385: TBitAddr', 'LongInt
11386: TByteAddrRec', 'record Kind : TAddrKind; ByteNo : Byte; end
11387: TByteAddr', 'SmallInt
11388: TInOutState', '( iosInit, iosHalt, iosRun, iosError )
11389: Function BitAddr(aIo: TIo; aInOutNo: TInOutNo; aByteNo: Byte; aBitNo: TBitNo): TBitAddr 11390: Function BusBitAddr(aIo:TIo;aInOutNo:TInOutNo:aStat:TatatianNo: TatatianNo:TinOutNo:aStat:TatatianNo:TinOutNo:AstatianNo:TinOutNo:AstatianNo:TinOutNo:AstatianNo:TinOutNo:AstatianNo:TinOutNo:TinOutNo:AstatianNo:TinOutNo:TinOutNo:AstatianNo:TinOutNo:TinOutNo:AstatianNo:TinOutNo:TinOutNo:TinOutNo:TinOutNo:TinOutNo:TinOutNo:TinOutNo:TinOutNo:TinOutNo:TinOutNo:TinOutNo:TinOutNo:TinOutNo:TinOutNo:TinOutNo:TinOutNo:TinOutNo:TinOutNo:TinOutNo:TinOutNo:TinOutNo:TinOutNo:TinOutNo:TinOutNo:TinOutNo:TinOutNo:TinOutNo:TinOutNo:TinOutNo:TinOutNo:TinOutNo:TinOutNo:TinOutNo:TinOutNo:TinOutNo:TinOutNo:TinOutNo:TinOutNo:TinOutNo:TinOutNo:TinOutNo:TinOutNo:TinOutNo:TinOutNo:TinOutNo:TinOutNo:TinOutNo:TinOutNo:TinOutNo:TinOutNo:TinOutNo:TinOutNo:TinOutNo:TinOutNo:TinOutNo:TinOutNo:TinOutNo:TinOutNo:TinOutNo:TinOutNo:TinOutNo:TinOutNo:TinOutNo:TinOutNo:TinOutNo:TinOutNo:TinOutNo:TinOutNo:TinOutNo:TinOutNo:TinOutNo:TinOutNo:TinOutNo:TinOutNo:TinOutNo:TinOutNo:TinOutNo:TinOutNo:TinOutNo:TinOutNo:TinOutNo:TinOutNo:TinOutNo:TinOutNo:TinOutNo:TinOutNo:TinOutNo:TinOutNo:TinOutNo:TinOutNo:TinOutNo:TinOutNo:TinOutNo:TinOutNo:TinOutNo:TinOutNo:TinOutNo:TinOutNo:TinOutNo:TinOutNo:TinOutNo:TinOutNo:TinOutNo:TinOutNo:TinOutNo:TinOutNo:TinOutNo:TinOutNo:TinOutNo:TinOutNo:TinOutNo:TinOutNo:TinOutNo:TinOutNo:TinOutNo:TinOutNo:TinOutNo:TinOutNo:TinOutNo:TinOutNo:TinOutNo:TinOutNo:TinOutNo:TinOutNo:TinOutNo:TinOutNo:TinOutNo:TinOutNo:TinOutNo:TinOutNo:TinOutNo:TinOutNo:TinOutNo:TinOutNo:TinOutNo:TinOutNo:TinOutNo:TinOutNo:TinOutNo:TinOutNo:TinOutNo:TinOutNo:TinOutNo:TinOutNo:TinOutNo:TinOutNo:TinOutNo:TinOutNo:TinOutNo:TinOutNo:TinOutNo:TinOutNo:TinOutNo:TinOutNo:TinOutNo:TinOutNo:TinOutNo:TinOutNo:TinOutNo:TinOutNo:TinOutNo:TinOutNo:TinOutNo:TinOutNo:TinOutNo:TinOutNo:TinOutNo:TinOutNo:TinOutNo:TinOutNo:TinOutNo:TinOutNo:TinOutNo:TinOutNo:TinOutNo:TinOutNo:TinOutNo:TinOutNo:TinOutNo:TinOutNo:TinOutNo:TinOutNo:TinOutNo:TinOutNo:TinOutNo:TinOutNo:Ti
             Function BusBitAddr(aIo:TIo;aInOutNo:TInOutNo;aStat:TStationNo;aStByteNo:TStByteNo;aBitNo:TBitNo) :
           TBitAddr;
11391: Procedure BitAddrToValues(aBitAdr:TBitAdr;var aIo:TIo;var aInOutNo:TInOutNo;var aByteNo:Byte;var
           aBitNo:TBitNo);
11392: Function BitAddrToStr( Value : TBitAddr) : string
             Function StrToBitAddr( const Value : string) : TBitAddr
11393:
11394:
             Function ByteAddr( alo : Tlo; alnOutNo : TlnOutNo; aByteNo : Byte) : TByteAddr
11395:
             Function BusByteAddr(aIo:TIo;aInOutNo:TInOutNo;aStation:TStationNo;aStByteNo: TStByteNo):TByteAddr
11396:
             Procedure ByteAddrToValues(aByteAddr:TByteAddr;var aIo:TIo;var aInOutNo:TInOutNo;var aByteNo:Byte)
             Function ByteAddrToStr( Value : TByteAddr) : string
Function StrToByteAddr( const Value : string) : TByteAddr
11397:
11398:
11399:
             Procedure IncByteAddr( var ByteAddr: TByteAddr: Increment: Integer)
             Procedure DecByteAddr( var ByteAddr : TByteAddr; Decrement : Integer)
11400:
             Function InOutStateToStr( State : TInOutState) : string
11401:
             Function MasterErrorToStr( ErrorCode : TErrorCode): string
Function SlaveErrorToStr( ErrorCode : TErrorCode): string
11402:
11403:
11404: end;
11405:
11406: procedure SIRegister_WDosTimers(CL: TPSPascalCompiler);
11407:
            begin
11408: TIntFreq', '( ifNone, if32768, if16384, if8192, if4096, if2048, '
11409: +'if1024, if512, if256, if128, if64, if32, if16, if8, if4, if2 )
11410: DpmipmVector', 'Int64
11411: 'DInterval', 'LongInt').SetInt( 1000);
             //'DEnabled','Boolean')BoolToStr( True);
'DIntFreq','string').SetString(' if64
11412:
11413:
11414:
             //'DMessages','Boolean').SetString( if64);
               SIRegister_TwdxCustomTimer(CL);
11415:
                SIRegister_TwdxTimer(CL);
11416:
11417:
               SIRegister_TwdxRtcTimer(CL);
11418:
               SIRegister_TCustomIntTimer(CL);
11419:
               SIRegister TIntTimer(CL);
11420:
               SIRegister_TRtcIntTimer(CL);
             Function RealNow : TDateTime
11421:
             Function MsToDateTime( MilliSecond : LongInt) : TDateTime
Function DateTimeToMs( Time : TDateTime) : LongInt
11422:
11423:
11424:
           end
11425:
11426: procedure SIRegister_IdSysLogMessage(CL: TPSPascalCompiler);
11427: begin
11428: TIdSyslogPRI',
                                     'Integer
11429: TIdSyslogFacility', '( sfKernel, sfUserLevel, sfMailSystem, sfSy
                 +'stemDaemon, sfSecurityOne, sfSysLogInternal, sfLPR, sfNNTP, sfUUCP, sfCloc'
11430:
                 +'kDaemonOne, sfSecurityTwo, sfFTPDaemon, sfNTP, sfLogAudit, sfLogAlert, sfC'
11431:
11432:
                 +'lockDaemonTwo, sfLocalUseZero, sfLocalUseOne, sfLocalUseTwo, sfLocalUseThr'
11433: +'ee, sfLocalUseFour, sfLocalUseFive, sfLocalUseSix, sfLocalUseSeven )
11434: TIdSyslogSeverity', '( slEmergency, slAlert, slCritical, slError'
11435:
                 +', slWarning, slNotice, slInformational, slDebug
11436:
               SIRegister_TIdSysLogMsgPart(CL);
               SIRegister_TIdSysLogMessage(CL);
11437:
11438:
             Function FacilityToString( AFac : TIdSyslogFacility) : string
11439:
             Function SeverityToString( ASec : TIdsyslogSeverity) : string
11440:
             Function NoToSeverity( ASev : Word) : TIdSyslogSeverity
             Function logSeverityToNo( ASev : TIdSyslogSeverity) : Word
11441:
             Function NoToFacility( AFac : Word) : TIdSyslogFacility
11442:
             Function logFacilityToNo( AFac : TIdSyslogFacility) : Word
11443:
11444: end;
11445:
11446: procedure SIRegister TextUtils(CL: TPSPascalCompiler);
11447: begin
             'UWhitespace','String').SetString( '(?:\s*)
Function StripSpaces( const AText : string) : string
11448:
11449:
11450: Function CharCount( const AText : string; Ch : Char) : Integer
11451: Function BalancedText( const AText : string; const Ch1, Ch2 : Char; const Count : Integer) : string
11452: Function BalancedTextReg( const AText:string; const Ch1, Ch2 : Char; const Count : Integer) : string
```

```
11453: end;
11454:
11455:
11456:
             procedure SIRegister_ExtPascalUtils(CL: TPSPascalCompiler);
11457:
             begin
              ExtPascalVersion', 'String'). SetString( '0.9.8
11458:
11459:
                AddTypeS('TBrowser', '( brUnknown, brIE, brFirefox, brChrome, brSafari, br'
                    +'Opera, brKonqueror,
                                                            brMobileSafari )
11460:
                AddTypeS('TCSSUnit', '( cssPX, cssPerc, cssEM, cssEX, cssIN, cssCM, cssMM, cssPT, cssPC, cssnone )
11461:
              AddTypeS('TExtProcedure', 'Procedure
Function DetermineBrowser( const UserAgentStr : string) : TBrowser
11462:
11463:
               Function ExtExtract(const Delims:array of string; var S:string; var Matches:TStringList; Remove:bool):bool;
              Function ExtExplode( Delim : char; const S: string; Separator : char) : TStringList Function FirstDelimiter( const Delimiters, S : string; Offset : integer) : integer Function RPosEx( const Substr, Str : string; Offset : integer) : integer Function CountStr( const Substr, Str : string; UntilStr : string) : integer
11465:
11466:
11467:
11468:
               Function StrToJS( const S : string; UseBR : boolean) : string
11469:
              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
11470 •
11471:
11472:
               Function SetPaddings(Top:integer;Right:int;Bottom:intr;Left:integer;CSSUnit:TCSSUnit;Header:bool):string;
11473:
11474:
              Function SetMargins(Top:integer;Right:int;Bottom:int;Left:integer;CSSUnit:TCSSUnit;Header:bool): string;
11475:
              \textbf{Function} \  \, \texttt{ExtBefore( const BeforeS, AfterS, S: string)} \  \, : \  \, \texttt{boolean}
11476:
              Function IsUpperCase( S : string) : boolean
Function BeautifyJS(const AScript:string;const StartingLevel:integer;SplitHTMLNewLine: boolean):string;
11477:
11478:
               Function BeautifyCSS( const AStyle : string) : string
11479:
              Function LengthRegExp( Rex : string; CountAll : Boolean) : integer
11480:
              Function JSDateToDateTime( JSDate : string) : TDateTime
11481: end;
11482:
11483:
             procedure SIRegister_JclShell(CL: TPSPascalCompiler);
11484: begin
                TSHDeleteOption', '( doSilent, doAllowUndo, doFilesOnly )
TSHDeleteOptions', 'set of TSHDeleteOption
TSHRenameOption', '( roSilent, roRenameOnCollision )
11485:
11486:
11487:
11488:
                TSHRenameOptions', 'set of TSHRenameOption
              Function SHDeleteFiles( Parent : HWND; const Files : string; Options : TSHDeleteOptions) : Boolean Function SHDeleteFolder( Parent : HWND; const Folder : string; Options : TSHDeleteOptions) : Boolean
11489:
11490:
11491:
               Function SHRenameFile( const Src, Dest : string; Options : TSHRenameOptions) : Boolean
                 TEnumFolderFlag', '( efFolders, efNonFolders, efIncludeHidden )
11492:
                TEnumFolderFlags', 'set of TEnumFolderFlag
11493:
                TEnumFolderRec', 'record DisplayName : string; Attributes : DWOR' +'D; IconLarge : HICON; IconSmall : HICON; Item : PItemIdList; EnumIdList : '
11494:
11495:
                   +'IEnumIdList; Folder : IShellFolder; end
11496:
11497:
              Function SHEnumFolderFirst(const Folder:string;Flags:TEnumFolderFlags;var F:TEnumFolderRec):Boolean;
11498:
              \textbf{Function} \ \texttt{SHEnumSpecialFolderFirst} (\texttt{SpecialFolder:DWORD}; \texttt{Flags:TEnumFolderFlags}; \textbf{var} \ \texttt{F:TEnumFolderRec}) : \texttt{Bool}; \texttt{Flags:TEnumFolderFlags}; \textbf{var} \ \texttt{F:TEnumFolderRec}) : \texttt{Bool}; \texttt{Flags:TEnumFolderFlags}; \textbf{var} \ \texttt{F:TEnumFolderRec}) : \texttt{Flags:TenumFolderFlags}; \textbf{var} \ \texttt{Flags:TenumFold
               Procedure SHEnumFolderClose( var F : TEnumFolderRec)
11499:
               Function SHEnumFolderNext( var F : TEnumFolderRec) : Boolean
11500:
11501:
               Function GetSpecialFolderLocation( const Folder : Integer) : string
              Function DisplayPropDialog( const Handle : HWND; const FileName : string) : Boolean; Function DisplayPropDialog1( const Handle : HWND; const Item : PItemIdList) : Boolean;
11502:
11503:
               Function DisplayContextMenu( const Handle : HWND; const FileName : string; Pos : TPoint) : Boolean
11504:
               Function OpenFolder( const Path : string; Parent : HWND) : Boolean
11505:
              Function OpenSpecialFolder( FolderID : Integer; Parent : HWND) : Boolean Function SHReallocMem( var P : Pointer; Count : Integer) : Boolean Function SHAllocMem( out P : Pointer; Count : Integer) : Boolean
11506:
11507:
11508:
               Function SHGetMem( var P : Pointer; Count : Integer) : Boolean
11509:
              Function SHFreeMem( var P : Pointer) : Boolean
11510:
11511:
              \textbf{Function} \  \, \texttt{DriveToPidlBind}( \  \, \textbf{const} \  \, \texttt{DriveName} \  \, : \  \, \textbf{string}; \  \, \textbf{out} \  \, \texttt{Folder} \  \, : \  \, \texttt{IShellFolder}) \  \, : \  \, \texttt{PItemIdList}
              Function PathToPidl( const Path : string; Folder : IShellFolder) : PItemIdList
Function PathToPidlBind( const FileName : string; out Folder : IShellFolder) : PItemIdList
11512:
11513:
               Function PidlBindToParent(const IdList:PItemIdList;out Folder:IShellFolder;out Last:PItemIdList):Bool;
11515:
              Function PidlCompare( const Pidl1, Pidl2 : PItemIdList) : Boolean
              Function PidlCopy( const Source : PItemIdList; out Dest : PItemIdList) : Boolean
Function PidlFree( var IdList : PItemIdList) : Boolean
11516:
11517:
               Function PidlGetDepth( const Pidl : PItemIdList) : Integer
               Function PidlGetLength( const Pidl : PItemIdList) : Integer
11519:
11520:
              Function PidlGetNext( const Pidl : PItemIdList) : PItemIdList
11521:
              Function PidlToPath( IdList : PItemIdList) : string
Function StrRetFreeMem( StrRet : TStrRet) : Boolean
              Function StrRetFreeMem( StrRet : TStrRet) : Boolean
Function StrRetToString( IdList : PItemIdList; StrRet : TStrRet; Free : Boolean) : string
11522:
11523:
11524:
                PShellLink', '^TShellLink // will not work
                TShellLink', 'record Arguments: string; ShowCmd: Integer; Work'
+'ingDirectory: string; IdList: PItemIDList; Target: string; Description'
11525:
11526:
                    +': string; IconLocation : string; IconIndex : Integer; HotKey : Word; end
11527:
11528:
               Procedure ShellLinkFree( var Link : TShellLink)
              Function ShellLinkResolve(const FileName: string; var Link: TShellLink): HRESULT
Function ShellLinkCreate(const Link: TShellLink; const FileName: string): HRESULT
Function ShellLinkCreateSystem(const Link:TShellLink; const Folder:Integer; const FileName:string):HRESULT;
11529:
11530:
11531:
              Function ShellLinkGetIcon( const Link: TShellLink; const Icon: TIcon): Boolean
Function SHDllGetVersion( const FileName: string; var Version: TDllVersionInfo): Boolean
Function GetSystemIcon( IconIndex: Integer; Flags: Cardinal): HICON
11533:
11534:
              Function OverlayIcon( var Icon: HICON; Overlay: HICON; Large: Boolean): Boolean
Function OverlayIconShortCut( var Large, Small: HICON): Boolean
11535:
11536:
               Function OverlayIconShared( var Large, Small : HICON) : Boolean
              Function SHGetItemInfoTip( const Folder : IShellFolder; Item : PItemIdList) : string
11538:
              Function ShellExecEx(const FileName:string;const Parameters:string;const Verb:string; CmdShow:Int):Bool;
11539:
11540:
              Function ShellExec(Wnd: Integer; const Operation, FileName, Parameters, Directy: string; ShowCommand:Int):Bool;
11541: Function ShellExecAndWait(const FileName:string;const Paramets:string;const Verb:string;CmdShow:Int):Bool;
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11542:
         Function ShellOpenAs( const FileName : string) : Boolean
          Function ShellRasDial( const EntryName : string) : Boolean
11543:
          Function ShellRunControlPanel( const NameOrFileName:string; AppletNumber:Integer):Boolean
11545
          Function GetFileNameIcon( const FileName : string; Flags : Cardinal) : HICON
         TJclFileExeType', '(etError, etMsDos, etWin16, etWin32Gui, etWin32Con)
Function GetFileExeType(const FileName: TFileName): TJclFileExeType
Function ShellFindExecutable(const FileName, DefaultDir: string): string
11546:
11547:
11548:
          Procedure keybd_event( bVk : Byte; bScan : Byte; dwFlags, dwExtraInfo : DWORD)
11549:
         Function OemKeyScan( wOemChar : Word) : DWORD
11550:
11551:
         Procedure mouse event ( dwFlags, dx, dy, dwData, dwExtraInfo : DWORD)
11552:
11554:
        procedure SIRegister_cXMLFunctions(CL: TPSPascalCompiler);
11555: begin
        xmlVersion','String').SetString( '1.0 FindClass('TOBJECT'),'Exml
11556:
11557:
          //Function xmlValidChar( const Ch : AnsiChar) : Boolean;
          Function xmlValidCharl( const Ch : UCS4Char) : Boolean;
11558:
11550:
         Function xmlValidChar2( const Ch : WideChar) : Boolean;
11560:
         Function xmlIsSpaceChar( const Ch : WideChar) : Boolean
11561:
         Function xmlIsLetter( const Ch : WideChar) : Boolean
          Function xmlIsDigit( const Ch : WideChar)
11563:
         Function xmlIsNameStartChar( const Ch : WideChar) : Boolean
11564:
         Function xmlIsNameChar( const Ch : WideChar) : Boolean
11565:
         Function xmllsPubidChar( const Ch : WideChar) : Boolean
         Function xmlValidName( const Text : UnicodeString) : Boolean
11566:
11567:
          //xmlSpace','Char').SetString( #$20 or #$9 or #$D or
        //Function xmlSkipSpace( var P : PWideChar) : Boolean
//Function xmlSkipEq( var P : PWideChar) : Boolean
//Function xmlExtractQuotedText( var P : PWideChar; var S : UnicodeString) : Boolean
//Function xmlGetEntityEncoding( const Buf : Pointer; const BufSize : Integer; out HeaderSize : Integer)
11568:
11569:
11570:
           TUnicodeCodecClass
11572:
         Function xmlResolveEntityReference( const RefName : UnicodeString) : WideChar
         Function xmlTag( const Tag: UnicodeString): UnicodeString
Function xmlEndTag( const Tag: UnicodeString): UnicodeString
11573:
11574:
          Function xmlAttrTag( const Tag : UnicodeString; const Attr : UnicodeString) : UnicodeString
11575:
11576:
         Function xmlEmptyTag( const Tag, Attr : UnicodeString) : UnicodeString
         Procedure xmlSafeTextInPlace( var Txt : UnicodeString)
Function xmlSafeText( const Txt : UnicodeString) : UnicodeString
11577:
11578:
11579:
          Function xmlSpaceIndent( const IndentLength : Integer; const IndentLevel : Integer):UnicodeString
11580:
         Function xmlTabIndent( const IndentLevel : Integer) : UnicodeString
         Function xmlComment( const Comment : UnicodeString) : UnicodeString
11581:
         Procedure SelfTestcXMLFunctions
11582:
11583:
        end;
11584:
11585:
11586: procedure SIRegister_DepWalkUtils(CL: TPSPascalCompiler);
11587: begin
11588: Function AWaitCursor : IUnknown
          Function ChangeCursor( NewCursor : TCursor) : IUnknown
         Procedure SuspendRedraw( AControl: TWinControl; Suspend: boolean)
Function YesNo( const ACaption, AMsg: string): boolean
Procedure strTokenize( const S: string; Delims: TSysCharSet; Results: TStrings)
11590:
11591:
11592:
         Function GetExpandedLibPath( Version : integer; ForDelphi : boolean) : string
Function GetExpandedLibRoot( Version : integer; ForDelphi : boolean) : string
11593:
11594:
11595:
         Procedure GetPathList( Version : integer; ForDelphi : boolean; Strings : TStrings)
         Procedure GetSystemPaths(Strings: TStrings)
11596:
         Procedure MakeEditNumeric( EditHandle : integer)
11597:
11598: end;
11599:
11600: procedure SIRegister vuvconverts(CL: TPSPascalCompiler);
11601: begin
11602:
           AddTypeS('TVideoCodec','(vcUnknown,vcRGB,vcYUY2,vcUYVY,vcBTYUV,vcYV,U9,vcYUV12,vcY8,vcY211)
11603:
          'BI_YUY2','LongWord').SetUInt( $32595559);
'BI_UYVY','LongWord').SetUInt( $59565955);
11604:
11605:
          'BI_BTYUV','LongWord').SetUInt(
         'BI_YVU9','LongWord').SetUInt( $39555659);
'BI_YUV12','LongWord').SetUInt( $30323449);
11607:
11608:
         'BI_Y8','LongWord').SetUInt( $20203859);
11609:
          'BI Y211', 'LongWord').SetUInt( $31313259);
11610:
         Function BICompressionToVideoCodec( Value : DWord) : TVideoCodec
         Function ConvertCodecToRGB(Codec:TVideoCodec;Src,Dst:Pointer;AWidth,AHeight:Integer):Boolean;
11611:
11612: end;
11613:
11614: (
11615: procedure SIRegister_AviCap(CL: TPSPascalCompiler);
11616: begin
11617:
          'WM_USER','LongWord').SetUInt( $0400);
         'WM_CAP_START', 'LongWord').SetUint($0400);
'WM_CAP_END', 'longWord').SetUint($0400+85);
11618:
11619:
         //WM_CAP_START+ 85
         /// WM_CAP_SET_CALLBACK_CAPCONTROL = (WM_CAP_START+ 85);

Function capSetCallbackOnError( hwnd : THandle; fpProc : LongInt) : LongInt
11621:
11622:
         Function capSetCallbackOnStatus( hwnd : THandle; fpProc : LongInt) : LongInt
11623:
11624:
          Function capSetCallbackOnYield( hwnd : THandle; fpProc : LongInt) : LongInt
          Function capSetCallbackOnFrame( hwnd : THandle; fpProc : LongInt) : LongInt
         Function capSetCallbackOnVideoStream( hwnd : THandle; fpProc : LongInt) : LongInt Function capSetCallbackOnWaveStream( hwnd : THandle; fpProc : LongInt) : LongInt Function capSetCallbackOnCapControl( hwnd : THandle; fpProc : LongInt) : LongInt
11626:
11627:
11628:
11629: Function capSetUserData( hwnd : THandle; lUser : LongInt) : LongInt
```

```
11630:
          Function capGetUserData( hwnd : THandle) : LongInt
          Function capDriverConnect( hwnd : THandle; I : Word) : LongInt
11631:
          Function capDriverDisconnect( hwnd : THandle) : LongInt
          Function capDriverGetName( hwnd: THandle; szName: LongInt; wSize: Word): LongInt
Function capDriverGetVersion( hwnd: THandle; szVer: LongInt; wSize: Word): LongInt
11633:
11634:
          Function capDriverGetCaps( hwnd : THandle; s : LongInt; wSize : Word) : LongInt
11635:
          Function capFileSetCaptureFile( hwnd : THandle; szName : LongInt) : LongInt
11636:
          Function capFileGetCaptureFile( hwnd : THandle; szName : LongInt; wSize : Word):LongInt
          Function capFileAlloc( hwnd : THandle; dwSize : LongInt) : LongInt
Function capFileSaveAs( hwnd : THandle; szName : LongInt) : LongInt
11638:
11639:
          Function capfileSetInfoChunk( hwnd : THandle; lpInfoChunk : LongInt) : LongInt
11640:
          Function capFileSaveDIB( hwnd : THandle; szName : LongInt) : LongInt
11641:
11642:
          Function capEditCopy( hwnd : THandle) : LongInt
          Function capSetAudioFormat( hwnd : THandle; s : LongInt; wSize : Word) : LongInt
Function capGetAudioFormat( hwnd : THandle; s : LongInt; wSize : Word) : LongInt
11643:
11644:
11645:
          Function capGetAudioFormatSize( hwnd : THandle) : LongInt
          Function capDlgVideoFormat( hwnd : THandle) : LongInt
11646:
11647:
          Function capDlgVideoSource( hwnd : THandle) : LongInt
11648:
          Function capDlgVideoDisplay( hwnd : THandle) : LongInt
11649:
          Function capDlgVideoCompression( hwnd : THandle) : LongInt
          Function capGetVideoFormat( hwnd : THandle; s : LongInt; wSize : Word) : LongInt
11651:
          Function capGetVideoFormatSize( hwnd : THandle) : LongInt
          Function capSetVideoFormat( hwnd: THandle; s: LongInt; wSize: Word): LongInt Function capPreview( hwnd: THandle; f: Word): LongInt
11652:
11653:
          Function capPreviewRate( hwnd : THandle; wMS : Word) : LongInt
11654:
11655:
          Function capOverlay( hwnd : THandle; f : Word) : LongInt
11656:
          Function capPreviewScale( hwnd : THandle; f : Word) : LongInt
          Function capGetStatus( hwnd : THandle; s : LongInt; wSize : Word) : LongInt
Function capSetScrollPos( hwnd : THandle; lpP : LongInt) : LongInt
11657:
11658:
          Function capGrabFrame( hwnd : THandle) : LongInt
          Function capGrabFrameNoStop( hwnd : THandle) : LongInt
Function capCaptureSequence( hwnd : THandle) : LongInt
11660:
11661:
          Function capCaptureSequenceNoFile( hwnd : THandle) : LongInt
11662:
          Function capCaptureStop( hwnd : THandle) : LongInt
Function capCaptureAbort( hwnd : THandle) : LongInt
11663:
11665:
          Function capCaptureSingleFrameOpen( hwnd : THandle) : LongInt
          Function capCaptureSingleFrameClose( hwnd : THandle) : LongInt
Function capCaptureSingleFrame( hwnd : THandle) : LongInt
11666:
11667:
          Function capCaptureGetSetup( hwnd : THandle; s : LongInt; wSize : Word) : LongInt
Function capCaptureSetSetup( hwnd : THandle; s : LongInt; wSize : Word) : LongInt
11668:
11669:
          Function capSetMCIDeviceName( hwnd : THandle; szName : LongInt) : LongInt
Function capGetMCIDeviceName( hwnd : THandle; szName : LongInt; wSize : Word) : LongInt
11670:
11671:
          Function capPaletteOpen( hwnd : THandle; szName : LongInt) : LongInt
11672:
          Function capPaletteSave( hwnd : THandle; szName : LongInt) : LongInt
11673:
          Function capPalettePaste( hwnd : THandle) : LongInt
Function capPaletteAuto( hwnd : THandle; iFrames : Word; iColors : LongInt) : LongInt
Function capPaletteManual( hwnd : THandle; fGrab : Word; iColors : LongInt) : LongInt
11674:
11675:
11676:
            //PCapDriverCaps', '^TCapDriverCaps // will not work
11677:
11678:
            TCapDriverCaps',
                                  'record wDeviceIndex : WORD; fHasOverlay : BOOL'
             +'; fHasDlgVideoSource : BOOL; fHasDlgVideoFormat : BOOL; fHasDlgVideoDispla'
+'y : BOOL; fCaptureInitialized : BOOL; fDriverSuppliesPalettes : BOOL; hVid'
11679:
11680:
            +'eoIn : THANDLE; hVideoOut : THANDLE; hVideoExtIn:THANDLE; hVideoExtOut:THANDLE; end //PCapStatus', '^TCapStatus // will not work
11681:
11683:
            TCapStatus', 'record uiImageWidth : UINT; uiImageHeight : UINT; '
             +'fLiveWindow : BOOL; fOverlayWindow : BOOL; fScale : BOOL; ptScroll : TPOIN'
+'T; fUsingDefaultPalette : BOOL; fAudioHardware : BOOL; fCapFileExists : BO'
11684:
11685:
             +'OL; dwCurrentVideoFrame : DWORD; dwCurrentVideoFramesDropped : DWORD; dwCu'
11686:
             +'rrentWaveSamples : DWORD; dwCurrentTimeElapsedMS : DWORD; hPalCurrent : HP'
11687:
             +'ALETTE; fCapturingNow : BOOL; dwReturn : DWORD; wNumVideoAllocated : WORD;' +' wNumAudioAllocated : WORD; end
11688:
11689:
            //PCaptureParms', '^TCaptureParms // will not work
11690:
11691:
            TCaptureParms', 'record dwRequestMicroSecPerFrame : DWORD; fMake'
11692:
             +'UserHitOKToCapture : BOOL; wPercentDropForError : WORD; fYield : BOOL; dwI'
             +'ndexSize : DWORD; wChunkGranularity : WORD; fUsingDOSMemory : BOOL; wNumVi' +'deoRequested : WORD; fCaptureAudio : BOOL; wNumAudioRequested : WORD; vKey'
11693:
11694:
             +'Abort: WORD; fAbortLeftMouse: BOOL; fAbortRightMouse: BOOL; fLimitEnabl'
             +'ed : BOOL; wTimeLimit : WORD; fMCIControl : BOOL; fStepMCIDevice : BOOL; d'
11696:
11697:
             +'wMCIStartTime : DWORD; dwMCIStopTime : DWORD; fStepCaptureAt2x : BOOL; wSt'
             +'epCaptureAverageFrames : WORD; dwAudioBufferSize : DWORD; fDisableWriteCac'
11698:
             +'he : BOOL; AVStreamMaster : WORD; end
11699:
          // PCapInfoChunk', '^TCapInfoChunk // will not work
11700:
11701:
            //TCapInfoChunk',
                                  'record fccInfoID : FOURCC; lpData : LongInt; cbData : LongInt; end
           'CONTROLCALLBACK_PREROLL', 'LongInt').SetInt( 1);
'CONTROLCALLBACK_CAPTURING', 'LongInt').SetInt( 2);
11702:
11703:
11704:
          Function capCreateCaptureWindow( lpszWindowName: PChar; dwStyle : DWord; x, y : Integer; nWidth, nHeight
           Integer; hwndParent : THandle; nID : Integer) : THandle
11705:
          Function
         capGetDriverDescription(wDriverIndex:DWord;lpszName:PChar;cbName:Integer;lpszVer:PChar;cbVer:Int):Bool;
           'IDS CAP BEGIN', 'LongInt').SetInt( 300);
          'IDS_CAP_END', 'LongInt').SetInt( 301);
'IDS_CAP_INFO', 'LongInt').SetInt( 401);
11708:
          'IDS_CAP_OUTOFMEM','LongInt').SetInt( 402);
'IDS_CAP_FILEEXISTS','LongInt').SetInt( 403);
'IDS_CAP_ERRORPALOPEN','LongInt').SetInt( 404);
11709:
11710:
11711:
          'IDS_CAP_ERRORPALSAVE', 'LongInt').SetInt( 405);
11712:
11713:
          'IDS_CAP_ERRORDIBSAVE', 'LongInt').SetInt( 406);
         'IDS_CAP_DEFAVIEXT', 'LongInt').SetInt( 407);
'IDS_CAP_DEFPALEXT', 'LongInt').SetInt( 408);
'IDS_CAP_CANTOPEN', 'LongInt').SetInt( 409);
11714:
11715:
```

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'IDS_CAP_SEQ_MSGSTART','LongInt').SetInt( 410);
'IDS_CAP_SEQ_MSGSTOP','LongInt').SetInt( 411);
11717:
11718:
           'IDS_CAP_VIDEDITERR', 'LongInt').SetInt( 412);
11720 •
           'IDS_CAP_READONLYFILE', 'LongInt').SetInt( 413);
           'IDS_CAP_WRITEERROR','LongInt').SetInt( 414);
'IDS_CAP_NODISKSPACE','LongInt').SetInt( 415);
'IDS_CAP_SETFILESIZE','LongInt').SetInt( 416);
11721:
11722:
11723:
           'IDS_CAP_DRIVER_ERROR','LongInt').SetInt( 417);
'IDS_CAP_DRIVER_ERROR','LongInt').SetInt( 418);
11724:
11725:
           'IDS_CAP_WAVE_OPEN_ERROR', 'LongInt').SetInt( 419);
'IDS_CAP_WAVE_ALLOC_ERROR', 'LongInt').SetInt( 420);
11726:
11727:
           'IDS_CAP_WAVE_PREPARE_ERROR', 'LongInt').SetInt( 421);
11728:
          'IDS_CAP_WAVE_ADD_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);
11729:
11730:
11731:
11732:
           'IDS_CAP_VIDEO_PREPARE_ERROR', 'LongInt').SetInt( 426);
11733:
           'IDS_CAP_VIDEO_ADD_ERROR','LongInt').SetInt( 427);
'IDS_CAP_VIDEO_SIZE_ERROR','LongInt').SetInt( 428);
11734 .
11735:
           'IDS_CAP_FILE_OPEN_ERROR', 'LongInt').SetInt( 429);
'IDS_CAP_FILE_WRITE_ERROR', 'LongInt').SetInt( 430);
11736:
11737:
           'IDS_CAP_RECORDING_ERROR', 'LongInt').SetInt( 431);
'IDS_CAP_RECORDING_ERROR2', 'LongInt').SetInt( 432);
11738:
11739:
           'IDS_CAP_NO_FRAME_CAP_ERROR', LongInt').SetInt( 433);
'IDS_CAP_NO_FRAME_CAP_ERROR', 'LongInt').SetInt( 434);
11740:
11741:
11742:
           'IDS_CAP_NO_PALETTE_WARN', 'LongInt').SetInt( 435);
11743:
           'IDS_CAP_MCI_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( 439);
'IDS_CAP_COMPRESSOR_ERROR', 'LongInt').SetInt( 440);
11744:
11745:
11746:
11747:
11748:
           'IDS_CAP_AUDIO_DROP_ERROR','LongInt').SetInt( 441);
           'IDS_CAP_STAT_LIVE_MODE', 'LongInt').SetInt( 500);
11749:
            IDS_CAP_STAT_OVERLAY_MODE', 'LongInt').SetInt( 501);
11750:
           'IDS_CAP_STAT_CAP_INIT', 'LongInt').SetInt( 502);
'IDS_CAP_STAT_CAP_FINI', 'LongInt').SetInt( 503);
11751:
11752:
           'IDS_CAP_STAT_OPTPAL_BUILD', 'LongInt').SetInt( 504);
'IDS_CAP_STAT_OPTPAL_BUILD', 'LongInt').SetInt( 505);
11753:
11754:
           'IDS_CAP_STAT_I_FRAMES','LongInt').SetInt( 506);
'IDS_CAP_STAT_L_FRAMES','LongInt').SetInt( 507);
11755:
11756:
11757:
           'IDS_CAP_STAT_CAP_L_FRAMES', 'LongInt').SetInt( 508);
           'IDS_CAP_STAT_CAP_AUDIO', 'LongInt').SetInt( 509);
'IDS_CAP_STAT_VIDEOCURRENT', 'LongInt').SetInt( 510);
11758:
11759:
           'IDS_CAP_STAT_VIDEOAUDIO', 'LongInt').SetInt( 511);
'IDS_CAP_STAT_VIDEOONLY', 'LongInt').SetInt( 512);
11760:
11761:
           'IDS CAP STAT FRAMESDROPPED', 'LongInt').SetInt( 513);
11762:
           'AVICAP32', 'String').SetString( 'AVICAP32.dll
11763:
11764: end;
11765:
11766:
         procedure SIRegister ALFcnMisc(CL: TPSPascalCompiler);
11767: begin
11768:
          Function AlBoolToInt( Value : Boolean) :
                                                                    Integer
           Function ALMediumPos( LTotal, LBorder, LObject : integer) : Integer
11769:
11770:
          Function AlIsValidEmail( const Value : AnsiString) : boolean
          Function AlLocalDateTimeToGMTDateTime( const aLocalDateTime : TDateTime) : TdateTime
Function ALInc( var x : integer; Count : integer) : Integer
11771:
11772:
           function ALCopyStr(const aSourceString: AnsiString; aStart, aLength: Integer): AnsiString
11773:
11774:
          function ALGetStringFromFile(filename: AnsiString; const ShareMode: Word = fmShareDenyWrite):AnsiString;
11775:
          procedure ALSaveStringtoFile(Str: AnsiString; filename: AnsiString);
          Function ALIsInteger(const S: AnsiString): Boolean;
function ALIsDecimal(const S: AnsiString): boolean;
11776:
11777:
11778:
           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;
11779:
11780:
          function ALDequotedStr(const S: AnsiString; AQuote: AnsiChar): AnsiString;
11781:
                        AluTF8removeBOM(const S: AnsiString): AnsiString;
          function
           Function ALRandomStr1(const aLength: Longint; const aCharset: Array of Char): AnsiString;
11783:
          Function ALRandomStr(const aLength: Longint): AnsiString;
11784:
11785: Function ALRandomStrUl(const aLength: Longint; const aCharset: Array of Char): String; 11786: Function ALRandomStrU(const aLength: Longint): String;
11787: end;
11788:
11789: procedure SIRegister ALJSONDoc(CL: TPSPascalCompiler);
11790: begin
11791:
         Procedure ALJSONToTStrings(const AJsonStr:AnsiString;aLst:TALStrings; const aNullStr:AnsiString;const
         aTrueStr: AnsiString; const aFalseStr : AnsiString)
11792: end;
11793:
11794: procedure SIRegister_ALWindows(CL: TPSPascalCompiler);
11795:
         begin
11796:
           _ALMEMORYSTATUSEX', 'record dwLength : DWORD; dwMemoryLoad : DWO'
             +'RD; ullTotalPhys : Int64; ullAvailPhys : Int64; ullTotalPageFile : Int64; '+'ullAvailPageFile : Int64; ullTotalVirtual : Int64; ullAvailVirtual : Int64;
11797:
11798:
11799:
              +'; ullAvailExtendedVirtual : Int64; end
            TALMemoryStatusEx', '_ALMEMORYSTATUSEX
11800:
          Function ALGlobalMemoryStatusEx( var lpBuffer : TALMEMORYSTATUSEX) : BOOL Function ALInterlockedExchange64( var Target : LONGLONG; Value : LONGLONG) : LONGLONG
11801:
11802:
          'INVALID_SET_FILE_POINTER','LongInt').SetInt( DWORD ( - 1 ));
'QUOTA_LIMITS_HARDWS_MIN_DISABLE','LongWord').SetUInt( $2);
11803:
```

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'QUOTA_LIMITS_HARDWS_MIN_ENABLE','LongWord').SetUInt( $1);
'QUOTA_LIMITS_HARDWS_MAX_DISABLE','LongWord').SetUInt( $8);
'QUOTA_LIMITS_HARDWS_MAX_ENABLE','LongWord').SetUInt( $4);
11805:
11806:
11807:
11808:
11809:
         procedure SIRegister IPCThrd(CL: TPSPascalCompiler);
11810:
11811:
         begin
11812:
            SIRegister_THandledObject(CL);
11813:
            SIRegister_TEvent(CL)
11814:
            SIRegister_TMutex(CL);
SIRegister_TSharedMem(CL);
11815:
11816:
           'TRACE_BUF_SIZE', 'LongInt').SetInt( 200 * 1024);
           'TRACE_BUFFER','String').SetString( 'TRACE_BUFFER'TRACE_MUTEX','String').SetString( 'TRACE_MUTEX'//PTraceEntry', '^TTraceEntry'/ will not work
11817:
11818:
11819:
11820:
            SIRegister_TIPCTracer(CL);
           'MAX_CLIENTS','LongInt').SetInt( 6);
'IPCTIMEOUT','LongInt').SetInt( 2000);
11821:
11822.
          'IPCTIMEOUT','LongInt').SetInt( 2000);

'IPCBUFFER_NAME','String').SetString( 'BUFFER_NAME

'BUFFER_MUTEX_NAME','String').SetString( 'BUFFER_MUTEX

'MONITOR_EVENT_NAME','String').SetString( 'MONITOR_EVENT

'CLIENT_EVENT_NAME','String').SetString( 'CLIENT_EVENT

'CONNECT_EVENT_NAME','String').SetString( 'CONNECT_EVENT

'CLIENT_DIR_NAME','String').SetString( 'CLIENT_DIRECTORY

'CLIENT_DIR_MUTEX','String').SetString( 'DIRECTORY_MUTEX
11823:
11824:
11825:
11826:
11827:
11828:
11829:
            FindClass('TOBJECT'), 'EMonitorActive FindClass('TOBJECT'), 'TIPCThread
11830:
11831:
11832:
            TEventKind', '( evMonitorAttach, evMonitorDetach, evMonitorSignal
             +'l, evMonitorExit, evClientStart, evClientStop, evClientAttach, evClientDet'
+'ach, evClientSwitch, evClientSignal, evClientExit )
11833:
11834:
            TClientFlag', '( cfError, cfMouseMove, cfMouseDown, cfResize, cfAttach )
11835:
            TClientFlags', 'set of TClientFlag
//PEventData', '^TEventData // will not work
11836:
11837:
            TEventData', 'record X : SmallInt; Y : SmallInt; Flag : TClientF'
11838:
           11839:
11840:
11841:
11842:
11843:
11844:
            TIPCEventInfo', 'record FID: Integer; FKind: TEventKind; FData: TEventData; end
11845:
            SIRegister_TIPCEvent(CL);
            //PClientDirRecords', '^TClientDirRecords // will not work SIRegister_TClientDirectory(CL);
11846:
11847:
            TIPCState', '( stInActive, stDisconnected, stConnected )
SIRegister_TIPCThread(CL);
11848:
11849:
            SIRegister_TIPCMonitor(CL);
SIRegister_TIPCClient(CL);
11850:
11851:
11852:
          Function IsMonitorRunning( var Hndl : THandle) : Boolean
11853:
11854:
11855:
11856: procedure SIRegister_ALGSMComm(CL: TPSPascalCompiler);
11857: begin
11858:
            SIRegister_TAlGSMComm(CL);
11859:
          Function AlGSMComm_BuildPDUMessage( aSMSCenter, aSMSAddress, aMessage : AnsiString) : AnsiString
          Procedure AlGSMComm_DecodePDUMessage(aPDUMessage:AnsiString; var aSMSCenter,aSMSAddress,
11860:
         AMessage: AnsiString);
11861:
         Function AlgSMComm_UnicodeToGSM7BitDefaultAlphabet( aMessage : WideString) : AnsiString
11862:
          Function AlgSMComm_GSM7BitDefaultAlphabetToUnicode(aMess:AnsiString;const
         UseGreekAlphabet:Bool):Widestring;
11863: function ALMatchesMask(const Filename, Mask: AnsiString): Boolean;
11864:
11865:
11866: procedure SIRegister ALHttpCommon(CL: TPSPascalCompiler);
11867: begin
11868:
            TALHTTPPropertyChangeEvent','Procedure(sender:Tobject;const PropertyIndex:Integer;
            TALHTTPProtocolVersion', '(HTTPpv_1_0, HTTPpv_1_1)
TALHTTPMethod', '(HTTPmt_Get, HTTPmt_Post, HTTPmt_Head, HTTPmt_Trace, HTTPmt_Put, HTTPmt_Delete);
11869:
11870:
           TInternetScheme', 'integer
TALIPv6Binary', 'array[1..16] of Char;
// TALIPv6Binary = array[1..16] of ansiChar;
11871:
11872:
11873:
11874:
                 TInternetScheme = Integer;
11875:
            {\tt SIRegister\_TALHTTPRequestHeader(CL):}
11876:
            SIRegister TALHTTPCookie(CL);
11877:
            SIRegister_TALHTTPCookieCollection(CL);
11878:
            SIRegister_TALHTTPResponseHeader(CL);
11879:
          Function ALHTTPDecode( const AStr : AnsiString) : AnsiString
          Procedure ALHTTPEncodeParamNameValues( ParamValues : TALStrings)
11880:
         // Procedure ALExtractHTTPFields(Separators, WhiteSpace, Quotes:TSysCharSet;
11881:
         Content:PAnsiChar;Strings:TALStrings;StripQuotes:Boolean;
11882:
         // Procedure ALExtractHeaderFields( Separators, WhiteSpace, Quotes : TSysCharSet; Content : PAnsiChar;
         Strings : TALStrings; Decode : Boolean; StripQuotes : Boolean)
11883:
         // Procedure ALExtractHeaderFieldsWithQuoteEscaped(Separators,WhiteSpace,
         Quotes:TSysCharSet;Content:PAnsiChar;Strings: TALStrings; Decode: Boolean; StripQuotes: Boolean)
          Function AlExtractHostNameFromUrl( aUrl: AnsiString): ansiString
Function AlExtractShemeFromUrl( aUrl: AnsiString): TinternetScheme
Function AlExtractHostNameFromUrl( aUrl: AnsiString): AnsiString
Function AlExtractDomainNameFromUrl( aUrl: AnsiString): AnsiString
11885:
11886:
11887:
11888: Function AlExtractUrlPathFromUrl( aUrl : AnsiString) : AnsiString
```

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11889: Function AlInternetCrackUrl( aUrl: AnsiString; var SchemeName, HostName, UserName, Password, UrlPath,
                  ExtraInfo : AnsiString; var PortNumber : integer) : Boolean;
                    Function AlInternetCrackUrll( aUrl : AnsiString; var SchemeName, HostName, UserName, Password, UrlPath,
                  Anchor : AnsiString; Query : TALStrings; var PortNumber : integer) : Boolean;
11891:
                  Function AlInternetCrackUrl2(var Url:AnsiString;var Anchor:AnsiString;Query:TALStrings):Boolean;
                    Function AlRemoveAnchorFromUrl( aUrl : AnsiString; var aAnchor : AnsiString; Function AlRemoveAnchorFromUrl1( aUrl : AnsiString) : AnsiString;
11892:
11893:
                    Function AlCombineUrl( RelativeUrl, BaseUrl : AnsiString) : AnsiString;
11894:
                    \textbf{Function} \  \, \texttt{AlCombineUrll}(\texttt{RelativeUrl}, \  \, \texttt{BaseUrl}, \  \, \texttt{Anchor} : \  \, \texttt{AnsiString}; \  \, \texttt{Query:TALStrings}) : \  \, \texttt{AnsiString}; \  \, \texttt{AnsiS
11895:
                    Function ALGmtDateTimeToRfc822Str( const aValue : TDateTime) : AnsiString
Function ALDateTimeToRfc822Str( const aValue : TDateTime) : AnsiString
Function ALTryRfc822StrToGMTDateTime( const S : AnsiString; out Value : TDateTime) : Boolean
11896:
11897:
11898:
11899:
                    Function ALRfc822StrToGMTDateTime( const s : AnsiString) : TDateTime
                    Function ALTryIPV4StrToNumeric( aIPv4Str : ansiString; var aIPv4Num : Cardinal) : Boolean Function ALIPV4StrToNumeric( aIPv4 : ansiString) : Cardinal Function ALNumericToIPv4Str( aIPv4 : Cardinal) : ansiString
11900:
11901:
11902:
                    Function ALZeroIpV6 : TALIPv6Binary
11903:
                    Function ALTryIPV6StrToBinary( aIPv6Str : ansiString; var aIPv6Bin : TALIPv6Binary) : Boolean Function ALIPV6StrTobinary( aIPv6 : ansiString) : TALIPv6Binary
Function ALBinaryToIPv6Str( aIPv6 : TALIPv6Binary) : ansiString
11904:
11905:
11906:
                    Function ALBinaryStrToIPv6Binary( aIPV6BinaryStr : ansiString) : TALIPv6Binary
11907:
11908: end;
11909:
11910: procedure SIRegister ALFCnHTML(CL: TPSPascalCompiler);
11911: begin
11912:
                    Procedure ALUTF8ExtractHTMLText(HtmlCont:AnsiString;LstExtractedResourceText:TALStrings;const
                  DecodeHTMLText:Boolean);
                  \textbf{Function} \  \, \texttt{ALUTF8ExtractHTMLText1} ( \texttt{HtmlContent:AnsiString}; \textbf{const} \  \, \texttt{DecodeHTMLText:Boolean}) \colon \  \, \texttt{AnsiString}; \\ \textbf{const} \  \, \texttt{DecodeHTMLText:Boolean}) \colon \  \, \texttt{AnsiString}; \\ \textbf{const} \  \, \texttt{DecodeHTMLText:Boolean}) \colon \  \, \texttt{AnsiString}; \\ \textbf{const} \  \, \texttt{DecodeHTMLText:Boolean}) \colon \  \, \texttt{AnsiString}; \\ \textbf{const} \  \, \texttt{DecodeHTMLText:Boolean}) \colon \  \, \texttt{DecodeHTMLText:Boolean} \cap \texttt{DecodeHTMLText:Boolean}) \colon \  \, \texttt{DecodeHTMLText:Boolean} \cap \texttt{Deco
11913:
11914:
                    Function ALXMLCDataElementEncode( Src : AnsiString) : AnsiString
                    Function ALXMLTextElementEncode(Src : AnsiString; const useNumericReference : boolean) : AnsiString
11916:
                    Function ALUTF8XMLTextElementDecode( const Src : AnsiString) : AnsiString
11917: Function ALUTF8HTMLEncode(const Src:AnsiStr;const EncodeASCIIHtmlEntities:Bool;const
                  useNumRef:bool):AnsiString);
11918:
                    Function ALUTF8HTMLDecode( const Src : AnsiString) : AnsiString
                    Function ALJavascriptEncode( const Src : AnsiString; const useNumericReference : boolean) : AnsiString
11920:
                    Function ALUTF8JavascriptDecode( const Src : AnsiString) : AnsiString
11921:
                   Procedure ALHideHtmlUnwantedTagForHTMLHandleTagfunct(var HtmlContent:AnsiString; const
                  DeleteBodyOfUnwantedTag : Boolean; const ReplaceUnwantedTagCharBy : AnsiChar)
                  Procedure ALCompactHtmlTagParams( TagParams : TALStrings)
11923: end;
11924:
11925:
                  procedure SIRegister ALInternetMessageCommon(CL: TPSPascalCompiler);
11926: begin
11927:
                       SIRegister_TALEMailHeader(CL);
11928:
                       SIRegister_TALNewsArticleHeader(CL);
                    Function AlParseEmailAddress(FriendlyEmail:AnsiString;var RealName:AString;const
11929:
                  decodeRealName:Bool):AnsiString;
11930: Function AlExtractEmailAddress( FriendlyEmail : AnsiString) : AnsiString
11931:
                    Function ALMakeFriendlyEmailAddress( aRealName, aEmail : AnsiString) : AnsiString
11932:
                    Function ALEncodeRealName4FriendlyEmailAddress( aRealName : AnsiString) : AnsiString
                    Function AlGenerateInternetMessageID : AnsiString;
Function AlGenerateInternetMessageID1( ahostname : AnsiString) : AnsiString;
11933:
11934:
                    Function ALDecodeQuotedPrintableString( src : AnsiString) : AnsiString
11935:
11936:
                    \textbf{Function} \ \texttt{AlDecodeInternetMessageHeaderInUTF8} \\ (\texttt{aHeaderStr:AnsiString;aDefaultCodePage:Integer}) \\ \texttt{:AnsiString;aDefaultCodePage:Integer}) \\ 
11937:
                  end;
11938:
11939:
11940: procedure SIRegister_ALFcnWinSock(CL: TPSPascalCompiler);
11941: begin
                    Function ALHostToIP( HostName : AnsiString; var Ip : AnsiString):Boolean
11942:
11943:
                    Function ALIPAddrToName( IPAddr : AnsiString) : AnsiString
                    Function ALgetLocalIPs : TALStrings
11944:
11945:
                    Function ALgetLocalHostName : AnsiString
11946:
                  end;
11947:
11948: procedure SIRegister_ALFcnCGI(CL: TPSPascalCompiler);
11949:
11950:
                  Procedure AlcGIInitDefaultServerVariablesFromWebRequest(WebRequest:
                  TALWebRequest; ServerVariables: TALStrings);
                    Procedure AlCGIInitDefaultServerVariablesFromWebRequest1(WebRequest: TALWebRequest; ServerVariables:
11951:
                  TALStrings; ScriptName, ScriptFileName : AnsiString; Url : AnsiString)
11952: Procedure ALCGIInitDefaultServerVariables( ServerVariables: TALStrings);
11953:
                    Procedure AlCGIInitDefaultServerVariables1(ServerVars:TALStrings;ScriptName,
                  ScriptFileName: AnsiString; Url: AnsiString);
                   Procedure AlCGIInitServerVariablesFromWebRequest( WebRequest: TALWebRequest; ServerVariables : TALStrings;
                  ScriptName, ScriptFileName : AnsiString; Url : AnsiString);
11955: Procedure AlCGIExec(InterpreterFilename: AnsiString; ServerVariables: TALStrings; RequestContentStream: Tstream; ResponseHeader: TALHTTPResponseHeader);
11956: Procedure AlCGIExec1(ScriptName, ScriptFileName, Url, X_REWRITE_URL, InterpreterFilename:AnsiString;
                                              : TALIsapiRequest;
                  WebRequest
                  overloadedCookies:AnsiString;overloadedQueryString:AnsiString;overloadedReferer: AnsiString;
11957:
                  +'overloadedRequestContentStream:Tstream;var
                  ResponseContentStr:AnsiString;ResponseHeader:TALHTTPResponseHeader;
11958: Procedure AlCGIExec2(ScriptName, ScriptFileName, Url, X_REWRITE_URL,
                  InterpreterFilename:AnsiString;WebRequest: TALIsapiRequest; var ResponseContentString: AnsiString;
                  ResponseHeader : TALHTTPResponseHeader);
11959: end;
11960:
11961: procedure SIRegister_ALFcnExecute(CL: TPSPascalCompiler);
```

```
11962: begin
11963:
                TStartupInfoA', 'TStartupInfo
                SE_CREATE_TOKEN_NAME', 'String').SetString( 'SeCreateTokenPrivilege
11965:
              {\tt SE\_ASSIGNPRIMARYTOKEN\_NAME','String'}). {\tt SetString('SeAssignPrimaryTokenPrivilege')} \\
11966:
              {\tt SE\_LOCK\_MEMORY\_NAME','String').SetString(\ 'SeLockMemoryPrivilege}
              SE_INCREASE_QUOTA_NAME','String').SetString( 'SeIncreaseQuotaPrivilege
11967:
              SE_UNSOLICITED_INPUT_NAME', 'String').SetString( 'SeUnsolicitedInputPrivilege
11968:
              SE_MACHINE_ACCOUNT_NAME','String').SetString(
                                                                                                  'SeMachineAccountPrivilege
11969:
              SE_TCB_NAME','String').SetString( 'SeTcbPrivilege
11970:
11971:
              SE_SECURITY_NAME','String').SetString( 'SeSecurityPrivilege
11972:
              SE_TAKE_OWNERSHIP_NAME','String').SetString( 'SeTakeOwnershipPrivilege
              SE_LOAD_DRIVER_NAME', 'String').SetString( 'SeLoadDriverPrivilege
11973:
              SE_SYSTEM_PROFILE_NAME','String').SetString( 'SeSystemProfilePrivilege
SE_SYSTEMTIME_NAME','string').SetString( 'SeSystemtimePrivilege
SE_PROF_SINGLE_PROCESS_NAME','String').SetString( 'SeProfileSingleProcessPrivilege
11974:
11975:
11976:
              SE_INC_BASE_PRIORITY_NAME', 'String').SetString( 'SeIncreaseBasePriorityPrivilege SE_CREATE_PAGEFILE_NAME', 'String').SetString( 'SeCreatePagefilePrivilege SE_CREATE_PRIMANENT_NAME', 'String').SetString( 'SeCreatePermanentPrivilege
11977:
11978:
11070.
              SE_BACKUP_NAME','String').SetString( 'SeBackupPrivilege
SE_RESTORE_NAME','String').SetString( 'SeRestorePrivilege
SE_SHUTDOWN_NAME','String').SetString( 'SeShutdownPrivilege
11980:
11981:
11982:
11983:
              SE_DEBUG_NAME', 'String').SetString( 'SeDebugPrivilege
SE_AUDIT_NAME', 'String').SetString( 'SeAuditPrivilege
SE_SYSTEM_ENVIRONMENT_NAME', 'String').SetString( 'SeSystemEnvironmentPrivilege
11984:
11985:
              SE_CHANGE_NOTIFY_NAME','String').SetString( 'SeChangeNotifyPrivilege
11986:
11987:
              SE_REMOTE_SHUTDOWN_NAME', 'String').SetString( 'SeRemoteShutdownPrivilege
11988:
              SE_UNDOCK_NAME','String').SetString( 'SeUndockPrivilege
              SE_SYNC_AGENT_NAME','String').SetString( 'SeSyncAgentPrivilege
SE_ENABLE_DELEGATION_NAME','String').SetString( 'SeEnableDelegationPrivilege
SE_MANAGE_VOLUME_NAME','String').SetString( 'SeManageVolumePrivilege
11989:
11990:
11991:
11992:
              Function AlGetEnvironmentString : AnsiString
11993:
              Function ALWinExec32(const FileName, CurrentDir,
            Environment:AnsiString;InStream:Tstream;OutStream:TStream):Dword;
              Function ALWinExec321(const FileName:AnsiString; InputStream:Tstream;OutputStream:TStream):Dword;
              Function ALWinExecAndWait32(FileName: AnsiString; Visibility: integer): DWORD
11995:
11996:
              Function ALWinExecAndWait32V2( FileName : AnsiString; Visibility : integer) : DWORD
11997:
              Function ALNTSetPrivilege( sPrivilege : AnsiString; bEnabled : Boolean) : Boolean
11998:
            end
11999:
12000:
            procedure SIRegister_ALFcnFile(CL: TPSPascalCompiler);
12001: begin
              Function AlEmptyDirectory(Directory:ansiString;SubDirectory:Bool;IgnoreFiles:array of AnsiString; const
12002:
             RemoveEmptySubDirectory : Boolean; const FileNameMask : ansiString; const MinFileAge : TdateTime):Boolean;
              Function AlEmptyDirectory1( Directory : ansiString; SubDirectory : Boolean; const
            RemoveEmptySubDirectory:Bool; const FileNameMask: ansiString; const MinFileAge: TdateTime): Boolean; Function AlCopyDirectory( SrcDirectory, DestDirectory: ansiString; SubDirectory: Boolean; const FileNameMask: ansiString; const FailIfExists: Boolean): Boolean
12004:
12005: Function ALGetModuleName : ansistring
12006:
              Function ALGetModuleFileNameWithoutExtension : ansistring
12007:
              Function ALGetModulePath : ansiString
              Function AlGetFileSize( const AFileName : ansistring) : int64
12008:
12009:
              Function AlGetFileVersion( const AFileName : ansistring) : ansiString
              Function ALGetFileCreationDateTime( const aFileName : Ansistring) : TDateTime
12010:
12011:
              \textbf{Function} \  \, \texttt{ALGetFileLastWriteDateTime}( \  \, \textbf{const} \  \, \texttt{aFileName} \  \, : \  \, \texttt{Ansistring}) \  \, : \  \, \texttt{TDateTime}( \  \, \textbf{const} \  \, \texttt{aFileName}) \  \, : \  \, \texttt{TDateTime}( \  \, \textbf{const} \  \, \texttt{aFileName}) \  \, : \  \, \texttt{TDateTime}( \  \, \textbf{const} \  \, \texttt{aFileName}) \  \, : \  \, \texttt{TDateTime}( \  \, \textbf{const} \  \, \texttt{aFileName}) \  \, : \  \, \texttt{TDateTime}( \  \, \textbf{const} \  \, \texttt{aFileName}) \  \, : \  \, \texttt{TDateTime}( \  \, \textbf{const} \  \, \texttt{aFileName}) \  \, : \  \, \texttt{TDateTime}( \  \, \textbf{const} \  \, \texttt{aFileName}) \  \, : \  \, \texttt{TDateTime}( \  \, \textbf{const} \  \, \texttt{aFileName}) \  \, : \  \, \texttt{TDateTime}( \  \, \textbf{const} \  \, \texttt{aFileName}) \  \, : \  \, \texttt{TDateTime}( \  \, \textbf{const} \  \, \texttt{aFileName}) \  \, : \  \, \texttt{TDateTime}( \  \, \textbf{const} \  \, \texttt{aFileName}) \  \, : \  \, \texttt{TDateTime}( \  \, \textbf{const} \  \, \texttt{aFileName}) \  \, : \  \, \texttt{TDateTime}( \  \, \textbf{const} \  \, \texttt{aFileName}) \  \, : \  \, \texttt{TDateTime}( \  \, \textbf{const} \  \, \texttt{aFileName}) \  \, : \  \, \texttt{TDateTime}( \  \, \textbf{const} \  \, \texttt{aFileName}) \  \, : \  \, \texttt{TDateTime}( \  \, \textbf{const} \  \, \texttt{aFileName}) \  \, : \  \, \texttt{TDateTime}( \  \, \textbf{const} \  \, \texttt{aFileName}) \  \, : \  \, \texttt{TDateTime}( \  \, \textbf{const} \  \, \texttt{aFileName}) \  \, : \  \, \texttt{TDateTime}( \  \, \textbf{const} \  \, \texttt{aFileName}) \  \, : \  \, \texttt{TDateTime}( \  \, \textbf{const} \  \, \texttt{aFileName}) \  \, : \  \, \texttt{TDateTime}( \  \, \textbf{const} \  \, \texttt{aFileName}) \  \, : \  \, \texttt{TDateTime}( \  \, \textbf{const} \  \, \texttt{aFileName}) \  \, : \  \, \texttt{TDateTime}( \  \, \textbf{const} \  \, \texttt{aFileName}) \  \, : \  \, \texttt{TDateTime}( \  \, \textbf{const} \  \, \texttt{aFileName}) \  \, : \  \, \texttt{TDateTime}( \  \, \textbf{const} \  \, \texttt{aFileName}) \  \, : \  \, \texttt{TDateTime}( \  \, \textbf{const} \  \, \texttt{aFileName}) \  \, : \  \, \texttt{TDateTime}( \  \, \textbf{const} \  \, \texttt{aFileName}) \  \, : \  \, \texttt{TDateTime}( \  \, \textbf{const} \  \, \texttt{aFileName}) \  \, : \  \, \texttt{TDateTime}( \  \, \textbf{const} \  \, \texttt{aFileName}) \  \, : \  \, \texttt{TDateTime}( \  \, \textbf{const} \  \, \texttt{aFileName}) \  \, : \  \, \texttt{TDateTime}( \  \, \textbf{const} \  \, \texttt{aFileName}) \  \, : \  \, \texttt{TDateTime}( \  \, \textbf{const} \  \, \texttt{aFileName}) \  \, : \  \, \texttt{TDateTime}( \  \, \textbf{const} \  \, \texttt{aF
12012:
              Function ALGetFileLastAccessDateTime( const aFileName : Ansistring) : TDateTime
12013:
              Procedure ALSetFileCreationDateTime( const aFileName : Ansistring; const aCreationDateTime : TDateTime)
              Function ALIsDirectoryEmpty( const directory : ansiString) : boolean
              Function ALFileExists( const Path : ansiString) : boolean
12015:
              Function ALDirectoryExists( const Directory : Ansistring) : Boolean
Function ALCreateDir( const Dir : Ansistring) : Boolean
Function ALRemoveDir( const Dir : Ansistring) : Boolean
12016:
12017:
12018:
12019:
              Function ALDeleteFile( const FileName : Ansistring) : Boolean
12020:
              Function ALRenameFile( const OldName, NewName : ansistring) : Boolean
12021:
            end;
12022:
12023: procedure SIRegister_ALFcnMime(CL: TPSPascalCompiler);
12024:
               NativeInt', 'Integer
NativeUInt', 'Cardinal
12025:
12026:
              Function ALMimeBase64EncodeString( const S : AnsiString) : AnsiString
12027:
              Function ALMimeBase64EncodeStringNoCRLF( const S : AnsiString) : AnsiString
12028:
12029:
              \textbf{Function} \  \, \texttt{ALMimeBase64DecodeString(} \  \, \textbf{const} \  \, \texttt{S} \  \, \texttt{:} \  \, \texttt{AnsiString)} \  \, \texttt{:} \  \, \texttt{AnsiString}
12030:
              \textbf{Function} \  \, \texttt{ALMimeBase64EncodedSize(} \  \, \textbf{const} \  \, \texttt{InputSize} : \texttt{NativeInt}) : \texttt{NativeInt}
12031:
              Function ALMimeBase64EncodedSizeNoCRLF( const InputSize : NativeInt) : NativeInt
              Procedure ALMimeBase64DecodedSize( const InputSize: NativeInt): NativeInt

Procedure ALMimeBase64Encode( const InputBuffer: TByteDynArray; InputOffset: NativeInt; const
12032:
12033:
             InputByteCount : NativeInt; out OutputBuffer : TByteDynArray; OutputOffset : NativeInt)
              Procedure ALMimeBase64EncodeNoCRLF( const InputBuffer : TByteDynArray; InputOffset : NativeInt; const
12034:
            InputByteCount: NativeInt; out OutputBuffer: TByteDynArray; OutputOffset: NativeInt; const

Procedure ALMimeBase64EncodeFullLines( const InputBuffer: TByteDynArray; InputOffset: NativeInt; const
             InputByteCount : NativeInt; out OutputBuffer : TByteDynArray; OutputOffset : NativeInt)
12036: Function ALMimeBase64Decode( const InputBuffer : TByteDynArray; InputOffset : NativeInt; const InputByteCount : NativeInt; out OutputBuffer : TByteDynArray; OutputOffset : NativeInt) : NativeInt;
12037: Function ALMimeBase64DecodePartial( const InputBuffer: TByteDynArray; InputOffset: NativeInt; const
            InputByteCount : NativeInt; out OutputBuffer : TByteDynArray; OutputOffset : NativeInt;
12038:
              + 'var ByteBuffer : Cardinal; var ByteBufferSpace : Cardinal) : NativeInt;
            Function ALMimeBase64DecodePartialEnd( out OutputBuffer : TByteDynArray; OutputOffset : NativeInt; const ByteBuffer : Cardinal; const ByteBufferSpace : Cardinal) : NativeInt;
12039:
            Procedure ALMimeBase64Encode(const InputBuf:TByteDynArray;const InputByteCnt:NatInt;out
             OutputBuf: TByteDynArray)
```

```
12041: 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
12043:
        OutputBuffer: TByteDynArray): NativeInt;
        Function ALMimeBase64DecodePartial1(const InputBuffer:TByteDynArray;const InputByteCount:NativeInt;out
        OutputBuffer: TByteDynArray; var ByteBuffer: Cardinal; var ByteBufferSpace: Cardinal)
12045:
         Function ALMimeBase64DecodePartialEnd1(out OutputBuffer:TByteDynArray;const ByteBuffer:Cardinal;const
        ByteBufferSpace:Cardinal):NativeInt;
12046:
         Procedure ALMimeBase64EncodeFile( const InputFileName, OutputFileName: TFileName)
         Procedure ALMimeBase64EncodeFileNoCRLF( const InputFileName, OutputFileName : TFileName)
12048:
         Procedure ALMimeBase64DecodeFile( const InputFileName, OutputFileName : TFileName)
         Procedure ALMimeBase64EncodeStream( const InputStream : TStream; const OutputStream : TStream)

Procedure ALMimeBase64EncodeStreamNoCRLF( const InputStream : TStream; const OutputStream : TStream)
12049:
12050:
12051:
         Procedure ALMimeBase64DecodeStream( const InputStream: TStream; const OutputStream: TStream)
         'cALMimeBase64_ENCODED_LINE_BREAK','LongInt').SetInt( 76);
'cALMimeBase64_DECODED_LINE_BREAK','LongInt').SetInt( cALMimeBase64_ENCODED_LINE_BREAK div 4 * 3);
12052:
12053:
         'CALMimeBase64_BUFFER_SIZE','LongInt').SetInt( CALMimeBase64_DECODED_LINE_BREAK * 3 * 4

Procedure ALFillMimeContentTypeByExtList( AMIMEList : TALStrings)

Procedure ALFillExtByMimeContentTypeList( AMIMEList : TALStrings)
12054:
12055:
12056:
12057:
         Function ALGetDefaultFileExtFromMimeContentType( aContentType : AnsiString) : AnsiString
12058:
         Function ALGetDefaultMIMEContentTypeFromExt( aExt : AnsiString) : AnsiString
12059:
        end
12060:
12061:
        procedure SIRegister_ALXmlDoc(CL: TPSPascalCompiler);
12062:
          'CALXMLNodeMaxListSize','LongInt').SetInt( Maxint div 16);
FindClass('TOBJECT'),'TALXMLNode
12063:
12064:
           FindClass('TOBJECT'), 'TALXMLNodeList
12065:
12066:
           FindClass('TOBJECT'), 'TALXMLDocument
12067:
           TAlXMLParseProcessingInstructionEvent', 'Procedure (Sender:TObject; const Target,Data:AnsiString)
12068:
           TALXMLParseTextEvent', 'Procedure ( Sender : TObject; const str: AnsiString)
           TALIMMParseStartElementEvent', 'Procedure ( Sender : TObject; co + 'nst Name : AnsiString; const Attributes : TALStrings)
12069:
12070:
12071:
           TAlXMLParseEndElementEvent', 'Procedure ( Sender : TObject; const Name : AnsiString)
           TALXmlNodeType', '( ntReserved, ntElement, ntAttribute, ntText, ' +'ntCData, ntEntityRef, ntEntity, ntProcessingInstr, ntComment, ntDocument, '
12072:
12073:
12074:
            +'ntDocType, ntDocFragment, ntNotation )
          TALXMLDocOptions', 'doNodeAutoCreate, doNodeAutoIndent )
TALXMLDocOptions', 'set of TALXMLDocOption
TALXMLParseOption', '(poPreserveWhiteSpace, poIgnoreXMLReferences)
TALXMLParseOptions', 'set of TALXMLParseOption
12075:
12076:
12077:
12078:
           TALXMLPrologItem', '( xpVersion, xpEncoding, xpStandalone )
PALPointerXMLNodeList', '^TALPointerXMLNodeList'/ will not work
12079:
12080:
           SIRegister_EALXMLDocError(CL);
12081:
           SIRegister_TALXMLNodeList(CL);
12082:
12083:
           SIRegister_TALXMLNode(CL);
           SIRegister_TALXmlElementNode(CL);
12084:
12085:
           SIRegister TALXmlAttributeNode(CL);
12086:
           SIRegister TALXmlTextNode(CL);
12087:
           SIRegister_TALXmlDocumentNode(CL);
           SIRegister_TALXmlCommentNode(CL)
12088:
12089:
           SIRegister_TALXmlProcessingInstrNode(CL);
12090:
           SIRegister_TALXmlCDataNode(CL);
12091:
           SIRegister_TALXmlEntityRefNode(CL);
12092:
           SIRegister_TALXmlEntityNode(CL);
           SIRegister_TALXmlDocTypeNode(CL);
12093:
12094:
           SIRegister_TALXmlDocFragmentNode(CL);
           SIRegister_TALXmlNotationNode(CL);
12095:
12096:
           SIRegister_TALXMLDocument(CL);
12097:
         cAlXMLUTF8EncodingStr','String').SetString('UTF-8
         cALXmluTF8HeaderStr','String').SetString('<?xmlversion="1.0"encoding="UTF-8"standalone="yes"?>'+#13#10);
CALNSDelim','String').SetString(':
12098:
12099:
         CALXML', 'String').SetString( 'xml
CALVersion', 'String').SetString( 'version
CALEncoding', 'String').SetString( 'encoding
12100:
12101:
12102:
         CALStandalone','String').SetString( 'standalone CALDefaultNodeIndent','String').SetString( '
12103:
12104:
         CALLYMIDocument', 'String').SetString( 'DOCUMENT

Function ALCreateEmptyXMLDocument( const Rootname : AnsiString) : TalXMLDocument
12105:
12106:
         Procedure ALClearXMLDocument(const rootname:AnsiString;xmldoc:TalXMLDocument;const
12107:
        EncodingStr:AnsiString);
        Function ALFindXmlNodeByChildNodeValue(xmlrec:TalxmlNode;const ChildNodeName,
12108:
        ChildNodeValue:AnsiString; const Recurse: Boolean) : TalxmlNode
         Function ALFindXmlNodeByNameAndChildNodeValue( xmlrec : TalxmlNode; const NodeName : ansiString; const
        {\tt ChildNodeName,\ ChildNodeValue\ :\ AnsiString;\ {\tt const}\ {\tt Recurse\ :\ Boolean)\ :\ TalxmlNode\ }}
12110:
         Function ALFindXmlNodeByAttribute(xmlrec:TalxmlNode;const AttributeName,AttributeValue:AnsiString;const
        Recurse: Boolean):TalxmlNode
         Function ALFindXmlNodeByNameAndAttribute( xmlrec : TalxmlNode; const NodeName : ansiString; const
        AttributeName, AttributeValue : AnsiString; const Recurse : Boolean) : TalxmlNode
12112: Function ALExtractAttrValue( const AttrName, AttrLine : AnsiString; const Default : AnsiString) :
        AnsiString
        end;
12113:
12114:
12115: procedure SIRegister_TeCanvas(CL: TPSPascalCompiler);
12116:
        //based on TEEProc. TeCanvas. TEEngine. TChart
12117: begin
        'TeePiStep', 'Double').setExtended( Pi / 180.0);
```

```
'TeeDefaultPerspective','LongInt').SetInt( 100);
'TeeMinAngle','LongInt').SetInt( 270);
12119:
12120:
            'teeclMoneyGreen', 'LongWord').SetUInt( TColor ( $CODCCO ));
            'teeclSkyBlue','LongWord').SetUInt( TColor ( $FOCAA6 ));
'teeclCream','LongWord').SetUInt( TColor ( $FOFBFF ));
12122.
12123:
            'teeclMedGray', 'LongWord').SetUInt( TColor ( $A4A0A0 ));
12124:
            'teeclMoneyGreen', 'LongWord').SetUInt( TColor ( $CODCCO ));
12125:
           'teeclSkyBlue','LongWord').SetUInt( TColor ( $F0CAA6 ));
'teeclCream','LongWord').SetUInt( TColor ( $F0FBFF ));
12126:
12127:
12128:
            'teeclMedGray', 'LongWord').SetUInt( TColor ( $A4A0A0 ));
           'TA_LEFT','LongInt').SetInt( 0);
'TA_RIGHT','LongInt').SetInt( 2);
'TA_CENTER','LongInt').SetInt( 6);
12129:
12130:
12131:
           'TA_TOP','LongInt').SetInt( 0);
'TA_BOTTOM','LongInt').SetInt( 8);
'teePATCOPY','LongInt').SetInt( 0);
12132:
12133:
12134:
           'NumCirclePoints', 'LongInt').SetInt( 64);
12135:
            'teeDEFAULT_CHARSET','LongInt').SetInt( 1);
'teeANTIALIASED_QUALITY','LongInt').SetInt( 4);
12136:
12137:
           teeAnlTABLASED_QUARTIT , bolight ).SetInt
'TA_LEFT', 'LongInt').SetInt( 0);
'bs_Solid', 'LongInt').SetInt( 0);
'teepf24Bit', 'LongInt').SetInt( 0);
'teepfDevice', 'LongInt').SetInt( 1);
'CM_MOUSELEAVE', 'LongInt').SetInt( 10000);
12138:
12139:
12140:
12141:
12142:
           'CM_SYSCOLORCHANGE', 'LongInt').SetInt( 10001);
'DC_BRUSH', 'LongInt').SetInt( 18);
12143:
12144:
12145:
           'DC_PEN','LongInt').SetInt( 19);
             teeCOLORREF', 'LongWord
TLogBrush', 'record lbStyle : Integer; lbColor : TColor; lbHatch: Integer; end
12146:
12147:
             //TNotifyEvent', 'Procedure ( Sender : TObject)
12148:
12149:
             SIRegister_TFilterRegion(CL);
12150:
             SIRegister_IFormCreator(CL);
12151:
             SIRegister TTeeFilter(CL);
             //TFilterClass', 'class of TTeeFilter
SIRegister_TFilterItems(CL);
12152:
12153:
12154:
             SIRegister_TConvolveFilter(CL);
             SIRegister_TBlurFilter(CL);
12155:
12156:
             SIRegister TTeePicture(CL);
12157:
             TPenEndStyle', '( esRound, esSquare, esFlat )
12158:
             SIRegister_TChartPen(CL);
12159:
             SIRegister_TChartHiddenPen(CL);
             SIRegister_TDottedGrayPen(CL);
SIRegister_TDarkGrayPen(CL);
12160:
12161:
12162:
             SIRegister_TWhitePen(CL);
12163:
             SIRegister_TChartBrush(CL);
             TTeeView3DScrolled', 'Procedure ( IsHoriz : Boolean)
TTeeView3DChangedZoom', 'Procedure ( NewZoom : Integer)
12164:
12165:
12166:
             SIRegister_TView3DOptions(CL);
             FindClass('TOBJECT'),'TTeeCanvas
TTeeTransparency', 'Integer
12167:
12168:
             SIRegister_TTeeBlend(CL);
FindClass('TOBJECT'),'TCanvas3D
12169:
12170:
12171:
             SIRegister_TTeeShadow(CL);
             teeTGradientDirection', '( gdTopBottom, gdBottomTop, gdLeftRight, g' +'dRightLeft, gdFromCenter, gdFromTopLeft, gdFromBottomLeft, gdRadial,gdDiagonalUp,gdDiagonalDown )
FindClass('TOBJECT'),'TSubGradient
12172:
12173:
12174:
12175:
             SIRegister_TCustomTeeGradient(CL);
12176:
             SIRegister_TSubGradient(CL);
12177:
             SIRegister_TTeeGradient(CL);
             SIRegister_TTeeFontGradient(CL);
SIRegister_TTeeFont(CL);
12178:
12179:
12180:
             TCanvasBackMode', '( cbmNone, cbmTransparent, cbmOpaque )
                                         Integer
12181:
             TCanvasTextAlign', 'Inte
TTeeCanvasHandle', 'HDC
12182:
             SIRegister_TTeeCanvas(CL);
12183:
             TPoint3DFloat', 'record X : Double; Y : Double; Z : Double; end
12185:
             SIRegister_TFloatXYZ(CL);
             \label{eq:total_problem} \begin{split} & \text{TPoint3D', 'record } x : \text{integer; } y : \text{integer; } z : \text{Integer; end} \\ & \text{TRGB', 'record blue: byte; green: byte; red: byte; end} \end{split}
12186:
12187:
             {TRGB=packed record
12188:
12189:
                Blue : Byte;
12190:
                Green : Byte;
12191:
                Red : Byte;
//$IFDEF CLX //Alpha : Byte; // Linux end;}
12192:
12193:
12194: TTeeCanvasCalcPoints', 'Function ( x, z : Integer; var P0, P1 : '
12195: +'TPoint3D; var Color0, Color1: TColor): Boolean 12196: TTeeCanvasSurfaceStyle', '( tcsSolid, tcsWire, tcsDot )
12197: TCanvas3DPlane', '(cpX, cpY, cpZ)
12198: //IInterface', 'IUnknown
12199:
             SIRegister_TCanvas3D(CL);
12200:
             SIRegister TTeeCanvas3D(CL);
             TTrianglePoints', 'Array[0..2] of TPoint;
TFourPoints', 'Array[0..3] of TPoint;
12201:
12202:
           Function ApplyDark( Color : TColor; HowMuch : Byte) : TColor
12203:
12204:
           Function ApplyBright( Color : TColor; HowMuch : Byte) : TColor
12205: Function Point3D( const x, y, z : Integer) : TPoint3D
12206: Procedure SwapDouble( var a, b : Double)
12207: Procedure SwapInteger( var a, b : Integer)
```

```
12208:
          Procedure RectSize( const R : TRect; var RectWidth, RectHeight : Integer)
12209:
          Procedure teeRectCenter( const R : TRect; var X, Y : Integer)
          Function RectFromPolygon( const Points : array of TPoint; NumPoints : Integer): TRect
12211:
          Function RectFromTriangle( const Points : TTrianglePoints) : TRect
12212:
          Function RectangleInRectangle( const Small, Big : TRect) : Boolean
12213:
          Procedure ClipCanvas ( ACanvas : TCanvas; const Rect : TRect)
12214:
          Procedure UnClipCanvas ( ACanvas : TCanvas)
          Procedure ClipEllipse( ACanvas : TTeeCanvas; const Rect : TRect)
12215:
12216:
          Procedure ClipRoundRectangle(ACanvas:TTeeCanvas;const Rect : TRect; RoundSize : Integer)
12217:
          Procedure ClipPolygon(ACanvas:TTeeCanvas;const Points:array of TPoint;NumPoints:Integer)
          'TeeCharForHeight','String').SetString('W')
'DarkerColorQuantity','Byte').SetUInt( 128);
12218:
12219:
12220:
          'DarkColorQuantity', 'Byte').SetUInt( 64);
TButtonGetColorProc', 'Function : TColo
12221:
                                       'Function : TColor
           SIRegister_TTeeButton(CL);
12222:
12223:
           SIRegister_TButtonColor(CL);
12224:
           SIRegister TComboFlat(CL);
12225 •
          Procedure TeeSetTeePen(FPen:TPen; APen : TChartPen; AColor : TColor; Handle:TTeeCanvasHandle)
12226:
          Function TeePoint( const aX, aY : Integer) : TPoint
          Function TEEPointInRect( const Rect : TRect; const P : TPoint) : Boolean;
12227:
          Function PointInRect1( const Rect : TRect; x, y : Integer) : Boolean;
12228:
          Function TeeRect( Left, Top, Right, Bottom : Integer) : TRect
12229:
          Function OrientRectangle( const R : TRect) : TRect
Procedure TeeSetBitmapSize( Bitmap : TBitmap; Width, Height : Integer)
12230:
12231:
          Function PolygonBounds( const P : array of TPoint) : TRect
12232:
12233:
          Function PolygonInPolygon( const A, B : array of TPoint) : Boolean
12234:
          Function RGBValue( const Color : TColor) : TRGB
          Function EditColor( AOwner : TComponent; AColor : TColor) : TColor
12235:
          Function EditColorDialog( AOwner: TComponent; var AColor: TColor): Boolean Function PointAtDistance( AFrom, ATo: TPoint; ADist: Integer): TPoint
12236:
12237:
12238:
          Function TeeCull( const P : TFourPoints) : Boolean;
          Function TecCull1( const PO, P1, P2 : TPoint) : Boolean;
TSmoothStretchOption', '( ssBestQuality, ssBestPerformance )
12239:
12240:
          Procedure SmoothStretch( Src, Dst : TBitmap);

Procedure SmoothStretch1( Src, Dst : TBitmap; Option : TSmoothStretchOption);
12241:
12242:
12243:
          \textbf{Function} \ \ \texttt{TeeDistance}( \ \ \textbf{const} \ \ \texttt{x}, \ \ \texttt{y} \ : \ \texttt{Double}) \ : \ \texttt{Double}
          Function TeeLoadLibrary( const FileName : String) : HInst
Procedure TeeFreeLibrary( hLibModule : HMODULE)
12244:
12245:
12246:
          Procedure TeeBlendBitmaps( const Percent : Double; ABitmap, BBitmap; TBitmap; BOrigin : TPoint)
        //Procedure TeeCalcLines( var Lines : TRGBArray; Bitmap : TBitmap)

Procedure TeeCalcLines( var Lines : TRGBArray; Bitmap : TBitmap)

Procedure TeeShadowSmooth(Bitmap, Back : TBitmap; Left, Top, Width, Height, horz, vert : Integer;
Smoothness : Double; FullDraw : Boolean; ACanvas : TCanvas3D; Clip : Boolean)
12247:
12248:
          SIRegister_ICanvasHyperlinks(CL);
12250:
           SIRegister_ICanvasToolTips(CL);
12251:
         Function Supports( const Instance : IInterface; const IID : TGUID) : Boolean
12252: end;
12253:
12254: procedure SIRegister_ovcmisc(CL: TPSPascalCompiler);
12255:
        begin
           TOvcHdc', 'Integer
12256:
           TOVCHWND', 'Cardinal
TOVCHdc', 'HDC
TOVCHWND', 'HWND
12257:
12258:
12259:
          Function LoadBaseBitmap( lpBitmapName : PChar) : HBITMAP
Function LoadBaseCursor( lpCursorName : PChar) : HCURSOR
12260:
12261:
          Function ovCompStruct( const S1, S2, Size : Cardinal) : Integer Function DefaultEpoch : Integer
12262:
12263:
          Function DrawButtonFrame(Canvas:TCanvas:const Client:TRect;IsDown,IsFlat:Bool;Style:TButtonStyle):TRect;
12264:
          Procedure FixRealPrim( P : PChar; DC : Char)
Function GetDisplayString( Canvas : TCanvas; const S : string; MinChars, MaxWidth : Integer) : string
12265:
12266:
12267:
          Function GetLeftButton : Byte
12268:
          Function GetNextDlgItem( Ctrl : TOvcHWnd) : hWnd
          Procedure GetRGB( Clr : TColor; var IR, IG, IB : Byte)
Function GetShiftFlags : Byte
12269:
12270:
12271:
          Function ovCreateRotatedFont(F: TFont; Angle: Integer): hFont
          Function GetTopTextMargin(Font:TFont;BorderStyle:TBorderStyle; Height:Integer;Ctl3D:Boolean): Integer
12272:
          Function ovExtractWord( N : Integer; const S : string; WordDelims : TCharSet) : string
12273:
12274:
          \textbf{Function} \  \, \text{ovIsForegroundTask} \  \, : \  \, \text{Boolean}
12275:
          Function ovTrimLeft( const S : string) : string
12276:
          Function ovTrimRight( const S : string) : string
12277:
          Function ovQuotedStr( const S : string) : string
12278:
          Function ovWordCount( const S : string; const WordDelims : TCharSet) : Integer
12279:
          Function ovWordPosition(const N:Integer;const S: string;const WordDelims : TCharSet) : Integer
12280:
          Function PtrDiff( const P1, P2 : PChar) : Word
          Procedure PtrInc( var P, Delta : Word)
12281:
          Procedure PtrDec( var P, Delta : Word)
12282:
          Procedure FixTextBuffer( InBuf, OutBuf : PChar; OutSize : Integer)

Procedure TransStretchBlt( DstDC : TovcHdc; DstX, DstY, DstW, DstH : Integer; SrcDC : TovcHdc; SrcX, SrcY, SrcW, SrcH : Integer; MaskDC : TovcHdc; MaskX, MaskY : Integer)
12283:
12284:
          Function ovMinI( X, Y : Integer) : Integer
Function ovMaxI( X, Y : Integer) : Integer
12285:
12286:
12287:
          Function ovMinL( X, Y : LongInt) : LongInt
          Function ovMaxL( X, Y : LongInt) : LongInt
12288:
          Function GenerateComponentName( PF: TWinControl; const Root: string): string
Function PartialCompare( const S1, S2: string): Boolean
12289:
12290:
         Function PathEllipsis( const S : string; MaxWidth : Integer) : string
Function ovCreateDisabledBitmap( FOriginal : TBitmap; OutlineColor : TColor) : TBitmap
Procedure ovCopyParentImage( Control : TControl; Dest : TCanvas)
12291:
12292:
12293:
          Procedure ovDrawTransparentBitmap( Dest : TCanvas; X, Y, W, H : Integer; Rect : TRect; Bitmap : TBitmap;
         TransparentColor : TColor)
```

```
12295: Procedure DrawTransparentBitmapPrim(DC:TOvcHdc;Bitmap:HBitmap;xStart,yStart,Width,Height:Int;Rect:TRect;
          TransparentColor : TColorRef)
           Function ovWidthOf( const R : TRect) : Integer
12297 •
           Function ovHeightOf( const R : TRect) : Integer
           Procedure ovDebugOutput( const S : string)
Function GetArrowWidth( Width, Height : Integer) : Integer
12298:
12299:
12300:
           Procedure StripCharSeq( CharSeq : string; var Str : string)
           Procedure StripCharFromEnd( aChr : Char; var Str : string)
12301:
           Procedure StripCharFromFront( aChr : Char; var Str : string)
Function SystemParametersInfo( uiAction, uiParam : UINT; pvParam : UINT; fWinIni : UINT) : BOOL
12302:
12303:
           Function SystemParametersInfoNCM(uiAction,uiParam:UINT;pvParam:TNonClientMetrics;fWinIni:UINT):BOOL;
12304:
           Function SystemParametersInfoA( uiAction, uiParam : UINT; pvParam : UINT; fWinIni : UINT) : BOOL
           Function CreateEllipticRgn( pl, p2, p3, p4 : Integer) : HRGN
Function CreateEllipticRgnIndirect( const p1 : TRect) : HRGN
12306:
12307:
           Function CreateFontIndirect( const pl : TLogFont) : HFONT Function CreateMetaFile( pl : PChar) : HDC
12308:
12309:
           \textbf{Function} \ \ \text{DescribePixelFormat} ( \ \text{DC}: \ \ \text{HDC}; p2: \text{Int}; p3: \ \text{UINT}; \textbf{var} \ \ p4: \ \text{TPixelFormatDescriptor}): \ \ \text{BOOL} 
12310:
           Function DrawText(hDC:HDC;lpString:PChar;nCount:Integer; var lpRect: TRect;uFormat:UINT):Integer Function DrawTextS(hDC:HDC;lpString:string;nCount:Integer; var lpRect:TRect;uFormat:UINT):Integer
12311 •
12312:
12313:
           Function SetMapperFlags( DC : HDC; Flag : DWORD) : DWORD
           Function SetGraphicsMode( hdc : HDC; iMode : Integer) : Integer
12314:
           Function SetMapMode( DC : HDC; p2 : Integer) : Integer
12315:
12316:
           Function SetMetaFileBitsEx( Size : UINT; const Data : PChar) : HMETAFILE
12317:
           //Function SetPaletteEntries(Palette: HPALETTE; StartIndex, NumEntries: UINT; var PaletteEntries): UINT
           Function SetPixel( DC : HDC; X, Y : Integer; Color : COLORREF) : COLORREF
12318:
           Function SetPixelV( DC : HDC; X, Y : Integer; Color : COLORREF) : BOOL
12319:
          //Function SetPixelFormat( DC : HDC; PixelFormat : Integer; FormatDef : PPixelFormatDescriptor) : BOOL Function SetPolyFillMode( DC : HDC; PolyFillMode : Integer) : Integer
Function StretchBlt(DestDC:HDC;X,Y,Width,Height:Int;SrcDC:HDC;XSrc,YSrc,SrcWidth,
12320:
12321:
12322:
          SrcHeight:Int;Rop:DWORD):BOOL
12323:
          Function SetRectRgn( Rgn : HRgn; X1, Y1, X2, Y2 : Integer) : BOOL
           \textbf{Function} \  \, \texttt{StretchDIBits}(\texttt{DC} \ : \ \texttt{HDC}; \  \, \texttt{DestX}, \texttt{DestY}, \texttt{DestWidth}, \texttt{DestHeight}, \texttt{SrcX}, \texttt{SrcY}, \texttt{SrcWidth}, \\
12324:
         {\tt SrcHeight:Int;Bits:int;} \ \textbf{var} \ {\tt BitsInfo} \ : \ {\tt TBitmapInfo;} \ {\tt Usage} \ : \ {\tt UINT;} \ {\tt Rop} \ : \ {\tt DWORD}) \ : \ {\tt Integer}
          Function SetROP2( DC : HDC; p2 : Integer) : Integer Function SetStretchBltMode( DC : HDC; p2 : UINT) : UINT

Function SetSystemPaletteUse( DC : HDC; p2 : UINT) : UINT

Function SetTextCharacterExtra( DC : HDC; CharExtra : Integer) : Integer

Function SetTextColor( DC : HDC; Color : COLORREF) : COLORREF
12325:
12327:
12328:
12329:
12330:
           Function SetTextAlign( DC :
                                                  HDC; Flags : UINT) : UINT
           Function SetTextJustification( DC: HDC; BreakExtra, BreakCount: Integer): Integer Function UpdateColors( DC: HDC): BOOL
12331:
12332:
           Function GetViewportExtEx( DC : HDC; var Size : TSize) : BOOL
Function GetViewportOrgEx( DC : HDC; var Point : TPoint) : BOOL
12333:
12334:
           Function GetWindowExtEx( DC : HDC; var Size : TSize) : BOOL
Function GetWindowOrgEx( DC : HDC; var Point : TPoint) : BOOL
12335:
12336:
           Function IntersectClipRect( DC : HDC; X1, Y1, X2, Y2 : Integer) : Integer Function InvertRgn( DC : HDC; p2 : HRGN) : BOOL
12337:
12338:
           Function MaskBlt( DestDC : HDC; XDest, YDest, Width, Height : Integer; SrcDC : HDC; XScr, YScr : Integer;
12339:
         Mask: HBITMAP; xMask, yMask: Integer; Rop: DWORD): BOOL
Function PlgBlt(DestDC:HDC;const PtsArray,SrcDC:HDC;XSrc,YSrc,Widt,Heigh:Int;Mask:HBITMAP;xMask,
12340:
         yMask:Int):BOOL;
12341:
           Function OffsetClipRgn( DC : HDC; XOffset, YOffset : Integer) :
                                                                                                     Integer
           Function OffsetRgn( RGN : HRGN; XOffset, YOffset : Integer) : Integer
12342:
12343:
           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
12344:
12345:
           Function PaintRgn( DC : HDC; RGN : HRGN) : BOOL
           Function PtInRegion( RGN : HRGN; X, Y : Integer) : BOOL
12347:
           Function PtVisible( DC : HDC; X, Y : Integer) : BOOL
Function RectInRegion( RGN : HRGN; const Rect : TRect) : BOOL
12348:
12349:
           Function RectVisible( DC : HDC; const Rect : TRect) : BOOL
12350:
          Function Rectangle( DC : HDC; X1, Y1, X2, Y2 : Integer) : BOOL
Function RestoreDC( DC : HDC; SavedDC : Integer) : BOOL
12351:
12352:
12353:
         end;
12354:
12355: procedure SIRegister_ovcfiler(CL: TPSPascalCompiler);
12356:
            SIRegister_TOvcAbstractStore(CL);
12357:
             //PExPropInfo', '^TExPropInfo // will not work
' TExPropInfo', 'record PI : TPropInfo; AObject : TObject; end
12358:
12359: //
            SIRegister_TOvcPropertyList(CL);
12360:
12361:
            SIRegister_TOvcDataFiler(CL);
12362:
           Procedure UpdateStoredList( AForm : TWinControl; AStoredList : TStrings; FromForm : Boolean)
Procedure UpdateStoredList1( AForm : TCustomForm; AStoredList : TStrings; FromForm : Boolean)
12363:
12364:
           Function CreateStoredItem( const CompName, PropName : string) : string
12365:
           Function ParseStoredItem( const Item : string; var CompName, PropName : string) : Boolean
12366:
           //Function GetPropType( PropInfo : PExPropInfo) : PTypeInfo
12367: end;
12368:
12369:
         procedure SIRegister_ovccoco(CL: TPSPascalCompiler);
12370: begin
           'ovsetsize','LongInt').SetInt( 16);
'etSyntax','LongInt').SetInt( 0);
'etSymantic','LongInt').SetInt( 1);
12371:
12372:
12373:
           'chCR','Char').SetString( #13);
'chLF','Char').SetString( #10);
12374:
12375:
           'chLineSeparator','').SetString( chCR);
12376:
12377:
            SIRegister_TCocoError(CL);
            SIRegister_TCommentItem(CL);
```

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12379:
           SIRegister_TCommentList(CL);
           SIRegister_TSymbolPosition(CL);
12380:
12381: TGenListType', '( glNever, glAlways, glOnError )
12382: TovBitSet', 'set of Integer
         //PStartTable', '^TStartTable // will not work
'TovCharSet', 'set of AnsiChar
12383:
12384:
12385: TAfterGenListEvent', 'Procedure ( Sender : TObject; var PrintErrorCount : boolean)
12386: TCommentEvent', 'Procedure ( Sender : TObject; CommentList : TCommentList)

12387: TCustomErrorEvent', 'Function(Sender:TObject; const ErrorCode: longint; const Data:string): string
12388: TovErrorEvent', 'Procedure ( Sender : TObject; Error : TCocoError) 12389: TovErrorProc', 'Procedure ( ErrorCode : integer; Symbol : TSymbolP
            +'osition; const Data : string; ErrorType : integer)
12391: TFailureEvent', 'Procedure ( Sender : TObject; NumErrors : integer)
12392: TGetCH', 'Function ( pos : longint) : char
12393: TStatusUpdateProc', 'Procedure ( Sender : TObject; Status: string; LineNum:integer)
           SIRegister_TCocoRScanner(CL);
           SIRegister_TCocoRGrammar(CL);
12395:
          '_EF','Char').SetString( #0);
'_TAB','Char').SetString( #09
12396
12397:
12398:
          '_CR','Char').SetString( #13);
          '_LF','Char').SetString( #10);
12399:
          '_EL','').SetString( _CR);
12400:
12401:
            _EOF','Char').SetString( #26);
          'LineEnds','TCharSet').SetInt(ord(_CR) or ord(_LF) or ord(_EF));
'minErrDist','LongInt').SetInt( 2);
12402:
12403:
12404: Function ovPadL( S : string; ch : char; L : integer) : string
12405: end;
12406:
12407:
           TFormatSettings = record
              CurrencyFormat: Byte;
12408:
12409:
              NegCurrFormat: Byte;
12410:
              ThousandSeparator: Char;
              DecimalSeparator: Char;
12411:
12412:
              CurrencyDecimals: Byte;
12413:
              DateSeparator: Char;
12414:
              TimeSeparator: Char;
12415:
              ListSeparator: Char;
              CurrencyString: string;
12416:
12417:
              ShortDateFormat: string;
12418:
              LongDateFormat: string
12419:
              TimeAMString: string;
              TimePMString: string;
12420:
12421:
              ShortTimeFormat: string;
              LongTimeFormat: string;
12422:
12423:
              ShortMonthNames: array[1..12] of string;
12424:
              LongMonthNames: array[1..12] of string;
              ShortDayNames: array[1..7] of string;
LongDayNames: array[1..7] of string;
12425:
12426:
12427:
              TwoDigitYearCenturyWindow: Word;
12428:
            end;
12429:
12430: procedure SIRegister OvcFormatSettings(CL: TPSPascalCompiler);
12431: begin
12432:
         Function ovFormatSettings : TFormatSettings
12433: end;
12434:
12435: procedure SIRegister_ovcstr(CL: TPSPascalCompiler);
12436: begin
           TOvcCharSet', 'set of Char

ovBTable', 'array[0..255] of Byte

//BTable = array[0..{$IFDEF UNICODE}{{$IFDEF}}
12437:
12438:
12439:
        HUGE_UNICODE_BMTABLE}$FFFFf\$ELSE\$FFF\$ENDIF\{\$ELSE\$FF\$ENDIF\}\] of Byte;
12440: Function BinaryBPChar( Dest : PChar; B : Byte) : PChar
          Function BinaryLPChar( Dest : PChar; L : LongInt) : PChar
Function BinaryWPChar( Dest : PChar; W : Word) : PChar
12441:
12442:
          Procedure BMMakeTable( MatchString : PChar; var BT : ovBTable)
          Function BMSearch(var Buffer, BufLength: Cardinal; var BT:ovBTable; MatchString: PChar; var Pos:Cardinal): Bool;
12444:
12445:
          Function BMSearchUC(var Buffer,BufLength:Card; var BT:ovBTable;MatchString:PChar; var Pos: Card):Boolean
          Function CharStrPChar( Dest : PChar; C : Char; Len : Cardinal) : PChar
Function DetabPChar( Dest : PChar; Src : PChar; TabSize : Byte) : PChar
Function HexBPChar( Dest : PChar; B : Byte) : PChar
12446:
12447:
12448:
12449:
          Function HexLPChar( Dest : PChar; L : LongInt) : PChar
12450:
          Function HexPtrPChar( Dest : PChar; P : TObject) : PChar
          Function HexWPChar( Dest : PChar; W : Word) : PChar
12451:
12452:
          Function LoCaseChar( C : Char) : Char
12453:
          \textbf{Function} \  \, \texttt{OctalLPChar}( \  \, \texttt{Dest} \  \, : \  \, \texttt{PChar}; \  \, \texttt{L} \  \, : \  \, \texttt{LongInt}) \  \, : \  \, \texttt{PChar}
          Function StrChDeletePrim( P : PChar; Pos : Cardinal) : PChar
Function StrChInsertPrim( Dest : PChar; C : Char; Pos: Cardinal) : PChar
12454:
12455:
          Function StrChPos( P : PChar; C : Char; var Pos : Cardinal) : Boolean
12456:
          Procedure StrInsertChars( Dest : PChar; Ch : Char; Pos, Count : Word)
          Function StrStCopy( Dest, S : PChar; Pos, Count : Cardinal) : PChar
Function StrStDeletePrim( P : PChar; Pos, Count : Cardinal) : PChar
12458:
12459:
          Function StrStInsert( Dest, S1, S2 : PChar; Pos : Cardinal) : PChar
Function StrStInsertPrim( Dest, S : PChar; Pos : Cardinal) : PChar
12460:
12461:
          Function StrStPos( P, S : PChar; var Pos : Cardinal) : Boolean
12462:
12463:
          \textbf{Function} \  \, \texttt{StrToLongPChar}(\  \, \texttt{S} \  \, \texttt{PChar}; \  \, \textbf{var} \  \, \texttt{I} \  \, \texttt{EnngInt}) \  \, \texttt{:} \  \, \texttt{Boolean}
          Procedure TrimAllSpacesPChar( P : PChar)
12464:
12465:
          Function TrimEmbeddedZeros( const S : string) : string
12466: Procedure TrimEmbeddedZerosPChar( P : PChar)
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12467:
        Function TrimTrailPrimPChar(S: PChar): PChar
12468:
        Function TrimTrailPChar( Dest, S : PChar) : PChar
12469:
         Function TrimTrailingZeros( const S : string) : string
12470:
        Procedure TrimTrailingZerosPChar( P : PChar)
12471:
        Function UpCaseChar( C : Char) : Char
        Function ovcCharInSet( C : Char; const CharSet : TovcCharSet) : Boolean
12472:
        Function ovc32StringIsCurrentCodePage( const S : WideString) : Boolean;
12473:
12474:
         //Function ovc32StringIsCurrentCodePage1( const S:PWideChar; CP : Cardinal) : Boolean;
12475:
12476:
12477:
       procedure SIRegister_AfUtils(CL: TPSPascalCompiler);
12478:
       begin
12479:
          //PRaiseFrame', '^TRaiseFrame // will not work
          TRaiseFrame', 'record NextRaise : PRaiseFrame; ExceptAddr : ___Poin'
+'ter; ExceptObject : TObject; ExceptionRecord : PExceptionRecord; end
12480:
12481:
12482:
        Procedure SafeCloseHandle( var Handle : THandle)
        Procedure ExchangeInteger( X1, X2 : Integer)
12483:
        Procedure FillInteger( const Buffer, Size, Value : Integer)
Function LongMulDiv( Mult1, Mult2, Div1 : Longint) : Longint
Function afCompareMem( P1, P2 : Tobject; Length : Integer) : Boolean
12484:
12485:
12486:
12487:
12488:
       FILENAME ADVAPT32
                                = 'ADVAPI32.DLL';
            function AbortSystemShutdown; external advapi32 name 'AbortSystemShutdownW';
12489:
       function AbortSystemShutdown(lpMachineName: PKOLChar): BOOL; stdcall;
12490:
            function AccessCheckAndAuditAlarm(SubsystemName: PKOLChar;
12491:
12492:
              HandleId: Pointer; ObjectTypeName, ObjectName: PKOLChar;
12493:
              SecurityDescriptor: PSecurityDescriptor; DesiredAccess: DWORD;
12494:
              const GenericMapping: TGenericMapping; ObjectCreation: BOOL;
12495:
              var GrantedAccess: DWORD; var AccessStatus, pfGenerateOnClose: BOOL): BOOL; stdcall;
            function AccessCheckByTypeAndAuditAlarm(SubsystemName: PKOLChar;
12496:
12497:
              HandleId: Pointer; ObjectTypeName, ObjectName: PKOLChar;
              SecurityDescriptor: PSecurityDescriptor; PrincipalSelfSid: PSID; DesiredAccess: DWORD;
12498:
              AuditType: AUDIT_EVENT_TYPE; Flags: DWORD; ObjectTypeList: PObjectTypeList;
12499:
              ObjectTypeListLength: DWORD; const GenericMapping: TGenericMapping; ObjectCreation: BOOL; var GrantedAccess: DWORD; var AccessStatus, pfGenerateOnClose: BOOL): BOOL; stdcall;
12500:
12501:
12502:
            \textbf{function} \ \texttt{AccessCheckByTypeResultListAndAuditAlarm(SubsystemName: PKOLCharites)} \\
              HandleId: Pointer; ObjectTypeName, ObjectName: PKOLChar;
SecurityDescriptor: PSecurityDescriptor; PrincipalSelfSid: PSID; DesiredAccess: DWORD;
12503:
12504:
12505:
              AuditType: AUDIT_EVENT_TYPE; Flags: DWORD; ObjectTypeList: PObjectTypeList;
12506:
              ObjectTypeListLength: DWORD; const GenericMapping: TGenericMapping;
                                                                                            ObjectCreation: BOOL;
12507:
              var GrantedAccess: DWORD; var AccessStatusList:DWORD; var pfGenerateOnClose: BOOL): BOOL; stdcall;
            function BackupEventLog(hEventLog: THandle; lpBackupFileName: PKOLChar): BOOL; stdcall;
function ClearEventLog(hEventLog: THandle; lpBackupFileName: PKOLChar): BOOL; stdcall;
12508:
12509:
            function CreateProcessAsUser(hToken: THandle; lpApplicationName: PKOLChar;
12510:
12511:
              {\tt lpCommandLine: PKOLChar; lpProcessAttributes: PSecurityAttributes;}
12512:
              lpThreadAttributes: PSecurityAttributes; bInheritHandles: BOOL;
              dwCreationFlags: DWORD; lpEnvironment: Pointer; lpCurrentDirectory: PKOLChar;
12513:
              const lpStartupInfo: TStartupInfo; var lpProcessInformation: TProcessInformation): BOOL; stdcall;
12514:
12515:
            function GetCurrentHwProfile(var lpHwProfileInfo: THWProfileInfo): BOOL; stdcall;
12516:
            function GetFileSecurity(lpFileName: PKOLChar; RequestedInformation: SECURITY_INFORMATION;
12517:
              pSecurityDescriptor: PSecurityDescriptor;nLength:DWORD;var lpnLengthNeeded: DWORD):BOOL; stdcall;
            function GetUserName(lpBuffer: PKOLChar; var nSize: DWORD): BOOL; stdcall;
12518:
            function InitiateSystemShutdown(lpMachineName, lpMessage: PKOLChar;
12519:
12520:
              dwTimeout: DWORD; bForceAppsClosed, bRebootAfterShutdown: BOOL; stdcall;
            function LogonUser(lpszUsername, lpszDomain, lpszPassword: PKOLChar;
dwLogonType, dwLogonProvider: DWORD; var phToken: THandle): BOOL; stdcall;
12521:
12522:
            function LookupAccountName(lpSystemName, lpAccountName: PKOLChar;
12523:
12524:
              Sid: PSID; var cbSid: DWORD; ReferencedDomainName: PKOLChar;
12525:
              var cbReferencedDomainName: DWORD; var peUse: SID_NAME_USE): BOOL; stdcall;
12526:
            function LookupAccountSid(lpSystemName: PKOLChar; Sid: PSID;
              Name: PKOLChar; var cbName: DWORD; ReferencedDomainName: PKOLChar;
12527:
12528:
              var cbReferencedDomainName: DWORD; var peUse: SID_NAME_USE): BOOL; stdcall;
12529:
            function LookupPrivilegeDisplayName(lpSystemName, lpName: PKOLChar;
12530:
              lpDisplayName: PKOLChar; var cbDisplayName, lpLanguageId: DWORD): BOOL; stdcall;
            function LookupPrivilegeName(lpSystemName: PKOLChar;
var lpLuid: TLargeInteger; lpName: PKOLChar; var cbName: DWORD): BOOL; stdcall;
12531:
12532:
12533:
            function LookupPrivilegeValue(lpSystemName, lpName: PKOLChar;
              var lpLuid: TLargeInteger): BOOL; stdcall;
12534:
            function ObjectCloseAuditAlarm(SubsystemName: PKOLChar;
12535:
              HandleId: Pointer; GenerateOnClose: BOOL; stdcall;
12536:
            function ObjectDeleteAuditAlarm(SubsystemName: PKOLChar;
12537:
12538:
              HandleId: Pointer; GenerateOnClose: BOOL): BOOL; stdcall;
            function ObjectOpenAuditAlarm(SubsystemName: PKOLChar; HandleId: Pointer;
12539:
              ObjectTypeName: PKOLChar; ObjectName: PKOLChar; pSecurityDescriptor: PSecurityDescriptor;
12540:
12541:
              ClientToken: THandle; DesiredAccess, GrantedAccess: DWORD;
12542:
              var Privileges: TPrivilegeSet; ObjectCreation, AccessGranted: BOOL;
12543:
              var GenerateOnClose: BOOL): BOOL; stdcall;
            function ObjectPrivilegeAuditAlarm(SubsystemName: PKOLChar;
12544:
              HandleId: Pointer; ClientToken: THandle; DesiredAccess: DWORD;
12545:
              var Privileges: TPrivilegeSet; AccessGranted: BOOL): BOOL; stdcall;
12546:
12547:
            function OpenBackupEventLog(lpUNCServerName, lpFileName: PKOLChar): THandle; stdcall;
12548:
            function OpenEventLog(lpUNCServerName, lpSourceName: PKOLChar): THandle; stdcall;
            function PrivilegedServiceAuditAlarm(SubsystemName, ServiceName: PKOLChar;
12549:
              ClientToken: THandle; var Privileges: TPrivilegeSet; AccessGranted: BOOL): BOOL; stdcall;
12550:
            function ReadEventLog(hEventLog: THandle; dwReadFlags, dwRecordOffset: DWORD;
   lpBuffer: Pointer; nNumberOfBytesToRead: DWORD;
12551:
12552:
              var pnBvtesRead. pnMinNumberOfBvtesNeeded: DWORD): BOOL; stdcall;
12553:
12554:
            function RegConnectRegistry(lpMachineName: PKOLChar; hKey: HKEY;
              var phkResult: HKEY): Longint; stdcall;
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12556:
                  function RegCreateKev(hKev: HKEY; lpSubKev: PKOLChar;
12557:
                     var phkResult: HKEY): Longint; stdcall;
12558:
                  function RegCreateKeyEx(hKey: HKEY; lpSubKey: PKOLChar;
12559 :
                     Reserved: DWORD; lpClass: PKOLChar; dwOptions: DWORD; samDesired: REGSAM;
                 lpSecurityAttributes: PSecurityAttributes; var phkResult: HKEY;
lpdwDisposition: PDWORD): Longint; stdcall;
function RegDeleteKey(hKey: HKEY; lpSubKey: PKOLChar): Longint; stdcall;
12560:
12561:
12562:
                 function RegDeletekey(NRey: HREY: IpSubkey: PROLChar): Longint; stdcall; 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;
12563:
12564:
12565:
12566:
                  function RegEnumKey(hKey:HKEY; dwIndex:DWORD; lpName:PKOLChar; cbName:DWORD):Longint;stdcall;
12567:
12568:
                  function RegEnumValue(hKey: HKEY; dwIndex: DWORD; lpValueName: PKOLChar;
                     var lpcbValueName: DWORD; lpReserved: Pointer; lpType: PDWORD; lpData: PByte; lpcbData: PDWORD): Longint; stdcall;
12569:
12570:
                 function RegLoadKey(hKey: HKEY; lpSubKey, lpFile: PKOLChar): Longint; stdcall; function RegOpenKey(hKey: HKEY; lpSubKey: PKOLChar; var phkResult: HKEY):Longint; stdcall;
12571:
12572:
                 function RegOpenKeyEx(hKey: HKEY; lpSubKey: PKOLChar;
  ulOptions: DWORD; samDesired: REGSAM; var phkResult: HKEY): Longint; stdcall;
function RegQueryInfoKey(hKey: HKEY; lpClass: PKOLChar;
12573
12574:
12575:
12576:
                     lpcbClass: PDWORD; lpReserved: Pointer
12577:
                     lpcSubKeys, lpcbMaxSubKeyLen, lpcbMaxClassLen, lpcValues,
                 lpcbMaxValueNameLen, lpcbMaxValueLen, lpcbSecurityDescriptor: PDWORD; lpttLastWriteTime: PFileTime: Longint; stdcall; function RegQueryMultipleValues(hKey: HKEY; var ValList; NumVals: DWORD; lpValueBuf: PKOLChar; var ldwTotsize: DWORD): Longint; stdcall;
12578:
12579:
12580:
12581:
                 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;
12582:
12583:
12584:
12585:
                 function RegReplaceKey(hKey: HKEY; lpSubKey: PKOLChar;
    lpNewFile: PKOLChar; lpOldFile: PKOLChar): Longint; stdcall;
function RegRestoreKey(hKey: HKEY; lpFile: PKOLChar; dwFlags: DWORD): Longint; stdcall;
12586:
12587:
12588:
                 function RegSaveKey(hKey: HKEY; lpFile: PKOLChar; lpSecurityAttributes: PSecurityAttributes): Longint; stdcall;
12589:
12590:
                 function RegSetValue(hKey: HKEY; lpSubKey: PKOLChar;
dwType: DWORD; lpData: PKOLChar; cbData: DWORD): Longint; stdcall;
function RegSetValueEx(hKey: HKEY; lpValueName: PKOLChar;
Reserved: DWORD; dwType: DWORD; lpData: Pointer; cbData: DWORD): Longint; stdcall;
12591:
12592:
12593:
12594:
12595:
                  function RegUnLoadKey(hKey: HKEY; lpSubKey: PKOLChar): Longint; stdcall;
12596:
                  \textbf{function} \ \ \texttt{RegisterEventSource(lpUNCServerName, lpSourceName: PKOLChar): THandle: } \ \ \textbf{stdcall}: \\
                 function ReportEvent(hEventLog: THandle; wType, wCategory: Word;
  dwEventID: DWORD; lpUserSid: Pointer; wNumStrings: Word;
12597:
12598:
                     dwDataSize: DWORD; lpStrings, lpRawData: Pointer): BOOL; stdcall;
12599:
                  function SetFileSecurity(lpFileName: PKOLChar; SecurityInformation: SECURITY_INFORMATION;
12600:
                     pSecurityDescriptor: PSecurityDescriptor): BOOL; stdcall;
12601:
12602:
12603:
            Function wAddAtom( lpString : PKOLChar) : ATOM
12604:
            Function wBeginUpdateResource( pFileName : PKOLChar; bDeleteExistingResources : BOOL) : THandle
           Function wBeginUpdateResource( pfileName : PKOLChar; bDeleteExistingResources : BOOL) : THandle
//Function wCallNamedPipe( lpNamedPipeName : PKOLChar; lpInBuffer : Pointer; nInBufferSize : DWORD;
lpOutBuffer : Pointer; nOutBufferSize : DWORD; var lpBytesRead : DWORD; nTimeOut : DWORD) : BOOL
//Function wCommConfigDialog( lpszName : PKOLChar; hWnd : HWND; var lpCC : TCommConfig) : BOOL
Function wCompareString( Locale : LCID; dwCmpFlags : DWORD; lpString1 : PKOLChar; cchCount1 : Integer;
lpString2 : PKOLChar; cchCount2 : Integer) : Integer
Function wCopyFile( lpExistingFileName | lpNewFileName : PKOLChar; bFailIfExists : BOOL) : BOOL
//Function wCopyFileRy( lpExistingFileName | lpNewFileName : PKOLChar; lnProgressPoutine :
12605:
12606:
12607:
12608:
12609: //Function wCopyFileEx( lpExistingFileName, lpNewFileName : PKOLChar; lpProgressRoutine : TFNProgressRoutine; lpData : Pointer; pbCancel : PBool; dwCopyFlags : DWORD) : BOOL
12610: Function wCreateDirectory( lpPathName : PKOLChar; lpSecurityAttributes : PSecurityAttributes) : BOOL
           Function wCreateDirectoryEx(lpTemplateDirectory,
lpNewDirectory:PKOLChar;lpSecAttrib:PSecurityAttribts):BOOL;
12611:
           Function wCreateEvent(lpEventAttribes:PSecurityAttrib;bManualReset,
           bInitialState:BOOL;lpName:PKOLChar):THandle;
12613: Function wCreateFile( lpFileName : PKOLChar; dwDesiredAccess, dwShareMode : DWORD; lpSecurityAttributes :
           PSecurityAttributes; dwCreationDisposition, dwFlagsAndAttributes:DWORD;hTemplateFile:THandle):THandle Function wCreateFileMapping( hFile: THandle; lpFileMappingAttributes: PSecurityAttributes; flProtect, dwMaximumSizeHigh, dwMaximumSizeLow: DWORD; lpName: PKOLChar): THandle
12614:
12615: Function wCreateHardLink(lpFileName
           {\tt lpExistingFileName:PKOLChar;lpSecurityAttributes:PSecurityAttributes):BOOL}
12616: Function
           CreateMailslot(lpName:PKOLChar;MaxMessSize:DWORD;lReadTimeout:DWORD;lpSecurityAttrib:PSecurityAttributes):THandle);
12617: Function wCreateNamedPipe( lpName : PKOLChar; dwOpenMode, dwPipeMode, nMaxInstances, nOutBufferSize,
           nInBufferSize, nDefaultTimeOut : DWORD; lpSecurityAttributes : PSecurityAttributes) : THandle
12618:
           //Function CreateProcess( lpApplicationName : PKOLChar; lpCommandLine : PKOLChar; lpProcessAttributes, lpThreadAttributes : PSecurityAttributes; bInheritHandles : BOOL; dwCreationFlags : DWORD; lpEnvironment :
           Pointer; lpCurrentDirectory:PKOLChar;const lpStartupInfo:TStartupInfo;var
           lpProcessInfo:TProcessInformation): BOOL
12619: Function wCreateSemaphore(lpSemaphoreAttributes: PSecurityAttributes; lInitialCount, lMaximumCount :
           Longint; lpName : PKOLChar) : THandle
12620: Function
           wCreateWaitableTimer(lpTimerAttributes:PSecurityAttribs;bManualReset:BOOL;lpTimerName:PKOLChar):THandle);
12621: Function wDefineDosDevice( dwFlags : DWORD; lpDeviceName, lpTargetPath : PKOLChar) : BOOL 12622: Function wDeleteFile( lpFileName : PKOLChar) : BOOL
12623: Function wEndUpdateResource( hUpdate : THandle; fDiscard : BOOL) : BOOL
12624:
             //Function
          wEnumCalendarInfo(lpCalInfEnumProc:TFNCalInfEnumProc;Locale:LCID;Calendar:CALID;CalType:CALTYPE):BOOL;
12625:
             //Function wEnumDateFormats(lpDateFmtEnumProc: TFNDateFmtEnumProc; Locale : LCID; dwFlags : DWORD) : BOOL
12626: // Function wEnumResourceLanguages(hModule:HMODULE;lpType)
           lpName:PChar;lpEnumFunc:ENUMRESLANGPROC;lParam:Longint:BOOL')
           w \textit{EnumResourceNames(hModule:HMODULE;lpType:PKOLChar;lpEnumFunc:ENUMRESNAMEPROC;lParam:Longint):BOOL;} \\
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12628:
                        // Function \ wEnumResourceTypes ( \ hModule: HMODULE; \ lpEnumFunc: ENUMRESTYPEPROC; lParam: Longint): BOOL; \\ // Function \ wEnumSystemCodePages ( \ lpCodePageEnumProc : TFNCodepageEnumProc; dwFlags : DWORD) : BOOL \\ // Function \ wEnumSystemCodePages ( \ lpCodePageEnumProc : TFNCodepageEnumProc; dwFlags : DWORD) : BOOL \\ // Function \ wEnumSystemCodePages ( \ lpCodePageEnumProc : TFNCodepageEnumProc; dwFlags : DWORD) : BOOL \\ // Function \ wEnumSystemCodePages ( \ lpCodePageEnumProc : TFNCodepageEnumProc : TFNCodepage
12629:
                         //Function wEnumSystemLocales( lpLocaleEnumProc : TFNLocaleEnumProc; dwFlags : DWORD) : BOOL
12631:
                          //Function wEnumTimeFormats(lpTimeFmtEnumProc:TFNTimeFmtEnumProc;Locale:LCID;dwFlags:DWORD):BOOL;
                        Function wExpandEnvironmentStrings( lpSrc : PKOLChar; lpDst : PKOLChar; nSize : DWORD) : DWORD

Procedure wFatalAppExit( uAction : UINT; lpMessageText : PKOLChar)

//Function wFillConsoleOutputCharacter( hConsoleOutput : THandle; cCharacter : KOLChar; nLength : DWORD;
12632:
12633:
12634:
                      dwWriteCoord : TCoord; var lpNumberOfCharsWritten : DWORD) : BOOL
12635:
                        Function wFindAtom( lpString : PKOLChar) : ATOM
12636:
                        Function
                      wFindFirstChangeNotification(lpPathName:PKOLChar;bWatchSubtree:BOOL;dwNotifyFilter:DWORD):THandle;
                        Function wFindFirstFile( lpFileName : PKOLChar; var lpFindFileData : TWIN32FindData) : THandle
12638:
                         // Function \ wFindFirstFileEx (\ 1pFileName : PKOLChar; fInfoLevelId : TFindexInfoLevels; 1pFindFileData : PKOLChar; fInfoLevelId : TFInfoLevels; 1pFindFileData : PKOLChar; fInfoLevels; 1pF
                      Pointer; fSearchOp: TFindexSearchOps; lpSearchFilter: Pointer; dwAdditionalFlags: DWORD): BOOL Function wFindNextFile( hFindFile: THandle; var lpFindFileData: TWIN32FindData): BOOL
12639:
12640:
                         Function wFindResource( hModule : HMODULE; lpName, lpType : PKOLChar) : HRSRC
                         Function wFindResourceEx( hModule : HMODULE; lpType, lpName : PKOLChar; wLanguage : Word) : HRSRC
12642:
                        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
 12644:
                        Function wGetAtomName( nAtom : ATOM; lpBuffer : PKOLChar; nSize : Integer) : UINT
Function wGetBinaryType( lpApplicationName : PKOLChar; var lpBinaryType : DWORD) : BOOL
12645:
 12646:
                        Function wGetCommandLine : PKOLChar
12647:
12648:
                         //Function wGetCompressedFileSize( lpFileName : PKOLChar; lpFileSizeHigh : PDWORD) : DWORD
12649:
                        Function wGetComputerName( lpBuffer : PKOLChar; var nSize : DWORD) : BOOL
Function wGetConsoleTitle( lpConsoleTitle : PKOLChar; nSize : DWORD) : DWORD
12650:
                      //Function wGetCurrencyFormat( Locale: LCID; dwFlags: DwORD): DwORD) - DwORD - JwORD -
12651:
12652:
                        Function wGetCurrentDirectory( nBufferLength : DWORD; lpBuffer : PKOLChar) : DWORD
                      //Function wGetDateFormat( Locale : LCID; dwFlags : DWORD; lpDate : PSystemTime; lpFormat : PKOLChar; lpDateStr : PKOLChar; cchDate : Integer) : Integer
12653:
12654:
                         //Function wGetDefaultCommConfig( lpszName:PKOLChar;var lpCC : TCommConfig;var lpdwSize:DWORD):BOOL
                         Function wGetDiskFreeSpace( lpRootPathName : PKOLChar; var lpSectorsPerCluster, lpBytesPerSector,
                      lpNumberOfFreeClusters, lpTotalNumberOfClusters : DWORD) : BOOL
                      //Function wGetDiskFreeSpaceEx( lpDirectoryName : PKOLChar; var lpFreeBytesAvailableToCaller, lpTotalNumberOfBytes, lpTotalNumberOfFreeBytes : PLargeInteger) : BOOL
12656:
12657:
                        Function wGetDriveType( lpRootPathName : PKOLChar) :
                        Function wGetEnvironmentStrings: PKOLChar
Function wGetEnvironmentVariable(lpName: PKOLChar; lpBuffer: PKOLChar; nSize: DWORD): DWORD;
 12658:
12659:
                        Function wGetFileAttributes( lpFileName : PKOLChar) : DWORD
12660:
12661:
                         //Function
                      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
12662:
                        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
12663:
12664:
 12665:
                        Function wGetModuleFileName( hModule : HINST; lpFilename :
                                                                                                                                                                                                             PKOLChar; nSize : DWORD) : DWORD
12666:
                        Function wGetModuleHandle( lpModuleName : PKOLChar) : HMODULE
                         //Function wGetNamedPipeHandleState( hNamedPipe : THandle; lpState, lpCurInstances, lpMaxCollectionCount,
12667:
                      lpCollectDataTimeout : PDWORD; lpUserName : PKOLChar; nMaxUserNameSize : DWORD) : BOOL
//Function wGetNumberFormat( Locale : LCID; dwFlags:DWORD; lpValue:PKOLChar; lpFormat:PNumberFmt;
                      lpNumberStr : PKOLChar; cchNumber : Integer) : Integer
12669:
                        Function wGetPrivateProfileInt(lpAppName,lpKeyName:PKOLChar;nDefault:Integer;lpFileName:PKOLChar):UINT;
12670:
                        Function
                      wGetPrivateProfileSection(lpAppName:PKOLChar;lpRetrStr:PKOLChar;nSize:DWORD;pFileName:PKOLChar):DWORD;
                        \textbf{Function} \ \ w \texttt{GetPrivateProfileSectionNames} \\ (lpszReturnBuffer: PKOLChar; nSize: DWORD; lpFileName: PKOLChar): DWORD; lpFileName: DWORD; lpF
 12671:
12672:
                        Function wGetPrivateProfileString( lpAppName, lpKeyName, lpDefault : PKOLChar;lpReturnedStr: PKOLChar;
                     nSize:DWORD; lpFileName : PKOLChar) : DWORD
12673: Function wGetProfileInt( lpAppName, lpKeyName : PKOLChar; nDefault : Integer) : UINT
                         Function wGetProfileSection( lpAppName : PKOLChar; lpReturnedString : PKOLChar; nSize : DWORD) : DWORD
12674:
12675:
                        Function wGetProfileString(lpAppName,lpKeyName,
                      lpDefault:PKOLChar;lpReturnedStr:PKOLChar;nSize:DWORD):DWORD;
                        Function wGetShortPathName( lpszLongPath:PKOLChar; pszShortPath: PKOLChar; cchBuffer: DWORD): DWORD //Procedure wGetStartupInfo( var lpStartupInfo: TStartupInfo)
12676:
                       // Function wGetStringTypeEx(Locale:LCID; dwInfoType:DWORD;lpSrcStr:PKOLChar;cchSrc:Integer;var
12678:
                       lpCharType):BOOL
                        Function wGetSystemDirectory( lpBuffer : PKOLChar; uSize : UINT) : UINT
12679:
                        Function wGetTempFileName (lpPathName, lpPrefixString: PKOLChar;uUnique:UINT;lpTempFileName:PKOLChar):UINT
Function wGetTempPath (nBufferLength: DWORD; lpBuffer: PKOLChar): DWORD
12680:
12681:
12682:
                     w {\tt GetTimeFormat(Loc:LCID;dwFlgs:DWORD;lpTime:PSystemTime;lpFrm:PKOLChar;lpTimeStr:PKOLChar;cTime:Int):Int//Function w {\tt GetVersionEx(var lpVersionInformation:TOSVersionInfo):BOOL}
12683:
                         /Function GetVolumeInformation( lpRootPathName : PKOLChar; lpVolumeNameBuffer : PKOLChar; nVolumeNameSize
12684:
                           DWORD; lpVolumeSerialNumber : PDWORD; var lpMaximumComponentLength, lpFileSystemFlags : DWORD;
                      : DWORD; IpVolumeSerialNumber : PDWORD; var IpMaximumComponentLength, IpFileSystemFlags
lpFileSystemNameBuffer : PKOLChar; nFileSystemNameSize : DWORD) : BOOL
Function wGetWindowsDirectory( lpBuffer : PKOLChar; uSize : UINT) : UINT
Function wGlobalAddAtom( lpString : PKOLChar) : ATOM
Function wGlobalFindAtom( lpString : PKOLChar) : ATOM
Function wGlobalGetAtomName( nAtom : ATOM; lpBuffer : PKOLChar; nSize : Integer) : UINT
Function wIsBadStringPtr( lpsz : PKOLChar; ucchMax : UINT) : BOOL
12685:
12686:
12688:
12689:
12690:
                        Function
                      wLCMapString(Loc:LCID;dwMapFlgs:DWORD;lpSrcStr:PKOLChar;cchSrc:Int;lpDestStr:PKOLChar;cchDest:Int):Int;
                        Function wLoadLibrary( lpLibFileName : PKOLChar) : HMODULE
Function wLoadLibraryEx( lpLibFileName : PKOLChar; hFile : THandle; dwFlags : DWORD) : HMODULE
12691:
12692:
                        \textbf{Function} \ \ \text{wMoveFile(lpExistingFileName,lpNewFileName:PKOLChar):BOOL}
12693:
                        Function wMoveFileEx( lpExistingFileName, lpNewFileName : PKOLChar; dwFlags : DWORD) : BOOL //Function wMoveFileWithProgress( lpExistingFileName, lpNewFileName : PKOLChar; lpProgressRoutine :
12694:
                      TFNProgressRoutine; lpData : Pointer; dwFlags : DWORD) : BOOL
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12696:
               Function wOpenEvent( dwDesiredAccess : DWORD; bInheritHandle : BOOL; bName:PKOLChar) : THandle
12697:
                Function wopenFileMapping( dwDesiredAccess : DWORD; bInheritHandle:BOOL; lpName: PKOLChar): THandle
               Function wOpenMutex( dwDesiredAccess : DWORD; bInheritHandle : BOOL; lpName : PKOLChar) : THandle

Function wOpenSemaphore( dwDesiredAccess : DWORD; bInheritHandle : BOOL; lpName : PKOLChar):THandle
12698:
12699:
12700:
                Function wOpenWaitableTimer(dwDesiredAccess:DWORD;bInheritHandle:BOOL;lpTimerName:PKOLChar):THandle
               Procedure wOutputDebugString( lpOutputString: PKOLChar)
//Function wPeekConsoleInput(hConsoleInput:THandle;var lpBuffer:TInputRecord;nLength:DWORD;var
12701:
12702:
               lpNumberOfEventsRead:DWORD):BOOL;
12703:
                Function wQueryDosDevice( lpDeviceName : PKOLChar; lpTargetPath : PKOLChar; ucchMax : DWORD) : DWORD
12704:
                //Function wQueryRecoveryAgents(p1:PKOLChar;var p2:Pointer;var p3:TRecoveryAgentInformation):DWORD
              //Function wReadConsole( hConsoleInput : THandle; lpBuffer : Pointer; nNumberOfCharsToRead : DWORD; var lpNumberOfCharsRead : DWORD; lpReserved : Pointer) : BOOL
12705:
12706:
                 //Function wReadConsoleInput(hConsInp:THandle;var lpBuf:TInpRec;nLength:DWORD;var
              lpNumbOfEventsRead:DWORD):BOOL;
//Function wReadConsoleOutput( hConsoleOutput : THandle; lpBuffer : Pointer; dwBufferSize, dwBufferCoord
12707:
                TCoord; var lpReadRegion : TSmallRect) : BOOL
//Function wReadConsoleOutputCharacter( hConsoleOutput : THandle; lpCharacter : PKOLChar; nLength :
              DWORD; dwReadCoord : TCoord; var lpNumberOfCharsRead : DWORD) : BOOL
Function wRemoveDirectory( lpPathName : PKOLChar) : BOOL
//Function wScrollConsoleScreenBuffer( hConsoleOutput : THandle; const lpScrollRectangle : TSmallRect;
12709:
12710:
              lpClipRectangle : PSmallRect; dwDestinationOrigin : TCoord; var lpFill : TCharInfo) : BOOL
               Function wSearchPath( lpPath, lpFileName, lpExtension: PKOLChar; nBufferLength: DWORD; lpBuffer: PKOLChar; var
12711:
              lpFilePart:PKOLChar):DWORD;
12712:
                Function wSetComputerName( lpComputerName : PKOLChar) : BOOL
                Function wSetConsoleTitle( lpConsoleTitle : PKOLChar) : BOOL
12713:
                Function wSetCurrentDirectory( lpPathName : PKOLChar) : BOOL
12714:
12715:
                //Function wSetDefaultCommConfig( lpszName : PKOLChar; lpCC : PCommConfig; dwSize : DWORD) : BOOL
               Function wSetEnvironmentVariable( lpName, lpValue : PKOLChar) : BOOL
Function wSetFileAttributes( lpFileName : PKOLChar; dwFileAttributes : DWORD) : BOOL
12716:
12717:
12718:
                //Function wSetLocaleInfo( Locale : LCID; LCType : LCTYPE; lpLCData : PKOLChar) : BOOL
12719:
                Function wSetVolumeLabel( lpRootPathName : PKOLChar; lpVolumeName : PKOLChar) : BOOL
                //Function wUpdateResource(hUpdate:THandle;lpType,
12720:
              lpName:PKOLChar;wLanguage:Word;lpData:Ptr;cbData:DWORD):BOOL
               Function wVerLanguageName( wLang : DWORD; szLang : PKOLChar; nSize : DWORD) : DWORD Function wWaitNamedPipe( lpNamedPipeName : PKOLChar; nTimeOut : DWORD) : BOOL
12721:
12722:
12723:
                //Function wWriteConsole( hConsoleOutput : THandle; const lpBuffer : Pointer; nNumberOfCharsToWrite :
             DWORD; var lpNumberOfCharsWritten : DWORD; lpReserved : Pointer) : BOOL
//Function wWriteConsoleInput( hConsoleInput : THandle; const lpBuffer : TInputRecord; nLength : DWORD;
12724:
              var lpNumberOfEventsWritten : DWORD) : BOOL
12725:
                //Function wWriteConsoleOutput(hConsoleOutput:THandle; lpBuffer:Pointer; dwBufferSize,dwBufferCoord :
             TCoord; var lpWriteRegion : TSmallRect) : BOOL
12726:
             //Function wWriteConsoleOutputCharacter( hConsoleOutput : THandle; lpCharacter : PKOLChar; nLength : DWORD; dwWriteCoord : TCoord; var lpNumberOfCharsWritten : DWORD) : BOOL
               Function wWritePrivateProfileSection( lpAppName, lpString, lpFileName : PKOLChar) : BOOL
12728:
                Function wWritePrivateProfileString( lpAppName, lpKeyName, lpString, lpFileName : PKOLChar) : BOOL
               Function wWriteProfileSection( lpAppName, lpString : PKOLChar) : BOOL
Function wWriteProfileString( lpAppName, lpKeyName, lpString : PKOLChar) : BOOL
12729:
12730:
                Function wlstrcat( lpString1, lpString2 : PKOLChar) : PKOLChar
12732:
                Function wlstrcmp( lpString1, lpString2 : PKOLChar) :
               Function wlstrcmpi( lpString1, lpString2 : PKOLChar) : Integer
Function wlstrcpy( lpString1, lpString2 : PKOLChar) : PKOLChar
Function wlstrcpyn( lpString1, lpString2 : PKOLChar) : PKOLChar
Function wlstrcpyn( lpString1, lpString2 : PKOLChar; iMaxLength : Integer) : PKOLChar
Function wlstrlen( lpString : PKOLChar) : Integer
12733:
12734:
12735:
12736:
                // Function \ w \texttt{MultinetGetConnectionPerformance} (\ \ Ip \texttt{NetResource} : \ P \texttt{NetResource}; \ \ Ip \texttt{NetConnectInfoStruc} : \ P \texttt{NetResource}; \ \ Ip \texttt{NetConnectInfoStruc} : \ P \texttt{NetResource}; \ \ P \texttt{NetResource} : \ P \texttt{NetResou
12737:
              PNetConnectInfoStruct) : DWORD
12738:
                //Function wWNetAddConnection2(var lpNetResource:TNetResource:lpPassword.
              lpUserName:PKOLChar;dwFlags:DWORD):DWORD;
12739:
                //Function wWNetAddConnection3( hwndOwner : HWND; var lpNetResource:TNetResource;lpPassword,
              lpUserName:PKOLChar; dwFlags : DWORD) : DWORD
               Function wWNetCancelConnection( lpRemoteName, lpPassword, lpLocalName : PKOLChar) : DWORD

Function wWNetCancelConnection2( lpName : PKOLChar; dwFlags : DWORD; fForce : BOOL) : DWORD
12740:
12741:
12742:
                Function wWNetCancelConnection( lpName : PKOLChar; fForce : BOOL) : DWORD
                //Function wWNetConnectionDialog1( var lpConnDlgStruct : TConnectDlgStruct) : DWORD
//Function wWNetDisconnectDialog1( var lpConnDlgStruct : TDiscDlgStruct) : DWORD
12743:
12744:
                //Function wWNetEnumResource(hEnum:THandle,var lpcCount:DWORD;lpBuffer:Ptr,var lpBufferSize:DWORD):DWORD;
Function wWNetGetConnection(lpLocalName:PKOLChar;lpRemoteName:PKOLChar; var lpnLength:DWORD):DWORD;
12745:
                Function wWNetGetLastError( var lpError: DWORD; lpErrorBuf: PKOLChar; nErrorBufSize: DWORD; lpNameBuf
12747:
               : PKOLChar; nNameBufSize : DWORD) : DWORD
                //Function wWNetGetNetworkInformation(lpProvider:PKOLChar;var lpNetInfoStruct:TNetInfoStruct):DWORD;
12748:
                Function wWNetGetProviderName(dwNetType:DWORD;lpProviderName:PKOLChar;var lpBufferSize:DWORD):DWORD;
12749:
12750:
                //Function wWNetGetResourceParent(lpNetResource:PNetResource;lpBuffer:Pointer;var cbBuffer:DWORD):DWORD;
12751:
               //Function wWNetGetUniversalName(lpLocalPath:PKOLChar;dwInfoLevel:DWORD;lpBuffer:Ptr;var
               lpBufferSize:DWORD):DWORD;
               Function wWNetGetUser( lpName : PKOLChar; lpUserName : PKOLChar; var lpnLength : DWORD) : DWORD
                / Function wWNetOpenEnum(dwScope,dwType,dwUsage:DWORD;lpNetResource:PNetRes;var lphEnum:THandle):DWORD;
12753:
12754:
                / Function wWNetSetConnection( lpName : PKOLChar; dwProperties : DWORD; pvValues : Pointer) : DWORD
12755:
                //Function wWNetUseConnection(hwndOwner:HWND;var
               1p \texttt{NetResource:TNetResource;1} p \texttt{UserID:PKOLChar;1} p \texttt{Password:PKOLChar;} \ dw \texttt{Flags:DWORD;1} p \texttt{AccessName:PKOLChar;var} = \texttt{NotResource:TNetResource;1} p \texttt{NotResource:TNetResource:TNetResource:TNetResource:TNetResource:TNetResource:TNetResource:TNetResource:TNetResource:TNetResource:TNetResource:TNetResource:TNetResource:TNetResource:TNetResource:TNetResource:TNetResource:TNetResource:TNetResource:TNetResource:TNetResource:TNetResource:TNetResource:TNetResource:TNetResource:TNetResource:TNetResource:TNetResource:TNetResource:TNetResource:TNetResource:TNetResource:TNetResource:TNetResource:TNetResource:TNetResource:TNetResource:TNetResource:TNetResource:TNetResource:TNetResource:TNetResource:TNetResource:TNetResource:TNetResource:TNetResource:TNetResource:TNetResource:TNetResource:TNetResource:TNetResource:TNetResource:TNetResource:TNetResource:TNetResource:TNetResource:TNetResource:TNetResource:TNetResource:TNetResource:TNetResource:TNetResource:TNetResource:TNetResource:TNetResource:TNetResource:TNetResource:TNetResource:TNetResource:TNetResource:TNetResource:TNetResource:TNetResource:TNetResource:TNetResource:TNetResource:TNetResource:TNetResource:TNetResource:TNetResource:TNetResource:TNetResource:TNetResource:TNetResource:TNetResource:TNetResource:TNetResource:TNetResource:TNetResource:TNetResource:TNetResource:TNetResource:TNetResource:TNetResource:TNetResource:TNetResource:TNetResource:TNetResource:TNetResource:TNetResource:TNetResource:TNetResource:TNetResource:TNetResource:TNetResource:TNetResource:TNetResource:TNetResource:TNetResource:TNetResource:TNetResource:TNetResource:TNetResource:TNetResource:TNetResource:TNetResource:TNetResource:TNetResource:TNetResource:TNetResource:TNetResource:TNetResource:TNetResource:TNetResource:TNetResource:TNetResource:TNetResource:TNetResource:TNetResource:TNetResource:TNetResource:TNetResource:TNetResource:TNetResource:TNetResource:TNetResource:TNetResource:TNetResource:TNetResource:TNetResource:TNetResource:TNetResource:TNetResource:TNetResource:TNetRe
               lpBufferSize:DWORD;var lpResult:DWORD):DWORD
                Function wGetFileVersionInfo(lptstrFilename:PKOLChar;dwHandle,dwLen:DWORD;lpData:Pointer):BOOL;
12756:
12757:
                Function wGetFileVersionInfoSize( lptstrFilename : PKOLChar; var lpdwHandle : DWORD) : DWORD
             Function wVerFindFile( uFlags : DWORD; szFileName, szWinDir, szAppDir, szCurDir : PKOLChar; var lpuCurDirLen : UINT; szDestDir : PKOLChar; var lpuDestDirLen : UINT) : DWORD

Function wVerInstallFile( uFlags : DWORD; szSrcFileName, szDestFileName, szSrcDir, szDestDir, szCurDir,
12758:
12759:
              szTmpFile : PKOLChar; var lpuTmpFileLen : UINT) : DWORD
12760:
             //Function wVerQueryValue(pBlock:Pointer;lpSubBlock:PKOLChar;var lplpBuffer:Ptr;var puLen:UINT):BOOL;
12761:
             //Function wGetPrivateProfileStruct(lpszSection,
               lpszKey:PKOLChar;lpStruct:Ptr;uSizeStruct:UINT;szFile:PKOLChar):BOOL;
             //Function wWritePrivateProfileStruct(lpszSection,
               lpszKey:PKOLChar;lpStruct:Ptr;uSizeStruct:UINT;szFile:PKOLChar):BOOL;
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12763:
                      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
12764:
12766:
12767:
                        //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,
12768:
12769:
12770:
                     fdwUnderline, \ fdwStrikeOut, fdwCharSet, fdwOutputPrec, fdwClipPrecision, fdwQualy, fdwUnderline, \ fdwStrikeOut, fdwCharSet, fdwOutputPrec, fdwClipPrecision, fdwQualy, fdwQualy, fdwOutputPrec, fdwClipPrecision, fdwQualy, fdwOutputPrec, fdwOutputPrec, fdwClipPrecision, fdwQualy, fdwOutputPrec, fdwClipPrecision, fdwOutputPrec, fdwClipPrecision, fdwOutputPrec, fdwOutputPrec
                     fdwPitchAndFamily:DWORD;lpszFace:PKOLChar):HFONT;
12771:
                      Function wCreateFontIndirect( const p1 : TLogFont) : HFONT
                        //Function wCreateFontIndirectEx( const p1 : PEnumLogFontExDV) : HFONT
12772:
12773:
                      // Function wCreateIC( lpszDriver, lpszDevice, lpszOutput : PKOLChar; lpdvmInit : PDeviceMode) : HDC
Function wCreateMetaFile( p1 : PKOLChar) : HDC
Function wCreateScalableFontResource( p1 : DWORD; p2, p3, p4 : PKOLChar) : BOOL
12774:
12775:
                    //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);
//Function wEnumFonts(DC:HDC;lpszFace:PKOLChar;fntenmprc:TFNFontEnumProc;lpszData:PKOLChar):Integer;
//Function wEnumICMProfiles( DC : HDC; ICMProc : TFNICMEnumProc; p3 : LPARAM) : Integer
12778:
12779:
12780:
                        //Function wExtTextOut(DC:HDC;X,
12781:
                    {\tt Y:Int;Options:Longint;Rect:PRect;Str:PKOLChar;Count:Longint;Dx:PInteger:BOOLChar;Count:Longint;Dx:PInteger:BOOLChar;Count:Longint;Dx:PInteger:BOOLChar;Count:Longint;Dx:PInteger:BOOLChar;Count:Longint;Dx:PInteger:BOOLChar;Count:Longint;Dx:PInteger:BOOLChar;Count:Longint;Dx:PInteger:BOOLChar;Count:Longint;Dx:PInteger:BOOLChar;Count:Longint;Dx:PInteger:BOOLChar;Count:Longint;Dx:PInteger:BOOLChar;Count:Longint;Dx:PInteger:BOOLChar;Count:Longint;Dx:PInteger:BOOLChar;Count:Longint;Dx:PInteger:BOOLChar;Count:Longint;Dx:PInteger:BOOLChar;Count:Longint;Dx:PInteger:BOOLChar;Count:Longint;Dx:PInteger:BOOLChar;Count:Longint;Dx:PInteger:BOOLChar;Count:Longint;Dx:PInteger:BOOLChar;Count:Longint;Dx:PInteger:BOOLChar;Count:Longint;Dx:PInteger:BOOLChar;Count:Longint;Dx:PInteger:BOOLChar;Count:Longint;Dx:PInteger:BOOLChar;Count:Longint;Dx:PInteger:BOOLChar;Count:Longint;Dx:PInteger:BOOLChar;Count:Longint;Dx:PInteger:BOOLChar;Count:Longint;Dx:PInteger:BOOLChar;Count:Longint;Dx:PInteger:BOOLChar;Count:Longint;Dx:PInteger:BOOLChar;Count:Longint;Dx:PInteger:BOOLChar;Count:Longint;Dx:PInteger:BOOLChar;Count:Longint;Dx:PInteger:BOOLChar;Count:Longint;Dx:PInteger:BOOLChar;Count:Longint;Dx:PInteger:BOOLChar;Count:Longint;Dx:PInteger:BOOLChar;Count:Longint;Dx:PInteger:BOOLChar;Count:Longint;Dx:PInteger:BOOLChar;Count:Longint;Dx:PInteger:BOOLChar;Count:Longint;Dx:PInteger:BOOLChar;Count:Longint;Dx:PInteger:BOOLChar;Count:Longint;Dx:PInteger:BOOLChar;Count:Longint;Dx:PInteger:BOOLChar;Count:Longint;Dx:PInteger:BOOLChar;Count:Longint;Dx:PInteger:BOOLChar;Count:Longint;Dx:PInteger:BOOLChar;Count:Longint;Dx:PInteger:BOOLChar;Count:Longint;Dx:PInteger:BOOLChar;Count:Longint;Dx:PInteger:BOOLChar;Count:Longint;Dx:PInteger:BOOLChar;Count:Longint;Dx:PInteger:BOOLChar;Count:Longint;Dx:PInteger:BOOLChar;Count:Longint;Dx:PInteger:BOOLChar;Count:Longint;Dx:PInteger:BOOLChar;Count:Longint;Dx:PInteger:BOOLChar;Count:Longint;Dx:PInteger:BOOLChar;Count:PInteger:BOOLChar;Count:Longint;Dx:PInteger:BOOLChar;Count:Longint;Dx:PInteger:BOOLChar;Count:Longi
12782:
                       //Function wGetCharABCWidths( DC : HDC; FirstChar, LastChar : UINT; const ABCStructs) : BOOL //Function wGetCharABCWidthsFloat( DC : HDC; FirstChar, LastChar : UINT; const ABCFloatSturcts) : BOOL
12783:
12784:
                        //Function wGetCharWidth32( DC : HDC; FirstChar, LastChar : UINT; const Widths) : BOOL
12785:
                     //Function wGetCharWidth( DC : HDC; FirstChar, LastChar : UINT; const Widths) : BOOL
// Function wGetCharWidthFloat( DC : HDC; FirstChar, LastChar : UINT; const Widths) : BOOL
// Function wGetCharacterPlacement(DC:HDC;p2:PKOLChar;p3,p4:BOOL;var p5:TGCPResults;p6:DWORD):DWORD
12786:
12787:
                      Function wGetEnhMetaFile(pl: PKOLChar): HENHMETAFILE

Function wGetEnhMetaFile(pl: PKOLChar): HENHMETAFILE

Function wGetEnhMetaFile(pl: PKOLChar): HENHMETAFILE; p2: UINT; p3: PKOLChar): UINT
12788:
12789:
                    // 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;
12790:
12791:
                     lpwBuffer : Pointer; const lpmat2 : TMat2) : DWORD
Function wGetICMProfile( DC : HDC; var Size : DWORD; Name : PKOLChar) : BOOL
12793:
                     // Function wGetLogColorSpace( p1 : HCOLORSPACE; var ColorSpace : TLogColorSpace; Size : DWORD) : BOOL
                     Function wGetMetaFile(p1: PKOLChar): HMETAFILE

// Function wGetObject(p1: HGDIOBJ; p2: Integer; p3: Pointer): Integer

//Function wGetOutlineTextMetrics(DC: HDC; p2: UINT; OTMetricStructs: Pointer): UINT
12794:
12795:
12796:
                      //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
12797:
12798:
                      Function wGetTextExtentPoint( DC : HDC; Str : PKOLChar; Count : Integer; var Size : TSize) : BOOL
Function wGetTextExtentPoint( DC : HDC; Str : PKOLChar; Count : Integer; var Size : TSize) : BOOL
12799:
12800:
                        //Function wGetTextMetrics( DC : HDC; var TM : TTextMetric) : BOOL
12801:
12802:
                       Function wPolyTextOut( DC : HDC; const PolyTextArray, Strings : Integer) : BOOL
12803:
                       Function wRemoveFontResource( FileName : PKOLChar) : BOOL
                        //Function wRemoveFontResourceEx( pl : PKOLChar; p2 : DWORD; p3 : PDesignVector) : BOOL 
//Function wResetDC( DC : HDC; const InitData : TDeviceMode) : HDC
12804:
12805:
12806:
                        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
12807:
12808:
                       Function wUpdateICMRegKey( pl : DWORD; p2, p3 : PKOLChar; p4 : UINT) : BOOL
Function wwglUseFontBitmaps( DC : HDC; p2, p3, p4 : DWORD) : BOOL
12809:
12810:
12811:
                        //Function wwglUseFontOutlines(p1:HDC; p2,p3,p4:DWORD;p5,p6:Single;p7:Int;p8:PGlyphMetricsFloat):BOOL
12812:
                      12813:
12814:
                        //Function
                    wCallWindowProc(lpPrevWndFunc:TFNWndProc;hWnd:HWND;Msg:UINT;wParam:WPARAM;lParam:LPARAM):LRESULT
12815:
                    //Function wChangeDisplaySettings( var lpDevMode : TDeviceMode; dwFlags : DWORD) : Longint // Function wChangeDisplaySettingsEx( lpszDeviceName:PKOLChar; var lpDevMode: TDeviceMode; wnd : HWND; dwFlags : DWORD; lParam : Pointer) : Longint
12816:
                       \textbf{Function} \ \ \text{wChangeMenu} \\ (\text{hMenu:HMENU}; \\ \text{cmd:UINT;lpszNewItem:PKOLChar;cmdInsert:UINT;flags:UINT):BOOL;} \\ (\text{hMenu:HMENU}; \\ \text{cmd:UINT;lpszNewItem:PKOLChar;cmdInsert:UINT;lpszNewItem:PKOLChar;cmdInsert:UINT;lpszNewItem:PKOLChar;cmdInsert:UINT;lpszNewItem:PKOLChar;cmdInsert:UINT;lpszNewItem:PKOLChar;cmdInsert:UINT;lpszNewItem:PKOLChar;cmdInsert:UINT;lpszNewItem:PKOLChar;cmdInsert:UINT;lpszNewItem:PKOLChar;cmdInsert:UINT;lpszNewItem:PKOLChar;cmdInsert:UINT;lpszNewItem:PKOLChar;cmdInsert:UINT;lpszNewItem:PKOLChar;cmdInsert:UINT;lpszNewItem:PKOLChar;cmdInsert:UINT;lpszNewItem:PKOLChar;cmdInsert:UINT;lpszNewItem:PKOLChar;cmdInsert:UINT;lpszNewItem:PKOLChar;cmdInsert:UINT;lpszNewItem:PKOLChar;cmdInsert:UINT;lpszNewItem:PKOLChar;cmdInsert:UINT;lpszNewItem:PKOLChar;cmdInsert:UINT;lpszNewItem:PKOLChar;cmdInsert:UINT;lpszNewItem:PKOLChar;cmdInsert:UINT;lpszNewItem:PKOLChar;cmdInsert:UINT;lpszNewItem:PKOLChar;cmdInsert:UINT;lpszNewItem:PKOLChar;cmdInsert:UINT;lpszNewItem:PKOLChar;cmdInsert:UINT;lpszNewItem:PKOLChar;cmdInsert:UINT;lpszNewItem:PKOLChar;cmdInsert:UINT;lpszNewItem:PKOLChar;cmdInsert:UINT;lpszNewItem:PKOLChar;cmdInsert:UINT;lpszNewItem:PKOLChar;cmdInsert:UINT;lpszNewItem:PKOLChar;cmdInsert:UINT;lpszNewItem:PKOLChar;cmdInsert:UINT;lpszNewItem:PKOLChar;cmdInsert:UINT;lpszNewItem:PKOLChar;cmdInsert:UINT;lpszNewItem:PKOLChar;cmdInsert:UINT;lpszNewItem:PKOLChar;cmdInsert:UINT;lpszNewItem:PKOLChar;cmdInsert:UINT;lpszNewItem:PKOLChar;cmdInsert:UINT;lpszNewItem:PKOLChar;cmdInsert:UINT;lpszNewItem:PKOLChar;cmdInsert:UINT;lpszNewItem:UINT;lpszNewItem:UINT;lpszNewItem:UINT;lpsz
12818:
                       Function wCharLower( lpsz : PKOLChar) : PKOLChar
12819:
                       Function wCharLowerBuff( lpsz : PKOLChar; cchLength : DWORD) : DWORD
                       Function wCharNext( lpsz : PKOLChar) : PKOLChar
12820:
                      //Function wCharNextEx( CodePage : Word; lpCurrentChar : LPCSTR; dwFlags : DWORD) : LPSTR Function wCharPrev( lpszStart : PKOLChar; lpszCurrent : PKOLChar) : PKOLChar
12822:
                      // Function wCharPrevEx( CodePage : Word; lpStart, lpCurrentChar : LPCSTR; dwFlags : DWORD) : LPSTR Function wCharToOem( lpszSrc : PKOLChar; lpszDst : PKOLChar) : BOOL
12823:
12824:
                       Function wCharToOemBuff( lpszSrc : PKOLChar; lpszDst : PKOLChar; cchDstLength : DWORD) : BOOL
12825:
                        Function wCharUpper( lpsz : PKOLChar) : PKOLChar
12826:
12827:
                       Function wCharUpperBuff( lpsz : PKOLChar; cchLength : DWORD) : DWORD
                      Function wCopyAcceleratorTable( hAccelSrc : HACCEL; var lpAccelDst, cAccelEntries : Integer) : Integer Function wCreateAcceleratorTable( var Accel, Count : Integer) : HACCEL
12828:
12829:
12830:
                        //Function wCreateDesktop(lpszDesktop,
                     lpsz Device: PKOLChar; pDevmode: PDeviceMode; dwFlags: DWORD; dwDesiredAccess: DWORD; lpsa: PSecurityAttribs): HDESK DWORD; dwDesiredAccess: DWORD; dwDesi
12831:
                        //Function wCreateDialogIndirectParam( hInstance : HINST; const lpTemplate : TDlgTemplate; hWndParent :
                   HWND; lpDialogFunc: TFNDlgProc; dwInitParam: LPARAM): HWND
//Function wCreateDialogParam( hInstance: HINST; lpTemplateName: PKOLChar; hWndParent: HWND;
lpDialogFunc: TFNDlgProc; dwInitParam: LPARAM): HWND
Function wCreateDialogParam( hInstance: HINST; lpTemplateName: PKOLChar; hWndParent: HWND;
lpDialogFunc: TFNDlgProc; dwInitParam: LPARAM): HWND
Function wCreateDialogParam( hInstance: HINST; lpTemplateName: PKOLChar; dwStyle: DWORD; X,Y,nWidth,nHeight:Integer;
12832:
                    hWndParent : HWND; hInstance : HINST; lParam : LPARAM) : HWND
                    //Function wCreateWindowEx(dwExStyle:DWORD;lpClassName:PKOLChar;lpWindowName:PKOLChar;dwStyle DWORD;X,Y,
12834:
                    nWidth, nHeight:Int WndParent:HWND;hMenu:HMENU;hInstance:HINST;lpParam:Pointer):HWND
                         //Function wCreateWindowStation(lpwinsta:PKOLChar;dwReserv,
                    dwDesiredAccess:DWORD;lpsa:PSecurityAttribs):HWINSTA;
12836: Function wDefDlgProc( hDlg : HWND; Msg : UINT; wParam : WPARAM; lParam : LPARAM) : LRESULT
                      Function wDefFrameProc(hWnd,hWndMDIClient:HWND;uMsg:UINT;wParam:WPARAM;lParam:LPARAM):LRESULT;
12837:
                      Function wDefMDIChildProc( hWnd : HWND; uMsg : UINT; wParam : WPARAM; lParam: LPARAM):LRESULT;
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12839:
                  Function wDefWindowProc( hWnd : HWND; Msg : UINT; wParam : WPARAM; lParam:LPARAM): LRESULT
                  //Function wDialogBoxIndirectParam( hInstance : HINST; const lpDialogTemplate : TDlgTemplate; hWndParent
12840:
                 : HWND; lpDialogFunc : TFNDlgProc; dwInitParam : LPARAM) : Integer
12841 .
                  //Function wDialogBoxParam( hInstance : HINST; lpTemplateName : PKOLChar; hWndParent : HWND; lpDialogFunc
                  : TFNDlgProc; dwInitParam : LPARAM) : Integer
Function wDispatchMessage( const lpMsg : TMsg) : Longint
12842:
                  Function wDlgDirList(hDlg:HWND;lpPathSpec:PKOLChar;nIDListBox,
12843:
                nIDStaticPath:Integer;uFileType:UINT):Integer;
12844: Function wDlgDirListComboBox(hDlg:HWND;lpPathSpec:PKOLChar;nIDComboBox,
                nIDStaticPath:Int;uFiletype:UINT):Int;
                  Function wDlgDirSelectComboBoxEx( hDlg : HWND; lpString:PKOLChar;nCount,nIDComboBox:Integer): BOOL
                  Function wDlgDirSelectEx( hDlg : HWND; lpString : PKOLChar; nCount, nIDListBox : Integer) : BOOL
12847:
                //Function wDrawState(DC:HDC;Brush:HBRUSH;CBFunc:TFNDrawStateProc;lData:LPARA;wDat:WPARA;x,y,cx,
                cy:Int;Flags:UINT):BOOL;
Function wDrawText(hDC:HDC;lpString:PKOLChar;nCount:Integer;var lpRect:TRect;uFormat:UINT):Integer;
                  Function wFindWindow(lpClassName,lpWindowName:PKOLChar): HWND
Function wFindWindow(Parent,Child:HWND;ClassName,WindowName:PKOLChar): HWND
                  //Function wGetAltTabInfo(hwnd:HWND;iItem:Int;var
12851:
                pati:TAltTabInfo;pszItemText:PKOLChar;cchItemText:UINT):BOOL;
               patt:Atttabinio/psztemnext:PROberar;contemnext:SUNT:BBODE;
// Function wGetClassInfo( hInstance : HINST; lpclassName : PKOLChar; var lpWndClass : TWndClass) : BOOL
//Function wGetClassInfoEx( Instance : HINST; Classname : PKOLChar; var WndClass : TWndClassEx) : BOOL
Function wGetClassLong( hWnd : HWND; nIndex : Integer) : DWORD
Function wGetClassName( hWnd : HWND; lpClassName : PKOLChar; nMaxCount : Integer) : Integer
Function wGetClipboardFormatName( format : UINT; lpszFormatName:PKOLChar; cchMaxCount:Integer):Integer;
12853:
12854:
12855:
12856:
                  Function wGetDlgItemText( hDlg: HWND/nIDDlgItem:Integer/lpString:PKOLChar/nMaxCount:Integer):UINT
12857:
                  Function wGetKeyNameText( lParam : Longint; lpString : PKOLChar; nSize : Integer) : Integer Function wGetKeyNameText( lParam : Longint; lpString : PKOLChar; nSize : Integer) : Integer
12858:
12859:
                  //Function wGetMenuItemInfo( p1 : HMENU; p2 : UINT; p3 : BOOL; var p4 : TMenuItemInfo) : BOOL
Function wGetMenuString(hMenu:HMENU;uIDItem:UINT;lpString:PKOLChar;nMaxCount:Integer;uFlag:UINT):Integer;
12860:
12861:
                  Function wGetMessage( var lpMsg: TMsg; hWnd: HWND; wMsgFilterMin, wMsgFilterMax: UINT): BOOL

Function wGetProp( hWnd: HWND; lpString: PKOLChar): THandle
12863:
                  //Function wGetTabbedTextExtent( hDC : HDC; lpString : PKOLChar; nCount, nTabPositions : Integer; var
12864:
                lpnTabStopPositions) : DWORD
12865:
                //Function wGetUserObjectInformation(hObj:THandle;nIndex:Int;pvInfo:Ptr;nLength:DWORD;var
                 lpnLengthNeed:DWORD)BOOL;
                  Function wGetWindowLong( hWnd : HWND; nIndex : Integer) : Longint
12866:
                  Function wGetWindowModuleFileName( hwnd: HWND; pszFileName: PKOLChar; cchFileNameMax: UINT): UINT Function wGetWindowText( hWnd: HWND; lpString: PKOLChar; nMaxCount: Integer): Integer
12867:
12868:
12869:
                  Function wGetWindowTextLength( hWnd : HWND) : Integer
12870:
                 //Function wGrayString(hDC:HDC;hBrush:HBRUSH;lpOutFunc:TFNGrayStrProc;lpDat:LPARA;nCnt,X,Y,nWidt,
                nHeigt:Int):BOOL;
                  Function wInsertMenu( hMenu: HMENU; uPosition, uFlags, uIDNewItem: UINT; lpNewItem: PKOLChar): BOOL //Function wInsertMenuItem( p1: HMENU; p2: UINT; p3: BOOL; const p4: TMenuItemInfo): BOOL Function wIsCharAlpha( ch: KOLChar): BOOL
12871:
12872:
12873:
12874:
                  \textbf{Function} \  \, \texttt{wIsCharAlphaNumeric(ch:KOLChar):BOOL}
12875:
                  Function wIsCharLower( ch : KOLChar) : BOOL
Function wIsCharUpper( ch : KOLChar) : BOOL
12876:
                  Function wIsDialogMessage( hDlg : HWND; var lpMsg : TMsg) : BOOL
12878:
                  Function wLoadAccelerators( hInstance : HINST; lpTableName : PKOLChar) : HACCEL
                  Function wLoadBitmap( hInstance : HINST; lpBitmapName : PKOLChar) : HBITMAP
Function wLoadCursor( hInstance : HINST; lpCursorName : PKOLChar) : HCURSOR
12879:
12880:
                  Function wLoadCursorFromFile( lpFileName : PKOLChar) : HCURSOR
12881:
                  Function wLoadIcon( hInstance : HINST; lpIconName : PKOLChar) : HICON
12882:
12883:
                  12884:
                  Function wLoadKeyboardLayout( pwszKLID : PKOLChar; Flags : UINT) : HKL
Function wLoadMenu( hInstance : HINST; lpMenuName : PKOLChar) : HMENU
12885:
12886:
                   //Function wLoadMenuIndirect( lpMenuTemplate : Pointer) : HMENU
                  Function wLoadString(hInstance:HINST;uID: UINT; lpBuffer :PKOLChar;nBufferMax:Integer):Integer
12887:
                  Function wMapVirtualKey( uCode, uMapType : UINT) : UINT
Function wMapVirtualKeyEx( uCode, uMapType : UINT; dwhkl : HKL) : UINT
Function wMessageBox( hWnd : HWND; lpText, lpCaption : PKOLChar; uType : UINT) : Integer
12888:
12889:
12890:
12891:
                  Function wMessageBoxEx( hWnd:HWND; lpText,lpCaption:PKOLChar;uType:UINT;wLanguageId:Word): Integer
                  //Function wMessageBoxIndirect( const MsgBoxParams : TMsgBoxParams) : BOOL

Function wModifyMenu( hMnu : HMENU; uPosition, uFlags, uIDNewItem : UINT; lpNewItem : PKOLChar) : BOOL

//Function wOemToAnsi( const lpszSrc : LPCSTR; lpszDst : LPSTR) : BOOL

//7Function wOemToAnsiBuff( lpszSrc : LPCSTR; lpszDst : LPSTR; cchDstLength : DWORD) : BOOL
12892:
12893:
12894:
                  //Function woemToChar( lpszSrc : PKOLChar; lpszDst : PKOLChar) : BOOL
Function w0emToCharBuff( lpszSrc : PKOLChar; lpszDst : PKOLChar; cchDstLength : DWORD) : BOOL
12896:
12897:
12898:
                  \textbf{Function} \ \texttt{wOpenDesktop}(\texttt{lpszDesktop}: \texttt{PKOLChar}; \texttt{dwFlags}: \texttt{DWORD}; \texttt{fInherit}: \texttt{BOOL}; \texttt{dwDesiredAccess}: \texttt{DWORD}): \ \texttt{HDESK}(\texttt{pszDesktop}; \texttt{PKOLChar}; \texttt{dwFlags}: \texttt{DWORD}; \texttt{fInherit}: \texttt{BOOL}; \texttt{dwDesiredAccess}: \texttt{DWORD}): \ \texttt{HDESK}(\texttt{pszDesktop}; \texttt{PKOLChar}; \texttt{dwFlags}: \texttt{DWORD}; \texttt{fInherit}: \texttt{BOOL}; \texttt{dwDesiredAccess}: \texttt{DWORD}): \ \texttt{HDESK}(\texttt{pszDesktop}; \texttt{pszDesktop}; \texttt{pszD
                  Function wopenWindowStation(lpszWinSta:PKOLChar; fInherit:BOOL; dwDesiredAccess:DWORD): HWINSTA
Function wPeekMessage(var lpMsg:TMsg; hWnd:HWND; wMsgFilterMin, wMsgFilterMax, wRemoveMsg:UINT):BOOL
12899:
12900:
12901:
                  Function wPostMessage( hWnd : HWND; Msg : UINT; wParam : WPARAM; lParam : LPARAM) : BOOL
12902:
                  \textbf{Function} \ \ \texttt{wPostThreadMessage(idThread:DWORD;Msg} \ : \ \ \texttt{UINT}; \ \ \ \texttt{wParam} : \ \ \texttt{PARAM}; \ \ \texttt{Param} : \ \ \texttt{LPARAM}) \ : \ \ \texttt{BOOL}
                  Function wRealGetWindowClass( hwnd : HWND; pszType : PKOLChar; cchType : UINT) : UINT
12903:
12904:
                // Function wRegisterClass( const lpWndClass : TWndClass) : ATOM
                // Function wRegisterClassEx( const WndClass : TWndClassEx) : ATOM Function wRegisterClipboardFormat( lpszFormat : PKOLChar) : UINT
12905:
12906:
                   / Function wRegisterDeviceNotification(hRecipient:THandle;NotificFilter:Pointer;Flags:DWORD):HDEVNOTIFY
12907:
                  Function wRegisterWindowMessage( lpString : PKOLChar) : UINT
Function wRemoveProp( hWnd : HWND; lpString : PKOLChar) : THandle
12908:
12910:
                  \textbf{Function} \ \ wSendDlgItemMessage(hDlg:HWND:nIDDlgItem:Integer;Msg:UINT:wParam:WPARAM;lParam:LPARAM):Longint;Mindstreets(hDlg:HWND:nIDDlgItem:Integer;Msg:UINT:wParam:WPARAM;lParam:LPARAM):Longint;Mindstreets(hDlg:HWND:nIDDlgItem:Integer;Msg:UINT:wParam:WPARAM;lParam:LPARAM):Longint;Mindstreets(hDlg:HWND:nIDDlgItem:Integer;Msg:UINT:wParam:WPARAM;lParam:LPARAM):Longint;Mindstreets(hDlg:HWND:nIDDlgItem:Integer;Msg:UINT:wParam:WPARAM;lParam:LPARAM):Longint;Msg:UINT:wParam:Msg:UINT:wParam:Msg:UINT:wParam:Msg:UINT:wParam:Msg:UINT:wParam:Msg:UINT:wParam:Msg:UINT:wParam:Msg:UINT:wParam:Msg:UINT:wParam:Msg:UINT:wParam:Msg:UINT:wParam:Msg:UINT:wParam:Msg:UINT:wParam:Msg:UINT:wParam:Msg:UINT:wParam:Msg:UINT:wParam:Msg:UINT:wParam:Msg:UINT:wParam:Msg:UINT:wParam:Msg:UINT:wParam:Msg:UINT:wParam:Msg:UINT:wParam:Msg:UINT:wParam:Msg:UINT:wParam:Msg:UINT:wParam:Msg:UINT:wParam:Msg:UINT:wParam:Msg:UINT:wParam:Msg:UINT:wParam:Msg:UINT:wParam:Msg:UINT:wParam:Msg:UINT:wParam:Msg:UINT:wParam:Msg:UINT:wParam:Msg:UINT:wParam:Msg:UINT:wParam:Msg:UINT:wParam:Msg:UINT:wParam:Msg:UINT:wParam:Msg:UINT:wParam:Msg:UINT:wParam:Msg:UINT:wParam:Msg:UINT:wParam:Msg:UINT:wParam:Msg:UINT:wParam:Msg:UINT:wParam:Msg:UINT:wParam:Msg:UINT:wParam:Msg:UINT:wParam:Msg:UINT:wParam:Msg:UINT:wParam:Msg:UINT:wParam:Msg:UINT:wParam:Msg:UINT:wParam:Msg:UINT:wParam:Msg:UINT:wParam:Msg:UINT:wParam:Msg:UINT:wParam:Msg:UINT:wParam:Msg:UINT:wParam:Msg:UINT:wParam:Msg:UINT:wParam:Msg:UINT:wParam:Msg:UINT:wParam:Msg:UINT:wParam:Msg:UINT:wParam:Msg:UINT:wParam:Msg:UINT:wParam:Msg:UINT:wParam:Msg:UINT:wParam:Msg:UINT:wParam:Msg:UINT:wParam:Msg:UINT:wParam:Msg:UINT:wParam:Msg:UINT:wParam:Msg:UINT:wParam:Msg:UINT:wWo:Msg:UINT:wWo:Msg:UINT:wWo:Msg:UINT:wWo:Msg:UINT:wWo:Msg:UINT:wWo:Msg:UINT:wWo:Msg:UINT:wWo:Msg:UINT:wWo:Msg:UINT:wWo:Msg:UINT:wwo:Msg:UINT:wwo:Msg:UINT:wwo:Msg:UINT:wwo:Msg:UINT:wwo:Msg:UINT:wwo:Msg:UINT:wwo:Msg:UINT:wwo:Msg:UINT:wwo:Msg:UINT:wwo:Msg:UINT:wwo:Msg:UINT:wwo:Msg:UINT:wwo:Msg:UINT:wwo:Msg:UINT:wwo:Msg:UINT:wwo:Msg:UINT:wwo:Msg:UINT:wwo:Msg:U
                Function wSendMessage( hWnd : HWND; Msg : UINT; wParam : WPARAM; lParam : LPARAM) : LRESULT //Function wSendMessageCallback( hWnd : HWND; Msg : UINT; wParam : WPARAM; lParam:LPARAM; lpResultCallBack : TFNSendAsyncProc; dwData : DWORD) : BOOL
12911:
12912:
                  Function wSendMessageTimeout(hWnd:HWND;Msg:UINT;wParam:WPARAM;lParam:LPARAM; fuFlags,uTimeout:UINT;var
12913:
                lpdwResult:DWORD): LRESULT
               Function wSendNotifyMessage( hWnd : HWND; Msg : UINT; wParam : WPARAM; lParam : LPARAM) : BOOL Function wSetClassLong( hWnd : HWND; nIndex : Integer; dwNewLong : Longint) : DWORD
12915:
                  Function wSetDlgItemText( hDlg : HWND; nIDDlgItem : Integer; lpString : PKOLChar) : BOOL
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12917:
                     //Function wSetMenuItemInfo( p1 : HMENU; p2 : UINT; p3 : BOOL; const p4 : TMenuItemInfo) : BOOL Function wSetProp( hWnd : HWND; lpString : PKOLChar; hData : THandle) : BOOL
12918:
                   // \ Function \ wSetUserObjectInformation (hObj:TH and le;nIndex:Integer;pvInfo:Pointer;nLength:DWORD):BOOL \ and the setUserObjectInformation (hObjectInformation) \ and th
                     Function wSetWindowLong( hWnd : HWND; nIndex : Integer; dwNewLong : Longint) : Longint Function wSetWindowText( hWnd : HWND; lpString : PKOLChar) : BOOL
12920 •
12921:
                     //Function wSetWindowsHook( nFilterType : Integer; pfnFilterProc : TFNHookProc) : HHOOK
//Function wSetWindowsHookEx(idHook:Integer;lpfn:TFNHookProc;hmod:HINST;dwThreadId:DWORD):HHOOK;
12922:
12923:
12924: // Function wSystemParametersInfo( uiAction, uiParam : UINT; pvParam : Pointer; fWinIni: UINT): BOOL
12925:
                     \textbf{Function} \ \ \text{wTabbedTextOut} \ ( \ \text{hDC:HDC:X,Y:Int:lpString:PKOLChar:nCount,nTabPositions:Int:} \\ \textbf{var} \ \ \text{one} \ \ \ \text{one} \ \ \text
                  lpnTabStopPositions,nTabOrigin:Int):Longint;
                     Function wTranslateAccelerator( hWnd : HWND; hAccTable : HACCEL; var lpMsg : TMsg) : Integer
12926:
                      Function wUnregisterClass( lpClassName : PKOLChar; hInstance : HINST) : BOOL
12927:
                     Function wVkKeyScan( ch : KOLChar) : SHORT
Function wVkKeyScanEx( ch : KOLChar; dwhkl : HKL) : SHORT
12928:
12929:
12930:
                     Function wWinHelp( hWndMain : HWND; lpszHelp : PKOLChar; uCommand : UINT; dwData : DWORD) : BOOL
12931:
                      Function wwsprintf( Output : PKOLChar; Format : PKOLChar) : Integer
                     Function wwwsprintf( Output : PKOLChar; Format : PKOLChar; arglist : va_list) : Integer
12932:
12933:
12934:
                   //TestDrive!
12935:
                   'SID_REVISION', 'LongInt').SetInt(1); 'FILENAME_ADVAPI32', 'String').SetString('ADVAPI32.DLL
                      'PROC_CONVERTSIDTOSTRINGSIDA', 'String').SetString( 'ConvertSidToStringSidA
12937:
                     Function GetDomainUserSidS(const domainName:String;const userName:String; var foundDomain:String):String;
12938:
                     \textbf{Function} \ \ \texttt{GetLocalUserSidStr}( \ \ \textbf{const} \ \ \texttt{UserName} \ : \ \textbf{string}) \ : \ \textbf{string}
                     Function getPid4user( const domain : string; const user : string; var pid : dword) : boolean
12939:
                     Function Impersonate2User( const domain : string; const user : string)
12940:
                                                                                                                                                                                                                         : boolean
12941:
                     Function GetProcessUserBypid( pid : DWORD; var UserName, Domain : AnsiString) : Boolean
12942:
                     Function KillProcessbyname( const exename : string; var found : integer) : integer
12943:
                     Function getWinProcessList : TStringList
12944: end;
12945:
12946:
                  procedure SIRegister_AfSafeSync(CL: TPSPascalCompiler);
12947:
                  begin
                     'AfMaxSyncSlots','LongInt').SetInt( 64);
12948:
                        AfSynchronizeTimeout','LongInt').SetInt( 2000);
TAfSyncSlotID', 'DWORD
12949:
12950:
12951:
                        {\tt TAfSyncStatistics','record\ MessagesCount:Int;TimeoutMessages:Int;DisabledMessages:Int;end;TimeoutMessages:Int;DisabledMessages:Int;end;TimeoutMessages:Int;DisabledMessages:Int;DisabledMessages:Int;DisabledMessages:Int;DisabledMessages:Int;DisabledMessages:Int;DisabledMessages:Int;DisabledMessages:Int;DisabledMessages:Int;DisabledMessages:Int;DisabledMessages:Int;DisabledMessages:Int;DisabledMessages:Int;DisabledMessages:Int;DisabledMessages:Int;DisabledMessages:Int;DisabledMessages:Int;DisabledMessages:Int;DisabledMessages:Int;DisabledMessages:Int;DisabledMessages:Int;DisabledMessages:Int;DisabledMessages:Int;DisabledMessages:Int;DisabledMessages:Int;DisabledMessages:Int;DisabledMessages:Int;DisabledMessages:Int;DisabledMessages:Int;DisabledMessages:Int;DisabledMessages:Int;DisabledMessages:Int;DisabledMessages:Int;DisabledMessages:Int;DisabledMessages:Int;DisabledMessages:Int;DisabledMessages:Int;DisabledMessages:Int;DisabledMessages:Int;DisabledMessages:Int;DisabledMessages:Int;DisabledMessages:Int;DisabledMessages:Int;DisabledMessages:Int;DisabledMessages:Int;DisabledMessages:Int;DisabledMessages:Int;DisabledMessages:Int;DisabledMessages:Int;DisabledMessages:Int;DisabledMessages:Int;DisabledMessages:Int;DisabledMessages:Int;DisabledMessages:Int;DisabledMessages:Int;DisabledMessages:Int;DisabledMessages:Int;DisabledMessages:Int;DisabledMessages:Int;DisabledMessages:Int;DisabledMessages:Int;DisabledMessages:Int;DisabledMessages:Int;DisabledMessages:Int;DisabledMessages:Int;DisabledMessages:Int;DisabledMessages:Int;DisabledMessages:Int;DisabledMessages:Int;DisabledMessages:Int;DisabledMessages:Int;DisabledMessages:Int;DisabledMessages:Int;DisabledMessages:Int;DisabledMessages:Int;DisabledMessages:Int;DisabledMessages:Int;DisabledMessages:Int;DisabledMessages:Int;DisabledMessages:Int;DisabledMessages:Int;DisabledMessages:Int;DisabledMessages:Int;DisabledMessages:Int;DisabledMessages:Int;DisabledMessages:Int;DisabledMessages:Int;DisabledMessages:Int;DisabledMessages:Int;DisabledMessages:Int;DisabledMessages
12952:
                        TAfSafeSyncEvent!.
                                                                            'Procedure ( ID : TAfSyncSlotID)
12953:
                        TAfSafeDirectSyncEvent', 'Procedure
12954:
                     Function AfNewSyncSlot( const AEvent :
                                                                                                                                TAfSafeSyncEvent) : TAfSyncSlotID
12955:
                     Function AfReleaseSyncSlot( const ID : TAfSyncSlotID) : Boolean
12956:
                     Function AfEnableSyncSlot( const ID : TAfSyncSlotID; Enable : Boolean) : Boolean
                     Function AfValidateSyncSlot(const ID: TAfSyncSlotID): Boolean
Function AfSyncEvent(const ID: TAfSyncSlotID; Timeout: DWORD): Boolean
12957:
12958:
12959:
                     Function AfDirectSyncEvent( Event : TAfSafeDirectSyncEvent; Timeout : DWORD) : Boolean
12960:
                     Function AfIsSyncMethod : Boolean
12961:
                     Function AfSvncWnd : HWnd
                     Function AfSyncStatistics : TAfSyncStatistics
12962:
12963:
                     Procedure AfClearSyncStatistics
12964:
12965:
12966: procedure SIRegister_AfComPortCore(CL: TPSPascalCompiler);
12967:
                  begin
                      regin
'fBinary','LongWord').SetUInt( $00000001);
'fParity','LongWord').SetUInt( $00000002);
'fOutxCtsFlow','LongWord').SetUInt( $00000004);
'fOutxDsrFlow','LongWord').SetUInt( $00000008);
'fDtrControl','LongWord').SetUInt( $00000030);
12968:
12969:
12970:
12971:
12972:
12973:
                      'fDtrControlDisable','LongWord').SetUInt( $00000000);
12974:
                      'fDtrControlEnable', 'LongWord').SetUInt( $00000010);
                      'fDtrControlHandshake','LongWord').SetUInt( $0000020);
'fDsrSensitivity','LongWord').SetUInt( $00000040);
'fTXContinueOnXoff','LongWord').SetUInt( $00000080);
12975:
12976:
12977:
                      'fOutX','LongWord').SetUInt( $00000100);
'fInX','LongWord').SetUInt( $00000200);
12978 .
12979:
12980:
                         fErrorChar', 'LongWord').SetUInt( $00000400);
                      'fNull', 'LongWord').SetUInt( $00000800);
12981:
12982:
                        fRtsControl','LongWord').SetUInt( $00003000);
                      'fRtsControlDisable','LongWord').SetUInt( $0000000);
'fRtsControlEnable','LongWord').SetUInt( $00001000);
12983:
12984:
                      'fRtsControlHandshake', 'LongWord').SetUInt( $00002000);
'fRtsControlToggle', 'LongWord').SetUInt( $00003000);
12985:
12986:
                      'fAbortOnError','LongWord').SetUInt( $00004000);
'fDummy2','LongWord').SetUInt( $FFFF8000);
TAfCoreEvent', '( ceOutFree, ceLineEvent, ceNeedReadData, ceException )
12987:
12988:
12989:
                        FindClass('TOBJECT'), 'EAfComPortCoreError
FindClass('TOBJECT'), 'TAfComPortCore
12990:
12991:
                        TAfComPortCoreEvent', 'Procedure ( Sender : TAfComPortCore; Even'
    +'tKind : TAfCoreEvent; Data : DWORD)
12992:
12993:
                        SIRegister_TAfComPortCoreThread(CL);
12994:
                         SIRegister_TAfComPortEventThread(CL);
12995:
12996:
                        SIRegister TAfComPortWriteThread(CL);
12997:
                        SIRegister_TAfComPortCore(CL);
12998:
                     Function FormatDeviceName( PortNumber : Integer) : string
12999:
                  end;
13000:
13001: procedure SIRegister_ApplicationFileIO(CL: TPSPascalCompiler);
13002: begin
13003:
                        TAFIOFileStreamEvent', 'Function ( const fileName : String; mode: Word) : TStream
                        TAFIOFileStreamExistsEvent', 'Function ( const fileName : String) : Boolean
```

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13005:
             SIRegister TApplicationFileIO(CL);
             TDataFileCapability', '( dfcRead, dfcWrite )
TDataFileCapabilities', 'set of TDataFileCapability
13006:
13007:
13008:
             SIRegister_TDataFile(CL);
13009:
             //TDataFileClass', 'class of TDataFile
13010:
           Function ApplicationFileIODefined : Boolean
           Function CreateFileStream(const fileName: String; mode: WordfmShareDenyNone):TStream
13011:
13012:
           Function FileStreamExists(const fileName: String) : Boolean
13013:
            //Procedure Register
13014:
          end;
13015:
13016:
          procedure SIRegister_ALFBXLib(CL: TPSPascalCompiler);
13017:
             TALFBXFieldType', '( uftUnKnown, uftNumeric, uftChar, uftVarchar'
13018:
              +', uftCstring, uftSmallint, uftInteger, uftQuad, uftFloat, uftDoublePrecisi'
+'on, uftTimestamp, uftBlob, uftBlobId, uftDate, uftTime, uftInt64, uftArray, uftNull)
13019:
13020:
             TALFBXScale', 'Integer
13021:
13022.
             FindClass('TOBJECT'),'EALFBXConvertError
             SIRegister_EALFBXError(CL);
13023:
13024:
             SIRegister_EALFBXException(CL);
             FindClass('TOBJECT'), 'EALFBXGFixError
FindClass('TOBJECT'), 'EALFBXDSQLError
13025:
13026:
             FindClass('TOBJECT'), 'EALFBXDynError
13027:
             FindClass('TOBJECT'), 'EALFBXGBakError
13028:
             FindClass('TOBJECT'), 'EALFBXGSecError
13029:
13030:
             FindClass('TOBJECT'), 'EALFBXLicenseError
13031:
             FindClass('TOBJECT'),'EALFBXGStatError
             //EALFBXExceptionClass', 'class of EALFBXError
TALFBXCharacterSet', '(csNONE, csASCII, csBIG_5, csCYRL, csDOS4'
13032:
13033:
              +'37, csDOS850, csDOS852, csDOS857, csDOS860, csDOS861, csDOS863, csDOS865, '
+'csEUCJ_0208, csGB_2312, csISO8859_1, csISO8859_2, csKSC_5601, csNEXT, csOC'
13034:
13035:
              +'TETS, CSSJIS_0208, CSUNICODE_FSS, CSUTF8, CSWIN1250, CSWIN1251, CSWIN1252,'
+' CSWIN1253, CSWIN1254, CSDOS737, CSDOS775, CSDOS858, CSDOS862, CSDOS864, C'
13036:
13037:
              +'sDOS866, csDOS869, csWIN1255, csWIN1256, csWIN1257, csIS08859_3, csIS08859+'_4, csIS08859_5, csIS08859_6, csIS08859_7, csIS08859_8, csIS08859_9, csIS0
13038:
               +'8859_13, csKOI8R, csKOI8U, csWIN1258, csTIS620, csGBK, csCP943C )
13040:
             TALFBXTransParam', '( tpConsistency, tpConcurrency, tpShared, tp' +'Protected, tpExclusive, tpWait, tpNowait, tpRead, tpWrite, tpLockRead, tpL' +'ockWrite, tpVerbTime, tpCommitTime, tpIgnoreLimbo, tpReadCommitted, tpAuto'
13041:
13042:
13043:
13044:
               +'Commit, tpRecVersion, tpNoRecVersion, tpRestartRequests, tpNoAutoUndo, tpLockTimeout )
13045:
             TALFBXTransParams', 'set of TALFBXTransParam
           Function ALFBXStrToCharacterSet( const CharacterSet : AnsiString) : TALFBXCharacterSet
13046:
           Function ALFBXCreateDBParams( Params: AnsiString; Delimiter: Char): AnsiString
13047:
           Function ALFBXCreateBlobParams( Params : AnsiString; Delimiter : Char) : AnsiString
13048:
13049:
             'cALFBXMaxParamLength','LongInt').SetInt( 125);
             TALFBXParamsFlag', '( pfNotInitialized, pfNotNullable )
TALFBXParamsFlags', 'set of TALFBXParamsFlag
//PALFBXSQLVar', '^TALFBXSQLVar // will not work
13050:
13051:
             ///PALFBXSQLDaData', ''TALFBXSQLDaData // will not work
TALFBXStatementType', '( stSelect, stInsert, stUpdate, stDelete,'
13053:
13054:
13055:
              +' stDDL, stGetSegment, stPutSegment, stExecProcedure, stStartTrans, stCommi'
13056:
                +'t, stRollback, stSelectForUpdate, stSetGenerator, stSavePoint )
             SIRegister_TALFBXSQLDA(CL);
13057:
             //PALFBXPtrarray', '^TALFBXPtrarray // will not work SIRegister_TALFBXPoolStream(CL);
13058:
13059:
             //PALFBXBlobData', '^TALFBXBlobData // will not work
TALFBXBlobData', 'record Size : Integer; Buffer : string; end
13060:
13061:
             //PALFBXArrayDesc', '^TALFBXArrayDesc // will not work
//TALFBXArrayDesc', 'TISCArrayDesc
//TALFBXBlobDesc', 'TISCBlobDesc
//PALFBXArrayInfo', '^TALFBXArrayInfo // will not work
//TALFBXArrayInfo', 'record index : Integer; size : integer; info: TALFBXArrayDesc; end
13062:
13063:
13064:
13065:
13066:
13067:
             SIRegister_TALFBXSQLResult(CL);
             //TALFBXSQLResultClass', 'class of TALFBXSQLResult \\ SIRegister\_TALFBXSQLParams(CL);
13068:
13069:
13070:
             //TALFBXSQLParamsClass', 'class of TALFBXSQLParams
             //TALFBXSQLFaramsclass', 'class' of TALFBXSQLFarams
TALFBXDSQLInfoData', 'record InfoCode : byte; InfoLen : Word; St'
+'atementType : TALFBXStatementType; end
FindClass('TOBJECT'), 'TALFBXLibrary
//PALFBXStatusVector', '^TALFBXStatusVector'/ will not work
TALFBXOnConnectionLost', 'Procedure ( Lib : TALFBXLibrary)
13071:
13072:
13073:
13074:
13075:
13076:
             //TALFBXOnGetDBExceptionClass', 'Procedure ( Number : Integer; out'
13077:
             //+' Excep : EALFBXExceptionClass)
SIRegister TALFBXLibrary(CL);
13078:
            'cAlFBXDateOffset','LongInt').SetInt( 15018);
'cALFBXTimeCoeff','LongInt').SetInt( 86400000);
13079:
13080:
13081:
            //Procedure ALFBXDecodeTimeStamp( v : PISCTimeStamp; out DateTime : Double);
           //Procedure ALFBXDecodeTimeStamp1( v : PISCTimeStamp; out TimeStamp : Double);

//Function ALFBXDecodeTimeStamp2( v : PISCTimeStamp) : Double;

Procedure ALFBXDecodeSQLDate( v : Integer; out Year : SmallInt; out Month, Day : Word)

Procedure ALFBXDecodeSQLTime(v:Cardinal;out Hour,Minute,Second:Word; out Fractions: LongWord)
13082:
13083:
13084:
13085:
13086:
            //Procedure ALFBXEncodeTimeStamp( const DateTime : TDateTime; v : PISCTimeStamp);
            //Procedure ALFBXEncodeTimeStamp1( const Date : Integer; v : PISCTimeStamp);
//Procedure ALFBXEncodeTimeStamp2( const Time : Cardinal; v : PISCTimeStamp);
13087:
13088:
           Function ALFBXEncodeSQLDate( Year : Integer; Month, Day : Integer) : Integer
Function ALFBXEncodeSQLTime( Hour, Minute, Second : Word; var Fractions : LongWord): Cardinal
13089:
13090:
             TALFBXParamType', '( prNone, prByte, prShrt, prCard, prStrg, prIgno )
TALFBXDPBInfo', 'record Name : AnsiString; ParamType : TALFBXParamType; end
13091:
13092:
           Function ALFBXSQLQuote( const name : AnsiString) : AnsiString
```

```
13094: Function ALFBXSOLUnOuote( const name : AnsiString) : AnsiString
13095: end;
13096:
13097:
             procedure SIRegister_ALFBXClient(CL: TPSPascalCompiler);
13098: begin
                 TALFBXClientSQLParam', 'record Value : AnsiString; IsNull : Boolean; end TALFBXClientSQLParams', 'array of TALFBXClientSQLParam
13099:
13100:
                 TALFBXClientSelectDataSQL', 'record SQL : AnsiString; Params : T'
13101:
                   +'ALFBXClientSQLParams; RowTag : AnsiString; ViewTag : AnsiString; Skip : in'
13102:
13103:
                   +'teger; First : Integer; CacheThreshold : Integer; end
                 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
13104:
13105:
13106:
13107:
13108:
13109:
                 SIRegister_TALFBXClient(CL);
                 SIRegister_TALFBXConnectionStatementPoolBinTreeNode(CL);
13110:
13111:
                 SIRegister_TALFBXConnectionStatementPoolBinTree(CL);
                 SIRegister TALFBXConnectionWithStmtPoolContainer(CL);
13112:
13113:
                 SIRegister_TALFBXConnectionWithoutStmtPoolContainer(CL);
                 SIRegister_TALFBXReadTransactionPoolContainer(CL);
13114:
13115:
                 SIRegister_TALFBXReadStatementPoolContainer(CL);
13116:
                 {\tt SIRegister\_TALFBXStringKeyPoolBinTreeNode(CL)};\\
                 SIRegister_TALFBXConnectionPoolClient(CL);
SIRegister_TALFBXEventThread(CL);
13117:
13118:
13119:
                 Function AlMySqlClientSlashedStr( const Str : AnsiString) : AnsiString
13120: end;
13121:
13122: procedure SIRegister_ovcBidi(CL: TPSPascalCompiler);
13123: begin
13124: _OSVERSIONINFOA = record
13125:
                     dwOSVersionInfoSize: DWORD;
13126:
                     dwMajorVersion: DWORD;
13127:
                     dwMinorVersion: DWORD;
                     dwBuildNumber: DWORD;
13128:
13129:
                     dwPlatformId: DWORD;
13130:
                     szCSDVersion: array[0..127] of AnsiChar; { Maintenance AnsiString for PSS usage }
13131:
                 end;
               TOSVersionInfoA', '_OSVERSIONINFOA
TOSVersionInfo', 'TOSVersionInfoA
13132:
13133:
               'WS_EX_RIGHT','LongWord').SetUInt( $00001000);
'WS_EX_LEFT','LongWord').SetUInt( $0000000);
13134:
13135:
               WS_EX_LTRREADING', 'LongWord').SetUInt( $00002000);
'WS_EX_LTRREADING', 'LongWord').SetUInt( $00000000);
13136:
13137:
               'WS_EX_LEFTSCROLLBAR','LongWord').SetUInt( $00004000);
'WS_EX_RIGHTSCROLLBAR','LongWord').SetUInt( $00000000);
13138:
13139:
               Function SetProcessDefaultLayout( dwDefaultLayout : DWORD) : BOOL
13140:
13141:
                'LAYOUT_RTL','LongWord').SetUInt( $00000001);
13142:
               'LAYOUT_BTT', 'LongWord').SetUInt( $00000002);
13143:
               'LAYOUT_VBH','LongWord').SetUInt( $00000004);
               'LAYOUT_BITMAPORIENTATIONPRESERVED','LongWord').SetUInt( $00000008);
13144:
                'NOMIRRORBITMAP', 'LongWord').SetUInt( DWORD ( $80000000 ));
13145:
13146:
               Function SetLayout( dc : HDC; dwLayout : DWORD) : DWORD
               Function GetLayout( dc : hdc) : DWORD
13147:
13148:
               Function IsBidi : Boolean
13149: Function GetCurrentHwProfile( var lpHwProfileInfo : THWProfileInfo) : BOOL
               Function GetVersionEx( var lpVersionInformation : TOSVersionInfo) : BOOL
13150:
               Function SetPriorityClass( hProcess : THandle; dwPriorityClass: DWORD) : BOOL
13151:
               Function GetPriorityClass( hProcess : THandle) : DWORD
Function OpenClipboard( hWndNewOwner : HWND) : BOOL
Function CloseClipboard : BOOL
13152:
13153:
13154:
13155:
               Function GetClipboardSequenceNumber : DWORD
               Function GetClipboardOwner : HWND
Function SetClipboardViewer( hWndNewViewer : HWND) : HWND
13156:
13157:
               Function GetClipboardViewer : HWND
13158:
               Function ChangeClipboardChain( hWndRemove, hWndNewNext : HWND) : BOOL
13159:
               Function SetClipboardData( uFormat : UINT; hMem : THandle) : THandle
13160:
               Function GetClipboardData( uFormat : UINT) : THandle
13161:
               Function RegisterClipboardFormat( lpszFormat : PChar) : UINT
Function CountClipboardFormats : Integer
Function EnumClipboardFormats( format : UINT) : UINT
13162:
13163:
13164:
13165:
               \textbf{Function} \ \ \texttt{GetClipboardFormatName} \\ (\texttt{format}: \texttt{UINT}; \texttt{lpszFormatName}: \texttt{PChar}; \texttt{cchMaxCount}: \texttt{Integer}) \\ : \texttt{Integer} \\ (\texttt{locality}) 
13166:
               Function EmptyClipboard : BOOL
13167:
               Function IsClipboardFormatAvailable( format : UINT) : BOOL
                Function GetPriorityClipboardFormat( var paFormatPriorityList, cFormats : Integer) : Integer
13168:
13169:
               Function GetOpenClipboardWindow : HWND
13170:
               Function EndDialog( hDlg : HWND; nResult : Integer) : BOOL
               Function GetDlgItem( hDlg : HWND; nIDDlgItem : Integer) : HWND

Function SetDlgItemInt( hDlg : HWND; nIDDlgItem : Integer; uValue : UINT; bSigned: BOOL): BOOL
13171:
13172:
               Function GetDlgItemInt(hDlg:HWND;nIDDlgItem:Integer;var lpTranslated:BOOL;bSigned: BOOL): UINT
              Function SetDlgItemText(hDlg: HWND; nIDDlgItem: Integer; lpString: PChar): BOOL Function CheckDlgButton(hDlg: HWND; nIDButton: Integer; uCheck: UINT): BOOL
13174:
13175:
               Function CheckRadioButton( hDlg : HWND; nIDFirstButton, nIDLastButton, nIDCheckButton : Integer) : BOOL Function IsDlgButtonChecked( hDlg : HWND; nIDButton : Integer) : UINT
13176:
13177:
               Function SendDlgItemMessage(hDlg:HWND;nIDDlgItem:Int;Msg:UINT;wParam:WPARAM;lParam:LPARAM):Longint;
13178:
13179: end;
13180:
13181: procedure SIRegister_DXPUtils(CL: TPSPascalCompiler);
13182: begin
```

```
13183:
         Function glExecuteAndWait(cmdLine:String; visibility:Word; timeout:Cardinal; killAppOnTimeOut:Bool):Int;
13184:
         Function GetTemporaryFilesPath : String
         Function GetTemporaryFileName : String
13186:
         Function FindFileInPaths( const fileName, paths : String) : String
13187:
         Function PathsToString( const paths : TStrings) : String
         Procedure StringToPaths( const pathsString : String; paths : TStrings)
13188:
13189:
         //Function MacroExpandPath( const aPath : String) : String
13190:
13191:
13192: procedure SIRegister ALMultiPartBaseParser(CL: TPSPascalCompiler);
13193:
        begin
13194:
          SIRegister_TALMultiPartBaseContent(CL);
13195:
           SIRegister_TALMultiPartBaseContents(CL);
13196:
          SIRegister_TAlMultiPartBaseStream(CL);
          SIRegister TALMultipartBaseEncoder(CL);
13197:
13198:
          SIRegister_TALMultipartBaseDecoder(CL);
         Function ALMultipartExtractBoundaryFromContentType( aContentType : AnsiString) : AnsiString
13199:
         Function ALMultipartExtractSubValueFromHeaderLine(aHeaderLine:AnsiString;aName:AnsiString):AnsiString;Function ALMultipartSetSubValueInHeaderLine(aHeaderLine:AnsiString;aName,AValue:AnsiString):AnsiString;
13200:
13201:
13202: end;
13203:
        procedure SIRegister_SmallUtils(CL: TPSPascalCompiler);
13204:
13205: begin
13206:
          TdriveSize', 'record FreeS : Int64; TotalS : Int64; end
          TWinVerRec'
13207:
                        , 'record WinPlatform : Integer; WinMajorVersion : In'
13208:
            +'teger; WinMinorVersion : Integer; WinBuildNumber : Integer; WinCSDVersion: String; end
13209:
         Function aAllocPadedMem( Size : Cardinal) : TObject
         Procedure aFreePadedMem( var P : TObject);
13210:
13211:
         Procedure aFreePadedMem1( var P : PChar);
         Function aCheckPadedMem( P : Pointer) : Byte
13212:
13213:
         Function aGetPadMemSize( P : Pointer) : Cardinal
         Function aAllocMem(Size: Cardinal): Pointer
Function aStrLen(const Str: PChar): Cardinal
13214:
13215:
         Function aStrLCopy( Dest : PChar; const Source : PChar; MaxLen : Cardinal) : PChar
Function aStrECopy( Dest : PChar; const Source : PChar) : PChar
13216:
13217:
13218:
         Function aStrCopy( Dest : PChar; const Source : PChar) : PChar
         Function aStrEnd( const Str : PChar) : PChar
Function aStrScan( const Str : PChar; aChr : Char) : PChar
13219:
13220:
13221:
         Function aStrMove( Dest : PChar; const Source : PChar; Count : Cardinal) : PChar
         Function aPCharLength( const Str : PChar) : Cardinal
13222:
13223:
         Function aPCharUpper( Str : PChar) : PChar
         Function aPCharLower( Str : PChar) : PChar
13224:
         Function aStrCat( Dest : PChar; const Source : PChar) : PChar
13225:
         Function aLastDelimiter( const Delimiters, S : String) : Integer
13226:
13227:
         Function aCopyTail( const S : String; Len : Integer) : String
         Function aInt2Thos( I : Int64) : String
Function aUpperCase( const S : String) : String
13228:
13229:
         Function aLowerCase( const S : string) : String
13231:
         Function aCompareText( const S1, S2 : string)
         Function aSameText( const S1, S2 : string) : Boolean Function aInt2Str( Value : Int64) : String
13232:
13233:
         Function aStr2Int( const Value : String) : Int64
13234:
         Function aStr2IntDef( const S : string; Default : Int64) : Int64
13235:
13236:
         Function aGetFileExt( const FileName : String) : String
13237:
         Function aGetFilePath( const FileName : String) : String
         Function aGetFileName( const FileName : String) : String
13238:
         Function aChangeExt( const FileName, Extension : String) : String
13239:
         Function aAdjustLineBreaks( const S : string) : string
13240:
13241:
         Function aGetWindowStr( WinHandle : HWND) : String
         Function aDiskSpace( Drive : String) : TdriveSize
13242:
         Function aFileExists( FileName : String) : Boolean
13243:
         Function aFileSize(FileName: String): Int64
Function aDirectoryExists(const Name: string): Boolean
Function aSysErrorMessage(ErrorCode: Integer): string
13244:
13245:
13246:
         Function aShortPathName( const LongName : string) : string
Function aGetWindowVer : TWinVerRec
13247:
13248:
         procedure InitDriveSpacePtr;
13249:
13250: end;
13251:
13252:
        procedure SIRegister MakeApp(CL: TPSPascalCompiler);
13253:
        begin
13254:
         aZero','LongInt').SetInt( 0);
13255:
         'makeappDEF','LongInt').SetInt( - 1);
'CS VREDRAW','LongInt').SetInt( DWORD ( 1 ));
13256:
         'CS_HREDRAW','LongInt').SetInt( DWORD ( 2 ));
13257:
13258:
         'CS_KEYCVTWINDOW', 'LongInt').SetInt(4);
         CS_DBLCLKS','LongInt').SetInt( 8);
'CS_OWNDC','LongWord').SetUInt( $20);
'CS_CLASSDC','LongWord').SetUInt( $40);
'CS_PARENTDC','LongWord').SetUInt( $80);
'CS_NOKEYCVT','LongWord').SetUInt( $100);
13259:
13260:
13261:
13262:
13263:
         'CS_NOCLOSE', 'LongWord').SetUInt( $200);
'CS_SAVEBITS', 'LongWord').SetUInt( $800);
13264:
13265:
         'CS_BYTEALIGNCLIENT', 'LongWord').SetUInt( $1000);
13266:
         'CS_BYTEALIGNWINDOW', 'LongWord').SetUInt(
13267:
         'CS_GLOBALCLASS','LongWord').SetUInt( $4000);
'CS_IME','LongWord').SetUInt( $10000);
13268:
13269:
         CS_DROPSHADOW', 'LongWord').SetUInt( $20000);
//PPanelFunc', '^TPanelFunc // will not work
13270:
```

```
TPanelStyle', '(psEdge, psTabEdge, psBorder, psTabBorder, psTab, psNone )
TFontLook', '(flBold, flItalic, flUnderLine, flStrikeOut )
TFontLooks', 'set of TFontLook
TMessagefunc', 'function(hWnd,iMsg,wParam,lParam:Integer):Integer)
13272:
13273:
13275:
13276:
         Function SetWinClass(const ClassName:String; pMessFunc: Tmessagefunc; wcStyle : Integer): Word
         Function SetWinClassO( const ClassName : String; pMessFunc : TObject; wcStyle : Integer): Word Function SetWinClass( const ClassName : String; pMessFunc : TObject; wcStyle : Integer) : Word
13277:
13278:
13279:
         Function MakeForm(Left,Top,Width,Height:Integer;const Caption:String;WinStyle:Integer):Integer
13280:
         Procedure RunMsgLoop( Show : Boolean)
         Function MakeFont(Height, Width:Integer; const FontName:String; Look:TFontLooks; Roman:Boolean): Integer
13281:
13282:
         Function MakeButton(Left, Top, Width, Height: Integer; pCaption: PChar; hParent,
        ID_Number:Cardinal;hFont:Int;
13283: Function MakeListBox(Left,Top,Width,Height,Parent:Integer;const ListItems:String;WinStyle:Integer):Integer
         Function MakeComboBox(Left, Top, Width, Height, Parent:Integer; const ListItems:String; WinStyle:Integer):Int
Function MakePanel(Left, Top, Width, Height,
13284:
13285:
        hParent:Int;WndFunc:TPanelFunc;ID_Number:Card;Style:TPanelStyle):Int;
        Function MakeSubMenu(const ItemList : String; ID1, ID2 : Cardinal; hMenu : Integer) : Integer
         Function id4menu( a, b : Byte; c : Byte; d : Byte) : Cardinal
Procedure DoInitMakeApp //set first to init formclasscontrol!
13287:
13288:
13289:
        end;
13290:
13291:
        procedure SIRegister_ScreenSaver(CL: TPSPascalCompiler);
13292: begin
          TScreenSaverOption', '( ssoAutoAdjustFormProperties, ssoAutoHook'
13293:
13294:
            +'KeyboardEvents, ssoAutoHookMouseEvents, ssoEnhancedMouseMoveDetection )
13295:
          TScreenSaverOptions', 'set of TScreenSaverOption
13296: 'cDefaultScreenSaverOptions','LongInt').Value.ts32:=ord(ssoAutoAdjustFormProperties) or ord(ssoAutoHookKeyboardEvents) or ord(ssoEnhancedMouseMoveDetection);
13297:
          TScreenSaverPreviewEvent', 'Procedure ( Sender : TObject; previewHwnd: HWND)
          SIRegister_TScreenSaver(CL);
13298:
13299:
          //Procedure Register
13300:
         Procedure SetScreenSaverPassword
13301: end;
13302:
13303:
        procedure SIRegister XCollection(CL: TPSPascalCompiler);
13304: begin
13305:
          FindClass('TOBJECT').'TXCollection
13306:
          SIRegister_EFilerException(CL);
13307:
          SIRegister_TXCollectionItem(CL);
13308:
           //TXCollectionItemClass',
                                         'class of TXCollectionItem
          SIRegister_TXCollection(CL);
13309:
13310:
         Procedure RegisterXCollectionDestroyEvent( notifyEvent: TNotifyEvent)
13311:
         Procedure DeRegisterXCollectionDestroyEvent( notifyEvent : TNotifyEvent)
         Procedure RegisterXCollectionItemClass( aClass : TXCollectionItemClass)
13312:
13313:
         \textbf{Procedure} \ \ \texttt{UnregisterXCollectionItemClass} ( \ \ \texttt{aClass} \ : \ \ \texttt{TXCollectionItemClass})
         Function FindXCollectionItemClass( const className : String) : TXCollectionItemClass Function GetXCollectionItemClassesList( baseClass : TXCollectionItemClass) : TList
13314:
13315:
13316:
        end;
13317:
13318:
        procedure SIRegister XOpenGL(CL: TPSPascalCompiler);
13319: begin
          TMapTexCoordMode', '(mtcmUndefined, mtcmNull, mtcmMain, mtcmDual, mtcmSecond, mtcmArbitrary);
13320:
         Procedure xglMapTexCoordToNull
13321:
13322:
         Procedure xglMapTexCoordToMain
13323:
         Procedure xqlMapTexCoordToSecond
13324:
         Procedure xglMapTexCoordToDual
         Procedure xglMapTexCoordToArbitrary( const units : array of Cardinal);
13325:
         Procedure xglMapTexCoordToArbitrary1( const bitWiseUnits : Cardinal)
13326:
13327:
         Procedure xglMapTexCoordToArbitraryAdd( const bitWiseUnits : Cardinal)
13328:
         Procedure xalBeginUpdate
13329:
         Procedure xglEndUpdate
13330:
         Procedure xglPushState
13331:
         Procedure xglPopState
13332:
         Procedure xqlForbidSecondTextureUnit
13333:
         Procedure xqlAllowSecondTextureUnit
13334:
         Function xglGetBitWiseMapping : Cardinal
13335:
13336:
13337: procedure SIRegister_VectorLists(CL: TPSPascalCompiler);
13338: begin
          TBaseListOption', '( bloExternalMemory, bloSetCountResetsMemory)
TBaseListOptions', 'set of TBaseListOption
13339:
13340:
          SIRegister_TBaseList(CL);
SIRegister_TBaseVectorList(CL);
13341:
13342:
13343:
           SIRegister_TAffineVectorList(CL);
13344:
           SIRegister_TVectorList(CL);
13345:
          SIRegister_TTexPointList(CL);
13346:
          SIRegister_TXIntegerList(CL);
13347:
           //PSingleArrayList', '^TSingleArrayList // will not work
           SIRegister_TSingleList(CL);
13348:
13349:
          SIRegister_TByteList(CL);
13350:
          SIRegister_TQuaternionList(CL);
         Procedure QuickSortLists( startIndex, endIndex : Integer; refList : TSingleList; objList : TList);
Procedure QuickSortLists( startIndex, endIndex : Integer; refList : TSingleList; objList : TBaseList);
13351:
13352:
13353:
         Procedure FastQuickSortLists(startIndex)
        endIndex:Integer;refList:TSingleList;objList:TPersistentObjectList);
13354:
13355:
13356: procedure SIRegister MeshUtils(CL: TPSPascalCompiler);
```

```
13357: begin
13358:
           Procedure ConvertStripToList( const strip : TAffineVectorList; list : TAffineVectorList);
             Procedure ConvertStripToList1( const strip: TIntegerList; list: TIntegerList);

Procedure ConvertStripToList2(const strip: TAffineVectorList; const
13360:
            indices:TIntegerList;list:TAffineVectorList);
             Procedure ConvertIndexedListToList(const data:TAffineVectlist;const
13361:
           indices:TIntegerList;list:TAffineVectorList);
13362: Function BuildVectorCountOptimizedIndices(const vertices:TAffineVectorList; const
normals:TAffineVectorList; const texCoords: TAffineVectorList): TIntegerList

13363: Procedure RemapReferences( reference: TAffineVectorList; const indices: TIntegerList);

13364: Procedure RemapReferences1( reference: TIntegerList; const indices: TIntegerList);
             Procedure RemapAndCleanupReferences( reference: TAffineVectorList; indices: TIntegerList)
13366:
             Function RemapIndicesToIndicesMap( remapIndices : TIntegerList) : TIntegerList
             Procedure RemapTrianglesIndices( indices, indicesMap : TIntegerList)
Procedure RemapIndices( indices, indicesMap : TIntegerList)
13367:
13368:
13369:
             Procedure UnifyTrianglesWinding( indices : TIntegerList)
             Procedure InvertTrianglesWinding( indices : TIntegerList)
13370:
             Function BuildNormals( reference : TAffineVectorList; indices : TIntegerList) : TAffineVectorList Function BuildNonOrientedEdgesList(triangleIndices:TIntegerList; triangleEdges : TIntegerList;
13371 •
13372:
           edgesTriangles : TIntegerList) : TIntegerList
             Procedure WeldVertices( vertices: TAffineVectorList; indicesMap: TIntegerList; weldRadius: Single)
13373:
             Function StripifyMesh(indices:TIntegerList;maxVertexIndex:Integer;agglomerateLoneTriangles:Boolean):
13374:
           TPersistentObjectList;
             Procedure IncreaseCoherency( indices : TIntegerList; cacheSize : Integer)

Procedure SubdivideTriangles( smoothFactor : Single; vertices : TAffineVectorList; triangleIndices :
13375:
13376:
            TIntegerList; normals : TAffineVectorList; onSubdivideEdge : TSubdivideEdgeEvent)
13377:
13378:
13379:
           procedure SIRegister_JclSysUtils(CL: TPSPascalCompiler);
           begin
             Procedure GetAndFillMem( var P : TObject; const Size : Integer; const Value : Byte)
13381:
             Procedure FreeMemAndNil( var P : TObject)
13382:
             Function PCharOrNil( const S : string) : PChar
13383:
13384:
               SIRegister_TJclReferenceMemoryStream(CL);
               FindClass('TOBJECT'), 'EJclVMTError
13386:
              {Function GetVirtualMethodCount( AClass : TClass) : Integer
13387:
             Function GetVirtualMethod( AClass : TClass; const Index : Integer) : Pointer
Procedure SetVirtualMethod( AClass : TClass; const Index : Integer; const Method:Pointer)
13388:
              PDynamicIndexList', '^TDynamicIndexList // will not work
PDynamicAddressList', '^TDynamicAddressList // will not work
13389:
13390:
13391:
             Function GetDynamicMethodCount( AClass : TClass) : Integer
             Function GetDynamicIndexList( AClass : TClass) : PDynamicIndexList
Function GetDynamicAddressList( AClass : TClass) : PDynamicAddressList
13392:
13393:
             Function HasDynamicMethod( AClass : TClass; Index : Integer) : Boolean
13394:
13395:
             Function GetDynamicMethod( AClass : TClass; Index : Integer) : Pointer
             Function GetInitTable( AClass : TClass) : PTypeInfo
PFieldEntry', '^TFieldEntry // will not work}
TFieldEntry', 'record OffSet : Integer; IDX : Word; Name : Short'
13396:
13397:
13398:
13399:
                 +'String;
                                 end
13400:
             Function JIsClass( Address : Pointer) : Boolean
             Function JIsObject( Address : Pointer) : Boolean
13401:
             Function GetImplementorOfInterface( const I : IInterface) : TObject
13402:
13403:
               TDigitCount',
                                       'Integer
13404:
               SIRegister_TJclNumericFormat(CL);
             Function JIntToStrZeroPad( Value, Count : Integer) : AnsiString TTextHandler', 'Procedure ( const Text : string)
13405:
13406:
                 'ABORT_EXIT_CODE', 'LongInt').SetInt( ERROR_CANCELLED 1223);
13407:
             Function JExecute(const
13408:
           \verb|CommandLine:string|| OutputLineCallback: TTextHandler|| RawOutpt: Bool|| AbortPtr: PBool|| : Card|| | Card|| | Card|| : Card|
13409:
             Function JExecute1(const CommandLine:string; var Output:string; RawOutput:Bool; AbortPtr:PBool):Cardinal;
             Tunction ReadKey: Char /,
TModuleHandle', 'HINST
//TModuleHandle', 'Pointer
                                                         //to and from the DOS console !
13410:
13411:
13412:
             'INVALID_MODULEHANDLE_VALUE','LongInt').SetInt( TModuleHandle ( 0 ));

Function LoadModule( var Module: TModuleHandle; FileName: string): Boolean

Function LoadModuleEx( var Module: TModuleHandle; FileName: string; Flags: Cardinal): Boolean
13413:
13414:
              Procedure UnloadModule( var Module : TModuleHandle)
13416:
13417:
             \textbf{Function} \ \ \texttt{GetModuleSymbol}( \ \ \texttt{Module} : \ \ \texttt{TModuleHandle}; \ \ \texttt{SymbolName} : \ \ \textbf{string}) : \ \ \texttt{Pointer}
             Function GetModuleSymbolEx( Module : TModuleHandle; SymbolName : string; var Accu : Boolean) : Pointer
13418:
             Function ReadModuleData(Module:TModuleHandle;SymbolName:string;var Buffer,Size: Cardinal):Boolean;
13419:
             Function WriteModuleData(Module:TModuleHandle;SymbolName:string;var Buffer,Size:Cardinal):Boolean;
13420:
13421:
               FindClass('TOBJECT'),'EJclConversionError
13422:
             Function JStrToBoolean( const S : string) : Boolean
             Function JBooleanToStr( B : Boolean) : string
13423:
             Function JIntToBool( I : Integer) : Boolean
Function JBoolToInt( B : Boolean) : Integer
13424:
13425:
              'ListSeparator','String').SetString( ';
'ListSeparator1','String').SetString( '
13426:
13427:
             Procedure ListAddItems( var List : string; const Separator, Items : string)
13428:
             Procedure ListIncludeItems( var List: string; const Separator, Items: string)
Procedure ListRemoveItems( var List: string; const Separator, Items: string)
13430:
13431:
             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
13432:
13433:
             Procedure ListSetItem(var List:string;const Separator:string;const Index:Integer;const Value:string)
13434:
13435:
             Function ListItemIndex( const List, Separator, Item : string) : Integer
             Function SystemTObjectInstance : LongWord Function IsCompiledWithPackages : Boolean
13436:
13437:
13438: Function JJclGUIDToString( const GUID : TGUID) : string
```

```
13439:
              Function JJclStringToGUID( const S : string) : TGUID
13440:
                SIRegister TJclIntfCriticalSection(CL);
13441:
                 SIRegister_TJclSimpleLog(CL);
13442:
              Procedure InitSimpleLog( const ALogFileName : string)
13443:
            end;
13444:
13445: procedure SIRegister_JclBorlandTools(CL: TPSPascalCompiler);
13446:
                FindClass('TOBJECT'),'EJclBorRADException
TJclBorRADToolKind', '( brDelphi, brCppBuilder, brBorlandDevStudio )
13447:
13448:
                TJclBorRADToolEdition', '( deOPEN, dePRO, deSVR )
TJclBorRADToolEdition', '( deSTD, dePRO, deCSS, deARC )
13449:
13450:
                TJclBorRADToolPath', 'string
13451:
               'SupportedDelphiVersions', 'LongInt').SetInt( 5 or 6 or 7 or 8 or 9 or 10 or 11);
'SupportedBCBVersions', 'LongInt').SetInt( 5 or 6 or 10 or 11);
'SupportedBDSVersions', 'LongInt').SetInt( 1 or 2 or 3 or 4 or 5);
13452:
13453:
13454:
              SurRADToolRepositoryPagesSection', 'String').SetString( 'Repository Pages
BorRADToolRepositoryDialogsPage', 'String').SetString( 'Dialogs
BorRADToolRepositoryFormsPage', 'String').SetString( 'Forms
BorRADToolRepositoryProjectsPage', 'String').SetString( 'Projects
13455:
13456
13457:
13458:
               BorRADToolRepositoryDataModulesPage', 'String').SetString( 'Data Modules
13459:
13460:
              BorRADToolRepositoryObjectType','String').SetString( 'Type
13461:
              {\tt BorRADToolRepositoryFormTemplate', 'String'). SetString(''FormTemplate')} \\
              BorRADToolRepositoryProjectTemplate','String').SetString( 'ProjectTemplate BorRADToolRepositoryObjectName','String').SetString( 'Name BorRADToolRepositoryObjectPage','String').SetString( 'Page
13462:
13463:
13464:
13465:
              BorRADToolRepositoryObjectIcon','String').SetString( 'Icon
              BOTRADIOOIRepositoryUDjectIcon', 'String').SetString( 'Icon
BOTRADTOOIRepositoryObjectDescr', 'String').SetString( 'Description
BOTRADTOOIRepositoryObjectAuthor', 'String').SetString( 'Author
BOTRADTOOIRepositoryObjectDesigner', 'String').SetString( 'Ancestor
BOTRADTOOIRepositoryObjectDesigner', 'String').SetString( 'Designer
BOTRADTOOIRepositoryDesignerDfm', 'String').SetString( 'dfm
BOTRADTOOIRepositoryDesignerXfm', 'String').SetString( 'xfm
13466:
13467:
13468:
13469:
13470:
13471:
              BorRADToolRepositoryObjectNewForm', 'String').SetString( 'DefaultNewForm BorRADToolRepositoryObjectMainForm', 'String').SetString( 'DefaultMainForm
13472:
13473:
              SourceExtensionDelphiPackage','String').SetString('.dpk
SourceExtensionBCBPackage','String').SetString('.bpk
SourceExtensionDelphiProject','String').SetString('.dpr
13474:
13475:
13476:
              SourceExtensionBCBProject', 'string').SetString( '.bpr SourceExtensionBDSProject', 'string').SetString( '.bdsproj
13477:
13478:
              SourceExtensionDProject', 'string').SetString('.dproj
BinaryExtensionPackage', 'string').SetString('.bpl
BinaryExtensionLibrary', 'string').SetString('.dll
13479:
13480:
13481:
              BinaryExtensionExecutable','String').SetString('.exe
13482:
              CompilerExtensionDCP','String').SetString('.dcp
CompilerExtensionBPI','String').SetString('.bpi
CompilerExtensionLIB','String').SetString('.lib
13483:
13484:
13485:
                                                                                                '.tds
              CompilerExtensionTDS','String').SetString(
13486:
              CompilerExtensionMAP', 'String').SetString(
CompilerExtensionDRC', 'String').SetString(
CompilerExtensionDEF', 'String').SetString(
13487:
                                                                                                 '.map
13488:
                                                                                                '.drc
                                                                                                 '.def
13489:
              SourceExtensionCPP', 'String').SetString(
SourceExtensionH', 'String').SetString('
13490:
                                                                                              .cpp
13491:
              SourceExtensionPAS', 'String').SetString('.pas
SourceExtensionDFM', 'String').SetString('.dfm
SourceExtensionXFM', 'String').SetString('.xfm
13492:
13493:
                                                                                            '.xfm
13494:
              SourceDescriptionPAS', 'String').SetString( 'Pascal source file
13495:
13496:
              SourceDescriptionCPP','String').SetString( 'C++ source file
              DesignerVCL', 'String').SetString( 'VCL
DesignerCLX', 'String').SetString( 'CLX
ProjectTypePackage', 'String').SetString( 'package
ProjectTypeLibrary', 'String').SetString( 'library
13497:
13498:
13499:
13500:
13501:
              ProjectTypeProgram','String').SetString( 'program'
              Personality32Bit', 'String').SetString( '32 bit
Personality64Bit', 'String').SetString( '64 bit
PersonalityDelphi', 'String').SetString( 'Delphi
13502:
13503:
13504:
              PersonalityDelphiDotNet', 'String').SetString( 'Delphi.net PersonalityBcB', 'String').SetString( 'C++Builder PersonalityCSB', 'String').SetString( 'C#Builder PersonalityVB', 'String').SetString( 'Visual Basic
13505:
13506:
13507:
13508:
              PersonalityDesign', 'String').SetString( 'Design PersonalityUnknown', 'String').SetString( 'Unknown personalityUnknown', 'String').SetString( 'Unknown personalityUnknown', 'String').SetString( 'Unknown personalityUnknown', 'String').
13509:
13510:
              PersonalityBDS', 'String').SetString( 'Borland Developer Studio DOFDirectoriesSection', 'String').SetString( 'Directories
13511:
13512:
              DOFUnitOutputDirKey', 'String').SetString( 'UnitOutp
DOFSearchPathName', 'String').SetString( 'SearchPath
13513:
                                                                                               'UnitOutputDir
13514:
              DOFConditionals', 'String').SetString('Conditionals DOFLinkerSection', 'String').SetString('Linker
13515:
13516:
              DOFPackagesKey', 'String').SetString( 'Packages
13517:
              DOFFackagesRey', String').SetString('Compiler DOFFackageNoLinkKey', 'String').SetString('PackageNoLink DOFAdditionalSection', 'String').SetString('Additional DOFOptionsKey', 'String').SetString('Options TJclBorPersonality', '(bpDelphi32, bpDelphi64, bpBCBuilder32, b'
13518:
13519:
13520:
13521:
13522:
                  +'pBCBuilder64, bpDelphiNet32, bpDelphiNet64, bpCSBuilder32, bpCSBuilder64, '
13523:
                   +'bpVisualBasic32, bpVisualBasic64, bpDesign, bpUnknown )
13524:
                TJclBorPersonalities', 'set of TJclBorPersonality
TJclBorDesigner', '( bdVCL, bdCLX )
TJclBorDesigners', 'set of TJclBorDesigner
13525:
13526:
```

```
13528:
          TJclBorPlatform', '( bp32bit, bp64bit )
           FindClass('TOBJECT'),'TJclBorRADToolInstallation
13529:
           SIRegister_TJclBorRADToolInstallationObject(CL);
13530:
13531:
           SIRegister_TJclBorlandOpenHelp(CL);
           TJclHelp2Object', '(hoRegisterSession, hoRegister, hoPlugin)
TJclHelp2Objects', 'set of TJclHelp2Object
13532:
13533:
13534:
           SIRegister_TJclHelp2Manager(CL);
13535:
           SIRegister_TJclBorRADToolIdeTool(CL);
13536:
           SIRegister_TJclBorRADToolIdePackages(CL);
13537:
          SIRegister_IJclCommandLineTool(CL);
FindClass('TOBJECT'),'EJclCommandLineToolError
13538:
           SIRegister_TJclCommandLineTool(CL);
13539:
13540:
           SIRegister_TJclBorlandCommandLineTool(CL);
13541:
           SIRegister_TJclBCC32(CL);
          SIRegister_TJclDCC32(CL);
TJclDCC', 'TJclDCC32
13542:
13543:
           SIRegister_TJclBpr2Mak(CL);
13544:
13545 .
           SIRegister_TJclBorlandMake(CL);
13546:
           SIRegister TJclBorRADToolPalette(CL);
13547:
           SIRegister_TJclBorRADToolRepository(CL);
           TCommandLineTool', '( clAsm, clBcc32, clDcc32, clDccIL, clMake,clProj2Mak )
TCommandLineTools', 'set of TCommandLineTool
13548:
13549:
13550:
           //TJclBorRADToolInstallationClass', 'class of TJclBorRADToolInstallation
           SIRegister_TJclBorRADToolInstallation(CL);
13551:
13552:
           SIRegister_TJclBCBInstallation(CL);
13553:
           SIRegister_TJclDelphiInstallation(CL);
13554:
           SIRegister_TJclDCCIL(CL);
13555:
           SIRegister_TJclBDSInstallation(CL);
13556:
           TTraverseMethod', 'Function (Installation: TJclBorRADToolInstallation): Boolean
           SIRegister_TJclBorRADToolInstallations(CL);
13557:
13558:
         Function BPLFileName( const BPLPath, PackageFileName : string) : string
         Function BinaryFileName( const OutputPath, ProjectFileName : string) : string
Function IsDelphiPackage( const FileName : string) : Boolean
13559:
13560:
         Function IsDelphiProject( const FileName : string) : Boolean
13561:
          Function IsBCBPackage( const FileName : string) : Boolean
13563:
         Function IsBCBProject( const FileName : string) : Boolean
13564:
         Procedure GetDPRFileInfo(const DPRFileName:string;out BinaryExtensio:string;const LibSuffx:PString);
         Procedure GetBPRFileInfo(const BPRFileName:string;out BinaryFileName:string;const Descript:PString);
13565:
13566:
         Procedure GetDPKFileInfo(const DPKFileName:string;out RunOnly:Bool;const LibSuffix:PString;const
        Descript:PString;
13567:
        Procedure GetBPKFileInfo(const BPKFileName:string;out RunOnly:Bool;const BinaryFName:PString;const
        Descript:PString);
        function SamePath(const Path1, Path2: string): Boolean;
13569:
13570:
13571: procedure SIRegister JclFileUtils max(CL: TPSPascalCompiler);
13572:
        begin
13573:
           ERROR_NO_MORE_FILES','LongInt').SetInt( 18);
13574:
          //Function stat64( FileName: PChar; var StatBuffer : TStatBuf64) : Integer
13575:
          //Function fstat64( FileDes: Integer; var StatBuffer : TStatBuf64) : Integer
13576:
         //Function lstat64( FileName: PChar; var StatBuffer : TStatBuf64) : Integer
          'LPathSeparator','String').SetString(
'LDirDelimiter','String').SetString(
13577:
13578:
          'LDirDelimiter',
13579:
          'LDirSeparator', 'String').SetString(
          'JXPathDevicePrefix','String').SetString( '\\.\
'JXPathSeparator','String').SetString( '\
'JXDirDelimiter','String').SetString( '\
13580:
13581:
13582:
13583:
          'JXDirSeparator', 'String').SetString( ';
         'JXPathUncPrefix', 'String').SetString( ';

'JXPathUncPrefix', 'String').SetString( '\\

'faNormalFile', 'LongWord').SetUInt( $00000080);

//'faUnixSpecific','').SetString( faSymLink);

JXTCompactPath', '( cpCenter, cpEnd )

_WIN32_FILE_ATTRIBUTE_DATA', 'record dwFileAttributes : DWORD; f'
+'tCreationTime : TFileTime; ftLastAccessTime : TFileTime; ftLastWriteTime :'
13584:
13585:
13586:
13587:
13588:
13589:
13590:
                TFileTime; nFileSizeHigh : DWORD; nFileSizeLow : DWORD; end
          TWin32FileAttributeData', '_WIN32_FILE_ATTRIBUTE_DATA
WIN32_FILE_ATTRIBUTE_DATA', '_WIN32_FILE_ATTRIBUTE_DATA
13591:
13592:
13593:
13594:
         Function jxPathAddSeparator( const Path : string) : string
         Function jxPathAddExtension( const Path, Extension: string): string
13595:
13596:
          Function jxPathAppend( const Path, Append : string) : string
13597:
         Function jxPathBuildRoot( const Drive : Byte) : string
         Function jxPathCanonicalize( const Path : string) : string
Function jxPathCommonPrefix( const Path1, Path2 : string) : Integer
13598:
13599:
13600:
         Function jxPathCompactPath(const DC:HDC;const Path:string;const Width:Integer;CmpFmt:TCompactPath):string
         Procedure jxPathExtractElements( const Source : string; var Drive, Path, FileName, Ext : string)
Function jxPathExtractFileDirFixed( const S : string) : string
13601:
13602:
         Function jxPathExtractFileDirFixed( const S : string)
         Function jxPathExtractFileNameNoExt( const Path : string) : string
13603:
         Function jxPathExtractPathDepth( const Path : string; Depth : Integer) : string
Function jxPathGetDepth( const Path : string) : Integer
13604:
13605:
13606:
         Function jxPathGetLongName( const Path : string) : string
         Function jxPathGetShortName( const Path : string) : string
13607:
         Function jxPathGetLongName( const Path : string) : string
13608:
         Function jxPathGetShortName( const Path : string) : string
13609:
         Function jxPathGetRelativePath( Origin, Destination : string) : string
13610:
13611:
         Function jxPathGetTempPath : string
         Function jxPathIsAbsolute( const Path : string) : Boolean
13612:
13613: Function jxPathIsChild( const Path, Base : string) : Boolean 13614: Function jxPathIsDiskDevice( const Path : string) : Boolean
```

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13615:
              Function jxPathIsUNC( const Path : string) : Boolean
              Function jxPathRemoveSeparator( const Path : string) : string
13616:
              Function jxPathRemoveExtension( const Path : string) : string
13618:
              Function jxPathGetPhysicalPath( const LocalizedPath: string)
              Function jxPathGetLocalizedPath( const PhysicalPath : string) : string
13619:
                JxTFileListOption', '( flFullNames, flRecursive, flMaskedSubfolders) JxTFileListOptions', 'set of TFileListOption
13620:
13621:
13622:
                JxTJclAttributeMatch', '( amAny, amExact, amSubSetOf, amSuperSetOf, amCustom )
             TFileHandler', 'Procedure ( const FileName : string)
TFileHandlerEx', 'Procedure ( const Directory : string; const FileInfo : TSearchRec)
Function BuildFileList( const Path : string; const Attr : Integer; const List : TStrings) : Boolean
//Function AdvBuildFileList( const Path : string; const Attr : Integer; const Files : TStrings; const
13623:
13624:
13625:
13626:
             AttributeMatch:TJclAttributeMatch;const Optis:TFileListOptions;const SubfoldersMask:string;const
             FileMatchFunc:TFileMatchFunc):Bool;
            Function jxVerifyFileAttributeMask( var RejectedAttributes, RequiredAttributes : Int) : Boolean
13627:
13628:
              Function jxIsFileAttributeMatch(FileAttributes,RejectedAttributes,RequiredAttributes:Int):Boolean;
              Function jxFileAttributesStr( const FileInfo : TSearchRec) : string
13629:
13630 •
              \textbf{Function} \hspace{0.2cm} \texttt{jxIsFileNameMatch(FileName:string;const} \hspace{0.2cm} \textbf{Mask:string;const} \hspace{0.2cm} \textbf{CaseSensitive:Boolean):Boolean;} \\
            Procedure jxEnumFiles(const Path:string; HandleFile:TFileHandlerEx;
RejectedAttributes:Integer;RequiredAttributes: Integer; Abort: TObject)
13631:
              Procedure jxEnumDirectories(const Root:string;const HandleDirectory:TFileHandler;const
13632:
             IncludeHiddenDirects:Boolean; const SubDirectoriesMask : string; Abort : TObject; ResolveSymLinks :
            Boolean)
13633:
              Procedure jxCreateEmptyFile( const FileName : string)
              Function jxCloseVolume( var Volume : THandle) : Boolean
13634:
              Function jxDeleteDirectory( const DirectoryName : string; MoveToRecycleBin : Boolean) : Boolean
13635:
13636:
              \textbf{Function} \  \, \texttt{jxCopyDirectory}(\  \, \texttt{ExistingDirectoryName}, \  \, \texttt{NewDirectoryName} : \  \, \textbf{string}) \  \, : \  \, \texttt{Boolean}
              \textbf{Function} \hspace{0.1cm} \texttt{jxMoveDirectory}(\hspace{0.1cm} \texttt{ExistingDirectoryName}, \hspace{0.1cm} \texttt{NewDirectoryName} : \hspace{0.1cm} \textbf{string}) \hspace{0.1cm} : \hspace{0.1cm} \texttt{Boolean}
13637:
              Function jxDelTree( const Path : string) : Boolean
13638:
              Function Jakefire Const Path: string; AbortonFailure:Boolean; Progress:TDelTreeProgress):Boolean Function jxDiskInDrive( Drive : Char) : Boolean
13640:
              \textbf{Function} \  \, \texttt{jxDirectoryExists(} \  \, \textbf{const} \  \, \texttt{Name} \  \, \textbf{:} \  \, \textbf{string;} \  \, \texttt{ResolveSymLinks} \  \, \textbf{:} \  \, \texttt{Boolean}) \  \, \textbf{:} \  \, \texttt{Boolean}
13641:
              Function jxFileCreateTemp( var Prefix : string) : THandle
13642:
13643:
              Function jxFileBackup( const FileName : string; Move : Boolean) : Boolean
              Function jxFileCopy( const ExistingFileName, NewFileName: string; ReplaceExisting: Boolean): Boolean
              Function jxFileDelete( const FileName : string; MoveToRecycleBin : Boolean) : Boolean Function jxFileExists( const FileName : string) : Boolean
13645:
13646:
              Function ixFileMove( const ExistingFileName, NewFileName: string; ReplaceExisting: Boolean): Boolean
13647:
13648:
              Function jxFileRestore( const FileName : string) : Boolean
              Function jxGetBackupFileName( const FileName: string): string
Function jxIsBackupFileName( const FileName: string): Boolean
13649:
13650:
              Function jxFileGetDisplayName( const FileName : string) : string
13651:
              Function jxFileGetGroupName( const FileName : string; ResolveSymLinks : Boolean) : string
13652:
              Function jxFileGetOwnerName( const FileName : string; ResolveSymLinks : Boolean) : string
13653:
              Function jxFileGetSize( const FileName : string) : Int64
Function jxFileGetTempName( const Prefix : string) : string
13654:
13655:
              Function jxFileGetTypeName( const FileName : string) : string
13656:
              Function jxFindUnusedFileName(FileName:string; const FileExt: string; NumberPrefix: string): string
13657:
13658:
              Function jxForceDirectories( Name : string) : Boolean
              Function jxGetDirectorySize( const Path : string) : Int64
Function jxGetDriveTypeStr( const Drive : Char) : string
13659:
13660:
              Function jxGetFileAgeCoherence( const FileName : string) : Boolean
13661:
              Procedure jxGetFileAttributeList( const Items : TStrings; const Attr : Integer)
13662:
13663:
              Procedure jxGetFileAttributeListEx( const Items : TStrings; const Attr : Integer)
              Function jxGetFileInformation( const FileName : string; out FileInfo : TSearchRec) : Boolean;
Function jxGetFileInformation1( const FileName : string) : TSearchRec;
13664:
13665:
               //Function GetFileStatus(const FileName:string;out StatBuf:TStatBuf64;const
13666:
             ResolveSymLinks:Boolean):Integer
             Function jxGetFileLastWrite( const FName : string) : TFileTime;
Function jxGetFileLastWritel( const FName : string; out LocalTime : TDateTime) : Boolean;
Function jxGetFileLastAccess( const FName : string) : TFileTime;
13667:
13668:
13669:
13670:
              Function jxGetFileLastAccess1( const FName : string; out LocalTime : TDateTime) : Boolean;
13671:
              \textbf{Function} \hspace{0.1cm} \texttt{jxGetFileCreation}(\hspace{0.1cm} \textbf{const} \hspace{0.1cm} \texttt{FName} \hspace{0.1cm} : \hspace{0.1cm} \textbf{string}) \hspace{0.1cm} : \hspace{0.1cm} \texttt{TFileTime};
              Function jxGetFileCreation1( const FName : string; out LocalTime : TDateTime) : Boolean;
Function jxGetFileLastWrite( const FName : string; out TimeStamp:Integer; ResolveSymLinks : Bool):Bool;
13672:
13673:
              Function jxGetFileLastWrite1(const FName:string; out LocalTime:TDateTime;ResolveSymLinks:Bool): Bool;
13674:
13675:
              Function jxGetFileLastWrite2( const FName : string; ResolveSymLinks : Boolean) : Integer;
13676:
              \textbf{Function} \  \, \texttt{jxGetFileLastAccess}(\textbf{const} \  \, \texttt{FName}: \textbf{string}; \  \, \textbf{out} \  \, \texttt{TimeStamp}: \texttt{Integer}; \texttt{ResolveSymLinks}: \  \, \texttt{Bool}): \  \, \texttt{Bool}; \\ \textbf{bool}: \  \, \texttt{Bool}: \  \, \texttt{FName}: \textbf{bool}: \  \, \texttt{Bool}: \  \, \texttt{FName}: \textbf{bool}: \  \, \texttt{Bool}: \  \, \texttt{FName}: \textbf{bool}: 
13677:
              Function jxGetFileLastAccess1(const FName:string; out LocalTime:TDateTime;ResolveSymLinks:Bool):Bool;
Function jxGetFileLastAccess2(const FName:string; ResolveSymLinks:Boolean): Integer;
13678:
              Function jxGetFileLastAttrChange(const FName:string;out TimeStamp:Integer;ResolveSymLinks:Bool): Bool;
13679:
13680:
              Function jxGetFileLastAttrChangel(const FName:string; out LocalTime:TDateTime;ResolveSymLinks:Bool):Bool;
13681:
              Function jxGetFileLastAttrChange2( const FName : string; ResolveSymLinks:Boolean): Integer;
Function jxGetModulePath( const Module : HMODULE) : string
13682:
                                                                                                             : Int64;
13683:
              Function jxGetSizeOfFile( const FileName : string)
              Function jxGetSizeOfFile1( const FileInfo : TSearchRec) : Int64;
13684:
13685:
              Function jxGetSizeOfFile2( Handle : THandle) : Int64;
              Function jxGetStandardFileInfo( const FileName : string) : TWin32FileAttributeData
Function jxIsDirectory( const FileName : string; ResolveSymLinks : Boolean) : Boolean
13686:
13687:
13688:
              Function jxIsRootDirectory( const CanonicFileName : string) : Boolean
              Function jxLockVolume( const Volume: string; var Handle: THandle): Boolean

Function jxOpenVolume( const Drive: Char): THandle

Function jxSetDirLastWrite( const DirName: string; const DateTime: TDateTime): Boolean
13689:
13690:
13691:
              Function jxSetDirLastAccess( const DirName : string; const DateTime : TDateTime) : Boolean
13692:
              Function jxSetDirCreation( const DirName : string; const DateTime : TDateTime) : Boolean
13693:
              Function jxSetFileLastWrite( const FileName : string; const DateTime : TDateTime) : Boolean Function jxSetFileLastAccess( const FileName : string; const DateTime : TDateTime) : Boolean
13694:
13695:
              Function jxSetFileCreation( const FileName : string; const DateTime : TDateTime) : Boolean
13696:
              Procedure jxShredFile( const FileName : string; Times : Integer)
```

```
13698:
            Function ixUnlockVolume( var Handle : THandle) : Boolean
            Function jxCreateSymbolicLink( const Name, Target : string) : Boolean
13699:
            Function jxSymbolicLinkTarget( const Name : string) : string
13701:
              TAttributeInterest', '( aiIgnored, aiRejected, aiRequired
13702:
              SIRegister TJclCustomFileAttrMask(CL);
13703:
              SIRegister TJclFileAttributeMask(CL);
             TFileSearchOption', '( fsIncludeSubDirectories, fsIncludeHiddenS'
13704:
13705:
                 'ubDirectories, fsLastChangeAfter, fsLastChangeBefore, fsMaxSize, fsMinSize)
             TFileSearchOptions', 'set of TFileSearchOption TFileSearchTaskID', 'Integer
13706:
13707:
13708:
                                                            'Procedure ( const ID : TFileSearc'
              TFileSearchTerminationEvent',
               +'hTaskID; const Aborted : Boolean)
13709:
13710:
              TFileEnumeratorSyncMode', '( smPerFile, smPerDirectory )
             SIRegister_IJclFileEnumerator(CL);
SIRegister_TJclFileEnumerator(CL);
13711:
13712:
13713:
            Function JxFileSearch : IJclFileEnumerator
             JxTFileFlag', '( ffDebug, ffInfoInferred, ffPatched,ffPreRelease,ffPrivateBuild, ffSpecialBuild )
13714:
13715 .
              JxTFileFlags
                                      'set of TFileFlag
              FindClass('TOBJECT'),'EJclFileVersionInfoError
13716:
13717:
             SIRegister_TJclFileVersionInfo(CL);
13718:
            Function jxOSIdentToString( const OSIdent : DWORD) : string
13719:
            Function jxOSFileTypeToString( const OSFileType : DWORD; const OSFileSubType : DWORD) : string
13720:
            Function jxVersionResourceAvailable( const FileName : string) : Boolean
13721:
            TFileVersionFormat', '( vfMajorMinor, vfFull )

Function jxFormatVersionString( const HiV, LoV : Word) : string;
13722:
13723:
            Function jxFormatVersionString1( const Major, Minor, Build, Revision : Word) : string;
13724:
            // Function \ Format Version String 2 (\ const\ Fixed Info: TVS Fixed File Info; Version Format: TFile Version Format): striple to the first of th
13725:
            //Procedure VersionExtractFileInfo(const FixedInfo:TVSFixedFileInfo;var Major,Minor,Build,Revision:Word);
13726:
            //Procedure VersionExtractProductInfo(const FixedInfo:TVSFixedFileInfo:var Major.Minor.Build.
           Revision:Word);
13727:
            //Function VersionFixedFileInfo( const FileName : string; var FixedInfo : TVSFixedFileInfo) : Boolean
13728:
            Function jxVersionFixedFileInfoString( const FileName : string; VersionFormat : TFileVersionFormat; const
          NotAvailableText : string) : string
13729:
              SIRegister TJclTempFileStream(CL);
              FindClass('TOBJECT'),'TJclCustomFileMapping
13730:
13731:
              SIRegister_TJclFileMappingView(CL);
13732:
              TJclFileMappingRoundOffset', '( rvDown, rvUp )
              SIRegister_TJclCustomFileMapping(CL);
13733:
13734:
              SIRegister_TJclFileMapping(CL);
13735:
              SIRegister_TJclSwapFileMapping(CL);
13736:
              SIRegister_TJclFileMappingStream(CL);
              TJclMappedTextReaderIndex', '( tiNoIndex, tiFull )
//PPCharArray', '^TPCharArray // will not work
13737:
13738:
              SIRegister_TJclMappedTextReader(CL);
13739:
13740:
              SIRegister_TJclFileMaskComparator(CL);
13741:
              FindClass('TOBJECT'),'EJclPathError
FindClass('TOBJECT'),'EJclFileUtilsError
13742:
              FindClass('TOBJECT'),'EJclTempFileStreamError
13743:
             FindClass('TOBJECT'), 'EJclTempFileStreamError
FindClass('TOBJECT'), 'EJclFileMappingError
FindClass('TOBJECT'), 'EJclFileMappingViewError
13744:
13745:
13746:
13747:
            Function jxPathGetLongName2( const Path : string) : string
13748:
            Function jxWin32DeleteFile( const FileName : string; MoveToRecycleBin : Boolean) : Boolean
13749:
            Function jxWin32MoveFileReplaceExisting( const SrcFileName, DstFileName: string) : Boolean
            13750:
13751:
13752:
            Function jxSamePath( const Path1, Path2 : string) : Boolean
13753:
            Procedure jxPathListAddItems( var List : string; const Items : string)
13754:
            Procedure jxPathListIncludeItems( var List : string; const Items : string)
            Procedure jxPathListDelItems( var List: string; const Items: string)
Procedure jxPathListDelItem( var List: string; const Index: Integer)
13755:
13756:
13757:
            Function jxPathListItemCount( const List : string) : Integer
           Function jxPathListGetItem(const List: string; const Index: Integer): string

Procedure jxPathListSetItem(var List: string; const Index: Integer): const Value: string)

Function jxPathListItemIndex( const List, Item: string): Integer

Function jxParamName(Idx:Int;const Separator:string;const AllowedPrefixChars:string;TrimName:Bool):string;
13758:
13759:
13760:
13762:
            Function jxParamValue(Index : Integer; const Separator : string; TrimValue : Boolean) : string;
13763:
            Function jxParamValuel(const SearchName:string; const Separator : string; CaseSensitive : Boolean; const
           AllowedPrefixCharacters : string; TrimValue : Boolean) : string;
            Function jxParamPos( const SearchName : string; const Separator : string; CaseSensitive : Boolean; const
13764:
           AllowedPrefixCharacters : string) : Integer
13765: end;
13766:
13767:
          procedure SIRegister FileUtil(CL: TPSPascalCompiler);
13768:
          begin
            'UTF8FileHeader','String').SetString( #$ef#$bb#$bf);
13769:
13770:
            Function | CompareFilenames( const Filename1, Filename2 : string) : integer
            Function | CompareFilenames | Const Filename1 | Filename2 | String | : Integer |
Function | CompareFilenames | Gonst Filename1 | Filename2 | String | : integer |
Function | CompareFilenames | Const Filename1 | Filename2 | String | ResolveLinks | : boolean | : integer |
13771:
13772:
            Function 1CompareFilenames(Filename1:PChar;Len1:int;Filename2:PChar;Len2:int;ResolveLinks:boolean):int;
13773:
13774:
            Function lFilenameIsAbsolute( const TheFilename : string) : boolean
13775:
            Function lFilenameIsWinAbsolute( const TheFilename : string) : boolean
13776:
            Function | Filename | SUnixAbsolute ( const The Filename : string) : boolean
13777:
            Procedure lCheckIfFileIsExecutable( const AFilename : string)
13778:
            Procedure lCheckIfFileIsSymlink( const AFilename : string)
            Function lFileIsReadable( const AFilename : string) : boolean Function lFileIsWritable( const AFilename : string) : boolean
13779:
13780:
13781:
            Function lFileIsText( const AFilename : string) : boolean
            Function lFileIsText( const AFilename : string; out FileReadable : boolean) : boolean
```

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13783:
          Function lFileIsExecutable( const AFilename : string) : boolean
13784:
          Function lFileIsSymlink( const AFilename : string) : boolean
          Function lFileIsHardLink( const AFilename : string)
                                                                             : boolean
13786:
          Function lFileSize( const Filename : string) : int64;
13787:
          Function | GetFileDescription( const AFilename : string) : string
13788:
          Function lReadAllLinks( const Filename : string; ExceptionOnError : boolean) : string
13789:
          Function lTryReadAllLinks( const Filename : string) : string
          Function lDirPathExists( const FileName : String) : Boolean
Function lForceDirectory( DirectoryName : string) : boolean
13790:
13791:
          Function | DeleteDirectory( const DirectoryName : string; OnlyChildren : boolean) : boolean
13792:
13793:
          Function 1ProgramDirectory : string
          Function | DirectoryIsWritable( const DirectoryName : string) : boolean
          Function lExtractFileNameOnly( const AFilename : string) : string
Function lExtractFileNameWithoutExt( const AFilename : string) : string
Function lCompareFileExt( const Filename, Ext : string; CaseSensitive : boolean) : integer;
13795:
13796:
13797:
13798:
          Function | CompareFileExt( const Filename, Ext : string) : integer;
13799:
          Function lFilenameIsPascalUnit( const Filename : string) : boolean
          Function lAppendPathDelim( const Path : string) : string
Function lChompPathDelim( const Path : string) : string
13800:
13801:
          Function lTrimFilename( const AFilename: string): string
Function lCleanAndExpandFilename( const Filename: string)
13802:
13803:
          Function lCleanAndExpandDirectory( const Filename : string) : string
13804:
13805:
          Function lCreateAbsoluteSearchPath( const SearchPath, BaseDirectory : string) : string
13806: Function | CreateRelativePath( const Filename, BaseDirectory: string; UsePointDirectory: boolean; AlwaysRequireSharedBaseFolder: Boolean): string
13807:
          Function lCreateAbsolutePath( const Filename, BaseDirectory: string): string
         Function lfileIsInPath( const Filename, Path: string): boolean
Function lfileIsInDirectory( const Filename, Directory: string): boolean
TSearchFileInPathFlag', '( sffDontSearchInBasePath, sffSearchLoUpCase )
TSearchFileInPathFlags', 'set of TSearchFileInPathFlag
'AllDirectoryEntriesMask', 'String'). SetString( '*
13808:
13809:
13810:
13811:
13812:
13813:
          Function | GetAllFilesMask : string
13814:
          Function lGetExeExt : string
13815:
          Function | SearchFileInPath( const Filename, BasePath, SearchPath, Delimiter : string; Flags :
         TSearchFileInPathFlags) : string
         Function | SearchAllFilesInPath( const Filename, BasePath, SearchPath, Delimiter:string;Flags:
13816:
         TSearchFileInPathFlags) : TStrings
13817: Function lFindDiskFilename( const Filename : string) : string
13818:
          Function lFindDiskFileCaseInsensitive( const Filename : string) : string
          Function lFindDefaultExecutablePath( const Executable : string; const BaseDir: string):string
13819:
13820:
          Function | GetDarwinSystemFilename( Filename : string) : string
13821:
           STRegister TFileIterator(CL);
           TFileFoundEvent', 'Procedure (FileIterator: TFileIterator)
13822:
           TDirectoryFoundEvent', 'Procedure (FileIterator: TFileIterator)
TDirectoryEnterEvent', 'Procedure (FileIterator: TFileIterator)
13823:
13824:
13825:
           SIRegister TFileSearcher(CL);
13826:
          Function 1FindAllFiles(const SearchPath:String;SearchMsk:String;SearchSubDirs:Bool):TStringList
13827:
          Function lFindAllDirectories( const SearchPath : string; SearchSubDirs : Boolean) : TStringList
          // TCopyFileFlag', '( cffOverwriteFile, cffCreateDestDirectory, cffPreserveTime , // TCopyFileFlags', 'set of TCopyFileFlag
13828:
13829:
          Function | CopyFile( const SrcFilename, DestFilename : string; Flags : TCopyFileFlags) : boolean
13830:
          Function | CopyFile( const | SrcFilename, DestFilename : string; PreserveTime : boolean) : boolean
13831:
          Function lCopyDirTree( const SourceDir, TargetDir: string; Flags: TCopyFileFlags): Boolean
13833:
          Function lReadFileToString( const Filename : string) : string
13834:
          Function lGetTempFilename( const Directory, Prefix : string) : string
13835:
          {Function NeedRTLAnsi : boolean
13836:
          Procedure SetNeedRTLAnsi( NewValue : boolean)
          Function UTF8ToSys( const s : string) : string
13837:
13838:
          Function SysToUTF8( const s : string) : string
          Function ConsoleToUTF8( const s : string) : string
Function UTF8ToConsole( const s : string) : string)
13839:
13840:
13841:
          Function FileExistsUTF8( const Filename : string)
          Function FileAgeUTF8( const FileName : string) : Longint
Function DirectoryExistsUTF8( const Directory : string) : Boolean
Function ExpandFileNameUTF8( const FileName : string) : string
13842:
13843:
13844:
          Function ExpandUNCFileNameUTF8( const FileName : string)
                                                                                   : string
          Function ExtractShortPathNameUTF8( const FileName : String) : String
Function FindFirstUTF8( const Path : string; Attr : Longint; out Rslt : TSearchRec) : Longint
13846:
13847:
          Function FindNextUTF8( var Rslt : TSearchRec) : Longint
Procedure FindCloseUTF8( var F : TSearchrec)
Function FileSetDateUTF8( const FileName : String; Age : Longint) : Longint
13848:
13849:
13850:
13851:
          Function FileGetAttrUTF8( const FileName : String) : Longint
13852:
          Function FileSetAttrUTF8( const Filename : String; Attr : longint) : Longint
          Function DeleteFileUTF8( const FileName : String) : Boolean
Function RenameFileUTF8( const OldName, NewName : String) : Boolean
13853:
13854:
          Function FileSearchUTF8( const Name, DirList : String; ImplicitCurrentDir : Boolean) : String
13855:
          Function FileIsReadOnlyUTF8( const FileName : String) : Boolean
Function GetCurrentDirUTF8 : String
13856:
13857:
          Function SetCurrentDirUTF8( const NewDir : String) : Boolean
13858:
          Function CreateDirUTF8( const NewDir : String) : Boolean
13860:
          Function RemoveDirUTF8( const Dir : String) : Boolean
13861:
          Function ForceDirectoriesUTF8( const Dir : string) : Boolean
          Function FileOpenUTF8( const FileName : string; Mode : Integer) : THandle Function FileCreateUTF8( const FileName : string) : THandle;
13862:
13863:
          Function FileCreateUTF81( const FileName : string; Rights : Cardinal) : THandle;
13864:
13865: Function ParamStrUTF8( Param : Integer) : string
13866: Function GetEnvironmentStringUTF8( Index : Integer) : string
13867: Function GetEnvironmentVariableUTF8( const EnvVar : string) : String
13868: Function GetAppConfigDirUTF8( Global : Boolean; Create : boolean) : string
```

```
13869:
         Function GetAppConfigFileUTF8(Global:Boolean; SubDir:boolean; CreateDir : boolean) : string
13870:
         Function SysErrorMessageUTF8( ErrorCode : Integer) : String
13871: end
13872:
13873: procedure SIRegister Keyboard(CL: TPSPascalCompiler);
13874: begin
          //VK_F23 = 134;
13875:
           //{$EXTERNALSYM VK_F24}
13876:
           //VK_F24 = 135;
13877:
13878:
         TVirtualKeyCode', 'Integer
'VK_MOUSEWHEELUP','integer').SetInt(134);
13879:
         'VK_MOUSEWHEELDOWN', 'integer').SetInt(135);
13880:
13881:
         Function glisKeyDown( c : Char) : Boolean;
         Function glisKeyDown1( vk : TVirtualKeyCode) : Boolean;
Function glKeyPressed( minVkCode : TVirtualKeyCode) : TVirtualKeyCode
13882:
13883:
13884:
         Function glVirtualKeyCodeToKeyName( vk : TVirtualKeyCode) : String
         Function glKeyNameToVirtualKeyCode( const keyName : String) : TVirtualKeyCode
13885:
        Function glCharToVirtualKeyCode( c : Char) : TVirtualKeyCode
Procedure glKeyboardNotifyWheelMoved( wheelDelta : Integer)
13886
13887:
13888: end;
13889:
        procedure SIRegister_GLCrossPlatform(CL: TPSPascalCompiler);
13890:
13891: begin
           TGLPoint', 'TPoint
13892:
           //PGLPoint', '^TGLPoint // will not work
13893:
           TGLRect', 'TRect
//PGLRect', 'ATGLRect // will not work
13894:
13895:
           TDelphiColor', 'TColor
TGLPicture', 'TPicture
TGLGraphic', 'TGraphic
TGLBitmap', 'TBitmap
13896:
13897:
13898:
13899:
           TGLBatmap', IDLUMAP
//TGraphicClass', 'class of TGraphic
TGLTextLayout', '( tlTop, tlCenter, tlBottom )
13900:
           13901:
13902:
13903:
           +'Button; Shift: TShiftState; X, Y: Integer)
TGLMouseMoveEvent', 'TMouseMoveEvent
13904:
13905:
           TGLKeyEvent', 'TKeyEvent
13906:
           TGLKeyPressEvent', 'TKeyP:
EGLOSError', 'EWin32Error
EGLOSError', 'EWin32Error
13907:
                                  'TKeyPressEvent
13908:
13909:
          EGLOSError', 'EOSError
'glsAllFilter','string').SetString('All // sAllFilter
13910:
13911:
         Function GLPoint( const x, y : Integer) : TGLPoint
13912:
         Function GLRGB( const r, g, b : Byte) : TColor
Function GLColorTORGB( color : TColor) : TColor
13913:
13914:
         Function GLGetRValue( rgb : DWORD) : Byte
13915:
         Function GLGetGValue( rgb : DWORD) : Byte
13916:
13917:
         Function GLGetBValue( rgb : DWORD) : Byte
13918:
         Procedure GLInitWinColors
13919:
         Function GLRect( const aLeft, aTop, aRight, aBottom : Integer) : TGLRect
         Procedure GLInflateGLRect( var aRect : TGLRect; dx, dy : Integer)
13920:
         Procedure GLIntersectGLRect( var aRect : TGLRect; const rect2 : TGLRect)
13921:
13922:
         Procedure GLInformationDlg( const msg : String)
         Function GLQuestionDlg( const msg : String) : Boolean
13923:
         Function GLInputDlg( const aCaption, aPrompt, aDefault : String) : String
Function GLSavePictureDialog( var aFileName : String; const aTitle : String) : Boolean
13924:
13925:
         Function GLOpenPictureDialog( var aFileName : String; const aTitle : String) : Boolean
13926:
13927:
         Function GLApplicationTerminated : Boolean
13928:
         Procedure GLRaiseLastOSError
13929:
         Procedure GLFreeAndNil( var anObject: TObject)
13930:
         Function GLGetDeviceLogicalPixelsX( device : Cardinal) : Integer
13931:
         \textbf{Function} \ \ \texttt{GLGetCurrentColorDepth} \ : \ \ \texttt{Integer}
         \textbf{Function} \ \ \texttt{GLPixelFormatToColorBits} ( \ \ \texttt{aPixelFormat} \ : \ \ \texttt{TPixelFormat}) \ : \ \ \texttt{Integer}
13932:
         Function GLBitmapScanLine( aBitmap; TGLBitmap; aRow : Integer) : Pointer
Procedure GLSleep( length : Cardinal)
13933:
13935:
         Procedure GLQueryPerformanceCounter( var val : Int64)
13936:
         \textbf{Function} \  \, \texttt{GLQueryPerformanceFrequency}(\  \, \textbf{var} \  \, \texttt{val} \  \, : \  \, \texttt{Int64}) \  \, : \  \, \texttt{Boolean}
13937:
         Function GLStartPrecisionTimer : Int64
         Function GLPrecisionTimerLap( const precisionTimer : Int64) : Double
13938:
         Function GLStopPrecisionTimer( const precisionTimer : Int64) : Double
13939:
13940:
         Function GLRDTSC : Int64
         Procedure GLLoadBitmapFromInstance( ABitmap : TBitmap; AName : string)
13941:
         Function GLOKMessageBox( const Text, Caption : string) : Integer Procedure GLShowHTMLUrl( Url : String)
13942:
13943:
13944:
         Procedure GLShowCursor( AShow : boolean)
13945:
         Procedure GLSetCursorPos( AScreenX, AScreenY : integer)
13946:
         Procedure GLGetCursorPos( var point : TGLPoint)
Function GLGetScreenWidth : integer
13947:
         Function GLGetScreenHeight : integer
13948:
         Function GLGetTickCount : int64
13949:
         function RemoveSpaces(const str : String) : String;
13950:
13951:
            TNormalMapSpace', '( nmsObject, nmsTangent )
         Procedure CalcobjectSpaceLightVectors(Light:TAffineVector;Vertices TAffineVectorList;Colors:TVectorList)
13952:
13953: Procedure SetupTangentSpace( Vertices, Normals, TexCoords, Tangents, BiNormals : TAffineVectorIst)
13954: Procedure CalcTangentSpaceLightVectors( Light : TAffineVector; Vertices, Normals, Tangents, BiNormals :
        TAffineVectorList; Colors: TVectorList)
         Function CreateObjectSpaceNormalMap( Width, Height:Integer; HiNormals,
        HiTexCoords:TAffineVectorList):TGLBitmap
```

```
13956: Function CreateTangentSpaceNormalMap( Width, Height : Integer; HiNormals, HiTexCoords, LoNormals,
         LoTexCoords, Tangents, BiNormals : TAffineVectorList) : TGLBitmap
13958:
         procedure SIRegister GLStarRecord(CL: TPSPascalCompiler);
13959:
13960: begin
13961:
            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
13962:
13963:
13964:
          Function StarRecordColor( const starRecord: TGLStarRecord; bias: Single): TVector
13965:
13966:
13967:
13968:
         procedure SIRegister GeometryBB(CL: TPSPascalCompiler);
13969:
13970: begin
13971:
                      'record min : TAffineVector; max : TAffineVector; end
          //PAABB', '^TAABB // will not work
TBSphere', 'record Center : TAffineVector; Radius : single; end
13972 .
13973:
13974:
          TClipRect
                           'record Left : Single; Top:Single; Right:Single; Bottom : Single; end
13975:
                                  '(scNoOverlap, scContainsFully, scContainsPartially)
13976:
          Function AddBB( var c1 : THmgBoundingBox; const c2 : THmgBoundingBox) : THmgBoundingBox
13977:
          Procedure AddAABB( var aabb : TAABB; const aabb1 : TAABB)
          Procedure SetBB( var c : THmgBoundingBox; const v : TVector
13978:
          Procedure SetAABB( var bb : TAABB; const v : TVector)
13979:
13980:
          Procedure BBTransform( var c : THmgBoundingBox; const m : TMatrix)
13981:
          Procedure AABBTransform( var bb : TAABB; const m : TMatrix)
          Procedure AABBScale( var bb : TAABB; const v : TAffineVector)
Function BBMinX( const c : THmgBoundingBox) : Single
13982:
13983:
          Function BBMaxX( const c : THmgBoundingBox) : Single
13984:
13985:
          Function BBMinY( const c : THmgBoundingBox) : Single
13986:
          Function BBMaxY( const c : THmgBoundingBox) : Single
13987:
          Function BBMinZ( const c : THmgBoundingBox) : Single
13988:
          Function BBMaxZ( const c : THmgBoundingBox) : Single
           Procedure AABBInclude( var bb : TAABB; const p : TAffineVector)
13990:
          Procedure AABBFromSweep( var SweepAABB : TAABB; const Start, Dest : TVector; const Radius : Single)
13991:
          Function AABBIntersection( const aabb1, aabb2 : TAABB) : TAABB
          Function BBToAABB( const aBB : THmgBoundingBox) : TAABB
13992:
13993:
          Function AABBToBB( const anAABB : TAABB) : THmgBoundingBox;
13994:
          Function AABBToBB1( const anAABB : TAABB; const m : TMatrix) : THmgBoundingBox;
13995:
          Procedure OffsetAABB( var aabb : TAABB; const delta : TAffineVector);
          Procedure OffsetAABB1( var aabb : TAABB; const delta : TVector);
13996:
          Function IntersectAABBs( const aabb1, aabb2 : TAABB; const m1To2, m2To1 : TMatrix) : Boolean;
13997:
          13998:
13999:
          Function IntersectAABBsAbsoluteXZ( const aabb1, aabb2 : TAABB) : Boolean
14000:
          \textbf{Function} \  \, \texttt{IntersectAABBsAbsolute}(\  \, \textbf{const} \  \, \texttt{aabb1}\,, \  \, \texttt{aabb2} \  \, \texttt{:} \  \, \texttt{TAABB}) \  \, \texttt{:} \  \, \texttt{Boolean}
          Function Intersectangus Abbrits Inabas about ( const aabbi, aabb2 : TAABB) : Boolean
Function PointInAABB( const p : TAffineVector; const aabb : TAABB) : Boolean;
14001:
          Function PointInAABB( const p : TVector; const aabb : TAABB) : Boolean;
Function PlaneIntersectAABB( Normal : TAffineVector; d : single; aabb : TAABB) : boolean
Function TriangleIntersectAABB( const aabb : TAABB; v1, v2, v3 : TAffineVector) : boolean
14003:
14004:
14005:
14006:
          Procedure ExtractAABBCorners( const AABB : TAABB; var AABBCorners : TAABBCorners)
          Procedure AABBToBSphere( const AABB : TAABB; var BSphere : TBSphere)
14007:
14008:
          Procedure BSphereToAABB( const BSphere : TBSphere; var AABB : TAABB);
          Function BSphereToAABB1( const center : TAFfineVector; radius : Single) : TAABB;
Function BSphereToAABB2( const center : TVector; radius : Single) : TAABB;
14009:
14010:
           Function AABBContainsAABB( const mainAABB, testAABB : TAABB) : TSpaceContains
          Function BSphereContainsAABB( const mainBSphere : TBSphere; const testAABB : TAABB) : TSpaceContains
14012:
          Function BSphereContainsBSphere( const mainBSphere, testBSphere: TBSphere): TSpaceContains
Function AABBContainsBSphere( const mainAABB: TAABB; const testBSphere: TBSphere): TSpaceContains
Function PlaneContainsBSphere( const Location,Normal:TAffineVector;const
14013:
14014:
14015:
         \verb|testBSphere:TBSphere|: TSpaceContains|
14016:
          Function FrustumContainsBSphere( const Frustum: TFrustum; const testBSphere: TBSphere): TSpaceContains
          Function FrustumContainsAABB( const Frustum: TFrustum; const testAABB: TAABB): TSpaceContains Function ClipToAABB( const v: TAffineVector; const AABB: TAABB): TAffineVector
14017:
14018:
          Function BSphereIntersectsBSphere( const mainBSphere, testBSphere: TBSphere): boolean
           Procedure IncludeInClipRect( var clipRect : TClipRect; x, y : Single)
14020:
14021:
          Function AABBToClipRect(const aabb:TAABB; modelViewProjection:TMatrix; viewportSizeX,
         viewportSizeY:Int):TClipRect
14022:
         end
14023:
14024:
         procedure SIRegister_GeometryCoordinates(CL: TPSPascalCompiler);
14025:
         begin
14026:
          Procedure Cylindrical Cartesian (const r, theta, z1 : single; var x, y, z : single);
14027:
          Procedure Cylindrical_Cartesian1( const r, theta, z1 : double; var x, y, z : double);
          Procedure Cylindrical_Cartesian2( const r,theta,z1 : single; var x, y, z : single; var ierr : integer);
Procedure Cylindrical_Cartesian3( const r,theta,z1 : double; var x, y, z : double; var ierr : integer);
14028:
14029:
          Procedure Cartesian_Cylindrical( const x, y, z1 : single; var r, theta, z : single;
Procedure Cartesian_Cylindrical1( const x, y, z1 : double; var r, theta, z : double;
14030:
14031:
          Procedure Spherical_Cartesian( const r, theta, phi : single; var x, y, z : single);
Procedure Spherical_Cartesian1( const r, theta, phi : double; var x, y, z : double);
14033:
          Procedure Spherical_Cartesian2( const r,theta, phi : single; var x, y, z : single; var ierr : integer);
Procedure Spherical_Cartesian3( const r,theta, phi : double; var x, y, z : double; var ierr : integer);
Procedure Cartesian_Spherical( const x, y, z : single; var r, theta, phi : single);
14034:
14035:
14036:
          Procedure Cartesian_Sphericall( const v : TAffineVector; var r, theta, phi : Single);
14037:
          Procedure Cartesian_Spherical2( const x, y, z : double; var r, theta, phi : double);

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

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

Procedure ProlateSpheroidal_Cartesian2(const xi, eta, phi, a : double; var x, y, z : double);

Procedure ProlateSpheroidal_Cartesian2(const xi, eta, phi, a : single; var x, y, z : integer);
14038:
14039:
14040:
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```
14042:
            Procedure ProlateSpheroidal_Cartesian3(const xi,eta,phi,a:double;var x,y,z:double;var ierr: integer);
            Procedure OblateSpheroidal_Cartesian( const xi, eta, phi, a : single; var x, y, z : single);

Procedure OblateSpheroidal_Cartesian1( const xi, eta, phi, a : double; var x, y, z : double);

Procedure OblateSpheroidal_Cartesian2(const xi, eta, phi, a : single; var x, y, z : double);

Procedure OblateSpheroidal_Cartesian2(const xi, eta, phi, a : single; var x, y, z : single; var ierr:integer);
14043:
14045
            Procedure OblateSpheroidal_Cartesian3( const xi,eta,phi,a:double; var x,y,z:double; var ierr:integer);
14046:
            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);
14047:
14048:
            Procedure BipolarCylindrical_Cartesian2(const u,v,z1,a: single;var x,y,z:single; var ierr : integer);
14049:
14050:
            Procedure BipolarCylindrical_Cartesian3(const u,v,zl,a: double;var x,y,z:double; var ierr : integer);
14051:
           end;
14052:
14053:
           procedure SIRegister_VectorGeometry(CL: TPSPascalCompiler);
14054:
             'EPSILON', 'Single').setExtended( 1e-40);
14055:
14056:
              'EPSILON2', 'Single').setExtended( 1e-30);
14057:
            TRenderContextClippingInfo', 'record origin : TVector; clippingD'
                +'irection : TVector; viewPortRadius : Single; farClippingDistance:Single; frustum: TFrustum; end
14058:
14059
            THmgPlane', 'TVector
              TDoubleHmgPlane', 'THomogeneousDblVector
14060:
             {TTransType', '( ttScaleX, ttScaleY, ttScaleZ, ttShearXY, ttShear'
14061:
               +'XZ, ttShearYZ, ttRotateX, ttRotateY, ttRotateZ, ttTranslateX, ttTranslateY'
+', ttTranslateZ, ttPerspectiveX, ttPerspectiveY, ttPerspectiveZ, ttPerspectiveW)}
14062:
14063:
              TSingleArray', 'array of Single TTransformations', 'array [0..15] of Single)
TPackedRotationMatrix', 'array [0..2] of Smallint)
14064:
14065:
14066:
14067:
              TVertex', 'TAffineVector
14068:
              //TVectorGL', 'THomogeneousFltVector
//TMatrixGL', 'THomogeneousFltMatrix
14069:
            // TPackedRotationMatrix = array [0..2] of SmallInt;
Function glTexPointMake( const s, t : Single) : TTexPoint
14070:
14071:
            Function glAffineVectorMake( const x, y, z : Single) : TAffineVector; Function glAffineVectorMakel( const v : TVectorGL) : TAffineVector; Procedure glSetAffineVector( var v : TAffineVector; const x, y, z : Single);
14072:
14073:
14074:
            Procedure glSetVector( var v : TAffineVector; const v, y, z : Single);

Procedure glSetVector( var v : TAffineVector; const vSrc : TVectorGL);
14075:
14076:
14077:
            Procedure glSetVector2( var v : TAffineVector; const vSrc : TAffineVector);
            Procedure glSetVector3( var v : TAffineDblVector; const vSrc : TAffineVector);
Procedure glSetVector4( var v : TAffineDblVector; const vSrc : TVectorGL);
14078:
14079:
            Function glVectorMake( const v : TaffineVector; w : Single) : TVectorGL;
Function glVectorMakel( const x, y, z : Single; w : Single) : TVectorGL;
14080:
14081:
14082:
            Function glPointMake( const x, y, z : Single) : TVectorGL;
Function glPointMakel( const v : TAffineVector) : TVectorGL;
14083:
            Function glPointMake2( const v : TVectorGL) : TVectorGL;
14084:
            Procedure glSetVector5( var v : TVectorGL; const x, y, z : Single; w : Single);

Procedure glSetVector6( var v : TVectorGL; const av : TAffineVector; w : Single);
14085:
14086:
            Procedure glglSetVector7( var v : TVectorGL; const vSrc : TVectorGL);
14087:
            Procedure glMakePoint( var v : TVectorGL; const x, y, z : Single);

Procedure glMakePoint1( var v : TVectorGL; const x, y, z : Single);
14088:
14089:
14090:
            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 av : TAffineVector);
14091:
14092:
14093:
            Procedure glMakeVector3( var v : TVectorGL; const av : TVectorGL);
14094:
14095:
            Procedure glRstVector( var v : TAffineVector);
            Procedure glRstVector1( var v : TVectorGL);
14096:
            Function glVectorAdd( const v1, v2 : TAffineVector) : TAffineVector;
14097:
            Procedure glVectorAdd1( const v1, v2 : TAffineVector; var vr : TAffineVector);
14098:
             //Procedure VectorAdd2( const v1, v2 : TAffineVector; vr : PAffineVector);
14099:
            Function glVectorAdd3( const v1, v2 : TVectorGL) : TVectorGL;

Procedure glVectorAdd4( const v1, v2 : TVectorGL; var vr : TVectorGL);

Function glVectorAdd5( const v : TAffineVector; const f : Single) : TAffineVector;
14100:
14101:
14102:
14103:
             Function glVectorAdd6( const v : TVectorGL; const f : Single)
14104:
            Procedure glAddVector7( var v1 : TAffineVector; const v2 : TAffineVector);
Procedure glAddVector8( var v1 : TAffineVector; const v2 : TVectorGL);
14105:
            Procedure glAddVector9( var v1 : TVectorGL; const v2 : TVectorGL);
14106:
            Procedure glAddVector10( var v : TAffineVector; const f : Single);
14108:
            Procedure glAddVector11( var v : TVectorGL; const f : Single)
14109:
             //Procedure TexPointArrayAdd(const src:PTexPointArray;const delta:TTexPoint;const
           nb:Int;dest:PTexPointArray);
//Procedure TexPointArrayScaleAndAdd(const src:PTexPointArray;const delta:TTexPoint;const
14110:
           nb:Integer;const scale: TTexPoint; dest : PTexPointArray);
14111:
             //Procedure VectorArrayAdd(const src:PAffineVectorArray,const delta:TAffineVector;const nb:Integer;dest:
           PAffineVectorArray);
           Function glVectorSubtract( const V1, V2 : TAffineVector) : TAffineVector;
14112:
            Procedure glVectorSubtract1( const v1, v2 : TAffineVector; var result : TAffineVector);

Procedure glVectorSubtract1( const v1, v2 : TAffineVector; var result : TVectorGL);

Procedure glVectorSubtract3( 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);
14114:
14115:
14116:
14117:
             Procedure glVectorSubtract6( const v1, v2 : TVectorGL; var result : TAffineVector);
            Function glVectorSubtract7( const v1: TAffineVector; delta: Single): TAffineVector;
Function glVectorSubtract8( const v1: TVectorGL; delta: Single): TVectorGL;
14119:
14120:
            Procedure glSubtractVector9( var V1 : TAffineVector; const V2 : TAffineVector);

Procedure glSubtractVector10( var V1 : TVectorGL; const V2 : TVectorGL);
14121:
14122:
             \textbf{Procedure} \ \ \text{glCombineVector}( \ \textbf{var} \ \ \text{vr} \ : \ \text{TAffineVector}; \ \textbf{const} \ \ \text{v} \ : \ \text{TAffineVector}; \ \textbf{var} \ \ \text{f} \ : \ \text{Single}); 
14123:
           //Procedure CombineVector1( var vr : TAffineVector; const v : TAffineVector; pf : PFloat);

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

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

Function glVectorCombine33( const V1, V2, V3 : TAffineVector; const F1, F2, F3 : Single) : TAffineVector;
14124:
14125:
14126:
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14128:
           Procedure glVectorCombine34(const V1.V2.V3:TAffineVector; const F1.F2.F3: Single; var vr : TAffineVector);
           Procedure glCombineVector5( var vr : TVectorGL; const v : TVectorGL; var f : Single);
14129:
           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;
14131:
14132:
           Procedure glVectorCombine9(const V1:TVectorGL;const V2:TAffineVector;const F1,F2:Single;var vr:TVectorGL);
14133:
           Procedure glvectorCombine10( const V1: VectorGL; const F1, F2: Single; var vr: TvectorGL);

Procedure glvectorCombine11( const V1, V2: TvectorGL; const F1, F2: Single; var vr: TvectorGL);

Procedure glvectorCombine11( const V1, V2: TvectorGL; const F2: Single; var vr: TvectorGL);

Function glvectorCombine3( const V1, V2, V3: TvectorGL; const F1, F2, F3: Single): TvectorGL;

Procedure glvectorCombine31( const V1, V2, V3: TvectorGL; const F1, F2, F3: Single; var vr: TvectorGL);

Function glvectorDotProduct( const V1, V2: TAffineVector): Single;
14134:
14135:
14136:
14137:
14138:
           Function glVectorDotProduct1( const V1, V2 : TAFfineVector) : Single;
Function glVectorDotProduct1( const V1, V2 : TVectorGL) : Single;
Function glVectorDotProduct2( const V1 : TVectorGL; const V2 : TAffineVector) : Single;
14140:
           Function glPointProject( const p, origin, direction : TAffineVector) : Single;
Function glPointProject1( const p, origin, direction : TVectorGL) : Single;
14141:
14142:
           Function glVectorCrossProduct( const V1, V2 : TAffineVector): TAffineVector;
Function glVectorCrossProduct1( const V1, V2 : TVectorGL) : TVectorGL;
14143:
14144:
           Procedure glVectorCrossProduct2( const v1, v2 : TVectorGL; var vr : TVectorGL);
Procedure glVectorCrossProduct3( const v1, v2 : TAffineVector; var vr : TVectorGL);
14145 .
14146:
           Procedure glVectorCrossProduct4( const v1, v2 : TVectorGL; var vr : TAffineVector);
14147:
           Procedure glVectorCrossProduct5( const v1, v2 : TAffineVector; var vr : TAffineVector);
14149:
           Function glLerp( const start, stop, t : Single) : Single
           Function glAngleLerp( start, stop, t : Single) : Single
14150:
           Function glDistanceBetweenAngles( angle1, angle2 : Single) : Single
Function glTexPointLerp( const t1, t2 : TTexPoint; t : Single) : TTexPoint;
14151:
14152:
14153:
           Function glVectorLerp( const v1, v2 : TAffineVector; t : Single) : TAffineVector;
14154:
           Procedure glVectorLerp1( const v1, v2 : TAffineVector; t : Single; var vr : TAffineVector);
Function glVectorLerp2( const v1, v2 : TVectorGL; t : Single) : TVectorGL;
Procedure glVectorLerp3( const v1, v2 : TVectorGL; t : Single; var vr : TVectorGL);
14155:
14156:
           Function glVectorAngleLerp( const v1, v2 : TAffineVector; t : Single) : TAffineVector;
           14158:
          // Procedure VectorArrayLerp( const src1, src2:PVectorArray; t:Single; n:Integer; dest:PVectorArray); // Procedure VectorArrayLerp1( const src1, src2 : PAffineVectorArray; t : Single; n : Integer; dest :
14159:
14160:
          PAffineVectorArray);
           Function glVectorLength( const x, y : Single) : Single;
           Function glVectorLength1( const x, y, z : Single) : Single;
Function glVectorLength2( const v : TAffineVector) : Single;
14162:
14163:
           Function glVectorLength3( const v : TVectorGL) : Single;
14164:
14165:
           Function glVectorLength4( const v : array of Single) : Single;
           Function glVectorNorm( const x, y : Single) : Single;
14166:
14167:
           Function glVectorNorm1( const v : TAffineVector) : Single;
           Function alVectorNorm2( const v : TVectorGL) : Single;
14168:
           Function glVectorNorm3( var V : array of Single) : Single;
14169:
           Procedure glNormalizeVector( var v : TAffineVector);
14170:
14171:
           \textbf{Procedure} \  \, \texttt{glNormalizeVector1(} \  \, \textbf{var} \  \, \texttt{v} \  \, \texttt{:} \  \, \texttt{TVectorGL)} \, ; \\
           14172:
           Function glVectorNormalize1( const v : TVectorGL) : TVectorGL;
14173:
          // Procedure NormalizeVectorArray( list : PAffineVectorArray; n : Integer);
14175:
           Function glVectorAngleCosine( const V1,
                                                                      V2 : TAffineVector)
           Function glVectorNegate( const v : TAffineVector) : TAffineVector;

Function glVectorNegate( const v : TVectorGL) : TVectorGL;
14176:
14177:
14178:
           Procedure glNegateVector( var V : TAffineVector);
14179:
           Procedure glNegateVector2( var V : TVectorGL);
14180:
           Procedure glNegateVector3( var V : array of Single);
           Procedure glScaleVector( var v : TAffineVector; factor : Single);
Procedure glScaleVector1( var v : TAffineVector; const factor : TAffineVector);
Procedure glScaleVector2( var v : TVectorGL; factor : Single);
14181:
14182:
14183:
           Procedure glScaleVector3( var v : TVectorGL; const factor : TVectorGL);
14184:
           Function glVectorScale( const v : TAffineVector; factor : Single) : TAffineVector;
Procedure glVectorScale1( const v : TAffineVector; factor : Single; var vr : TAffineVector);
Function glVectorScale2( const v : TVectorGL; factor : Single) : TVectorGL;
14185:
14186:
14187:
14188:
           Procedure glVectorScale3( const v : TVectorGL; factor : Single; var vr : TVectorGL);
14189:
           Procedure glVectorScale4( const v : TVectorGL; factor : Single; var vr : TAffineVector);
14190:
           Procedure glDivideVector( var v : TVectorGL; const divider : TVectorGL);
           Function glVectorEquals( const V1, V2 : TVectorGL) : Boolean;
Function glVectorEquals( const V1, V2 : TAffineVector) : Boolean;
14191:
           Function glAffineVectorEquals( const V1, V2 : TVectorGL) : Boolean;
14193:
14194:
           \textbf{Function} \  \, \texttt{glVectorIsNull(} \  \, \textbf{const} \  \, \texttt{v} \  \, \texttt{i} \  \, \texttt{TVectorGL)} \  \, \texttt{i} \  \, \texttt{Boolean;}
14195:
           Function glVectorIsNull1( const v : TAffineVector) : Boolean;
           Function glVectorSpacing( const v1, v2 : TTexPoint) : Single:
Function glVectorSpacing( const v1, v2 : TAffineVector) : Si
14196:
14197:
14198:
           Function glVectorSpacing2( const v1, v2 : TVectorGL) : Single;
14199:
           \textbf{Function} \  \, \texttt{glVectorDistance}(\  \, \textbf{const} \  \, \texttt{v1}, \  \, \texttt{v2} \  \, \texttt{:} \  \, \texttt{TAffineVector}) \  \, \texttt{:} \  \, \texttt{Single};
           Function glvectorDistance1(const v1, v2 : TAffineVector) : Single;
Function glVectorDistance2(const v1, v2 : TAffineVector) : Single;
14200:
14201:
           Function glVectorDistance21( const v1, v2 : TVectorGL) : Single;
14202:
           Function glVectorPerpendicular( const V, N : TAffineVector) : TAffineVector

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

Procedure glRotateVector( var vector : TVectorGL; const axis : TAffineVector; angle : Single);
14203:
14204:
14205:
           Procedure glRotateVector1( var vector : TVectorGL; const axis : TVectorGL; angle : Single);
14207:
           Procedure glRotateVectorAroundY( var v : TAffineVector; alpha : Single)
           Function glVectorRotateAroundX( const v : TAffineVector; alpha : Single) : TAffineVector;
Function glVectorRotateAroundY( const v : TAffineVector; alpha : Single) : TAffineVector;
14208:
14209:
14210:
           Procedure glVectorRotateAroundY1(const v : TAffineVector; alpha : Single; var vr : TAffineVector);
           \textbf{Function} \  \, \texttt{glVectorRotateAroundZ(const} \  \, v \  \, \texttt{TAffineVector; alpha} \  \, : \  \, \texttt{Single)} \  \, : \  \, \texttt{TAffineVector}
14211:
           Procedure glAbsVector( var v : TVectorGL);
Procedure glAbsVector1( var v : TAffineVector);
14212:
14213:
           Function glVectorAbs( const v : TVectorGL) : TVectorGL;
14214:
           Function glVectorAbs1( const v : TAffineVector) : TAffineVector;
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14216:
           Procedure glSetMatrix( var dest : THomogeneousDblMatrix; const src : TMatrixGL);
            Procedure glSetMatrix1( var dest : TAffineMatrix; const src : TMatrixGL);
14217:
            Procedure glSetMatrix2( var dest : TMatrixGL; const src : TAffineMatrix);
14210 .
            Procedure glSetMatrixRow( var dest : TMatrixGL; rowNb : Integer; const aRow : TVectorGL);
            Function glCreateScaleMatrix( const v : TAffineVector) : TMatrixGL;
14220:
            Function glCreateScaleMatrix1( const v : TVectorGL) : TMatrixGL;
14221:
            Function glCreateTranslationMatrix( const V : TAffineVector) : TMatrixGL;
14222:
            Function glCreateTranslationMatrix1( const V : TVectorGL) : TMatrixGL;
14223:
           Function glCreateScaleAndTranslationMatrix( const scale, offset : TVectorGL) : TMatrixGL;
Function glCreateRotationMatrixX( const sine, cosine : Single) : TMatrixGL;
14224:
14225:
            Function glCreateRotationMatrixX1( const angle : Single) : TMatrixGL;
14226:
            Function glCreateRotationMatrixY( const sine, cosine : Single) : TMatrixGL;
14228:
            Function glCreateRotationMatrixY1( const angle : Single) : TMatrixGL;
           Function glCreateRotationMatrixZ( const sine, cosine : Single) : TMatrixGL;
Function glCreateRotationMatrixZ1( const angle : Single) : TMatrixGL;
Function glCreateRotationMatrix( const anAxis : TAffineVector; angle : Single) : TMatrixGL;
14229:
14230:
14231:
            Function glCreateRotationMatrix1( const anAxis : TVectorGL; angle : Single) : TMatrixGL;
14232:
           Function glCreateAffineRotationMatrix( const anAxis: Tectoral angle: Single): TMATrixGI/
Function glCreateAffineRotationMatrix( const anAxis: TAffineVector; angle:Single): TAffineMatrix
Function glMatrixMultiply( const M1, M2: TMatrixGL): TMatrixGL;

Procedure glMatrixMultiply2( const M1, M2: TMatrixGL; var MResult: TMatrixGL);
14233:
14234:
14235:
           Function glVectorTransform( const V : TVectorGL; const M : TMatrixGL) : TVectorGL;
Function glVectorTransform( 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;
14237:
14238:
14239:
14240:
14241:
            Function glMatrixDeterminant( const M : TAffineMatrix)
                                                                                                : Single;
14242:
            Function glMatrixDeterminant1( const M : TMatrixGL) : Single;
           Procedure glAdjointMatrix( var M : TMatrixGL);
Procedure glAdjointMatrix1( var M : TAffineMatrix);
14243:
14244:
            Procedure glScaleMatrix( var M : TAffineMatrix; const factor : Single);
14246:
            Procedure glScaleMatrix1( var M : TMatrixGL; const factor : Single)
           Procedure glTranslateMatrix( var M : TMatrixGL; const v : TAffineVector);
Procedure glTranslateMatrix1( var M : TMatrixGL; const v : TVectorGL);
14247:
14248:
14249:
            Procedure glNormalizeMatrix( var M : TMatrixGL)
            Procedure glTransposeMatrix( var M : TAffineMatrix);
14250:
14251:
           Procedure glTransposeMatrix1( var M : TMatrixGL);
14252:
           Procedure glInvertMatrix( var M : TMatrixGL);
Procedure glInvertMatrix1( var M : TAffineMatrix);
14253:
14254:
            Function glanglePreservingMatrixInvert( const mat : TMatrixGL) : TMatrixGL
14255:
            Function glMatrixDecompose( const M : TMatrixGL; var Tran : TTransformations) : Boolean
14256:
            \textbf{Function} \  \, \texttt{glPlaneMake(} \  \, \textbf{const} \  \, \texttt{p1, p2, p3} \  \, \texttt{:} \  \, \texttt{TAffineVector)} \  \, \texttt{:} \  \, \texttt{THmgPlane;}
           Function glPlaneMakel( const p1, p2, p3 : TATTIMEVECTOR) : THmgPlane;

Function glPlaneMakel( const p1, p2, p3 : TVectorGL) : THmgPlane;

Function glPlaneMake2( const point, normal : TAffineVector) : THmgPlane;
14257:
14258:
14260:
            Procedure glSetPlane( var dest : TDoubleHmgPlane; const src : THmgPlane)
14261:
           Procedure glNormalizePlane( var plane : THmgPlane)
           Function glPlaneEvaluatePoint( const plane: THmgPlane; const point: TAffineVector): Single;
Function glPlaneEvaluatePoint1( const plane: THmgPlane; const point: TVectorGL): Single;
14262:
14263:
14264:
            Function glCalcPlaneNormal( const p1, p2, p3 : TAffineVector) :
                                                                                                             TAffineVector
           Procedure glCalcPlaneNormall( const p1, p2, p3 : TAffineVector; var vr : TAffineVector);

Procedure glCalcPlaneNormal2( const p1, p2, p3 : TVectorGL; var vr : TAffineVector);
14265:
14266:
           Function glPointIsInHalfSpace( const point, planePoint, planeNormal : TVectorGL) : Boolean;
Function glPointIsInHalfSpace1( const point, planePoint, planeNormal : TAffineVector) : Boolean;
14267:
14268:
14269:
            Function glPointPlaneDistance( const point, planePoint, planeNormal : TVectorGL) : Single;
           Function glPointPlaneDistancel( const point, planePoint, planeNormal : TAffineVector) : Single;
Function glPointSegmentClosestPoint( const point, segmentStart, segmentStop:TAffineVector):TAffineVector
14270:
14271:
           Function glPointSegmentDistance( const point, segmentStart, segmentStop: TAffineVector): single Function glPointLineClosestPoint( const point, linePoint, lineDirection: TAffineVector): TAffineVector
14273:
          Function glPointLineDistance( const point, linePoint, lineDirection: TAffineVector): Single Procedure SglegmentSegmentClosestPoint( const SOStart, SOStop, SlStart, SlStop: TAffineVector; var SegmentOclosest, SegmentlClosest: TAffineVector)
14274:
14275:
           Function glSegmentSegmentDistance( const S0Start, S0Stop, S1Start, S1Stop: TAffineVector): single
14277:
            TEulerOrder',
                                 '( eulXYZ, eulXZY, eulYXZ, eulYZX, eulZXY, eulZYX)
14278:
            \textbf{Function} \ \ \text{glQuaternionMake}( \ \ \textbf{const} \ \ \text{Imag} \ : \ \ \textbf{array of} \ \ \text{Single}; \ \ \text{Real} \ : \ \ \text{Single}) \ : \ \ \text{TQuaternion}
           Function glQuaternionConjugate( const Q : TQuaternion) : TQuaternion Function glQuaternionMagnitude( const Q : TQuaternion) : Single
14279:
            Procedure glNormalizeQuaternion( var Q : TQuaternion)
14281:
           Function glQuaternionFromPoints( const V1, V2 : TAffineVector) : TQuaternion

Procedure glQuaternionToPoints( const Q : TQuaternion; var ArcFrom, ArcTo : TAffineVector)
14282:
14283:
            Function glOuaternionFromMatrix( const mat : TMatrixGL) : TOuaternion
14284:
            Function glQuaternionToMatrix( quat : TQuaternion) : TMatrixGL
14285:
14286:
            Function glQuaternionToAffineMatrix( quat : TQuaternion) : TAffineMatrix
           Function glQuaternionFromAngleAxis( const angle : Single; const axis : TAffineVector) : TQuaternion Function glQuaternionFromRollPitchYaw( const r, p, y : Single) : TQuaternion Function glQuaternionFromEuler( const x, y, z : Single; eulerOrder : TEulerOrder) : TQuaternion Function glQuaternionMultiply( const qL, qR : TQuaternion) : TQuaternion
14287:
14288:
14289:
14290:
           Function glQuaternionSlerp( const QStart, QEnd : TQuaternion; Spin : Integer; t : Single) : TQuaternion;
Function glQuaternionSlerp1( const source, dest : TQuaternion; const t : Single) : TQuaternion;
Function glLnXP1( X : Extended) : Extended
14291:
14292:
14293:
            Function glLog10( X : Extended) : Extended
           Function glLog2( X : Extended) : Extended;
Function glLog21( X : Single) : Single;
14295:
14296:
           Function glLogN( Base, X : Extended) : Extended
Function glIntPower( Base : Extended; Exponent : Integer) : Extended
14297:
14298:
            Function glPower( const Base, Exponent : Single) : Single;
14299:
           Function glPower1( Base : Single; Exponent : Integer) : Single;
14300:
           Function glDegToRad( const Degrees : Extended) : Extended;
Function glDegToRad1( const Degrees : Single) : Single;
14301:
14302:
           Function glRadToDeg( const Radians : Extended) : Extended;
```

```
14304:
          Function glRadToDeg1( const Radians : Single) : Single;
14305:
           Function glNormalizeAngle( angle : Single) : Single
           Function glNormalizeDegAngle( angle : Single) : Single
14307:
           Procedure glSinCos( const Theta : Extended; var Sin, Cos : Extended);
           Procedure glSinCos1( const Theta : Double; var Sin, Cos : Double);
14308:
          Procedure glSinCos( const Theta : Single; var Sin, Cos : Single);
Procedure glSinCos1( const theta, radius : Double; var Sin, Cos :
14309:
14310:
           Procedure glSinCos2( const theta, radius : Double; var Sin, Cos : Double);
14311:
14312:
          Procedure glSinCos3( const theta, radius : Single; var Sin, Cos : Single);
          Procedure glPrepareSinCosCache( var s, c : array of Single; startAngle, stopAngle : Single)
Function glArcCos( const X : Extended) : Extended;
14313:
14314:
           Function glArcCosl( const x : Single) : Single;
14316:
          Function glArcSin( const X : Extended) : Extended;
          Function glarcSin1( const X : Single) : Single;
14317:
          Function glArcTan21( const Y, X : Extended) : Extended;
Function glArcTan21( const Y, X : Single) : Single;
14318:
14319:
          Function glFastArcTan2( y, x : Single) : Single
14320:
          Function glTan( const X : Extended) : Extended;
Function glTan1( const X : Single) : Single;
Function glCoTan( const X : Extended) : Extended;
14321 .
14322:
14323:
           Function glCoTanl( const X : Single) : Single;
14324:
          Function glSinh( const x : Single) : Single;
14325:
14326:
          Function glSinh1( const x : Double) : Double;
          Function glCosh( const x : Single) : Single;
Function glCosh1( const x : Double) : Double;
14327:
14328:
14329:
           Function glRSqrt( v : Single) : Single
14330:
          Function glRLength( x, y : Single) : Single
          Function glISqrt( i : Integer) : Integer
Function glILength( x, y : Integer) : Integer;
Function glILength1( x, y, z : Integer) : Integer;
14331:
14332:
14334:
          Procedure glRegisterBasedExp
14335:
          Procedure glRandomPointOnSphere( var p : TAffineVector)
          Function glRoundInt( v : Single) : Single;
14336:
          Function glRoundInt1( v : Extended) : Extended;
14337:
           Function glTrunc( v : Single) : Integer
14339:
          Function glTrunc64( v : Extended) : Int64;
          Function glInt( v : Single) : Single;
Function glInt( v : Extended) : Extended;
14340:
14341:
          Function glFrac( v : Single) : Single;
Function glFrac( v : Extended) : Extended;
14342:
14343:
14344:
          Function glRound( v : Single) : Integer;
          Function glRound64( v : Single) : Int64;
Function glRound641( v : Extended) : Int64;
14345:
14346:
          Function glTrunc( X : Extended) : Int64
Function glRound( X : Extended) : Int64
14347:
14348:
          Function glFrac( X : Extended) : Integer;
Function glCeil( v : Single) : Integer;
14349:
14350:
           Function glCeil64( v : Extended) : Int64;
14351:
          Function glfloor( v : Single) : Integer;
Function glfloor64( v : Extended) : Int64;
14352:
14353:
          Function glScaleAndRound( i : Integer; var s : Single) : Integer Function glSign( x : Single) : Integer
14354:
14355:
           Function glIsInRange( const x, a, b : Single) : Boolean;
          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;
//Function MinFloat( values : PSingleArray; nbItems : Integer) : Single;
14357:
14358:
14359:
14360:
           //Function MinFloat1( values : PDoubleArray; nbItems : Integer) : Double;
14361:
          //Function MinFloat2( values : PExtendedArray; nbItems : Integer) : Extended;
Function glMinFloat3( const v1, v2 : Single) : Single;
14362:
14363:
          Function glMinFloat4( const v : array of Single) : Single;
14364:
          Function glMinFloat5( const v1, v2 : Double) : Double;
Function glMinFloat6( const v1, v2 : Extended) : Extended;
14365:
14366:
          Function glMinFloat7( const v1, v2, v3 : Single) : Single; Function <math>glMinFloat8( const v1, v2, v3 : Double) : Double;
14367:
14368:
          Function glMinFloat9( const v1, v2, v3 : Extended) : Extended;
14370:
           //Function MaxFloat10( values : PSingleArray; nbItems : Integer) : Single;
          //Function MaxFloat( values : PDoubleArray; nbItems : Integer) : Double;
//Function MaxFloat1( values : PExtendedArray; nbItems : Integer) : Extended;
Function glMaxFloat2( const v : array of Single) : Single;
14371:
14372:
14373:
          Function glMaxFloat3( const v1, v2: Single): Single;
Function glMaxFloat4( const v1, v2: Double): Double;
14374:
14375:
14376:
          Function glMaxFloat5( const v1, v2 : Extended) : Extended;
14377:
          Function glMaxFloat6( const v1, v2, v3 : Single) : Single;
           Function glMaxFloat7( const v1, v2, v3 : Double) : Double;
14378:
14379:
           Function glMaxFloat8( const v1, v2, v3 : Extended) : Extended;
          Function glMinInteger9( const v1, v2 : Integer) : Integer;
Function glMinInteger( const v1, v2 : Cardinal) : Cardinal;
14380:
14381:
          Function glMaxInteger( const v1, v2 : Integer) : Integer;
14382:
           Function glMaxInteger1( const v1, v2 : Cardinal) : Cardinal;
14384:
           Function glTriangleArea( const p1, p2, p3 : TAffineVector) : Single;
14385:
           /\!/ Function \ Polygon Area( \ const \ p : PAffine Vector Array; \ nSides : Integer) : Single;
          Function glTriangleSignedArea( const p1, p2, p3: TAffineVector): Single;
//Function PolygonSignedArea( const p: PAffineVectorArray; nSides: Integer): Single;
14386:
14387:
           //Procedure ScaleFloatArray( values : PSingleArray; nb : Integer; var factor : Single);
14388:
14389:
          Procedure glScaleFloatArray( var values : TSingleArray; factor : Single);
          //Procedure OffsetFloatArray( values : PSingleArray; nb : Integer; var delta : Single);
Procedure gloffsetFloatArray1( var values : array of Single; delta : Single);
//Procedure OffsetFloatArray2( valuesDest, valuesDelta : PSingleArray; nb : Integer);
14390:
14391:
```

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14393:
               Function glMaxXYZComponent( const v : TVectorGL) : Single;
               Function glMaxXYZComponent1( const v : TAffineVector) : single;
14394:
               Function glMinXYZComponent( const v : TVectorGL) : Single;
Function glMinXYZComponent1( const v : TAffineVector) : single;
14396:
               Function glMaxAbsXYZComponent( v : TVectorGL) : Single Function glMinAbsXYZComponent( v : TVectorGL) : Single
14397:
14398:
               Procedure glMaxVector( var v : TVectorGL; const v1 : TVectorGL);
14399:
               Procedure glMaxVector1( var v : TAffineVector; const v1 : TAffineVector);
14400:
               Procedure glMinVector( var v : TVectorGL);

Procedure glMinVector( var v : TVectorGL);

Procedure glMinVectorl( var v : TAffineVector; const vl : TAffineVector);
14401:
14402:
               Procedure glSortArrayAscending( var a : array of Extended)
14403:
               Function glClampValue( const aValue, aMin, aMax : Single) : Single;
14405:
               Function glClampValue1( const aValue, aMin : Single) : Single;
               \textbf{Function} \  \, \texttt{glGeometryOptimizationMode} \  \, \textbf{String}
14406:
               Procedure glBeginFPUOnlySection
14407:
14408:
               Procedure glEndFPUOnlySection
14409:
               \textbf{Function} \  \, \texttt{glConvertRotation}( \  \, \textbf{const} \  \, \texttt{Angles} \  \, : \  \, \texttt{TAffineVector}) \  \, : \  \, \texttt{TVectorGL}
               Function glMakeAffineDblVector( var v : array of Double) : TAffineDblVector Function glMakeDblVector( var v : array of Double) : THomogeneousDblVector
14410:
14411:
               Function glVectorAffineDblToFlt( const v : TAffineDblVector) : TAffineVector
14412:
                \textbf{Function} \  \, \texttt{glVectorDblToFlt}( \  \, \textbf{const} \  \, \texttt{v} : \  \, \texttt{THomogeneousDblVector}) : \  \, \texttt{THomogeneousVector}
14413:
14414:
               Function glVectorAffineFltToDbl( const v : TAffineVector) : TAffineDblVector
14415:
               \textbf{Function} \  \, \texttt{glVectorFltToDbl} \, ( \  \, \textbf{const} \  \, \texttt{v} \  \, \texttt{:} \  \, \texttt{TVectorGL}) \  \, \texttt{:} \  \, \texttt{THomogeneousDblVector}
               Function glPointInPolygon( var xp, yp : array of Single; x, y : Single) : Boolean

Procedure glDivMod( Dividend : Integer; Divisor : Word; var Result, Remainder : Word)
14416:
14417:
14418:
               Function glTurn( const Matrix : TMatrixGL; angle : Single) : TMatrixGL;
14419:
               Function glTurn1( const Matrix : TMatrixGL; const MasterUp:TAffineVector;Angle:Single):TMatrixGL;
Function glPitch( const Matrix : TMatrixGL; Angle : Single) : TMatrixGL;
14420:
14421:
               Function glPitchl( const Matrix:TMatrixGL;const MasterRight:TAffineVector;Angle:Single):TMatrixGL;
               Function glRoll( const Matrix: TMatrixGL; Angle : Single) : TMatrixGL;
               Function glRoll1(const Matrix: TMatrixGL;const MasterDirection:TAffineVector;Angle: Single): TMatrixGL;
14423:
14424:
               \textbf{Function} \ \ \texttt{glRayCastMinDistToPoint} ( \ \textbf{const} \ \ \texttt{rayStart}, \ \ \texttt{rayVector} \colon \ \texttt{TVectorGL}; \\ \textbf{const} \ \ \texttt{point} \colon \texttt{TVectorGL}) \colon \texttt{Single} \\ \textbf{const} \ \ \texttt{point} \colon \texttt{TVectorGL} \mapsto \texttt{TVectorGL} \cap \texttt{TVectorGL} 
               \textbf{Function} \  \, \texttt{glRayCastIntersectsSphere}( \  \, \textbf{const} \  \, \texttt{rayStart}, \  \, \texttt{rayVector} : \  \, \texttt{TVectorGL}; \  \, \textbf{const}
14425:
              sphereCenter:TVectorGL;const sphereRadius : Single) : Boolean;
               Function glRayCastSphereIntersect( const rayStart, rayVector: TVectorGL; const sphereCenter:TVectorGL;
              const sphereRadius : Single; var i1, i2 : TVectorGL) : Integer;
               Function glSphereVisibleRadius( distance, radius: Single): Single
Function glExtractFrustumFromModelViewProjection( const modelViewProj : TMatrixGL) : TFrustum
14427:
14428:
14429:
               Function glIsVolumeClipped( const objPos : TVectorGL; const objRadius : Single; const rcci :
              TRenderContextClippingInfo) : Boolean;
14430:
             Function glIsVolumeClipped1( const objPos : TAffineVector; const objRadius : Single; const rcci :
              TRenderContextClippingInfo) : Boolean;
14431: Function glTsVolumeClipped2(const min, max:TAffineVector; const rcci : TRenderContextClippingInfo) : Bool;
14432:
               Function glIsVolumeClipped3(const objPos:TAffineVector;const objRadius:Single;const
              Frustum:TFrustum):Bool;
14433: Function glMakeParallelProjectionMatrix( const plane : THmgPlane; const dir : TVectorGL) : TMatrixGL
               Function glMakeShadowMatrix( const planePoint, planeNormal, lightPos: TVectorGL): TMatrixGL

Function glMakeReflectionMatrix( const planePoint, planeNormal : TAffineVector): TMatrixGL
14434:
               Function glPackRotationMatrix( const mat : TMatrixgL) : TPackedRotationMatrix
Function glUnPackRotationMatrix( const packedMatrix : TPackedRotationMatrix) : TMatrixGL
14436:
14437:
14438:
                 'cPI', 'Single').setExtended( 3.141592654);
                'cPIdiv180','Single').setExtended( 0.017453292);
'c180divPI','Single').setExtended( 57.29577951);
14439:
14440:
14441:
                'c2PI', 'Single').setExtended( 6.283185307);
                'cPIdiv4', 'Single').setExtended( 1.570796326);
'cPIdiv4', 'Single').setExtended( 0.785398163);
14442:
14443:
                'c3PIdiv4','Single').setExtended( 2.35619449);
14444:
14445:
                'cInv2PI', 'Single').setExtended( 1 / 6.283185307);
14446:
                'cInv360','Single').setExtended( 1 / 360);
                'c180', 'Single').setExtended( 180);
'c360', 'Single').setExtended( 360);
14447:
14448:
14449:
                'cOneHalf', 'Single').setExtended( 0.5)
14450:
                'cLn10','Single').setExtended( 2.302585093);
                {'MinSingle','Extended').setExtended( 1.5e-45);
'MaxSingle','Extended').setExtended( 3.4e+38);
'MinDouble','Extended').setExtended( 5.0e-324);
14451:
14452:
14454:
                 'MaxDouble', 'Extended').setExtended( 1.7e+308);
                'MinExtended','Extended').setExtended( 3.4e-4932);
'MaxExtended','Extended').setExtended( 1.1e+4932);
14455:
14456:
                 'MinComp','Extended').setExtended( - 9.223372036854775807e+18);
14457:
                'MaxComp','Extended').setExtended( 9.223372036854775807e+18);}
14458:
14459: end;
14460:
14461:
             procedure SIRegister_GLVectorFileObjects(CL: TPSPascalCompiler);
14462:
             begin
                  AddClassN(FindClass('TOBJECT'),'TMeshObjectList
14463:
                  (FindClass('TOBJECT'),'TFaceGroups
TMeshAutoCentering', '( macCenterX, macCenterY, macCenterZ, macUseBarycenter )
14464:
14465:
                  TMeshAutoCenterings', 'set of TMeshAutoCentering
14466:
                  TMeshObjectMode', '( momTriangle SIRegister_TBaseMeshObject(CL);
                                                      '( momTriangles, momTriangleStrip, momFaceGroups )
14467:
14468:
14469:
                  (FindClass('TOBJECT'), 'TSkeletonFrameList
14470:
                  TSkeletonFrameTransform', '( sftRotation, sftOuaternion )
                  SIRegister_TSkeletonFrame(CL);
14471:
                  SIRegister_TSkeletonFrameList(CL);
14472:
                  (FindClass('TOBJECT'),'TSkeleton
(FindClass('TOBJECT'),'TSkeletonBone
14473:
14474:
14475:
                  SIRegister_TSkeletonBoneList(CL);
                  SIRegister_TSkeletonRootBoneList(CL);
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14477:
           SIRegister TSkeletonBone(CL);
14478:
           (FindClass('TOBJECT'), 'TSkeletonColliderList
           SIRegister_TSkeletonCollider(CL);
14479:
14480:
           SIRegister_TSkeletonColliderList(CL);
           (FindClass('TOBJECT'),'TGLBaseMesh
TBlendedLerpInfo', 'record frameIndex1 : Integer; frameIndex2 :
14481:
14482:
            +'Integer; lerpFactor : Single; weight : Single; externalPositions : TAffine'
14483:
14484:
             +'VectorList; externalRotations : TAffineVectorList; externalQuaternions : T'
14485:
             +'OuaternionList; end
           SIRegister_TSkeleton(CL);
14486:
           TMeshObjectRenderingOption', '( moroGroupByMaterial )
TMeshObjectRenderingOptions', 'set of TMeshObjectRenderingOption
14487:
14488:
14489:
           SIRegister_TMeshObject(CL);
           SIRegister_TMeshObjectList(CL);
14490:
           //TMeshObjectListClass', 'class of TMeshObjectList (FindClass('TOBJECT'), 'TMeshMorphTargetList
14491:
14492:
           SIRegister_TMeshMorphTarget(CL);
14493:
14494 .
           SIRegister_TMeshMorphTargetList(CL);
14495:
           SIRegister_TMorphableMeshObject(CL);
14496:
           TVertexBoneWeight', 'record BoneID : Integer; Weight : Single; end
           //PVertexBoneWeightArray', 'TVertexBoneWeightArray // will not wo'rk
//PVerticesBoneWeights', '^TVerticesBoneWeights // will not work
14497:
14498:
           TVertexBoneWeightDynArray', 'array of TVertexBoneWeight SIRegister_TSkeletonMeshObject(CL);
14499:
14500:
           SIRegister_TFaceGroup(CL);
14501:
           TFaceGroupMeshMode', '( fgmmTriangles, fgmmTriangleStrip, fgmmFl' +'atTriangles, fgmmTriangleFan, fgmmQuads )
SIRegister_TFGVertexIndexList(CL);
14502:
14503:
14504:
14505:
           SIRegister_TFGVertexNormalTexIndexList(CL);
14506:
           SIRegister_TFGIndexTexCoordList(CL);
14507:
           SIRegister_TFaceGroups(CL);
           TMeshNormalsOrientation', '( mnoDefault, mnoInvert )
SIRegister_TVectorFile(CL);
14508:
14509:
           //TVectorFileClass', 'class of TVectorFile
SIRegister_TGLGLSMVectorFile(CL);
14510:
14511:
14512:
           SIRegister_TGLBaseMesh(CL);
14513:
           SIRegister TGLFreeForm(CL);
           TGLActorOption', '( aoSkeletonNormalizeNormals )
TGLActorOptions', 'set of TGLActorOption
14514:
14515:
14516:
            cDefaultGLActorOptions','LongInt').Value.ts32:= ord(aoSkeletonNormalizeNormals);
           (FindClass('TOBJECT'), 'TGLActor
14517:
           TActorAnimationReference', '( aarMorph, aarSkeleton, aarNone )
SIRegister_TActorAnimation(CL);
14518:
14519:
14520:
           TActorAnimationName', 'String
14521:
           SIRegister_TActorAnimations(CL);
14522:
           SIRegister TGLBaseAnimationControler(CL);
           SIRegister_TGLAnimationControler(CL);
14523:
14524:
           TActorFrameInterpolation', '( afpNone, afpLinear )
14525:
           TActorAnimationMode', '( aamNone, aamPlayOnce, aamLoop, aamBounc'
           +'eForward, aamBounceBackward, aamLoopBackward, aamExternal )
SIRegister_TGLActor(CL);
14526:
14527:
14528:
           SIRegister_TVectorFileFormat(CL);
14529:
           SIRegister_TVectorFileFormatsList(CL);
          (FindClass('TOBJECT'),'EInvalidVectorFile
Function GetVectorFileFormats: TVectorFileFormatsList
Function VectorFileFormatsFilter: String
14530:
14531:
14532:
14533:
          Function VectorFileFormatsSaveFilter : String
14534:
          Function VectorFileFormatExtensionByIndex( index : Integer) : String
          Procedure RegisterVectorFileFormat( const aExtension, aDescription : String; aClass : TVectorFileClass)
Procedure UnregisterVectorFileClass( aClass : TVectorFileClass)
14535:
14536:
14537:
         end
14538:
14539:
        procedure SIRegister_AxCtrls(CL: TPSPascalCompiler);
14540:
        begin
          'Class_DColorPropPage','TGUID').SetString( '{5CFF5D59-5946-11D0-BDEF-00A024D1875C}
'Class_DFontPropPage','TGUID').SetString( '{5CFF5D5B-5946-11D0-BDEF-00A024D1875C}
14541:
14542:
          'Class_DPicturePropPage','TGUID').SetString( '{5CFF5D5A-5946-11D0-BDFF-00A024D1875C}'Class_DStringPropPage','TGUID').SetString( '{F42D677E-754B-11D0-BDFB-00A024D1875C}
14543:
14544:
14545:
           SIRegister TOleStream(CL);
           (FindClass('TOBJECT'), 'TConnectionPoints
TConnectionKind', '( ckSingle, ckMulti )
14546:
14547:
14548:
           SIRegister_TConnectionPoint(CL);
14549:
           SIRegister TConnectionPoints(CL);
           TDefinePropertyPage', 'Procedure ( const GUID : TGUID) (FindClass('TOBJECT'), 'TActiveXControlFactory
14550:
14551:
14552:
           SIRegister_TActiveXControl(CL);
           //TActiveXControlClass', 'class of TActiveXControl
SIRegister_TActiveXControlFactory(CL);
SIRegister_TActiveFormControl(CL);
14553:
14554:
14555:
14556:
           SIRegister_TActiveForm(CL);
14557:
            //TActiveFormClass', 'class of TActiveForm
14558:
           SIRegister_TActiveFormFactory(CL);
14559:
            (FindClass('TOBJECT'), 'TPropertyPageImpl
           SIRegister_TPropertyPage(CL);
14560:
           //TPropertyPageClass', 'class of TPropertyPage
SIRegister_TPropertyPageImpl(CL);
14561:
14562:
14563:
           SIRegister_TActiveXPropertyPage(CL);
14564:
           SIRegister_TActiveXPropertyPageFactory(CL);
14565:
           SIRegister_TCustomAdapter(CL);
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14566:
              SIRegister_TAdapterNotifier(CL);
              SIRegister_IFontAccess(CL);
14567:
14568:
               SIRegister_TFontAdapter(CL);
14569 .
               SIRegister_IPictureAccess(CL);
14570:
               SIRegister TPictureAdapter(CL);
14571:
               SIRegister_ToleGraphic(CL);
14572:
               SIRegister_TStringsAdapter(CL);
14573:
               SIRegister_TReflectorWindow(CL);
14574:
             Procedure EnumDispatchProperties(Dispatch:IDispatch:PropType:TGUID;VTCode:Int;PropList:TStrings);
             Procedure GetOleFont( Font : TFont; var OleFont : IFontDisp)
Procedure SetOleFont( Font : TFont; OleFont : IFontDisp)
14575:
14576:
             Procedure GetOlePicture( Picture : TPicture; var OlePicture : IPictureDisp)
14577:
14578:
             Procedure SetOlePicture( Picture : TPicture; OlePicture : IPictureDisp)
             Procedure GetOleStrings( Strings: TStrings; var OleStrings: IStrings)
14579:
             Procedure SetOleStrings (Strings: TStrings; OleStrings: IStrings)
14580:
14581:
             Function ParkingWindow : HWND
14582: end;
14583.
14584: procedure SIRegister synaip(CL: TPSPascalCompiler);
14585: begin
           // TIp6Bytes = array [0..15] of Byte;
{:binary form of IPv6 adress (for string conversion routines)}
14587:
14588:
            // TIp6Words = array [0..7] of Word;
              AddTypeS('TIp6Bytes', 'array [0..15] of Byte;');
AddTypeS('TIp6Words', 'array [0..7] of Word;');
14589:
14590:
               AddTypeS('TIPAdr', 'record Oct1 : Byte; Oct2 : Byte; Oct3 : Byte; Oct4: Byte; end');
14591:
14592:
            AddDelphiFunction('Function synaIsIP( const Value : string) : Boolean');
             Function synaIsIP6( const Value : string) : Boolean');
Function synaIPToID( Host : string) : Ansistring');
14593:
14594:
             Function synaffron (value : string) : TIp6Bytes);
Function synaffron (value : TIp6Bytes);
Function synaffron (value : TIp6Bytes) : string');
14595:
14596:
            Function synaStrToIp( value : string) : integer');
Function synaIpToStr( value : integer) : string');
14597:
14598:
             Function synaReverseIP( Value : AnsiString) : AnsiString');
Function synaReverseIP6( Value : AnsiString) : AnsiString');
14599:
14600:
14601:
             Function synaExpandIP6( Value : AnsiString) : AnsiString');
            Function xStrToIP( const Value : String) : TIPAdr');
Function xIPToStr( const Adresse : TIPAdr) : String');
14602:
14603:
            Function IPToCardinal( const Adresse : TIPAdr) : Cardinal');
Function CardinalToIP( const Value : Cardinal) : TIPAdr');
14604:
14605:
14606:
14607: end;
14608:
14609: procedure SIRegister synacode(CL: TPSPascalCompiler);
14610: begin
           AddTypeS('TSpecials', 'set of Char');
14611:
             Const('SpecialChar','TSpecials').SetSet( '=()[]<>:;,@/?\"_');
14612:
             Const('URLFullSpecialChar','TSpecials').SetSet(';/?:@=&#+');
14613:
14614:
                        'TableBase64'ABCDEFGHIJKLMNOPQRSTUVWXYZabcdefghijklmnopqrstuvwxyz0123456789+/=');
14615:
             \textbf{Const}(\ '\ Table Base 64 mod\ '\ ABCDEFGHIJKLMNOPQRSTUVWXYZ abcdefghijklmnopqrstuvwxyz0123456789+, -'); in the property of the property o
14616:
             Const('TableUU'(`!"#$%&''()*+,-,'0123456789:;<=>?@ABCDEFGHIJKLMNOPORSTUVWXYZ[\]^
             Const('TableXX'(+-0123456789ABCDEFGHIJKLMNOPQRSTUVWXYZabcdefghijklmnopqrstuvwxyz');
14617:
14618:
             Function DecodeTriplet( const Value : AnsiString; Delimiter : Char) : AnsiString');
14619:
             Function DecodeQuotedPrintable( const Value : AnsiString) : AnsiString');
             Function DecodeURL( const Value : AnsiString) : AnsiString');
Function EncodeTriplet( const Value : AnsiString; Delimiter : Char; Specials : TSpecials) : AnsiString');
14620:
14621:
             Function EncodeQuotedPrintable( const Value : AnsiString) : AnsiString');
14622:
             Function EncodeSafeQuotedPrintable( const Value : AnsiString) : AnsiString');
14623:
             Function EncodeURLElement( const Value : AnsiString) : AnsiString');
Function EncodeURL( const Value : AnsiString) : AnsiString');
Function Decode4to3( const Value, Table : AnsiString) : AnsiString');
14624:
14625:
14626:
14627:
             Function Decode4to3Ex( const Value, Table : AnsiString) : AnsiString');
14628:
             Function Encode3to4( const Value, Table : AnsiString) : AnsiString');
14629:
             Function synDecodeBase64( const Value : AnsiString) : AnsiString');
             Function synEncodeBase64( const Value : AnsiString) : AnsiString
14630:
             Function DecodeBase64mod( const Value : AnsiString) : AnsiString
             Function EncodeBase64mod( const Value : AnsiString) : AnsiString');
14632:
14633:
             Function DecodeUU( const Value : AnsiString) : AnsiString');
             Function EncodeUU( const Value : AnsiString) : AnsiString');
14634:
             Function DecodeXX( const Value : AnsiString) : AnsiString');
14635:
             Function DecodeYEnc( const Value : AnsiString) : AnsiString');
14636:
14637:
             Function UpdateCrc32( Value : Byte; Crc32 : Integer) : Integer');
14638:
             Function synCrc32( const Value : AnsiString) : Integer');
             Function UpdateCrc16( Value : Byte; Crc16 : Word) : Word');
Function Crc16( const Value : AnsiString) : Word');
14639:
14640:
             Function synMD5( const Value : AnsiString) : AnsiString');
14641:
            Function HMAC_MD5( Text, Key : AnsiString) : AnsiString');
Function MD5LongHash( const Value : AnsiString; Len : integer) : AnsiString');
14642:
14643:
             Function synSHAl( const Value : AnsiString) : AnsiString');
Function HMAC_SHAl( Text, Key : AnsiString) : AnsiString');
14644:
14646:
             Function SHAlLongHash( const Value : AnsiString; Len : integer) : AnsiString');
14647:
             Function synMD4( const Value : AnsiString) : AnsiString');
14648: end;
14649:
14650: procedure SIRegister_synachar(CL: TPSPascalCompiler);
14651: 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'
14652:
14653:
```

```
+'4, CP1255, CP1256, CP1257, CP1258, KO18_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,'
14655:
14656:
                                          ISO_8859_16, KOI8_U, KOI8_RU, CP862, CP866, MAC, MACCE, MACICE
14658 .
                        MACCRO, MACRO, MACCYR, MACUK, MACGR, MACTU, MACHEB, MACAR, MACTH, ROMAN8'
14659:
                 +', 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'
14660:
                  +'1988_80, GB2312_80, ISO_IR_165, ISO_IR_149, EUC_JP, SHIFT_JIS, CP932, ISO_
14661:
                 +'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, CP857, CP858, CP860, CP861, CP863'
14662:
14663:
14664:
                     , CP864, CP865, CP869, CP1125 )');
14665:
               AddTypeS('TMimeSetChar', 'set of TMimeChar');
14667:
             Function CharsetConversion(const Value:AnsiString;CharFrom:TMimeChar;CharTo:TMimeChar):AnsiString;
14668:
             TransformTable : array of Word) : AnsiString');

Function CharsetConversionTrans( Value : AnsiString; CharFrom : TMimeChar; CharTo : TMimeChar; const
            TransformTable : array of Word; Translit : Boolean) : AnsiString');
14670: Function GetCurCP: TMimeChar');
14671: Function GetCurOEMCP: TMimeChar');
             Function GetCPFromID( Value : AnsiString) : TMimeChar');
14672:
              Function GetIDFromCP( Value : TMimeChar) : AnsiString');
14674:
             Function NeedCharsetConversion( const Value : AnsiString) : Boolean');
14675:
             \textbf{Function} \  \, \textbf{IdealCharsetCoding(const} \  \, \textbf{Value:AnsiString:CharFrom:TMimeChar:CharTo:TMimeSetChar):TMimeChar:CharTo:TMimeSetChar):TMimeChar:CharTo:TMimeSetChar):TMimeChar:CharTo:TMimeSetChar):TMimeChar:CharTo:TMimeSetChar):TMimeChar:CharTo:TMimeSetChar):TMimeChar:CharTo:TMimeSetChar):TMimeSetChar:CharTo:TMimeSetChar:CharTo:TMimeSetChar:CharTo:TMimeSetChar:CharTo:TMimeSetChar:CharTo:TMimeSetChar:CharTo:TMimeSetChar:CharTo:TMimeSetChar:CharTo:TMimeSetChar:CharTo:TMimeSetChar:CharTo:TMimeSetChar:CharTo:TMimeSetChar:CharTo:TMimeSetChar:CharTo:TMimeSetChar:CharTo:TMimeSetChar:CharTo:TMimeSetChar:CharTo:TMimeSetChar:CharTo:TMimeSetChar:CharTo:TMimeSetChar:CharTo:TMimeSetChar:CharTo:TMimeSetChar:CharTo:TMimeSetChar:CharTo:TMimeSetChar:CharTo:TMimeSetChar:CharTo:TMimeSetChar:CharTo:TMimeSetChar:CharTo:TMimeSetChar:CharTo:TMimeSetChar:CharTo:TMimeSetCharTo:TMimeSetChar:CharTo:TMimeSetChar:CharTo:TMimeSetChar:CharTo:TMimeSetChar:CharTo:TMimeSetChar:CharTo:TMimeSetChar:CharTo:TMimeSetChar:CharTo:TMimeSetChar:CharTo:TMimeSetChar:CharTo:TMimeSetChar:CharTo:TMimeSetChar:CharTo:TMimeSetChar:CharTo:TMimeSetChar:CharTo:TMimeSetChar:CharTo:TMimeSetChar:CharTo:TMimeSetChar:CharTo:TMimeSetChar:CharTo:TMimeSetChar:CharTo:TMimeSetChar:CharTo:TMimeSetChar:CharTo:TMimeSetChar:CharTo:TMimeSetChar:CharTo:TMimeSetChar:CharTo:TMimeSetChar:CharTo:TMimeSetChar:CharTo:TMimeSetChar:CharTo:TMimeSetChar:CharTo:TMimeSetChar:CharTo:TMimeSetChar:CharTo:TMimeSetChar:CharTo:TMimeSetChar:CharTo:TMimeSetChar:CharTo:TMimeSetChar:CharTo:TMimeSetChar:CharTo:TMimeSetChar:CharTo:TMimeSetChar:CharTo:TMimeSetChar:CharTo:TMimeSetChar:CharTo:TMimeSetChar:CharTo:TMimeSetChar:CharTo:TMimeSetChar:CharTo:TMimeSetChar:CharTo:TMimeSetChar:CharTo:TMimeSetChar:CharTo:TMimeSetChar:CharTo:TMimeSetChar:CharTo:TMimeSetChar:CharTo:TMimeSetChar:CharTo:TMimeSetChar:CharTo:TMimeSetChar:CharTo:TMimeSetChar:CharTo:TMimeSetChar:CharTo:TMimeSetChar:CharTo:TMimeSetChar:CharTo:TMimeSetChar:CharTo:TMimeSetChar:CharTo:TMimeSetChar:CharTo:TMimeSetChar:CharTo:TMimeSetChar:C
14676:
             Function GetBOM( Value : TMimeChar) : AnsiString');
Function StringToWide( const Value : AnsiString) : WideString');
14677:
14678:
             Function WideToString( const Value : WideString) : AnsiString');
14679: end;
14680:
14681: procedure SIRegister_synamisc(CL: TPSPascalCompiler);
14682:
           begin
14683:
               AddTypeS('TProxySetting', 'record Host : string; Port : string; Bypass : string; end');
             Procedure WakeOnLan( MAC, IP : string)');
14684:
14685:
             Function GetDNS : string');
             Function GetIEProxy( protocol : string) : TProxySetting');
Function GetLocalIPs : string');
14686:
14687:
14688: end;
14689:
14690:
14691:
            procedure SIRegister_synaser(CL: TPSPascalCompiler);
14692:
            begin
            AddConstantN('synCR','Char').SetString( #$0d);
Const('synLF','Char').SetString( #$0a);
Const('cSerialChunk','LongInt').SetInt( 8192);
14693:
14694:
14695:
              Const('LockfileDirectory','String').SetString('/var/lock');
14696:
              Const('PortIsClosed', 'LongInt').SetInt( - 1);
14697:
             Const('ErrAlreadyOwned','LongInt').SetInt( 9991);
Const('ErrAlreadyInUse','LongInt').SetInt( 9992);
14698:
14699:
                         'ErrWrongParameter', 'LongInt').SetInt( 9993);
              Const (
14701:
              Const (
                         'ErrPortNotOpen','LongInt').SetInt( 9994);
14702:
              Const('ErrNoDeviceAnswer','LongInt').SetInt( 9995);
14703:
                         'ErrMaxBuffer', 'LongInt').SetInt( 9996);
             Const (
                         'ErrTimeout', 'LongInt').SetInt( 9997);
'ErrNotRead', 'LongInt').SetInt( 9998);
14704:
              Const (
14705:
              Const (
14706:
              Const('ErrFrame','LongInt').SetInt( 9999);
             Const('ErrOverrun','LongInt').SetInt( 10000);
Const('ErrRxOver','LongInt').SetInt( 10001);
14707:
14708:
14709:
              Const (
                         'ErrRxParity', 'LongInt').SetInt( 10002);
14710:
              Const('ErrTxFull','LongInt').SetInt( 10003);
14711:
              Const('dcb_Binary','LongWord').SetUInt( $00000001);
                         'dcb_ParityCheck','LongWord').SetUInt( $00000002);
'dcb_OutxCtsFlow','LongWord').SetUInt( $00000004);
14712:
              Const (
14713:
              Const (
14714:
              Const (
                         'dcb_OutxDsrFlow','LongWord').SetUInt( $00000008);
14715:
                         'dcb_DtrControlMask', 'LongWord').SetUInt( $00000030);
              Const (
                         'dcb_DtrControlDisable','LongWord').SetUInt( $0000000);
'dcb_DtrControlEnable','LongWord').SetUInt( $0000010);
14716:
              Const (
14717:
             Const (
                          'dcb_DtrControlHandshake','LongWord').SetUInt( $00000020);
14718:
              Const (
14719:
                         'dcb_DsrSensivity', 'LongWord').SetUInt( $00000040);
              Const (
             Const('dcb_TXContinueOnXoff','LongWord').SetUInt( $00000080);
Const('dcb_OutX','LongWord').SetUInt( $00000100);
Const('dcb_InX','LongWord').SetUInt( $00000200);
14720:
14721:
14722:
14723:
                         'dcb_ErrorChar', 'LongWord').SetUInt( $00000400);
14724:
                         'dcb_NullStrip','LongWord').SetUInt( $00000800);
              Const (
                         'dcb_RtsControlMask','LongWord').SetUInt( $00003000);
'dcb_RtsControlDisable','LongWord').SetUInt( $00000000);
'dcb_RtsControlEnable','LongWord').SetUInt( $00001000);
14725:
              Const (
14726:
              Const (
14727:
              Const (
14728:
                         'dcb_RtsControlHandshake', 'LongWord').SetUInt( $00002000);
             Const('dcb_RtsControlToggle','LongWord').SetUInt( $00003000);
Const('dcb_AbortOnError','LongWord').SetUInt( $00004000);
Const('dcb_Reserveds','LongWord').SetUInt( $FFFF8000);
14729:
14730:
14731:
              Const('synSB1','LongInt').SetInt(
14733:
              Const('SBlandHalf','LongInt').SetInt( 1);
             Const('synSB2','LongInt').SetInt( 2);
Const('synINVALID_HANDLE_VALUE','LongInt').SetInt( THandle ( - 1 ));
Const('CS7fix','LongWord').SetUInt( $0000020);
14734:
14735:
14736:
               AddTypeS('synTDCB', 'record DCBlength : DWORD; BaudRate : DWORD; Flags : Long' +'int; wReserved : Word; XonLim : Word; XoffLim : Word; ByteSize : Byte; Par'
14737:
14738:
                 +'ity : Byte; StopBits : Byte; XonChar : CHAR; XoffChar : CHAR; ErrorChar :
14739:
                  +'CHAR; EofChar : CHAR; EvtChar : CHAR; wReserved1 : Word; end');
14740:
               //AddTypeS('PDCB', '^TDCB // will not work');
```

```
14742:
           //Const('MaxRates','LongInt').SetInt( 18);
//Const('MaxRates','LongInt').SetInt( 30);
14743:
           //Const('MaxRates','LongInt').SetInt( 19);
           Const('0_SYNC','LongWord').SetUInt( $0080);
Const('synOK','LongInt').SetInt( 0);
14745 .
14746:
           Const('synErr', 'LongInt').SetInt( integer ( - 1 ));
14747:
            AddTypeS('THookSerialReason', '( HR_SerialClose, HR_Connect, HR_CanRead, HR_CanWrite, HR_ReadCount,
14748:
          HR_WriteCount, HR_Wait )');
14749: Type('ThookSerialStatus', Procedure(Sender: TObject; Reason:ThookSerialReason; const Value:string)');
14750:
            SIRegister_ESynaSerError(CL);
SIRegister_TBlockSerial(CL);
14751:
14752:
           Function GetSerialPortNames : string');
14753: end;
14754:
14755:
         procedure SIRegister synaichy(CL: TPSPascalCompiler);
14756: begin
           Const('DLLIconvName', 'String').SetString( 'libiconv.so');
14757:
           Const('DLLIconvName','String').SetString( 'iconv.dll');
AddTypeS('size_t', 'Cardinal');
AddTypeS('iconv_t', 'Integer');
14758 .
14759:
14760:
            //AddTypeS('iconv_t', 'Pointer');
AddTypeS('argptr', 'iconv_t');
14761:
14762:
14763:
           Function SynaIconvOpen( const tocode, fromcode : Ansistring) : iconv_t');
          Function SynalconvOpenTranslit( const tocode, fromcode: Ansistring): iconv_t');
Function SynalconvOpenIgnore( const tocode, fromcode: Ansistring): iconv_t');
14764:
14765:
14766:
           Function SynaIconv( cd : iconv_t; inbuf : AnsiString; var outbuf : AnsiString) : integer');
14767:
           Function SynaIconvClose( var cd : iconv_t) : integer');
           Function SynaIconvCtl( cd : iconv_t; request : integer; argument : argptr) : integer');
Function IsIconvloaded : Boolean');
14768:
14769:
14770:
           Function InitIconvInterface : Boolean');
14771:
           Function DestroyIconvInterface : Boolean');
          Const('ICONV_TRIVIALP','LongInt').SetInt( 0);
Const('ICONV_GET_TRANSLITERATE','LongInt').SetInt( 1);
Const('ICONV_SET_TRANSLITERATE','LongInt').SetInt( 2);
Const('ICONV_GET_DISCARD_ILSEQ','LongInt').SetInt( 3);
14772:
14773:
14774:
14775:
           Const('ICONV_SET_DISCARD_ILSEQ','LongInt').SetInt(4);
14776:
14777: end;
14778:
14779:
         procedure SIRegister_pingsend(CL: TPSPascalCompiler);
14780: begin
14781:
          Const 'ICMP_ECHO', 'LongInt').SetInt( 8);
           Const('ICMP_ECHOREPLY', 'LongInt').SetInt( 0);
Const('ICMP_UNREACH', 'LongInt').SetInt( 3);
14782:
14783:
           Const('ICMP_TIME_EXCEEDED', 'LongInt').SetInt( 11);
Const('ICMP6_ECHO', 'LongInt').SetInt( 128);
14784:
14785:
           Const('ICMP6_ECHOREPLY','LongInt').SetInt( 129);
Const('ICMP6_UNREACH','LongInt').SetInt( 1);
14786:
14787:
           Const('ICMP6_TIME_EXCEEDED','LongInt').SetInt( 3);
14788:
           AddTypeS('TICMPError', '( IE_NoError, IE_Other, IE_TTLExceed, IE_UnreachOt' +'her, IE_UnreachRoute, IE_UnreachAdmin, IE_UnreachAddr, IE_UnreachPort )');
14789:
14790:
14791:
            SIRegister TPINGSend(CL);
14792:
           Function PingHost( const Host : string) : Integer');
           Function TraceRouteHost( const Host : string) : string');
14793:
14794: end;
14795:
14796: procedure SIRegister_asnlutil(CL: TPSPascalCompiler);
14797:
         begin
14798:
         AddConstantN('synASN1_BOOL','LongWord').SetUInt( $01);
          AddConstantN('synASN1_BOOL','LongWord').SetUInt(
Const('synASN1_INT','LongWord').SetUInt( $02);
Const('synASN1_OCTSTR','LongWord').SetUInt( $04);
Const('synASN1_NULL','LongWord').SetUInt( $05);
Const('synASN1_OBJID','LongWord').SetUInt( $06);
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_IPADDR','LongWord').SetUInt( $40);
14799:
14800:
14801:
14802:
14803:
14804:
14805:
14806:
14807:
           Const('synASN1_COUNTER','LongWord').SetUInt( $41);
           Const('synASN1_GAUGE','LongWord').SetUInt( $42);
14808:
           Const('synASN1_TIMETICKS','LongWord').SetUInt( $43);
Const('synASN1_OPAQUE','LongWord').SetUInt( $44);
Function synASNEncOIDItem( Value : Integer) : AnsiString');
14809:
14810:
14811:
           Function synASNDecOIDItem( var Start : Integer; const Buffer : AnsiString) : Integer');
Function synASNEncLen( Len : Integer) : AnsiString');
14812:
14813:
           Function synASNDecLen( var Start : Integer; const Buffer : AnsiString) : Integer');
14814:
           Function synASNEncInt( Value : Integer) : AnsiString');
Function synASNEncUInt( Value : Integer) : AnsiString');
14815:
14816:
           Function synASNObject( const Data : AnsiString; ASNType : Integer) : AnsiString');
14817:
           Function synASNItem(var Start:Integer; const Buffer:AnsiString; var ValueType:Integer):AnsiString;
14818:
14819:
           Function synMibToId( Mib : String) : AnsiString');
           Function synIdToMib( const Id : AnsiString) : String');
           Function synIntMibToStr( const Value : AnsiString) : AnsiString');
14821:
14822:
           Function ASNdump( const Value : AnsiString) : AnsiString');
          Function GetMailServers( const DNSHost, Domain : AnsiString; const Servers:TStrings): Boolean');
Function LDAPResultDump( const Value : TLDAPResultList) : AnsiString');
14823:
14824:
14825: end;
14826:
14827:
         procedure SIRegister ldapsend(CL: TPSPascalCompiler);
14828: begin
14829: 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);
Const('LDAP_ASN1_SEARCH_REQUEST', 'LongWord').SetUInt( $63);
14830:
14831:
14832:
14833:
           Const('LDAP_ASN1_SEARCH_ENTRY','LongWord').SetUInt( $64);
Const('LDAP_ASN1_SEARCH_DONE','LongWord').SetUInt( $65);
14834:
14835:
                     'LDAP_ASN1_SEARCH_REFERENCE', 'LongWord').SetUInt( $73);
14836:
           Const (
           Const('LDAP_ASN1_MODIFY_REQUEST','LongWord').SetUInt( $66);
Const('LDAP_ASN1_MODIFY_RESPONSE','LongWord').SetUInt( $67);
14837:
14838:
           14839:
14840:
14841:
14842:
           Const('LDAP_ASN1_MODIFYDN_REQUEST', 'LongWord').SetUInt( $6C);
Const('LDAP_ASN1_MODIFYDN_RESPONSE', 'LongWord').SetUInt( $6D);
14843:
14844:
           Const ('LDAP_ASN1_COMPARE_REQUEST', LongWord').SetUInt ($6E);
Const ('LDAP_ASN1_COMPARE_RESPONSE', 'LongWord').SetUInt ($6F);
14845:
14846:
           Const('LDAP_ASN1_ABANDON_REQUEST','LongWord').SetUInt( $70);
Const('LDAP_ASN1_EXT_REQUEST','LongWord').SetUInt( $77);
Const('LDAP_ASN1_EXT_RESPONSE','LongWord').SetUInt( $78);
14847 .
14848:
14849:
             SIRegister_TLDAPAttribute(CL);
14850:
14851:
            SIRegister_TLDAPAttributeList(CL);
14852:
            SIRegister_TLDAPResult(CL);
            SIRegister_TLDAPResultList(CL);
14853:
            AddTypeS('TLDAPModifyOp', '( MO_Add, MO_Delete, MO_Replace )');
AddTypeS('TLDAPSearchScope', '( SS_BaseObject, SS_SingleLevel, SS_WholeSubtree )');
AddTypeS('TLDAPSearchAliases', '( SA_NeverDeref, SA_InSearching, SA_FindingBaseObj, SA_Always )');
14854:
14855:
14856:
14857:
            SIRegister TLDAPSend(CL);
14858:
          Function LDAPResultDump( const Value : TLDAPResultList) : AnsiString');
14859:
         end;
14860:
14861:
14862: procedure SIRegister slogsend(CL: TPSPascalCompiler);
14863: begin
           Const('cSysLogProtocol','String').SetString( '514');
14864:
14865:
           Const('FCL_Kernel','LongInt').SetInt( 0);
14866:
           Const('FCL_UserLevel','LongInt').SetInt( 1);
Const('FCL_MailSystem','LongInt').SetInt( 2);
14867:
           Const('FCL_System','LongInt').SetInt( 3);
Const('FCL_Security','LongInt').SetInt( 4)
Const('FCL_Syslogd','LongInt').SetInt( 5);
14868:
14869:
14870:
           Const('FCL_Printer','LongInt').SetInt( 6);
14871:
           Const('FCL_News','LongInt').SetInt( 7);
Const('FCL_UUCP','LongInt').SetInt( 8);
Const('FCL_Clock','LongInt').SetInt( 9);
14872:
14873:
14874:
           Const('FCL_Authorization','LongInt').SetInt( 10);
Const('FCL_FTP','LongInt').SetInt( 11);
Const('FCL_NTP','LongInt').SetInt( 12);
14875:
14876:
14877:
           Const('FCL_LogAudit','LongInt').SetInt( 13);
Const('FCL_LogAlert','LongInt').SetInt( 14);
14878:
14879:
14880:
           Const('FCL Time', 'LongInt').SetInt( 15);
14881:
           Const('FCL_Local0','LongInt').SetInt( 16);
           Const('FCL_Locall','LongInt').SetInt( 17);
14882:
14883:
           Const('FCL_Local2','LongInt').SetInt( 18);
           Const('FCL_Local3','LongInt').SetInt( 19);
14884:
           Const('FCL_Local4','LongInt').SetInt( 20);
14885:
14886:
           Const('FCL_Local5','LongInt').SetInt( 21);
14887:
           Const('FCL_Local6','LongInt').SetInt( 22);
14888:
           Const('FCL_Local7','LongInt').SetInt( 23);
            AddTypeS('TSyslogSeverity',
+' Notice, Info, Debug )');
                                                     '( Emergency, Alert, Critical, Error, Warning,
14889:
14890:
14891:
             SIRegister_TSyslogMessage(CL);
14892.
            SIRegister_TSyslogSend(CL);
14893:
           Function ToSysLog(const SyslogServer:string; Facil:Byte; Sever:TSyslogSeverity; const
         Content: string): Boolean;
14894: end;
14895:
14896:
14897: procedure SIRegister_mimemess(CL: TPSPascalCompiler);
14898: begin
            AddTypeS('TMessPriority', '( MP_unknown, MP_low, MP_normal, MP_high )');
14899:
14900:
            SIRegister_TMessHeader(CL);
14901:
            //AddTypeS('TMessHeaderClass', 'class of TMessHeader');
SIRegister TMimeMess(CL);
14902:
14903: end;
14904:
14905: procedure SIRegister_mimepart(CL: TPSPascalCompiler);
14906: begin
            (FindClass('TOBJECT'),'TMimePart');
14907:
            AddTypeS('ThookWalkPart', 'Procedure ( const Sender : TMimePart)');
AddTypeS('TMimePrimary', '( MP_TEXT, MP_MULTIPART, MP_MESSAGE, MP_BINARY )');
AddTypeS('TMimeEncoding', '( ME_7BIT, ME_8BIT, ME_QUOTED_PRINTABLE, ME_BASE64, ME_UU, ME_XX )');
14908:
14909:
14910:
14911:
            SIRegister TMimePart(CL);
14912:
           Const('MaxMimeType','LongInt').SetInt( 25);
           Function GenerateBoundary : string')
14913:
14914: end;
14915:
14916: procedure SIRegister_mimeinln(CL: TPSPascalCompiler);
```

```
14918:
         Function InlineDecode( const Value : string; CP : TMimeChar) : string');
14919:
          Function InlineEncode( const Value : string; CP, MimeP : TMimeChar) : string');
          Function NeedInline( const Value : AnsiString) : boolean');
         Function InlineCodeEx( const Value : string; FromCP : TMimeChar) : string');
Function InlineCode( const Value : string) : string');
14921 .
14922:
         Function InlineEmailEx( const Value : string; FromCP : TMimeChar) : string');
14923:
         Function InlineEmail( const Value : string) : string');
14924:
14925: end;
14926:
14927: procedure SIRegister ftpsend(CL: TPSPascalCompiler);
14928: begin
         Const('cFtpProtocol','String').SetString('21')
         Const('cFtpDataProtocol','String').SetString( '20');
Const('FTP_OK','LongInt').SetInt( 255);
Const('FTP_ERR','LongInt').SetInt( 254);
14930:
14931:
14932:
14933:
           AddTypeS('TFTPStatus', 'Procedure ( Sender : TObject; Response : Boolean; const Value : string)');
           SIRegister_TFTPListRec(CL);
14934:
14035 .
           SIRegister_TFTPList(CL);
14936:
          SIRegister TFTPSend(CL);
         Function FtpGetFile( const IP, Port, FileName, LocalFile, User, Pass : string) : Boolean');
Function FtpPutFile( const IP, Port, FileName, LocalFile, User, Pass : string) : Boolean');
14937:
14938:
         Function FtpInterServerTransfer(const FromIP,FromPort, FromFile, FromUser, FromPass: string; const ToIP,
14939:
        ToPort, ToFile, ToUser, ToPass : string) : Boolean');
14940: end;
14941:
14942: procedure SIRegister_httpsend(CL: TPSPascalCompiler);
14943: begin
        Const('cHttpProtocol','String').SetString( '80');
14944:
14945:
           AddTypeS('TTransferEncoding', '( TE_UNKNOWN, TE_IDENTITY, TE_CHUNKED )');
14946:
           SIRegister THTTPSend(CL);
14947:
         Function HttpGetText( const URL : string; const Response : TStrings) : Boolean');
         Function HttpGetBinary( const URL : string; const Response : TStream) : Boolean');
Function HttpPostBinary( const URL : string; const Data : TStream) : Boolean');
14948:
14949:
14950:
         Function HttpPostURL( const URL, URLData : string; const Data : TStream) : Boolean');
         Function HttpPostFile(const URL,FieldName,FileName:string;const Data:TStream;const
        ResultData:TStrings):Boolean;
14952: end;
14953:
14954: procedure SIRegister_smtpsend(CL: TPSPascalCompiler);
14955: begin
14956: Const('cSmtpProtocol','String').SetString( '25');
          SIRegister_TSMTPSend(CL);
14957:
         Function SendToRaw(const MailFrom, MailTo, SMTPHost: string; const MailData: TStrings; const Username,
14958:
        Password:string): Bool;
        Function SendTo(const MailFrom, MailTo, Subject, SMTPHost:string; const MailData: TStrings): Boolean;
14960: Function SendToEx(const MailFrom, MailTo, Subject, SMTPHost: string; const MailData: TStrings; const
        Username, Password : string):Boolean');
14961: end;
14962:
14963:
        procedure SIRegister snmpsend(CL: TPSPascalCompiler);
14964: begin
14965:
         Const('cSnmpProtocol','String').SetString('161');
         Const('cSnmpTrapProtocol', 'String').SetString( '162');
Const('SNMP_V1', 'LongInt').SetInt( 0);
Const('SNMP_V2C', 'LongInt').SetInt( 1);
14966:
14967:
14968:
                  'SNMP_V3', 'LongInt').SetInt( 3);
14969:
         Const (
14970:
          Const (
                  'PDUGetRequest', 'LongWord').SetUInt( $A0);
14971:
          Const('PDUGetNextRequest', 'LongWord').SetUInt( $A1);
14972:
         Const('PDUGetResponse','LongWord').SetUInt( $A2);
Const('PDUSetRequest','LongWord').SetUInt( $A3);
14973:
14974:
                  'PDUTrap', 'LongWord').SetUInt( $A4)
         Const (
         Const('PDUGetBulkRequest','LongWord').SetUInt( $A5);
Const('PDUInformRequest','LongWord').SetUInt( $A6);
14975:
14976:
         Const('PDUTrapV2','LongWord').SetUInt( $A7);
Const('PDUReport','LongWord').SetUInt( $A8);
Const('ENoError','LongInt').SetInt( 0);
14977:
14978:
14979:
14980:
          Const('ETooBig','LongInt').SetInt( 1);
         Const('ENoSuchName','LongInt').SetInt( 2);
Const('EBadValue','LongInt').SetInt( 3);
14981:
14982:
         Const('EReadOnly','LongInt').SetInt(4);
Const('EGenErr','LongInt').SetInt(5);
14983:
14984:
         Const('ENoAccess','LongInt').SetInt( 6);
Const('EWrongType','LongInt').SetInt( 7);
Const('EWrongLength','LongInt').SetInt( 8);
14985:
14986:
14987:
14988:
         Const (
                  'EWrongEncoding','LongInt').SetInt( 9);
         Const('EWrongValue','LongInt').SetInt( 10);
Const('ENoCreation','LongInt').SetInt( 11);
14989:
14990:
         Const('EInconsistentValue','LongInt').SetInt( 12);
Const('EResourceUnavailable','LongInt').SetInt( 13);
14991:
14992:
         Const('ECommitFailed','LongInt').SetInt( 14
Const('EUndoFailed','LongInt').SetInt( 15);
14993:
14994:
14995:
          Const('EAuthorizationError','LongInt').SetInt( 16);
         Const('ENotWritable','LongInt').SetInt( 17);
Const('EInconsistentName','LongInt').SetInt( 18);
14996:
14997:
           AddTypeS('TV3Flags',
                                      '( NoAuthNoPriv, AuthNoPriv, AuthPriv )');
14998:
           AddTypeS('TV3Auth', '( AuthMD5, AuthSHA1 )');
AddTypeS('TV3Priv', '( PrivDES, Priv3DES, PrivAES )');
14999:
15000:
15001:
           SIRegister_TSNMPMib(CL);
           AddTypeS('TV3Sync', 'record EngineID : AnsiString; EngineBoots : integer; '
```

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15003:
           +'EngineTime : integer; EngineStamp : Cardinal; end');
15004:
         SIRegister_TSNMPRec(CL);
15005:
         SIRegister_TSNMPSend(CL);
15006:
        Function SNMPGet( const OID, Community, SNMPHost : AnsiString; var Value : AnsiString) : Boolean');
15007:
        Function SNMPSet( const OID, Community, SNMPHost, Value: AnsiString; ValueType: Integer): Boolean');
15008:
        Function SNMPGetNext(var OID:AnsiString;const Community,SNMPHost:AnsiString;var Value:AnsiString):Boolean;
15009:
        Function SNMPGetTable(const BaseOID, Community, SNMPHost : AnsiString; const Value : TStrings): Boolean;
        Function SNMPGetTableElement(const BaseOID, RowID, ColID, Community, SNMPHost: AnsiStr; var Value: AnsiStr):
15010:
       Boolean;
15011: 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');
15013: end;
15014:
15015: procedure SIRegister_NetWork(CL: TPSPascalCompiler);
15016:
       begin
15017:
       Function GetDomainName2: AnsiString');
        Function GetDomainController( Domain : AnsiString) : AnsiString');
15018:
15019:
        Function GetDomainUsers( Controller : AnsiString) : AnsiString');
         Function GetDomainGroups( Controller : AnsiString) : AnsiString');
15020:
        Function GetDateTime( Controller : AnsiString) : TDateTime');
15021:
        Function GetFullName2( Controller, UserID : AnsiString) : AnsiString');
15022:
15023: end;
15024:
15025:
       procedure SIRegister_wwSystem(CL: TPSPascalCompiler);
15026: begin
         AddTypeS('TwwDateOrder', '( doMDY, doDMY, doYMD )');
AddTypeS('TwwDateTimeSelection', '( wwdsDay, wwdsMonth, wwdsYear, wwdsHour'
15027:
15028:
           +', wwdsMinute, wwdsSecond, wwdsAMPM )');
15029:
15030:
        Function wwStrToDate( const S : string) : boolean');
15031:
        Function wwStrToTime( const S : string) : boolean');
15032:
        Function wwStrToDateTime( const S : string) : boolean');
15033:
        Function wwStrToTimeVal( const S : string) : TDateTime');
        Function wwStrToDateVal( const S : string)
                                                       : TDateTime');
15034:
15035:
        Function wwStrToDateTimeVal( const S : string) : TDateTime');
        Function wwStrToInt( const S : string) : boolean');
Function wwStrToFloat( const S : string) : boolean');
15036:
15037:
15038:
        Function wwGetDateOrder( const DateFormat : string) : TwwDateOrder');
        Function wwNextDay( Year, Month, Day : Word) : integer');
Function wwPriorDay( Year, Month, Day : Word) : integer');
15039:
15040:
        Function wwDoEncodeDate( Year, Month, Day: Word; var Date: TDateTime): Boolean');
Function wwDoEncodeTime( Hour, Min, Sec, MSec: Word; var Time: TDateTime): Boolean');
15041:
15042:
        \textbf{Function} \ \ ww \texttt{GetDateTimeCursorPosition} (SelStart: int; \texttt{Text}: \textbf{string}; \texttt{TimeOnly}: \texttt{Bool}) : \texttt{TwwDateTimeSelection'}); \\
15043:
        Function wwGetTimeCursorPosition( SelStart : integer; Text : string) : TwwDateTimeSelection');
Function wwScanDate( const S : string; var Date : TDateTime) : Boolean');
15044:
15045:
        Function wwScanDateEpoch( const S : string; var Date : TDateTime; Epoch : integer) : Boolean');
15046:
        Procedure wwSetDateTimeCursorSelection(dateCursor:TwwDateTimeSelection;edit:TCustomEdit;TimeOnly:Bool;
15048:
        Function wwStrToFloat2( const S : string; var FloatValue : Extended; DisplayFormat: string): boolean');
15049: end;
15050:
15051: unit uPSI Themes;
15052: Function ThemeServices : TThemeServices');
15053: Function ThemeControl( AControl: TControl): Boolean');
15054: Function UnthemedDesigner( AControl : TControl) : Boolean');
15055: procedure SIRegister_UDDIHelper(CL: TPSPascalCompiler);
15056: begin
15057: Function GetBindingkeyAccessPoint( const Operator : String; const key : String) : String');
15058: end;
15059: Writ uPSC menus;
15060:
       CL.AddDelphiFunction('Function StripHotkey( const Text : string) : string');
15061:
        Function GetHotkey( const Text : string) : string');
15062:
        Function AnsiSameCaption( const Text1, Text2 : string) : Boolean');
15063:
        Function IsAltGRPressed : boolean');
15064:
15065: procedure SIRegister IdIMAP4Server(CL: TPSPascalCompiler);
15066:
15067:
         TCommandEvent', 'Procedure(Thread:TIdPeerThread; const Tag, CmdStr:String; var Handled:Boolean);
         SIRegister_TIdIMAP4Server(CL);
15068:
15069: end;
15070:
15071:
15072: Functions max hex in the box maxbox
15073: functionslist.txt
15074: FunctionsList1 3.9.9.86/88/91
15075:
15077: Procedure
15078: PROCEDURE SIZE 7401 6792 6310 5971 4438 3797 3600 3385 3296 2883 2255
15081: Procedure ( Agg : TAggregate)
15082: Procedure ( ASender : TComponent; const AReplyStatus : TReplyStatus)
15083: Procedure ( ASender : TComponent; const AString : String; var AMsg : TIdMessage)
                    ASender : TComponent; var AMsg : TIdMessage)
15084: Procedure (
15085: Procedure ( ASender : TObject; const ABytes : Integer)
15086: Procedure ( ASender : TObject; VStream : TStream)
15087: Procedure ( AThread : TIdThread)
15088: Procedure ( AWebModule : TComponent)
```

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15089: Procedure ( Column : TColumn)
15090: Procedure ( const AUsername : String; const APassword : String; AAuthenticationResult : Boolean)
15091: Procedure (
                      const iStart : integer; const sText : string)
15092: Procedure
                     Control : TCustomTabControl; TabIndex : Integer; const Rect : TRect; Active : Boolean)
Database : TDatabase; LoginParams : TStrings)
15093: Procedure
15094: Procedure (DataSet:TCustomClientDataSet;E:EReconcileError;UpdateKind:TUpdateKind;var Action:
        TReconcileAction)
15095: Procedure (
                      DATASET : TDATASET)
15096: Procedure
                      {\tt DataSet:TDataSet}; \ {\tt E:EDatabaseError;UpdateKind:TUpdateKind;war} \ {\tt UpdateAction:} \ {\tt TUpdateAction})
                      DATASET: TDATASET; E: TObject; var ACTION: TDATAACTION)

DataSet: TDataSet; UpdateKind: TUpdateKind; var UpdateAction: TUpdateAction)
15097: Procedure
15098: Procedure
                      DATASET : TDATASET; var ACCEPT : BOOLEAN)
15099: Procedure
15100: Procedure
                      DBCtrlGrid : TDBCtrlGrid; Index : Integer)
15101: Procedure ( Done : Integer)
15102: Procedure ( HeaderControl : TCustomHeaderControl; Section : THeaderSection)
15103: Procedure (HeaderControl:TCustomHeaderControl;Section:THeaderSection; const Rect:TRect;Pressed:Boolean)
        (\texttt{HeaderControl:} TCustom \texttt{HeaderControl}; Section: THeaderSection; \texttt{Width:} Integer; State: TSectionTrackState)) \\
15105: Procedure ( HeaderControl : THeaderControl; Section : THeaderSection)
15106: Procedure (HeaderControl:THeaderControl;Section: THeaderSection; const Rect:TRect; Pressed : Boolean)
15107: Procedure (HeaderControl:THeaderControl;Section:THeaderSection;Width:Integer;State : TSectionTrackState)
15108: Procedure (Sender: TCustomListView; const ARect: TRect; Stage: TCustomDrawStage; var DefaultDraw: Boolean)
15109: Procedure
                    ( Sender : TCustomListView; const ARect : TRect; var DefaultDraw : Boolean)
15110: Procedure
                      Sender :
                                 TCustomListView; Item : TListItem; Rect : TRect; State : TOwnerDrawState)
15111: Procedure
                                 TCustomTreeView; const ARect : TRect; var DefaultDraw : Boolean)
                      Sender
15112: Procedure
                      SENDER : TFIELD; const TEXT : String)
15113: Procedure
                      SENDER : TFIELD; var TEXT : STRING; DISPLAYTEXT : BOOLEAN)
                                TIdTelnet; const Buffer : String)
TIdTelnet; Status : TIdTelnetCommand)
15114: Procedure
                      Sender :
15115: Procedure
                      Sender :
                                TOBJECT; ACANVAS : TCANVAS; ARECT : TRECT; SELECTED : BOOLEAN)
TOBJECT; ACANVAS : TCANVAS; ARECT : TRECT; STATE : TOWNERDRAWSTATE)
15116: Procedure
                      SENDER :
15117: Procedure
                      SENDER :
                                 TOBJECT; ACANVAS : TCANVAS; var WIDTH, HEIGHT : INTEGER)
15118: Procedure
                      SENDER :
                                TObject; ACol, ARow : Longint; const Value : string)
15119: Procedure
                      Sender :
15120: Procedure
                      Sender :
                                 TObject; ACol, ARow : Longint; Rect : TRect; State : TGridDrawState)
                                 TObject; ACol, ARow : Longint; var CanSelect : Boolean)
15121: Procedure
                      Sender :
15122: Procedure
                      Sender :
                                TObject; ACol, ARow : Longint; var Value : string)
                      Sender: TObject; Button: TMPBtnType)
Sender: TObject; Button: TMPBtnType; var DoDefault: Boolean)
15123: Procedure
15124: Procedure (
15125: Procedure
                      Sender :
                                 TObject; Button : TUDBtnType)
15126: Procedure
                      Sender : TObject; Canvas : TCanvas; PageRect : TRect; var DoneDrawing : Boolean)
15127: Procedure (
                      Sender: TObject; ClientSocket: TServerClientWinSocket; var SocketThread: TServerClientThread)
                                TObject; Column : TListColumn)
TObject; Column : TListColumn; Point : TPoint)
                      Sender :
15128: Procedure
15129: Procedure (
                      Sender :
15130: Procedure
                      Sender : TObject; Connecting : Boolean)
15131: Procedure (Sender:TObject;const PapSize:SmallInt;const Orient:TPrinterOrient;const PageTy:TPageTy;var
        DoneDrawing:Bool
15132: Procedure (Sender: TObject; const Rect : TRect; DataCol : Integer; Column: TColumn; State : TGridDrawState)
                     Sender : TObject; const Rect : TRect; Field : TField; State : TGridDrawState)
15133: Procedure
15134: Procedure
                     Sender: TObject; const UserString:string:var DateAndTime:TDateTime;var AllowChange:Boolean)
                                TObject; E : Exception; var Handled : Boolean)
TObject; FromIndex, ToIndex : Longint)
15135: Procedure
                      Sender :
15136: Procedure
                      Sender :
15137: Procedure
                      Sender :
                                 TObject; FromSection, ToSection: THeaderSection; var AllowDrag: Boolean)
15138: Procedure
                                 TObject; Index : LongInt)
                      Sender :
15139: Procedure
                      Sender :
                                 TObject; Item : TListItem)
15140: Procedure
                      Sender :
                                 TObject; Item : TListItem; Change : TItemChange)
                                 TObject; Item: TListItem; Change: TItemChange; var AllowChange: Boolean)
15141: Procedure
                      Sender :
15142: Procedure
                      Sender :
                                 TObject; Item : TListItem; Selected : Boolean)
15143: Procedure
                                 TObject; Item : TListItem; var AllowEdit : Boolean)
                      Sender :
                                TObject; Item: TListItem; var S: string)
TObject; Item1, Item2: TListItem; Data: Integer; var Compare: Integer)
TObject; ModalResult: TModalResult; var CanClose: Boolean)
15144: Procedure
                      Sender :
15145: Procedure
                      Sender :
15146: Procedure
                      Sender :
                                 TObject; Month : LongWord; var MonthBoldInfo : LongWord)
15147: Procedure
                      Sender
15148: Procedure
                      Sender :
                                 TObject; NewTab : Integer; var AllowChange : Boolean)
15149: Procedure
                      Sender :
                                 TObject; Node : TTreeNode)
                      Sender :
                                 TObject; Node: TTreeNode; var AllowChange: Boolean)
15150: Procedure
                                 TObject; Node : TTreeNode; var AllowCollapse : Boolean)
15151: Procedure
                      Sender
15152: Procedure
                                 TObject; Node : TTreeNode; var AllowEdit : Boolean)
                      Sender :
15153: Procedure
                      Sender :
                                TObject; Node : TTreeNode; var AllowExpansion : Boolean)
15154: Procedure
                      Sender :
                                TObject; Node: TTreeNode; var S: string)
TObject; Node1, Node2: TTreeNode; Data: Integer; var Compare: Integer)
15155: Procedure
                      Sender :
15156: Procedure
                                 TObject; NumObjects, NumChars : Integer; var SaveClipboard : Boolean)
                      Sender :
15157: Procedure
                      Sender : TObject; Rect : TRect)
15158: Procedure
                      Sender : TObject; Request : TWebRequest; Response : TWebResponse; var Handled : Boolean)
15159: Procedure (Sender:TObject;Shift:TShiftState;X,Y:Integer;Orient:TPageScrollerOrientation;var Delta:Int
15160: Procedure
                      Sender : TObject; Socket : TCustomWinSocket)
15161: Procedure
                     Sender:TObject; Socket:TCustomWinSocket;ErrorEvent: TErrorEvent; var ErrorCode : Integer)
                     Sender : TObject; Socket : TCustomWinSocket; SocketEvent : TSocketEvent)
Sender : TObject; Socket : TSocket; var ClientSocket : TServerClientWinSocket)
15162: Procedure
15163: Procedure
                      SENDER :
                                 TOBJECT; SOURCE : TMENUITEM; REBUILD : BOOLEAN)
15164: Procedure
                                 TObject; StartPos, EndPos: Integer; var AllowChange: Boolean)
15165: Procedure
                      Sender :
                                TObject; TabCanvas: TCanvas; R: TRect; Index: Integer; Selected: Boolean)
TObject; TabIndex: Integer; var ImageIndex: Integer)
TObject; Thread: TServerClientThread)
15166: Procedure
                      Sender :
15167: Procedure
                      Sender :
15168: Procedure
                      Sender :
15169: Procedure
                      Sender :
                                 TObject; TickCount : Cardinal; var Reset : Boolean)
                                 TObject; Username, Password : string)
15170: Procedure
                      Sender
15171: Procedure ( Sender : Tobject; var AllowChange : Boolean)

15172: Procedure ( Sender : Tobject; var AllowChange : Boolean; NewValue : SmallInt; Direction:TUpDownDirection)

15173: Procedure ( Sender : Tobject; var AllowChange : Boolean; NewValue : SmallInt; Direction:TUpDownDirection)

15174: Procedure ( Sender : Tobject; var Caption : string; var Alignment : THTMLCaptionAlignment)

15174: Procedure ( Sender : Tobject; var Continue : Boolean)
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15175: Procedure (Sender:TObject; var dest:string; var NumRedirect:Int; var Handled:bool; var VMethod:TIdHTTPMethod)
15176: Procedure ( Sender : TObject; var Username : string)
15177: Procedure (
                    Sender :
                              TObject; Wnd : HWND)
15178: Procedure
                    Sender : TToolbar; Button : TToolButton)
15179: Procedure ( Sender : TToolBar; const ARect : TRect; Stage : TCustomDrawStage; var DefaultDraw : Boolean)
15180: Procedure ( Sender : TToolBar; const ARect : TRect; var DefaultDraw : Boolean)
15181: Procedure (
                    Sender : TToolbar; Index : Integer; var Allow : Boolean)
                    Sender : TToolbar; Index : Integer; var Button : TToolButton)
15182: Procedure (
15183: Procedure ( StatusBar : TCustomStatusBar; Panel : TStatusPanel; const Rect : TRect)
15184: Procedure ( StatusBar : TStatusBar; Panel : TStatusPanel; const Rect : TRect)
15185: Procedure (var FieldNames: TWideStrings; SQL: WideString; var BindAllFields: Boolean; var TableName: WideString)
15186: Procedure ( var FieldNames : TWideStrings; SQL : WideString; var TableName : WideString)
15187: procedure (Sender: TObject)
15188: procedure (Sender: TObject; var Done: Boolean)
15189: procedure (Sender: TObject; var Key: Word; Shift: TShiftState);
15190: procedure _T(Name: tbtString; v: Variant);
15191: Procedure AbandonSignalHandler( RtlSigNum : Integer)
15192: Procedure Abort
15193: Procedure About1Click( Sender : TObject)
15194: Procedure Accept( Socket : TSocket)
15195: Procedure AESSymetricExecute(const plaintext, ciphertext, password: string)
15196: Procedure AESEncryptFile(const plaintext, ciphertext, password: string)
15197: Procedure AESDecryptFile(const replaintext, ciphertext, password: string)
15198: Procedure AESEncryptString(const plaintext: string; var ciphertext: string; password: string)
15199: Procedure AESDecryptString(var plaintext: string; const ciphertext: string; password: string)
15200: Procedure Add( Addend1, Addend2 : TMyBigInt)
15201: Procedure ADD( const AKEY, AVALUE : VARIANT)
15202: Procedure Add( const Key: string; Value: Integer)
15203: Procedure ADD( const NAME, FIELDS: string; OPTIONS: TINDEXOPTIONS)
15204: Procedure ADD( FIELD : TFIELD)
15205: Procedure ADD( ITEM : TMENUITEM)
15206: Procedure ADD( POPUP : TPOPUPMENU)
15207: Procedure AddCharacters( xCharacters: TCharSet)
15208: Procedure AddDriver( const Name : string; List : TStrings)
15209: Procedure AddImages( Value : TCustomImageList)
15210: Procedure AddIndex( const Name, Fields : string; Options : TIndexOptions; const DescFields : string)
15211: Procedure AddLambdaTransitionTo( oState : TniRegularExpressionState)
15212: Procedure AddLoader( Loader : TBitmapLoader)
15213: Procedure ADDPARAM( VALUE : TPARAM)
15214: Procedure AddPassword( const Password: string)
15215: Procedure AddStandardAlias( const Name, Path, DefaultDriver : string)
15216: Procedure AddState( oState : TniRegularExpressionState)
15217: Procedure AddStrings( Strings : TStrings);
15218: procedure AddStrings(Strings: TStrings);
15219: Procedure AddStrings1( Strings : TWideStrings);
15220: Procedure AddStringTerm( var sString: string; const sTerm: string; const sSeparator: string)
15221: Procedure AddToRecentDocs( const Filename : string)
15222: Procedure AddTransitionTo( oState : TniRegularExpressionState; xCharacters : TCharset)
15223: Procedure AllFunctionsList1Click( Sender : TObject)
15224: procedure AllObjectsList1Click(Sender: TObject);
15225: Procedure Allocate( AAllocateBytes : Integer)
15226: procedure AllResourceList1Click(Sender: TObject);
15227: Procedure AnsiAppend( var dst : AnsiString; const src : AnsiString)
15228: Procedure AnsiAssign( var dst : AnsiString; var src : AnsiString)
15229: Procedure AnsiDelete( var dst : AnsiString; index, count : Integer)
15230: Procedure AnsiFree( var s : AnsiString)
15231: Procedure AnsiFromWide( var dst : AnsiString; const src : WideString)
15232: Procedure AnsiInsert( var dst : AnsiString; const src : AnsiString; index : Integer)
15233: Procedure AnsiSetLength( var dst : AnsiString; len : Integer)
15234: Procedure AnsiString to stream( const Value : ansistring; Destin : TStream)
15235: Procedure AntiFreeze;
15236: Procedure APPEND
15237: Procedure Append( const S : WideString)
15238: procedure Append(S: string);
15239: Procedure AppendByte( var VBytes: TIdBytes; AByte: byte)
15240: Procedure AppendBytes( var VBytes: TIdBytes; AAdd: TIdBytes)
15241: Procedure AppendChunk( Val : OleVariant)
15242: Procedure AppendData( const Data : OleVariant; HitEOF : Boolean)
15243: Procedure AppendStr( var Dest : string; S : string)
15244: Procedure AppendString( var VBytes: TIdBytes; const AStr: String; ALength: Integer)
15245: Procedure ApplyRange
15246: procedure Arc(X1, Y1, X2, Y2, X3, Y3, X4, Y4: Integer);
15247: Procedure Arrange( Code: TListArrangement)
15248: procedure Assert(expr: Boolean; const msg: string);
15249: procedure Assert2(expr : Boolean; const msg: string);
15250: Procedure Assign( AList : TCustomBucketList)
15251: Procedure Assign( Other : TObject)
15252: Procedure Assign( Source : TDragObject)
15253: Procedure Assign( Source : TPersistent)
15254: Procedure Assign(Source: TPersistent)
15255: procedure Assign2(mystring, mypath: string);
15256: Procedure AssignCurValues( Source : TDataSet);
15257: Procedure AssignCurValues1( const CurValues : Variant);
15258: Procedure ASSIGNFIELD( FIELD : TFIELD)
15259: Procedure ASSIGNFIELDVALUE( FIELD : TFIELD; const VALUE : VARIANT)
15260: Procedure AssignFile(var F: Text; FileName: string)
15261: procedure AssignFile(var F: TextFile; FileName: string)
15262: procedure AssignFileRead(var mystring, myfilename: string);
15263: procedure AssignFileWrite(mystring, myfilename: string);
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15264: Procedure AssignTo( Other : TObject)
15265: Procedure AssignValues( Value : TParameters)
15266: Procedure ASSIGNVALUES( VALUE : TPARAMS)
15267: Procedure AssociateExtension( IconPath, ProgramName, Path, Extension : string)
15268: Procedure Base64_to_stream( const Base64 : ansistring; Destin : TStream)
15269: Procedure Base64ToVar( NatData : Pointer; const SoapData : WideString);
15270: Procedure Base64ToVar1( var V : Variant; const SoapData : WideString);
15271: Procedure BcdAdd( const bcdIn1, bcdIn2 : TBcd; var bcdOut : TBcd)
15272: Procedure BcdDivide( Dividend, Divisor : string; var bcdOut : TBcd);
15273: Procedure BcdDivide1( const Dividend, Divisor : TBcd; var bcdOut : TBcd);
15274: Procedure BcdDivide2( const Dividend : TBcd; const Divisor : Double; var bcdOut : TBcd);
15275: Procedure BcdDivide3( const Dividend : TBcd; const Divisor : string; var bcdOut : TBcd);
15276: Procedure BcdMultiply( const bdIn1, bcdIn2: TBcd; var bcdOut: TBcd);
15277: Procedure BcdMultiply( const bcdIn1, bcdIn2: TBcd; var bcdOut: TBcd);
15277: Procedure BcdMultiply1( const bcdIn: TBcd; const DoubleIn: Double; var bcdOut: TBcd);
15278: Procedure BcdMultiply2( const bcdIn: TBcd; const StringIn: string; var bcdOut: TBcd);
15279: Procedure BcdMultiply3( StringIn1, StringIn2: string; var bcdOut: TBcd);
15280: Procedure BcdSubtract( const bcdIn1, bcdIn2 : TBcd; var bcdOut : TBcd)
15281: Procedure BcdToBytes( Value : TBcd; Bytes : array of byte)
15282: procedure Beep
15283: Procedure BeepOk
15284: Procedure BeepQuestion
15285: Procedure BeepHand
15286: Procedure BeepExclamation
15287: Procedure BeepAsterisk
15288: Procedure BeepInformation
15289: procedure BEGINDRAG(IMMEDIATE:BOOLEAN)
15290: Procedure BeginLayout
15291: Procedure BeginTimer( const Delay, Resolution : Cardinal)
15292: Procedure BeginUpdate
15293: procedure BeginUpdate;
15294: procedure BigScreen1Click(Sender: TObject);
15295: procedure BinToHex(Buffer: PChar; Text: PChar; BufSize: Integer);
15296: Procedure BitsToBooleans( const Bits : Byte; var B : TBooleanArray; AllBits : Boolean);
15297: Procedure BitsToBooleans1( const Bits : Word; var B : TBooleanArray; AllBits : Boolean);
15298: Procedure BitsToBooleans2( const Bits : Integer; var B : TBooleanArray; AllBits :
15299: Procedure BitsToBooleans3( const Bits : Int64; var B : TBooleanArray; AllBits : Boolean);
15300: Procedure BoldDays(Days: array of LongWord; var MonthBoldInfo: LongWord)
15301: Procedure BooleansToBits( var Dest: Byte; const B: TBooleanArray);
15302: Procedure BooleansToBits1( var Dest : Word; const B : TBooleanArray);
15303: Procedure BooleansToBits2( var Dest : Integer; const B : TBooleanArray);
15304: Procedure BooleansToBits3( var Dest : Int64; const B : TBooleanArray);
15305: Procedure BreakPointMenuClick( Sender : TObject)
15306: procedure BRINGTOFRONT
15307: procedure BringToFront;
15308: Procedure btnBackClick( Sender : TObject)
15309: Procedure btnBrowseClick( Sender : TObject)
15310: Procedure BtnClick( Index : TNavigateBtn)
15311: Procedure btnLargeIconsClick( Sender : TObject)
15312: Procedure BuildAndSendRequest( AURI : TIdURI)
15313: Procedure BuildCache
15314: Procedure BurnMemory( var Buff, BuffLen : integer)
15315: Procedure BurnMemoryStream( Destructo : TMemoryStream)
15316: Procedure CalculateFirstSet
15317: Procedure Cancel
15318: procedure CancelDrag; 15319: Procedure CancelEdit
15320: procedure CANCELHINT
15321: Procedure CancelRange
15322: Procedure CancelUpdates
15323: Procedure CancelWriteBuffer
15324: Procedure Capture1(ADest:TStream;out VLineCount:Integer;const ADelim:string;const AIsRFCMessage:Bool;
15325: Procedure Capture2( ADest : TStrings; const ADelim : string; const AIsRFCMessage : Boolean);
15326: Procedure Capture3(ADest:TStrings;out VLineCount:Integer;const ADelim:string;const AIsRFCMessage:Bool
15327: procedure CaptureScreenFormat(vname: string; vextension: string);
15328: procedure CaptureScreenPNG(vname: string);
15329: procedure CardinalsToI64(var I: Int64; const LowPart, HighPart: Cardinal);
15330: procedure CASCADE
15331: Procedure CastNativeToSoap(Info:PTypeInfo;var SoapData:WideString;NatData:Pointer;var IsNull: Boolean)
15332: Procedure CastSoapToVariant( SoapInfo : PTypeInfo; const SoapData : WideString; NatData : Pointer);
15333: Procedure cbPathClick( Sender : TObject)
15334: Procedure cbPathKeyDown( Sender : TObject; var Key : Word; Shift : TShiftState)
15335: Procedure cedebugAfterExecute( Sender : TPSScript)
15336: Procedure cedebugBreakpoint( Sender: TObject; const FileName: String; Position, Row, Col: Cardinal) 15337: Procedure cedebugCompile( Sender: TPSScript)
15338: Procedure cedebugExecute( Sender : TPSScript)
15339: Procedure cedebugIdle( Sender : TObject)
15340: Procedure cedebugLineInfo( Sender : TObject; const FileName : String; Position, Row, Col : Cardinal)
15340: Procedure CenterHeight( const pc, pcParent: TControl)
15342: Procedure CenterDlg(AForm: TForm; MForm: TForm); { Zentriert Forms }
15343: Procedure CenterForm(AForm: TForm; MForm: TForm); { Zentriert Forms }
15344: Procedure Change
15345: procedure ChangeBiDiModeAlignment(var Alignment: TAlignment);
15346: Procedure Changed
15347: Procedure ChangeDir( const ADirName : string)
15348: Procedure ChangeDirUp
15349: Procedure ChangeEntryTransitions( oNewState : TniRegularExpressionState)
15350: Procedure ChangeLevelBy( Value : TChangeRange)
15351: Procedure ChDir(const s: string)
15352: Procedure Check(Status: Integer)
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15353: Procedure CheckCommonControl( CC : Integer)
15354: Procedure CHECKFIELDNAME ( const FIELDNAME : String)
15355: Procedure CHECKFIELDNAMES( const FIELDNAMES: String)
15356: Procedure CheckForDisconnect(const ARaiseExceptionIfDisconnected: boolean;const AlgnoreBuffer:bool)
15357: Procedure CheckForGracefulDisconnect( const ARaiseExceptionIfDisconnected : Boolean)
15358: Procedure CheckToken( T : Char)
15359: procedure CheckToken(t:char)
15360: Procedure CheckTokenSymbol( const S : string)
15361: procedure CheckTokenSymbol(s:string)
15362: Procedure CheckToolMenuDropdown( ToolButton: TToolButton)
15363: procedure Chord(X1, Y1, X2, Y2, X3, Y3, X4, Y4: Integer);
15364: Procedure CIED65ToCIED50( var X, Y, Z : Extended)
15365: Procedure CIELABTOBGR( const Source, Target : Pointer; const Count : Cardinal);
15366: procedure CipherFile1Click(Sender: TObject);
15367: Procedure Clear;
15368: Procedure Clear1Click( Sender : TObject)
15369: Procedure ClearColor( Color : TColor)
15370: Procedure CLEARITEM( AITEM : TMENUITEM)
15371: Procedure ClearMapping
15372: Procedure ClearSelection( KeepPrimary : Boolean)
15373: Procedure ClearWriteBuffer
15374: Procedure Click
15375: Procedure Close
15376: Procedure CloselClick( Sender : TObject)
15377: Procedure CloseDatabase( Database: TDatabase)
15378: Procedure CloseDataSets
15379: Procedure CloseDialog
15380: Procedure CloseFile(var F: Text);
15381: Procedure Closure
15382: Procedure CMYKToBGR( const Source, Target : Pointer; const BitsPerSample : Byte; Count : Cardinal);
15383: Procedure CMYKToBGR1( const C, M, Y, K, Target : Pointer; const BitsPerSample : Byte; Count : Cardinal);
15384: Procedure CodeCompletionList1Click( Sender : TObject)
15385: Procedure ColEnter
15386: Procedure Collapse
15387: Procedure Collapse( Recurse : Boolean)
15388: Procedure ColorRGBToHLS( clrRGB : TColorRef; var Hue, Luminance, Saturation : Word)
15389: Procedure CommaSeparatedToStringList( AList : TStrings; const Value : string)
15390: Procedure CommitFreeAndNil( var Transaction : TDBXTransaction)
15391: Procedure Compile1Click( Sender : TObject)
15392: procedure ComponentCount1Click(Sender: TObject);
15393: Procedure Compress(azipfolder, azipfile: string)
15394: Procedure DeCompress(azipfolder, azipfile: string)
15395: Procedure XZip(azipfolder, azipfile: string)
15396: Procedure XUnZip(azipfolder, azipfile: string)
15397: Procedure Connect( const ATimeout : Integer 15398: Procedure Connect( Socket : TSocket)
15399: procedure ConsolelClick(Sender: TObject);
15400: Procedure Continue
15401: Procedure ContinueCount( var Counter : TJclCounter)
15402: procedure CONTROLDESTROYED(CONTROL:TCONTROL)
15403: Procedure ConvertStreamFromAnsiToUTF8( Src, Dst : TStream; cp : integer)
15404: Procedure ConvertStreamFromUTF8ToAnsi( Src, Dst : TStream; cp : integer)
15405: Procedure ConvertImage(vsource, vdestination: string);
15406: // Ex. ConvertImage(Exepath+'my233_bmp.bmp',Exepath+'mypng111.png')
15407: Procedure ConvertToGray(Cnv: TCanvas);
15408: Procedure Copy( Buffer : TRecordBuffer; Dest : TBytes; Offset : Integer; Length : Integer)
15409: Procedure Copy( Buffer : TValueBuffer; Dest : TBytes; Offset : Integer; Count : Integer);
15410: Procedure Copyl( Source : TBytes; Offset : Integer; Buffer : TValueBuffer; Count : Integer);
15411: Procedure CopyBytesToHostLongWord(const ASource:TIdBytes;const ASourceIndex:Integer;var VDest:LongWord)
15412: Procedure CopyBytesToHostWord( const ASource: TIdBytes; const ASourceIndex: Integer; var VDest: Word)
15413: Procedure CopyFrom( mbCopy : TMyBigInt)
15414: Procedure CopyMemoryStream( Source, Destination: TMemoryStream)
15415: procedure CopyRect(const Dest: TRect; Canvas: TCanvas; const Source: TRect);
15416: Procedure CopyTldByteArray( const ASource: array of Byte; const ASourceIndex: Integer; var VDest: array of Byte; const ADestIndex: Integer; const ALength: Integer)
15417: Procedure CopyTidBytes(const ASrc:TidBytes;const ASrcIndex:Int;var VDest:TidBytes;const ADestIdx:Int;const
        ALength: Int)
15418: Procedure CopyTIdCardinal( const ASource : Cardinal; var VDest : TIdBytes; const ADestIndex : Integer)
15419: Procedure CopyTIdInt64( const ASource : Int64; var VDest : TIdBytes; const ADestIndex : Integer)
15420: Procedure CopyTidIPV6Address(const ASource:TidIPv6Address; var VDest: TidBytes; const ADestIndex: Integer)
15421: Procedure CopyTldLongWord( const ASource : LongWord; var VDest : TldBytes; const ADestIndex : Integer)
15422: Procedure CopyTldNetworkLongWord( const ASource : LongWord; var VDest : TldBytes; const ADestIndex:Integer)
15423: Procedure CopyTldNetworkWord( const ASource: Word; var VDest: TldBytes; const ADestIndex: Integer)
15424: Procedure CopyTldString(const ASource:String; var VDest:TldBytes; const ADestIndex:Integer; ALength: Integer)
15425: Procedure CopyTldWord( const ASource : Word; var VDest : TldBytes; const ADestIndex : Integer)
15426: Procedure CopyToClipboard
15427: Procedure CountParts
15428: Procedure CreateDataSet
15429: Procedure CreateEmptyFile( const FileName : string)
15430: Procedure CreateFileFromString( const FileName, Data : string)
15431: Procedure CreateFromDelta( Source : TPacketDataSet)
15432: procedure CREATEHANDLE
15433: Procedure CreateProcAsUser( const UserDomain, UserName, PassWord, CommandLine : string)
15434: Procedure CreateProcAsUserEx(const UserDomain, UserName, Password, CommandLine: string; const Environment: PChar)
15435: Procedure CreateTable
15436: Procedure CreateUDLFile( const FileName, ProviderName, DataSourceName : WideString)
15437: procedure CSyntax1Click(Sender: TObject);
15438: Procedure CurrencyToComp( Value : Currency; var Result : Comp)
15439: Procedure CURSORPOSCHANGED
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15440: procedure CutFirstDirectory(var S: String)
15441: Procedure DataBaseError(const Message: string)
15442: Procedure DateTimeToString( var Result : string; Format : string; DateTime
15443: procedure DateTimeToString(var Result: string; const Format: string; DateTime: TDateTime)
15444: Procedure DateTimeToSystemTime( DateTime: TDateTime; var SystemTime: TSystemTime)
15445: procedure DateTimeToSystemTime(const DateTime: TDateTime; var SystemTime: TSystemTime);
15446: Procedure DBIError(errorCode: Integer)
15447: Procedure DebugOutput( const AText : string)
15448: Procedure DebugRun1Click( Sender : TObject
15449: procedure Deci
15450: Procedure DecodeDate( DateTime : TDateTime; var Year, Month, Day : Word)
15451: procedure DecodeDate(const DateTime: TDateTime; var Year, Month, Day: Word);
15452: Procedure DecodeDateDay( const AValue : TDateTime; out AYear, ADayOfYear : Word)
15453: Procedure DecodeDateMonthWeek(const AValue:TDateTime;out AYear, AMonth,AWeekOfMonth,ADayOfWeek : Word)
15454: Procedure DecodeDateTime(const AValue:TDateTime;out AYear,AMonth,ADay,AHour,AMin,ASec,AMillSec:Word)
15455: Procedure DecodeDateWeek( const AValue : TDateTime; out AYear, AWeekOfYear, ADayOfWeek : Word)
15456: Procedure DecodeDayOfWeekInMonth(const AValue:TDateTime;out AYear,AMonth,ANthDayOfWeek,ADayOfWeek:Word)
15457: Procedure DecodeTime( DateTime: TDateTime: var Hour, Min, Sec, MSec: Word)
15458: procedure DecodeTime(const DateTime: TDateTime; var Hour, Min, Sec, MSec: Word);
15459: Procedure Decompile1Click( Sender : TObject)
15460: Procedure DefaultDrawColumnCell(const Rect : TRect; DataCol:Integer;Column:TColumn;State:TGridDrawState)
15461: Procedure DefaultDrawDataCell( const Rect : TRect; Field : TField; State : TGridDrawState)
15462: Procedure DeferLayout
15463: Procedure defFileread
15464: procedure DEFOCUSCONTROL(CONTROL:TWINCONTROL;REMOVING:BOOLEAN)
15465: Procedure DelayMicroseconds ( const MicroSeconds : Integer)
15466: Procedure Delete
15467: Procedure Delete( const AFilename : string)
15468: Procedure Delete( const Index : Integer)
15469: Procedure DELETE( INDEX : INTEGER)
15470: Procedure Delete( Index : LongInt)
15471: Procedure Delete( Node : TTreeNode)
15472: procedure Delete(var s: AnyString; ifrom, icount: Longint);
15473: Procedure DeleteAlias( const Name : string)
15474: Procedure DeleteDriver( const Name : string)
15475: Procedure DeleteIndex( const Name : string)
15476: Procedure DeleteKey( const Section, Ident : String)
15477: Procedure DeleteRecords
15478: Procedure DeleteRecords( AffectRecords : TAffectRecords)
15479: Procedure DeleteString( var pStr : String; const pDelStr : string)
15480: Procedure DeleteTable
15481: procedure DelphiSite1Click(Sender: TObject);
15482: Procedure Deselect
15483: Procedure Deselect( Node : TTreeNode)
15484: procedure DestroyComponents
15485: Procedure DestroyHandle
15486: Procedure Diff( var X : array of Double)
15487: procedure Diff(var X: array of Double);
15488: procedure DISABLEALIGN
15489: Procedure DisableConstraints
15490: Procedure Disconnect
15491: Procedure Disconnect( Socket : TSocket)
15492: Procedure Dispose
15493: procedure Dispose(P: PChar)
15494: Procedure DivMod( Dividend : Integer; Divisor : Word; var Result, Remainder : Word)
15495: Procedure DoKey( Key : TDBCtrlGridKey)
15496: Procedure DomToTree(anXmlNode: IXMLNode; aTreeNode: TTreeNode; aTreeView: TTreeView);
15497: Procedure DomToTreeJ(anXmlNode: TJvXMLNode; aTreeNode: TTreeNode; aTreeView: TTreeView);
15498: Procedure Dormant
15499: Procedure DoubleToBcd1( const AValue : Double; var bcd : TBcd);
15500: Procedure DoubleToBytes( Value : Double; Bytes : array of byte)
15501: Procedure DoubleToComp( Value : Double; var Result : Comp)
15502: Procedure Draw( Canvas : TCanvas; X, Y, Index : Integer; Enabled : Boolean);
15503: procedure Draw(X, Y: Integer; Graphic: TGraphic);
15504: Procedure Drawl(Canvas:TCanvas; X,Y,
       Index:Int;ADrawingStyle:TDrawingStyle;AImageType:TImageType;Enabled:Bool);
15505: Procedure DrawChevron( ACanvas: TCanvas; Direction: TScrollDirection; Location: TPoint; Size: Integer)
15506: Procedure DrawCheck( ACanvas: TCanvas; Location: TPoint; Size: Integer; Shadow: Boolean)
15507: Procedure DrawChevron( ACanvas: TCanvas; Direction: TScrollDirection; Location: TPoint; Size: Integer)
15508: Procedure DrawColumnCell( const Rect: TRect; DataCol: Integer; Column: TColumn; State: TGridDrawState)
15509: procedure DrawFocusRect(const Rect: TRect);
15510: Procedure DrawHDIBToTBitmap( HDIB : THandle; Bitmap : TBitmap)
15511: Procedure DRAWMENUITEM( MENUITEM: TMENUITEM; ACANVAS: TCANVAS; ARECT: TRECT; STATE: TOWNERDRAWSTATE)
15512: Procedure DrawOverlay(Canvas:TCanvas;X.Y:Integer;ImageIndex:Integer;Overlay:TOverlay;Enabled: Boolean);
15513: Procedure DrawOverlay1(Canvas: TCanvas; X,Y:Int; ImageIndex:Int; Overlay: TOverlay; ADrawingStyle
       TDrawingStyle; AImageType : TImageType; Enabled : Boolean);
15514: procedure drawPlot(vPoints: TPointArray; cFrm: TForm; vcolor: integer);
15515: Procedure DrawPolyLine( const Canvas: TCanvas; var Points: TPointArray; const ClipRect: TRect)
15516: Procedure DropConnections
15517: Procedure DropDown
15518: Procedure DumpDescription( oStrings : TStrings)
15519: Procedure DumpStateTable( oStrings : TStrings)
15520: Procedure EDIT
15521: Procedure EditButtonClick
15522: Procedure EditFontlClick( Sender : TObject)
15523: procedure Ellipse(X1, Y1, X2, Y2: Integer);
15524: Procedure Ellipse1( const Rect : TRect);
15525: Procedure EMMS
15526: Procedure Encode ( ADest : TStream)
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15527: procedure ENDDRAG(DROP:BOOLEAN)
15528: Procedure EndEdit( Cancel : Boolean)
15529: Procedure EndTimer
15530: Procedure EndUpdate
15531: Procedure EraseSection( const Section : string)
15532: Procedure Error( const Ident : string)
15533: procedure Error(Ident:Integer)
15534: Procedure ErrorFmt( const Ident : string; const Args : array of const)
15535: Procedure ErrorStr( const Message : string)
15536: procedure ErrorStr(Message:String)
15537: Procedure Exchange( Index1, Index2: Integer) 15538: procedure Exchange(Index1, Index2: Integer);
15539: Procedure Exec( FileName, Parameters, Directory: string)
15540: Procedure ExecProc
15541: Procedure ExecSOL( UpdateKind : TUpdateKind)
15542: Procedure Execute
15543: Procedure Execute( const CommandText : WideString; var Params, OwnerData : OleVariant)
15544: Procedure ExecuteAndWait( FileName : string; Visibility : Integer) 15545: Procedure ExecuteCommand(executeFile, paramstring: string)
15546: Procedure ExecuteShell(executeFile, paramstring: string)
15547: Procedure ExitThread(ExitCode: Integer); stdcall;
15548: Procedure ExitProcess(ExitCode: Integer); stdcall;
15549: Procedure Expand( AUserName : String; AResults : TStrings)
15550: Procedure Expand( Recurse : Boolean)
15551: Procedure ExportClipboard1Click( Sender : TObject)
15552: Procedure ExportDataSetToExcel( DataSet : TDataSet; OnExportProgress : TOnExportProgress)
15553: Procedure ExtractContentFields( Strings : TStrings)
15554: Procedure ExtractCookieFields( Strings : TStrings)
15555: Procedure ExtractFields( Separators, WhiteSpace : TSysCharSet; Content : PChar; Strings : TStrings)
15556: Procedure ExtractHeaderFields(Separ,
        WhiteSpace:TSysChSet;Content:PChar;Strings:TStrings;Decode:Bool;StripQuots:Bool)
15557: Procedure ExtractHTTPFields(Separators, WhiteSpace:
       TSysCharSet; Content: PChar; Strings: TStrings; StripQuotes: Bool)
15558: Procedure ExtractQueryFields( Strings : TStrings)
15559: Procedure FastDegToGrad
15560: Procedure FastDegToRad
15561: Procedure FastGradToDeg
15562: Procedure FastGradToRad
15563: Procedure FastRadToDeg
15564: Procedure FastRadToGrad
15565: Procedure FileClose( Handle : Integer)
15566: Procedure FileClose(handle: integer)
15567: procedure FilesFromWildcard (Dir, Mask: string; var Files: TStringList; Subdirs, ShowDirs, Multitasking: Bool)
15568: Procedure FileStructure( AStructure : TIdFTPDataStructure)
15569: Procedure FillByte2(var X: Byte ; count: integer; value: byte)
15570: Procedure FillBytes( var VBytes: TIdBytes; const ACount: Integer; const AValue: Byte)
15571: Procedure FillChar( Buffer: TRecordBuffer; Length: Integer; value: Byte)
15572: Procedure FillChar2(var X: PChar ; count: integer; value: char)
15573: Procedure FillCharS(var p: string; count: integer; value: char); //fix3.8
15574: Procedure FillIPList
15575: procedure FillRect(const Rect: TRect);
15576: Procedure FillTStrings( AStrings: TStrings)
15577: Procedure FilterOnBookmarks( Bookmarks: array of const)
15578: procedure FinalizePackage(Module: HMODULE)
15579: procedure FindClose;
15580: procedure FindClose2(var F: TSearchRec)
15581: Procedure FindMatches( const sString: string; xNotify: TniRegularExpressionMatchFoundEvent);
15582: Procedure FindMatches1(const sString:string:iStart:integer;xNotify:TniRegularExpressionMatchFoundEvent);
15583: Procedure FindNearest( const KeyValues : array of const)
15584: Procedure FinishContext.
15585: Procedure FIRST
15586: Procedure FloatToDegMinSec( const X : Float; var Degs, Mins, Secs : Float)
15587: Procedure FloatToDecimal(var Result:TFloatRec;const Value:extend;ValueType:TFloatValue;Precis,Decs:Int);
15588: Procedure FloodFill( X, Y : Integer; Color : TColor; FillStyle : TFillStyle) 15589: Procedure FlushSchemaCache( const TableName : string)
15590: procedure FmtStr(var Result: string; const Format: string; const Args: array of const)
15591: procedure FOCUSCONTROL(CONTROL:TWINCONTROL)
15592: Procedure Form1Close( Sender : TObject; var Action : TCloseAction)
15593: Procedure FormActivate( Sender : TObject)
15594: procedure FormatLn(const format: String; const args: array of const); //alias
15595: Procedure FormClose( Sender : TObject; var Action : TCloseAction)
15596: Procedure FormCreate( Sender : TObject)
15597: Procedure FormDestroy( Sender : TObject)
15598: Procedure FormKeyPress( Sender : TObject; var Key : Char)
15599: procedure FormOutputlClick(Sender: TObject);
15600: Procedure FormToHtml( Form : TForm; Path : string)
15601: procedure FrameRect(const Rect: TRect);
15602: Procedure Frame3D(Canyas:TCanyas; var Rect:TRect; TopColor,BottomColor:TColor; Width: Integer)
15603: Procedure NotebookHandlesNeeded( Notebook: TNotebook)
15604: Procedure Free( Buffer : TRecordBuffer)
15605: Procedure Free( Buffer : TValueBuffer)
15606: Procedure Free;
15607: Procedure FreeAndNil(var Obj:TObject)
15608: Procedure FreeImage
15609: procedure FreeMem(P: PChar; Size: Integer)
15610: Procedure FreeTreeData( Tree : TUpdateTree)
15611: Procedure Frexp( const X : Extended; var Mantissa : Extended; var Exponent : Integer)
15612: Procedure FullCollapse
15613: Procedure FullExpand
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15614: Procedure GenerateDPB(sl: TStrings; var DPB: string; var DPBLength: Short); //InterBase
15615: Procedure GenerateTPB(sl: TStrings; var TPB: string; var TPBLength: Short);
15616: Procedure OUTPUTXML( SQLOBJECT : TIBSQL; OUTPUTOBJECT : TIBOUTPUTXML)
15617: Procedure Getl( AURL : string; const AResponseContent : TStream);
15618: Procedure Get1( const ASourceFile : string; ADest : TStream; AResume : Boolean);
15619: Procedure Get2(const ASourceFile, ADestFile: string; const ACanOverwrite: boolean; AResume: Boolean);
15620: Procedure GetAliasNames( List : TStrings)
15621: Procedure GetAliasParams( const AliasName : string; List : TStrings)
15622: Procedure GetApplicationsRunning(Strings: TStrings)
15623: Procedure GetCommandTypes(List: TWideStrings)
15624: Procedure GetConfigParams( const Path, Section : string; List : TStrings)
15625: Procedure GetConnectionNames( List: TStrings; Driver: string; DesignMode: Boolean)
15626: Procedure GetConvFamilies( out AFamilies : TConvFamilyArray)

15627: Procedure GetConvFamilies( out AFamilies : TConvFamilyArray)

15628: Procedure GetConvTypes( const AFamily : TConvFamily; out ATypes : TConvTypeArray)

15628: Procedure GetDatabaseNames( List : TStrings)

15629: Procedure GetDataPacket( DataSet : TDataSet; var RecsOut : Integer; out Data : OleVariant)
15630: Procedure GetDIBSizes(Bitmap: HBITMAP; var InfoHeaderSize: longWORD; var ImageSize : longWORD)
15631: Procedure GetDir(d: byte; var s: string)
15632: Procedure GetDirList( const Search : string; List : TStrings; Recursive : Boolean)
15633: Procedure GetDriverNames( List : TStrings)
15634: Procedure GetDriverNames( List : TStrings; DesignMode : Boolean)
15635: Procedure GetDriverParams( const DriverName : string; List : TStrings)
15636: Procedure GetEMailslClick( Sender : TObject)
15637: Procedure getEnvironmentInfo;
15638: Function getEnvironmentString: string;
15639: Procedure GetFieldNames( const DatabaseName, TableName : string; List : TStrings)
15640: Procedure GetFieldNames( const TableName : string; List : TStrings) 15641: Procedure GetFieldNames( const TableName : string; List : TStrings);
15642: Procedure GetFieldNames (const TableName : WideString; List : TWideStrings);
15643: Procedure GETFIELDNAMES( LIST: TSTRINGS)
15644: Procedure GetFieldNames1( const TableName : string; List : TStrings);
15645: Procedure GetFieldNames1( const TableName : string; SchemaName : string; List : TStrings);
15646: Procedure GetFieldNames2( const TableName : WideString; SchemaName : WideString; List : TWideStrings);
15647: Procedure GetFieldNames3( const TableName : WideString; List : TWideStrings);
15648: Procedure GetFileAttributeList( const Items : TStrings; const Attr : Integer
15649: Procedure GetFileAttributeListEx( const Items : TStrings; const Attr : Integer)
15650: Procedure GetFMTBcd( Buffer : TRecordBuffer; var value : TBcd)
15651: Procedure GetFormatSettings
15652: Procedure GetFromDIB( var DIB : TBitmapInfo)
15653: Procedure GetFromHDIB( HDIB : HBitmap)
15654: Procedure GetIcon( Index : Integer; Image : TIcon);
15655: Procedure GetIcon1(Index : Integer; Image:TIcon; ADrawingStyle:TDrawingStyle; AImageType:TImageType);
15656: Procedure GetIndexInfo( IndexName : string)
15657: Procedure GetIndexNames( const TableName, SchemaName : string; List : TStrings);
15658: Procedure GetIndexNames( List : TStrings)
15659: Procedure GetIndexNames1( const TableName : WideString; List : TWideStrings);
15660: Procedure GetIndexNames2( const TableName, SchemaName: WideString; List: TWideStrings);
15661: Procedure GetIndexNames4( const TableName : string; List : TStrings);
15662: Procedure GetInternalResponse
15663: Procedure GETITEMNAMES( LIST : TSTRINGS)
15664: procedure GetMem(P: PChar; Size: Integer)
15665: Procedure GETOLE2ACCELERATORTABLE(var ACCELTABLE: HACCEL; var ACCELCOUNT: INTEGER; GROUPS: array of INTEGER)
15666: procedure GetPackageDescription(ModuleName: PChar): string)
15667: Procedure GetPackageNames( List : TStrings);
15668: Procedure GetPackageNames1( List : TWideStrings);
15669: Procedure GetParamList( List : TList; const ParamNames : WideString)
15670: Procedure GetProcedureNames( List : TStrings);
15671: Procedure GetProcedureNames( List : TWideStrings);
15672: Procedure GetProcedureNames1( const PackageName : string; List : TStrings);
15673: Procedure GetProcedureNames1( List : TStrings);
15674: Procedure GetProcedureNames2( const PackageName, SchemaName : string; List : TStrings);
15675: Procedure GetProcedureNames3( List : TWideStrings);
15676: Procedure GetProcedureNames4( const PackageName : Widestring; List : TWideStrings);
15677: Procedure GetProcedureNames5( const PackageName, SchemaName : WideString; List : TWideStrings); 15678: Procedure GetProcedureParams( ProcedureName : WideString; List : TList);
15679: Procedure GetProcedureParams1( ProcedureName, PackageName : WideString; List : TList);
15680: Procedure GetProcedureParams2( ProcedureName, PackageName, SchemaName : Widestring; List : TList);
15681: Procedure GetProviderNames( Names : TWideStrings);
15682: Procedure GetProviderNames( Proc : TGetStrProc)
15683: Procedure GetProviderNames1( Names : TStrings);
15684: procedure GetQrCode2(Width, Height: Word; Correct_Level: string; const Data: string; apath: string);
15685: procedure GetQrCode3(Width, Height: Word; Correct_Level: string; const Data: string; apath: string);//no auto
        open image
15686: Function GetOrCode4(Width, Height: Word; Correct Level: string; const
        Data: string; aformat: string): TLinearBitmap;
15687: Procedure GetRGBValue( const Color : TColor; out Red, Green, Blue : Byte)
15688: Procedure GetSchemaNames( List : TStrings);
15689: Procedure GetSchemaNames1( List : TWideStrings);
15690: Procedure GetSessionNames( List : TStrings)
15691: Procedure GetStoredProcNames( const DatabaseName : string; List : TStrings)
15692: Procedure GetStrings( List : TStrings)
15693: Procedure GetSystemTime; stdcall;
15694: Procedure GetTableNames(const DatabaseName, Pattern: string; Extensions, SystemTables: Boolean; List: TStrings)
15695: Procedure GetTableNames( List: TStrings; SystemTables: Boolean)
15696: Procedure GetTableNames( List : TStrings; SystemTables : Boolean);
15697: Procedure GetTableNames( List : TWideStrings; SystemTables : Boolean);
15698: Procedure GetTableNames1( List : TStrings; SchemaName : WideString; SystemTables : Boolean); 15699: Procedure GetTableNames1( List : TStrings; SystemTables : Boolean);
15700: Procedure GetTableNames2( List : TWideStrings; SchemaName : WideString; SystemTables : Boolean);
```

```
15701: Procedure GetTransitionsOn( cChar : char; oStateList : TList)
15702: Procedure GetVisibleWindows( List : Tstrings)
15703: Procedure GoBegin
15704: Procedure GotoCurrent( DataSet : TCustomClientDataSet)
15705: Procedure GotoCurrent( Table : TTable)
15706: procedure GotoEndlClick(Sender: TObject);
15707: Procedure GotoNearest
15708: Procedure GradientFillCanvas(const ACanvas:TCanvas;const AStartCol,AEndCol:TColor;const ARect:TRect;const
       Direction: TGradientDirection)
15709: Procedure HandleException( E : Exception; var Handled : Boolean)
15710: procedure HANDLEMESSAGE
15711: procedure HandleNeeded;
15712: Procedure Head( AURL : string)
15713: Procedure Help( var AHelpContents : TStringList; ACommand : String)
15714: Procedure HexToBinary( Stream : TStream)
15715: procedure HexToBinary(Stream:TStream)
15716: Procedure HideDragImage
15717: Procedure HideFormCaption( FormHandle : THandle; Hide : Boolean)
15718: Procedure HideTraybar
15719: Procedure HideWindowForSeconds(secs: integer);
                                                             {//3 seconds}
15720: Procedure HideWindowForSeconds2(secs: integer; apphandle, aself: TForm); {//3 seconds}
15721: Procedure HookOSExceptions
15722: Procedure HookSignal( RtlSigNum : Integer)
15723: Procedure HSLTORGB( const H, S, L : Single; out R, G, B : Single);
15724: Procedure HTMLSyntaxlClick( Sender : TObject)
15725: Procedure IFPS3ClassesPluginlCompImport( Sender : TObject; x : TPSPascalCompiler)
15726: Procedure IFPS3ClassesPlugin1ExecImport( Sender : TObject; Exec : TPSExec; x : TPSRuntimeClassImporter)
15727: Procedure ImportfromClipboard1Click( Sender : TObject)
15728: Procedure ImportfromClipboard2Click( Sender : TObject)
15729: Procedure IncAMonth( var Year, Month, Day : Word; NumberOfMonths : Integer)
15730: procedure Incb(var x: byte);
15731: Procedure Include1Click( Sender : TObject)
15732: Procedure IncludeOFF; //preprocessing
15733: Procedure IncludeON;
15734: procedure InfolClick(Sender: TObject)
15735: Procedure InitAltRecBuffers( CheckModified : Boolean)
15736: Procedure InitContext( Request: TWebRequest; Response: TWebResponse)
15737: Procedure InitContext(WebModuleList:TAbstractWebModuleList;Request:TWebRequest;Response:TWebResponse)
15738: Procedure InitData( ASource : TDataSet)
15739: Procedure InitDelta( ADelta : TPacketDataSet);
15740: Procedure InitDeltal( const ADelta : OleVariant);
15741: Procedure InitErrorPacket( E : EUpdateError; Response : TResolverResponse)
15742: Procedure Initialize
15743: procedure InitializePackage(Module: HMODULE)
15744: Procedure INITIATEACTION
15745: Procedure initHexArray(var hexn: THexArray);
                                                           //THexArray', 'array[0..15] of char;'
15746: Procedure InitKeyFields( Tree : TUpdateTree; ADelta : TPacketDataSet)
15747: Procedure InitModule( AModule : TComponent)
15748: Procedure InitStdConvs
15749: Procedure InitTreeData( Tree : TUpdateTree)
15750: Procedure INSERT
15751: Procedure Insert( Index : Integer; AClass : TClass)
15752: Procedure Insert( Index : Integer; AComponent : TComponent)
15753: Procedure Insert( Index : Integer; AObject : TObject
15754: Procedure Insert( Index : Integer; const S : WideString)
15755: Procedure Insert( Index : Integer; Image, Mask : TBitmap)
15756: Procedure Insert(Index: Integer; const S: string);
15757: procedure Insert(Index: Integer; S: string);
15758: procedure Insert(s: AnyString; var s2: AnyString; iPos: Longint);
15759: procedure InsertComponent(AComponent:TComponent)
15760: procedure InsertControl(AControl: TControl);
15761: Procedure InsertIcon( Index : Integer; Image : TIcon)
15762: Procedure InsertMasked( Index : Integer; Image : TBitmap; MaskColor : TColor)
15763: Procedure InsertObject( Index : Integer; const S : WideString; AObject : TObject)
15764: procedure InsertObject(Index:Integer;S:String;AObject:TObject)
15765: Procedure Intl6ToBytes( Value : SmallInt; Bytes : array of byte 15766: Procedure Int32ToBytes( Value : Integer; Bytes : array of byte)
15767: Procedure Int64ToBytes( Value : Int64; Bytes : array of byte)
15768: procedure I64ToCardinals(I: Int64; var LowPart, HighPart: Cardinal);
15769: Procedure InternalBeforeResolve( Tree : TUpdateTree)
15770: Procedure InvalidateModuleCache
15771: Procedure InvalidateTitles
15772: Procedure InvalidDateDayError( const AYear, ADayOfYear : Word)
15773: Procedure InvalidDateMonthWeekError( const AYear, AMonth, AWeekOfMonth, ADayOfWeek; Word)
15774: Procedure InvalidDateTimeError(const AYear,AMth,ADay,AHour,AMin,ASec,AMilSec:Word;const
       ABaseDate:TDateTime)
15775: Procedure InvalidDateWeekError(const AYear, AWeekOfYear, ADayOfWeek: Word)
15776: Procedure InvalidDayOfWeekInMonthError( const AYear, AMonth, ANthDayOfWeek, ADayOfWeek: Word)
15777: procedure JavaSyntax1Click(Sender: TObject);
15778: Procedure JclLocalesInfoList( const Strings : TStrings; InfoType : Integer)
15779: Procedure KillDataChannel
15780: Procedure LargefontlClick( Sender : TObject)
15781: Procedure LAST
15782: Procedure LaunchCpl(FileName: string
15783: Procedure Launch (const AFile : string)
15784: Procedure LaunchFile( const AFile : string)
15785: Procedure LetFileList(FileList: TStringlist; apath: string);
15786: Procedure lineToNumber( xmemo : String; met : boolean)
15787: Procedure ListViewCustomDrawItem(Sender:TCustomListView;Item:TListItem;State:TCustomDrawState;var
       DefaultDraw:Bool)
```

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15788: Procedure ListViewCustomDrawSubItem( Sender : TCustomListView; Item : TListItem; SubItem : Integer; State
        : TCustomDrawState; var DefaultDraw : Boolean)
15789: Procedure ListViewData( Sender : TObject; Item : TListItem)
15790: Procedure ListViewDataFind(Sender:TObject; Find: TItemFind; const FindString: String; const FindPosition
        : TPoint; FindData:Pointer; StartIndex:Integer;Direction:TSearchDirection;Wrap:Boolean; var Index: Integer)
15791: Procedure ListViewDataHint( Sender : TObject; StartIndex, EndIndex : Integer) 15792: Procedure ListViewDblClick( Sender : TObject)
15793: Procedure ListViewKeyDown( Sender : TObject; var Key : Word; Shift : TShiftState)
15794: Procedure ListDLLExports(const FileName: string; List: TStrings);
15795: Procedure Load (const WSDLFileName: WideString; Stream: TMemoryStream)
15796: procedure LoadBytecodelClick(Sender: TObject);
15797: procedure LoadFilefromResource(const FileName: string; ms: TMemoryStream);
15798: Procedure LoadFromClipboardFormat( AFormat : Word; AData : THandle; APalette : HP)
15799: Procedure LoadFromClipboardFormat( AFormat : Word; AData : THandle; APalette : HPALETTE)
15800: Procedure LoadFromFile( AFileName : string)
15801: Procedure LoadFromFile( const AFileName : string; const AHeadersOnly : Boolean)
15802: Procedure LoadFromFile( const FileName : string)
15803: Procedure LOADFROMFILE( const FILENAME : String; BLOBTYPE : TBLOBTYPE)
15804: Procedure LoadFromFile( const FileName : string; DataType : TDataType)
15805: Procedure LoadFromFile( const FileName : WideString)
15806: Procedure LoadFromFile( const FileName, FileType : string; Bitmap : TLinearBitmap)
15807: Procedure LoadFromFile(const AFileName: string)
15808: procedure LoadFromFile(FileName: string);
15809: procedure LoadFromFile(FileName:String)
15810: Procedure LoadFromResourceID( Instance : THandle; ResID : Integer)
15811: Procedure LoadFromResourceName( Instance: THandle; const ResName: String)
15812: Procedure LoadFromStream( AStream: TStream; const AHeadersOnly: Boolean)
15813: Procedure LoadFromStream( const Stream : TStream)
15814: Procedure LoadFromStream( S : TStream)
15815: Procedure LoadFromStream( Stream: TSeekableStream; const Ext: string; Bitmap: TLinarBitmap)
15816: Procedure LoadFromStream( Stream: TSeekableStream; const Ext: string; Bitmap: TLinearBitmap)
15817: Procedure LoadFromStream( Stream: TStream)
15818: Procedure LOADFROMSTREAM( STREAM: TSTREAM; BLOBTYPE: TBLOBTYPE)
15819: Procedure LoadFromStream( Stream: TStream; DataType: TDataType)
15820: procedure LoadFromStream(Stream: TStream);
15821: Procedure LoadFromStream1( Stream : TSeekableStream; const FormatExt : string);
15822: Procedure LoadFromStream2( Stream : TStream; const FormatExt : string);
15823: Procedure LoadFromStrings( AStrings: TStrings; const MimeSeparator: Char)
15824: Procedure LoadLastFile1Click( Sender : TObject)
15825: { LoadIcoToImage loads two icons from resource named NameRes,
15826:
         into two image lists ALarge and ASmall}
15827: Procedure LoadIcoToImage(ALarge, ASmall: ImgList.TCustomImageList; const NameRes: string);
15828: Procedure LoadMemo
15829: Procedure LoadParamsFromIniFile( FFileName : WideString)
15830: Procedure Lock
15831: Procedure Login
15832: Procedure MakeAlphaChannelFromAlphaPalette( Source : TLinearBitmap)
15833: Procedure MakeAlphaChannelFromColorKey( Source : TLinearBitmap; ColorKey : TColor)
15834: Procedure MakeCaseInsensitive
15835: Procedure MakeDeterministic (var bChanged : boolean)
15836: Procedure MakeGrayPal( var Palette, ColorCount : Integer)
15837: // type TVolumeLevel = 0..127; , savaFilePath as C:\MyFile.wav
15838: Procedure MakeSound(Frequency{Hz}, Duration{mSec}: Int; Volume: TVolumeLevel; savefilePath: string);
15839: Procedure MakeComplexSound(N:integer;freqlist:TStrings;Duration{mSec}:Int;pinknoise:bool;Volume:Byte);
15840: Procedure SetComplexSoundElements(freqedt, Phaseedt, AmpEdt, WaveGrp:integer);
15841: Procedure SetRectComplexFormatStr( const S : string)
15842: Procedure SetPolarComplexFormatStr( const S : string)
15843: Procedure AddComplexSoundObjectToList(newf,newp,newa,news:integer; freqlist: TStrings);
15844: Procedure MakeVisible
15845: Procedure MakeVisible( PartialOK : Boolean)
15846: Procedure ManuallClick( Sender : TObject)
15847: Procedure MarkReachable
15848: Procedure maxbox; //shows the exe version data in a win box
15849: Procedure MeanAndStdDev( const Data : array of Double; var Mean, StdDev : Extended) 15850: Procedure MemolChange( Sender : TObject)
15851: Procedure MemolReplaceText(Sender:TObject;const ASearch,AReplace:String;Line,Column:Int;var
        Action: TSynReplaceAction)
15852: Procedure MemolSpecialLineColors(Sender:Tobject;Line:Integer; var Special:Boolean;var FG,BG: TColor)
15853: Procedure MemolStatusChange( Sender : TObject; Changes : TSynStatusChanges)
15854: procedure MemorylClick(Sender: TObject);
15855: Procedure MERGE( MENU : TMAINMENU)
15856: Procedure MergeChangeLog
15857: procedure MINIMIZE
15858: Procedure MinimizeMaxbox;
15859: Procedure MkDir(const s: string)
15860: Procedure mnuPrintFont1Click( Sender : TObject)
15861: procedure ModalStarted
15862: Procedure Modified
15863: Procedure ModifyAlias( Name : string; List : TStrings)
15864: Procedure ModifyDriver( Name : string; List : TStrings)
15865: Procedure MomentSkewKurtosis(const Data:array of Double;var M1,M2,M3,M4, Skew,Kurtosis:Extended)
15866: Procedure MouseToCell( X, Y : Integer; var ACol, ARow : Longint)
15867: Procedure Move(CurIndex, NewIndex: Integer)
15868: procedure Move(CurIndex, NewIndex: Integer);
15869: procedure Move2(const Source: TByteArray; var Dest: TByteArray; Count: Integer)
15870: Procedure MoveChars(const ASource: String; ASourceStart:int;var ADest: String; ADestStart,ALen:integer)
15871: Procedure moveCube( o : TMyLabel)
15872: Procedure MoveTo( Destination : LongInt; AttachMode : TAttachMode)
15873: procedure MoveTo(X, Y: Integer);
```

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15874: procedure MoveWindowOrg(DC: HDC; DX, DY: Integer);
15875: Procedure MovePoint(var x,y:Extended; const angle:Extended);
15876: Procedure Multiply( Multiplier1, Multiplier2 : TMyBigInt);
15877: Procedure Multiply1( Multiplier1 : TMyBigInt; Multiplier2 : Integer);
15878: Procedure MsgAbout(Handle:Int;const Msg,Caption:string;const IcoName:string = 'MAINICON';Flags:DWORD=MB_OK);
15879: Procedure mxButton(x,y,width,height,top,left,ahandle: integer);
15880: Procedure New( Width, Height : Integer; PixFormat : TPixelFormat)
15881: procedure New(P: PChar)
15882: procedure NewlClick(Sender: TObject);
15883: procedure NewInstancelClick(Sender: TObject);
15884: Procedure NEXT
15885: Procedure NextMonth
15886: Procedure Noop
15887: Procedure NormalizePath( var APath: string)
15888: procedure ObjectBinaryToText(Input, Output: TStream)
15889: procedure ObjectBinaryToText1(Input, Output: TStream; var OriginalFormat: TStreamOriginalFormat)
15890: procedure ObjectResourceToText(Input, Output: TStream)
15891: procedure ObjectResourceToText1(Input, Output: TStream; var OriginalFormat: TStreamOriginalFormat)
15892: procedure ObjectTextToBinary(Input, Output: TStream)

15893: procedure ObjectTextToBinary(Input, Output: TStream)
15894: procedure ObjectTextToResource(Input, Output: TStream)
15895: procedure ObjectTextToResource1(Input, Output: TStream; var OriginalFormat: TStreamOriginalFormat)
15896: Procedure Open( const Name, Address, Service : string; Port : Word; Block : Boolean)
15897: Procedure Open( const UserID : WideString; const Password : WideString);
15898: Procedure Open;
15899: Procedure open1Click( Sender : TObject)
15900: Procedure OpenCdDrive
15901: Procedure OpenCloseCdDrive( OpenMode : Boolean; Drive : Char)
15902: Procedure OpenCurrent
15903: Procedure OpenFile(vfilenamepath: string)
15904: Procedure OpenDirectorylClick( Sender : TObject)
15905: Procedure OpenIndexFile( const IndexName : string)
15906: Procedure OpenSchema(const Schema: TSchemaInf; const Restricts: OleVar; const
        SchemaID:OleVariant;DataSet:TADODataSet)
15907: Procedure OpenWriteBuffer( const AThreshhold : Integer)
15908: Procedure OptimizeMem
15909: Procedure Options1( AURL : string);
15910: Procedure OutputDebugString(lpOutputString : PChar)
15911: Procedure PackBuffer
15912: Procedure Paint
15913: Procedure PaintToCanvas( Canvas: TCanvas; const Dest: TRect; HalftoneStretch: Boolean)
15914: Procedure PaintToTBitmap( Target : TBitmap)
15915: Procedure PaletteChanged
15916: Procedure ParentBiDiModeChanged
15917: Procedure PARENTBIDIMODECHANGED( ACONTROL : TOBJECT)
15918: Procedure PasteFromClipboard;
15919: Procedure PasteImage( Source : TLinearBitmap; X, Y : Integer)
15920: Procedure PathExtractElements( const Source : string; var Drive, Path, FileName, Ext : string)
15921: Procedure PerformEraseBackground(Control: TControl; DC: HDC);
15922: Procedure PError( Text : string)
15923: procedure Pie(X1, Y1, X2, Y2, X3, Y3, X4, Y4: Integer);
15924: procedure Pie(X1:Integer;Y1:Integer;X2:Integer;Y2:Integer;X3:Int;Y3:Integer;X4:Integer;Y4:Integer);
15925: Procedure Play( FromFrame, ToFrame : Word; Count : Integer)
15926: procedure playmp3(mpath: string);
15927: Procedure PlayMP31Click( Sender : TObject)
15928: Procedure PointCopy( var Dest : TPoint; const Source : TPoint)
15929: Procedure PointMove( var P : TPoint; const DeltaX, DeltaY : Integer)
15930: procedure PolyBezier(const Points: array of TPoint);
15931: procedure PolyBezierTo(const Points: array of TPoint);
15932: procedure Polygon(const Points: array of TPoint);
15933: procedure Polyline(const Points: array of TPoint);
15934: Procedure Pop
15935: Procedure POPULATEOLE2MENU(SHAREDMENU: HMENU; GROUPS: array of INT; var WIDTHS: array of LONGINT)
15936: Procedure PopulationVarianceAndMean( const X : TDynFloatArray; var Variance, Mean : Float)
15937: Procedure POPUP( X, Y : INTEGER)
15938: Procedure PopupURL(URL : WideString);
15939: Procedure POST
15940: Procedure Post4( AURL : string; const ASource : TStrings; const AResponseContent : TStream);
15941: Procedure Post5( AURL : string; const ASource, AResponseContent : TStream);
15942: Procedure Post6( AURL : string; const ASource : TidMultiPartFormDataStream; AResponseContent : TStream); 15943: Procedure PostUser( const Email, FirstName, LastName : WideString)
15944: Procedure PostKeyEx32(key: Word; const shift: TShiftState; specialkey: Boolean);
15945: procedure Pred(X: int64);
15946: Procedure Prepare
15947: Procedure PrepareStatement
15948: Procedure PreProcessXML( AList : TStrings)
15949: Procedure PreventDestruction
15950: Procedure Print( const Caption : string)
15951: procedure PrintBitmap(aGraphic: TGraphic; Title: string);
15952: procedure printf(const format: String; const args: array of const);
15953: Procedure PrintList(Value: TStringList);
15954: Procedure PrintImage(aValue:TBitmap;Style:TBitmapStyle)://TBitmapStyle=(bsNormal,bsCentered,bsStretched)
15955: Procedure PrintoutlClick( Sender : TObject)
15956: Procedure ProcessHeaders
15957: Procedure PROCESSMENUCHAR( var MESSAGE : TWMMENUCHAR)
15958: Procedure ProcessMessage( AMsg : TIdMessage; AHeaderOnly : Boolean);
15959: Procedure ProcessMessage1( AMsg : TIdMessage; const AStream : TStream; AHeaderOnly : Boolean);
15960: Procedure ProcessMessage2( AMsg : TIdMessage; const AFilename : string; AHeaderOnly : Boolean);
15961: Procedure ProcessMessagesOFF; //application.processmessages
```

```
15962: Procedure ProcessMessagesON;
15963: Procedure ProcessPath(const EditText:string; var Drive:Char; var DirPart:string; var FilePart : string)
15964: Procedure ProcessPath1(const EditText:string; var Drive:Char; var DirPart:string; var FilePart:string);
15965: Procedure Proclist Size is: 3797 /1415
15966: Procedure procMessClick( Sender : TObject)
15967: Procedure PSScriptCompile( Sender : TPSScript)
15968: Procedure PSScriptExecute( Sender : TPSScript)
15969: Procedure PSScriptLine( Sender : TObject)
15970: Procedure Push( ABoundary : string)
15971: procedure PushItem(AItem: Pointer)
15972: Procedure Put2( AURL : string; const ASource, AResponseContent : TStream);
15973: Procedure Put2( const ASourceFile : string; const ADestFile : string; const AAppend : boolean);
15974: procedure PutLinuxLines(const Value: string)
15975: Procedure Ouit
15976: Procedure RaiseConversionError( const AText : string);
15977: Procedure RaiseConversionError1( const AText : string; const AArgs : array of const);
15978: Procedure RaiseConversionRegError( AFamily : TConvFamily; const ADescription : string)
15979: procedure RaiseException(Ex: TIFException; Param: String);
15980: Procedure RaiseExceptionForLastCmdResult;
15981: procedure RaiseLastException;
15982: procedure RaiseException2:
15983: Procedure RaiseLastOSError
15984: Procedure RaiseLastWin32;
15985: procedure RaiseLastWin32Error)
15986: Procedure RaiseListError( const ATemplate : string; const AData : array of const)
15987: Procedure RandomFillStream( Stream: TMemoryStream)
15988: procedure randomize;
15989: Procedure Rasterize( Rasterizer : TRasterizer; Dst : TBitmap32; DstRect : TRect)
15990: Procedure RCS
15991: Procedure Read( Socket : TSocket)
15992: Procedure ReadBlobData
15993: procedure ReadBuffer(Buffer:String;Count:LongInt)
15994: procedure ReadOnly1Click(Sender: TObject);
15995: Procedure ReadSection( const Section: string; Strings: TStrings)
15996: Procedure ReadSections( Strings: TStrings);
15997: Procedure ReadSections( Strings: TStrings);
15998: Procedure ReadSections1( const Section : string; Strings : TStrings);
15999: Procedure ReadSectionValues (const Section: string; Strings: TStrings)
16000: Procedure ReadStream (AStream: TStream; AByteCount:LongInt; const AReadUntilDisconnect: boolean)
16001: Procedure ReadStrings( ADest: TStrings; AReadLinesCount: Integer)
16002: Procedure ReadVersion2(aFileName: STRING; aVersion: TStrings);
16003: Function ReadVersion(aFileName: STRING; aVersion: TStrings): boolean;
16004: Procedure Realign;
16005: procedure Rectangle(X1, Y1, X2, Y2: Integer);
16006: Procedure Rectangle1( const Rect : TRect);
16007: Procedure RectCopy( var Dest : TRect; const Source : TRect)
16008: Procedure RectFitToScreen( var R : TRect)
16009: Procedure RectGrow( var R : TRect; const Delta : Integer)
16010: Procedure RectGrowY( var R : TRect; const Delta : Integer)
16011: Procedure RectGrowY( var R : TRect; const Delta : Integer)
16012: Procedure RectMove( var R : TRect; const DeltaX, DeltaY : Integer)
16013: Procedure RectMoveTo( var R : TRect; const X, Y : Integer)
16014: Procedure RectNormalize( var R : TRect)
16015: // TFileCallbackProcedure = procedure(filename:string);
16016: Procedure RecurseDirectory(Dir: String:IncludeSubs: boolean; callback: TFileCallbackProcedure);
16017: Procedure RecurseDirectory2(Dir: String; IncludeSubs: boolean);
16018: Procedure RedirectTransition(oOldState:TniRegularExpressionState; oNewState: TniRegularExpressionState)
16019: Procedure Refresh;
16020: Procedure RefreshData( Options : TFetchOptions)
16021: Procedure REFRESHLOOKUPLIST
16022: Procedure RegisterAuthenticationMethod( MethodName : String; AuthClass : TIdAuthenticationClass)
16023: Procedure RegisterChanges( Value : TChangeLink)
16024: Procedure RegisterConversionFormat( const AExtension: string; AConversionClass: TConversionClass)
16025: Procedure RegisterFileFormat( const AExtension, ADescription: string; AGraphicClass: TGraphicClass)
16026: Procedure RegisterFileFormat(Extension, AppID: string; Description: string; Executable: string; IconIndex:Int)
16027: Procedure ReInitialize( ADelay : Cardinal)
16028: procedure RELEASE
16029: Procedure Remove( const AByteCount : integer)
16030: Procedure REMOVE( FIELD : TFIELD)
16031: Procedure REMOVE ( ITEM : TMENUITEM)
16032: Procedure REMOVE ( POPUP : TPOPUPMENU)
16033: Procedure RemoveAllPasswords
16034: procedure RemoveComponent(AComponent:TComponent)
16035: Procedure RemoveDir( const ADirName : string)
16036: Procedure RemoveLambdaTransitions( var bChanged : boolean)
16037: Procedure REMOVEPARAM( VALUE : TPARAM)
16038: Procedure RemoveTransitionTo( oState : TniRegularExpressionState; xCharacters : TCharset);
16039: Procedure RemoveTransitionTol( oState : TniRegularExpressionState);
16040: Procedure Rename (const ASourceFile, ADestFile: string)
16041: Procedure Rename ( const FileName : string; Reload : Boolean)
16042: Procedure RenameTable( const NewTableName : string)
16043: Procedure Replace( Index : Integer; Image, Mask : TBitmap) 16044: Procedure ReplacelClick( Sender : TObject)
16045: Procedure ReplaceDate( var DateTime: TDateTime; NewDate: TDateTime)
16046: procedure ReplaceDate(var DateTime: TDateTime; const NewDate: TDateTime))
16047: Procedure ReplaceIcon( Index : Integer; Image : TIcon)
16048: Procedure ReplaceMasked( Index : Integer; NewImage : TBitmap; MaskColor : TColor)
16049: Procedure ReplaceTime ( var DateTime : TDateTime ; NewTime : TDateTime)
16050: procedure ReplaceTime(var DateTime: TDateTime; const NewTime: TDateTime);
```

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16051: Procedure Requery( Options : TExecuteOptions)
16052: Procedure Reset
16053: Procedure ResetlClick( Sender : TObject)
16054: Procedure ResizeCanvas( XSiz, YSiz, XPos, YPos : Integer; Color : TColor)
16055: procedure ResourceExplore1Click(Sender: TObject);
16056: Procedure RestoreContents
16057: Procedure RestoreDefaults
16058: Procedure RestoreOtherInstance( MainFormClassName, MainFormCaption : string)
16059: Procedure RetrieveHeaders
16060: Procedure RevertRecord
16061: Procedure RGBATOBGRA( const Source, Target : Pointer; const BitsPerSample : Byte; Count : Cardinal)
16062: Procedure RGBToBGR( const Source, Target : Pointer; const BitsPerSample : Byte; Count : Cardinal);
16063: Procedure RGBTOBGR1( const R, G, B, Target: Pointer; const BitsPerSample: Byte; Count: Cardinal);
16064: Procedure RGBTOHSL( const R, G, B: Single; out H, S, L: Single);
16065: Procedure RGBTOHSL1( const RGB: TColor32; out H, S, L: Single);
16066: Procedure RGBTOHSV( r, g, b: Integer; var h, s, v: Integer)
16067: Procedure RleCompress2( Stream: TStream)
16068: Procedure RleDecompress2( Stream : TStream)
16069: Procedure RmDir(const S: string)
16070: Procedure Rollback
16071: Procedure Rollback( TransDesc : TTransactionDesc)
16072: Procedure RollbackFreeAndNil( var Transaction : TDBXTransaction)
16073: Procedure RollbackIncompleteFreeAndNil( var Transaction : TDBXTransaction)
16074: Procedure RollbackTrans
16075: procedure RoundRect(X1, Y1, X2, Y2, X3, Y3: Integer);
16076: Procedure RoundToAllocGranularity64( var Value : Int64; Up : Boolean)
16077: Procedure RoundToAllocGranularityPtr( var Value : Pointer; Up : Boolean)
16078: Procedure RunDll32Internal( Wnd : HWnd; const DLLName, FuncName, CmdLine : string; CmdShow : Integer) 16079: Procedure S_AddMessageToStrings( AMessages : TStrings; AMsg : string)
16080: Procedure S_EBox( const AText : string)
16081: Procedure S_GetEncryptionKeys(DateTime1,DateTime2:TDateTime;var StartKey:int;var MultKey:integer;var
        AddKev:int
16082: Procedure S_IBox( const AText : string)
16083: Procedure S_ReplaceChar( var cStr : string; cOldChr, cNewChr : char)
16084: Procedure S_ReplaceStringInFile( AFileName : string; ASearchString, AReplaceString : string)
16085: Procedure S TokenInit( cBuffer : PChar; const cDelimiters : string)
16086: Procedure SampleVarianceAndMean
16087: ( const X : TDynFloatArray; var Variance, Mean : Float)
16088: Procedure Save2Click( Sender : TObject)
16089: Procedure Saveas3Click( Sender : TObject)
16090: Procedure SavebeforelClick( Sender : TObject)
16091: Procedure SaveBytesToFile(const Data: TBytes; const FileName: string);
16092: procedure SaveCanvas2(vCanvas: TCanvas; FileName: string);
16093: Procedure SaveConfigFile
16094: Procedure SaveOutputlClick( Sender : TObject)
16095: procedure SaveScreenshotClick(Sender: TObject);
16096: Procedure SaveIn(pathname, content: string); //SaveIn(exepath+'mysaveIntest.txt', memo2.text); 16097: Procedure SaveToClipboardFormat( var AFormat : Word; var AData : THandle; var APalette : HPALETTE)
16098: Procedure SaveToClipboardFormat( var Format : Word; var Data : THandle; var APalette : HPALETTE)
16099: Procedure SaveToFile( AFileName : string)
16100: Procedure SAVETOFILE( const FILENAME : String)
16101: Procedure SaveToFile( const FileName : WideString)
16102: Procedure SaveToFile( const FileName : WideString; Format : TPersistFormat)
16103: Procedure SaveToFile( const FileName, FileType: string; Bitmap: TLinearBitmap)
16104: procedure SaveToFile(FileName: string);
16105: procedure SaveToFile(FileName:String)
16106: Procedure SaveToStream( AStream: TStream; const AHeadersOnly: Boolean)
16107: Procedure SaveToStream( OutStream : TSeekableStream; const Ext : string; Bitmap : TLinarBitmap)
16108: Procedure SaveToStream( S : TStream)
16109: Procedure SaveToStream( Stream: TSeekableStream; const Ext: string; Bitmap: TLinearBitmap)
16110: Procedure SaveToStream( Stream: TStream)
16111: Procedure SaveToStream( Stream: TStream; Format: TDataPacketFormat)
16112: procedure SaveToStream(Stream: TStream);
16113: procedure SaveToStream(Stream:TStream)
16114: Procedure SaveToStream1(Stream: TSeekableStream; const FormatExt: string); 16115: Procedure SaveToStream2(Stream: TStream; const FormatExt: string);
16116: Procedure SaveToStrings( AStrings: TStrings; const MimeSeparator
16117: procedure Say(const sText: string)
16118: Procedure SBytecodelClick( Sender : TObject)
16119: Procedure ScaleImage( const SourceBitmap, ResizedBitmap: TBitmap; const ScaleAmount : Double) 16120: procedure ScriptExplorerlClick(Sender: TObject);
16121: Procedure Scroll( Distance : Integer)
16122: Procedure Scroll( DX, DY : Integer)
16123: procedure ScrollBy(DeltaX, DeltaY: Integer);
16124: procedure SCROLLINVIEW(ACONTROL:TCONTROL)
16125: Procedure ScrollTabs( Delta : Integer)
16126: Procedure Search1Click( Sender : TObject)
16127: procedure SearchAndOpenDoc(vfilenamepath: string)
16128: procedure SearchAndOpenFile(vfilenamepath: string)
16129: procedure SearchAndReplace(aStrList: TStrings; aSearchStr, aNewStr: string)
16130: procedure SearchAndCopy(aStrList: TStrings; aSearchStr, aNewStr: string; offset: integer);
16131: Procedure SearchNext1Click( Sender : TObject)
16132: Procedure Select( Node: TTreeNode; ShiftState: TShiftState);
16133: Procedure Select1( const Nodes: array of TTreeNode);
16134: Procedure Select2( Nodes : TList);
16135: Procedure SelectNext( Direction : Boolean)
16136: Procedure SelectNextPage( GoForward : Boolean; CheckTabVisible : Boolean)
16137: Procedure SelfTestPEM //unit uPSI_cPEM
16138: Procedure Send( AMsg : TidMessage)
```

```
16139: //config forst in const MAILINIFILE = 'maildef.ini';
16140: //ex.: SendEmail('max@kleiner.ch','max@kleiner.com','this test7','maxbox the SSL fox','
16141: Procedure SendEmail(mFrom, mTo, mSubject, mBody, mAttachment: variant);
16142: Procedure SendMail(mFrom, mTo, mSubject, mBody, mAttachment: variant);
16143: Procedure SendMsg(AMsg: TIdMessage; const AHeadersOnly: Boolean)
16144: Procedure SendMsg(AMsg: TIdMessage; const AHeadersOnly: Boolean = False)
16145: Procedure SendResponse
16146: Procedure SendStream( AStream: TStream)
16147: Procedure Set8087CW( NewCW : Word)
16148: Procedure SetAll( One, Two, Three, Four : Byte)
16149: Procedure SetAltRecBuffers( Old, New, Cur : PChar)
16150: Procedure SetAppDispatcher( const ADispatcher: TComponent)
16151: procedure SetArrayLength;
16152: procedure SetArrayLength2String(arr: T2StringArray; asize1, asize2: integer); //2 dimension
16153: procedure SetArrayLength2Integer(arr: T2IntegerArray; asize1, asize2: integer);
16154: Procedure SetAsHandle( Format : Word; Value : THandle)
16155: procedure SetBounds(ALeft, ATop, AWidth, AHeight: Integer)
16156: procedure SetCaptureControl(Control: TControl);
16157: Procedure SetColumnAttributes
16158: Procedure SetCookieField(Values:TStrings;const ADomain,APath:string;AExpires:TDateTime;ASecure:Boolean)
16159: Procedure SetCustomHeader( const Name, Value : string)
16160: Procedure SetExprParams(const Text:Widestring;Opts:TFilterOpts;ParserOpts:TParserOpts;const
         FieldName:Widestring)
16161: Procedure SetFMTBcd( Buffer : TRecordBuffer; value : TBcd)
16162: Procedure SetFocus
16163: procedure SetFocus; virtual;
16164: Procedure SetInitialState
16165: Procedure SetKey
16166: procedure SetLastError(ErrorCode: Integer)
16167: procedure SetLength;
16168: Procedure SetLineBreakStyle( var T : Text; Style : TTextLineBreakStyle)
16169: Procedure SETOLE2MENUHANDLE ( HANDLE : HMENU)
16170: Procedure SetParams ( ADataset : TDataset; UpdateKind : TUpdateKind);
16171: procedure SETPARAMS(APOSITION, AMIN, AMAX:INTEGER)
16172: Procedure SetParams1( UpdateKind : TUpdateKind)
16173: Procedure SetPassword( const Password : string)
16174: Procedure SetPointer( Ptr : Pointer; Size : Longint)
16175: Procedure SetPrimalityTest( const Method : TPrimalityTestMethod)
16176: Procedure SetPrinter( ADevice, ADriver, APort : PChar; ADeviceMode : THandle)
16177: Procedure SetProvider( Provider : TComponent)
16178: Procedure SetProxy( const Proxy : string)
16179: Procedure SetPSResult( var PSResult: TPSResult; Value: TObject) 16180: Procedure SetRange( const StartValues, EndValues: array of const)
16181: Procedure SetRangeEnd
16182: Procedure SetRate( const aPercent, aYear : integer)
16183: procedure SetRate(const aPercent, aYear: integer)
16184: Procedure Set_ReportMemoryLeaksOnShutdown(abo: boolean)
16185: Procedure SetSafeCallExceptionMsg( Msg : String)
16186: procedure SETSELTEXTBUF(BUFFER: PCHAR)
16187: Procedure SetSize( AWidth, AHeight : Integer)
16188: procedure SetSize(NewSize:LongInt)
16189: procedure SetString(var s: string; buffer: PChar; len: Integer)
16190: Procedure SetStrings( List : TStrings)
16191: Procedure SetText( Text: PwideChar)
16192: procedure SetText(Text: PChar);
16193: Procedure SetTextBuf( Buffer : PChar)
16194: procedure SETTEXTBUF(BUFFER:PCHAR)
16195: Procedure SetTick( Value : Integer)
16196: Procedure SetTimeout( ATimeOut : Integer)
16197: Procedure SetTraceEvent( Event : TDBXTraceEvent)
16198: Procedure SetUserName( const UserName : string)
16199: Procedure SetWallpaper( Path : string);
16200: procedure ShellStylelClick(Sender: TObject);
16201: Procedure SHORTCUTTOKEY( SHORTCUT : TSHORTCUT; var KEY : WORD; var SHIFT : TSHIFTSTATE)
16202: Procedure ShowFileProperties( const FileName : string)
16203: Procedure ShowInclude1Click( Sender : TObject)
16204: Procedure ShowInterfaces1Click( Sender : TObject)
16205: Procedure ShowLastException1Click( Sender : TObject)
16206: Procedure ShowMessage( const Msg : string)
16207: Procedure ShowMessageBig(const aText : string);
16208: Procedure ShowMessageBig2(const aText : string; aautosize: boolean);
16209: Procedure ShowMessageBig3(const aText : string; fsize: byte; aautosize: boolean);
16210: Procedure MsgBig(const aText : string);
16211: procedure showmessage(mytext: string);
                                                                       //alias
16212: Procedure ShowMessageFmt( const Msg : string; Params : array of const)
16213: procedure ShowMessageFmt(const Msg: string; Params: array of const))
16214: Procedure ShowMessagePos( const Msg : string; X, Y : Integer)
16215: procedure ShowMessagePos(const Msg: string; X: Integer; Y: Integer))
16216: Procedure ShowSearchDialog( const Directory : string)
16217: Procedure ShowSpecCharslClick( Sender: TObject)
16218: Procedure ShowSpecCharslClick( Sender: TObject)
16218: Procedure ShowBitmap(bmap: TBitmap); //draw in a form!
16219: Procedure ShredFile( const FileName: string; Times: Integer)
16220: procedure Shuffle(vQ: TStringList);
16221: Procedure ShuffleList( var List : array of Integer; Count : Integer)
16222: Procedure SimulateKeystroke( Key : byte; Shift : TShiftState)
16223: Procedure SinCos( const Theta : Extended; var Sin, Cos : Extended) 16224: Procedure SinCosE( X : Extended; out Sin, Cos : Extended)
16225: Procedure Site (const ACommand : string)
16226: Procedure SkipEOL
```

```
16227: Procedure Sleep( ATime : cardinal)
16228: Procedure Sleep( milliseconds : Cardinal)
16229: Function SleepEx( dwMilliseconds : DWORD; bAlertable : BOOL) : DWORD
16230: Procedure Slinenumbers1Click( Sender : TObject)
16231: Procedure Sort.
16232: Procedure SortColorArray(ColorArray:TColorArray;L.R:Int;SortType:TColorArraySortType;Reverse:Bool)
16233: procedure Speak(const sText: string) //async like voice
16234: procedure Speak2(const sText: string) //sync
16235: procedure Split(Str: string; SubStr: string; List: TStrings);
16236: Procedure SplitNameValue( const Line : string; var Name, Value : string)
16237: Procedure SplitColumns( const AData : String; AStrings : TStrings; const ADelim : String)
16238: Procedure SplitColumnsNoTrim( const AData : String; AStrings : TStrings; const ADelim : String)
16239: Procedure SplitLines( AData : PChar; ADataSize : Integer; AStrings : TStrings) 16240: Procedure SplitString( const AStr, AToken : String; var VLeft, VRight : String) 16241: procedure SQLSyntaxlClick(Sender: TObject);
16242: Procedure SRand( Seed : RNG_IntType)
16243: Procedure Start
16244: Procedure StartCount( var Counter : TJclCounter; const Compensate : Boolean)
16245: procedure StartFileFinder3(spath,aext,searchstr: string; arecursiv: boolean; reslist: TStringlist); 16246: Procedure StartTransaction( TransDesc : TTransactionDesc)
16247: Procedure Status( var AStatusList : TStringList)
16248: Procedure StatusBarlDblClick( Sender : TObject)
16249: Procedure StepIntolClick( Sender : TObject)
16250: Procedure StepIt
16251: Procedure StepOutlClick( Sender : TObject)
16252: Procedure Stop
16253: procedure stopmp3;
16254: procedure StartWeb(aurl: string);
16255: Procedure Str(aint: integer; astr: string); //of system
16256: Procedure StrDispose( Str : PChar)
16257: procedure StrDispose(Str: PChar)
16258: Procedure StrReplace(var Str: String; Old, New: String);
16259: Procedure StretchDIBits( DC : THandle; const Dest : TRect; HalftoneStretch : Boolean)
16260: procedure StretchDraw(const Rect: TRect; Graphic: TGraphic);
16261: Procedure StringToBytes( Value : String; Bytes : array of byte)
16262: procedure StrSet(c : Char; I : Integer; var s : String);
16263: Procedure StrSplitP(const Delimiter: Char; Input: string; const Strings: TStrings);
16264: Procedure StructureMount( APath : String)
16265: procedure STYLECHANGED(SENDER: TOBJECT)
16266: Procedure Subselect( Node : TTreeNode; Validate : Boolean)
16267: procedure Succ(X: int64);
16268: Procedure SumsAndSquares (const Data: array of Double; var Sum. SumOfSquares: Extended)
16269: procedure SwapChar(var X,Y: char); //swapX follows
16270: Procedure SwapFloats( var X,
                                        Y : Float)
16271: procedure SwapGrid(grd: TStringGrid);
16272: Procedure SwapOrd( var I, J: Byte);
16273: Procedure SwapOrd( var X, Y: Integer)
16274: Procedure SwapOrd1( var I, J : Shortint);
16275: Procedure SwapOrd2( var I, J : Smallint);
16276: Procedure SwapOrd3( var I, J : Word);
16277: Procedure SwapOrd4( var I, J : Integer);
16278: Procedure SwapOrd5( var I, J : Cardinal);
16279: Procedure SwapOrd6( var I, J : Int64);
16280: Procedure SymetricCompareFiles(const plaintext, replaintext: string)
16281: Procedure Synchronizel ( Method : TMethod);
16282: procedure SyntaxCheck1Click(Sender: TObject);
16283: Procedure SysFreeString(const S: WideString); stdcall;
16284: Procedure TakeOver( Other : TLinearBitmap)
16285: Procedure Talkln(const sText: string) //async voice
16286: procedure tbtn6resClick(Sender: TObject);
16287: Procedure tbtnUseCaseClick( Sender : TObject)
16288: procedure TerminalStyle1Click(Sender: TObject);
16289: Procedure Terminate
16290: Procedure texSyntax1Click( Sender : TObject)
16291: procedure TextOut(X, Y: Integer; Text: string);
16292: Procedure TextRect( Rect : TRect; X, Y : Integer; const Text : string);
16293: procedure TextRect(Rect: TRect; X: Integer; Y: Integer; const Text: string);
16294: Procedure TextRect1( var Rect : TRect; var Text : string; TextFormat : TTextFormat);
16295: Procedure TextStart
16296: procedure TILE
16297: Procedure TimeStampToBytes( Value : TBcd; Bytes : array of byte)
16298: Procedure TitleClick( Column : TColumn)
16299: Procedure ToDo
16300: procedure toolbtnTutorialClick(Sender: TObject);
16301: Procedure Tracel( AURL : string; const AResponseContent : TStream);
16302: Procedure TransferMode( ATransferMode: TIdFTPTransferMode)
16303: Procedure Truncate
16304: procedure Tutorial101Click(Sender: TObject);
16305: procedure Tutorial10Statistics1Click(Sender: TObject);
16306: procedure Tutorial111Forms1Click(Sender:
16307: procedure Tutorial12SQL1Click(Sender: TObject);
16308: Procedure tutorial1Click( Sender : TObject)
16309: Procedure tutorial21Click( Sender : TObject)
16310: Procedure tutorial31Click( Sender : TObject)
16311: Procedure tutorial4Click( Sender : TObject)
16312: Procedure Tutorial5Click( Sender : TObject)
16313: procedure Tutorial6Click(Sender: TObject);
16314: procedure Tutorial91Click(Sender: TObject);
16315: Procedure UnhookSignal( RtlSigNum : Integer; OnlyIfHooked : Boolean)
```

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16316: procedure UniqueString(var str: AnsiString)
16317: procedure UnloadLoadPackage(Module: HMODULE)
16318: Procedure Unlock
16319: Procedure UNMERGE( MENU : TMAINMENU)
16320: Procedure UnRegisterChanges( Value : TChangeLink)
16321: Procedure UnregisterConversionFamily( const AFamily : TConvFamily)
16322: Procedure UnregisterConversionType( const AType : TConvType)
16323: Procedure UnRegisterProvider( Prov : TCustomProvider)
16324: Procedure UPDATE
16325: Procedure UpdateBatch( AffectRecords : TAffectRecords)
16326: Procedure UPDATECURSORPOS
16327: Procedure UpdateFile
16328: Procedure UpdateItems( FirstIndex, LastIndex : Integer)
16329: Procedure UpdateResponse ( AResponse : TWebResponse)
16330: Procedure UpdateScrollBar
16331: Procedure UpdateViewlClick( Sender : TObject)
16332: procedure Val(const s: string; var n, z: Integer)
16333: procedure VarArraySet(c : Variant; I : Integer; var s : Variant); 16334: Procedure VarFMTBcdCreate( var ADest : Variant; const ABcd : TBcd);
16335: Procedure VariantAdd( const src : Variant; var dst : Variant)
16336: Procedure VariantAnd( const src : Variant; var dst : Variant)
16337: Procedure VariantArrayRedim( var V : Variant; High : Integer)
16338: Procedure VariantCast( const src : Variant; var dst : Variant; vt : Integer)
16339: Procedure VariantClear( var V : Variant)
16340: Procedure VariantCpy( const src : Variant; var dst : Variant)
16341: Procedure VariantDiv( const src : Variant; var dst : Variant)
16342: Procedure VariantMod( const src : Variant; var dst : Variant)
16343: Procedure VariantMul( const src : Variant; var dst : Variant)
16344: Procedure VariantOr( const src : Variant; var dst : Variant)
16345: Procedure VariantPutElement( var V : Variant; const data : Variant; i1 : integer);
16346: Procedure VariantPutElement1( var V : Variant; const data : Variant; i1, i2 : integer);
16347: Procedure VariantPutElement2( var V : Variant; const data : Variant; i1, i2, i3 : integer);
16348: Procedure VariantPutElement3( var V : Variant; const data : Variant; i1, i2, i3, i4 : integer);
16349: Procedure VariantPutElement4( var V : Variant; const data : Variant; i1, i2, i3, i4, i5 : integer);
16350: Procedure VariantShl( const src : Variant; var dst : Variant)
16351: Procedure VariantShr( const src : Variant; var dst : Variant)
16352: Procedure VariantSub( const src : Variant; var dst : Variant)
16353: Procedure VariantXor( const src : Variant; var dst : Variant
16354: Procedure VarCastError;
16355: Procedure VarCastError1( const ASourceType, ADestType: TVarType);
16356: Procedure VarInvalidOp
16357: Procedure VarInvalidNullOp
16358: Procedure VarOverflowError( const ASourceType, ADestType : TVarType)
16359: Procedure VarRangeCheckError( const ASourceType, ADestType : TVarType)
16360: Procedure VarArrayCreateError
16361: Procedure VarResultCheck( AResult : HRESULT);
16362: Procedure VarResultCheck1( AResult : HRESULT; ASourceType, ADestType : TVarType);
16363: Procedure HandleConversionException( const ASourceType, ADestType: TVarType)
16364: Function VarTypeAsText( const AType : TVarType) : string
16365: procedure Voice(const sText: string) //async
16366: procedure Voice2(const sText: string) //sync
16367: Procedure WaitMiliSeconds( AMSec : word)
16368: Procedure WideAppend( var dst : WideString; const src : WideString)
16369: Procedure WideAssign( var dst : WideString; var src : WideString)
16370: Procedure WideDelete( var dst : WideString; index, count : Integer)
16371: Procedure WideFree( var s : WideString)
16372: Procedure WideFromAnsi( var dst : WideString; const src : AnsiString)
16373: Procedure WideFromPChar( var dst : WideString; src : PChar)
16374: Procedure WideInsert( var dst : WideString; const src : WideString; index : Integer) 16375: Procedure WideSetLength( var dst : WideString; len : Integer)
16376: Procedure WideString2Stream( aWideString : WideString; oStream : TStream)
16377: Procedure WideStringToBytes( Value : WideString; Bytes : array of byte)
16378: Procedure WinColorToOpenGLColor( const Color : TColor; out Red, Green, Blue : Float)
16379: Procedure WinInet HttpGet(const Url: string; Stream:TStream);
16380: Procedure HttpGet(const Url: string; Stream:TStream);
16381: Procedure WordToTwoBytes( AWord : Word; ByteArray : TIdBytes; Index : integer)
16382: Procedure WordWrap1Click( Sender : TObject)
16383: Procedure Write( const AOut : string)
16384: Procedure Write( Socket : TSocket)
16385: procedure Write(S: string);
16386: Procedure WriteBinaryStream( const Section, Name : string; Value : TStream)
16387: Procedure WriteBool( const Section, Ident : string; Value : Boolean)
16388: Procedure WriteBuffer( const ABuffer, AByteCount : Longint; const AWriteNow : Boolean) 16389: procedure WriteBuffer(Buffer:String;Count:LongInt)
16390: Procedure WriteCardinal( AValue : Cardinal; const AConvert : Boolean)
16391: Procedure WriteChar( AValue : Char)
16392: Procedure WriteDate( const Section, Name : string; Value : TDateTime)
16393: Procedure WriteDateTime( const Section, Name : string; Value : TDateTime)
16394: Procedure WriteFloat( const Section, Name : string; Value : Double)
16395: Procedure WriteHeader( AHeader : TStrings)
16396: Procedure WriteInteger( AValue : Integer; const AConvert : Boolean)
16397: Procedure WriteInteger( const Section, Ident : string; Value : Longint)
16398: Procedure WriteLn( const AOut : string)
16399: procedure Writeln(s: string);
16400: Procedure WriteLog( const FileName, LogLine : string)
16401: Procedure WriteRFCReply( AReply : TIdRFCReply)
16402: Procedure WriteRFCStrings( AStrings : TStrings)
16403: Procedure WriteSmallInt( AValue : SmallInt; const AConvert : Boolean)
16404: Procedure WriteStream(AStream:TStream;const AAll:Bool;const AWriteByteCount:Bool;const ASize:Int)
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16405: Procedure WriteString( const Section, Ident, Value : String)
16406: Procedure WriteStrings( AValue : TStrings; const AWriteLinesCount : Boolean)
16407: Procedure WriteTime( const Section, Name : string; Value : TDateTime)
16408: Procedure WriteObjectResourceHeader( ObjStream, Output : TStream)
16409: Procedure Write16bitResourceHeader( const AName : TBytes; DataSize : Integer; Output : TStream)
16410: Procedure Write32bitResourceHeader( const AName : TBytes; DataSize : Integer; Output : TStream)
16411: procedure WStrSet(c : AnyString; I : Integer; var s : AnyString);
16412: procedure XMLSyntax1Click(Sender: TObject);
16413: Procedure XOR_Streams2( Dest, Srce : TMemoryStream)
16414: Procedure XOR_Streams3( Dest, SrceA, SrceB: TMemoryStream)
16415: Procedure ZeroFillStream( Stream : TMemoryStream)
16416: procedure XMLSyntax1Click(Sender: TObject);
16417: Procedure ZeroMemory( Ptr : Pointer; Length : Longint)
16418: procedure(Control: TwinControl; Index: Integer; Rect: TRect; State: Byte)
16419: procedure(Control: TwinControl; Index: Integer; var Height: Integer)
16420: procedure (Sender, Source: TObject; X, Y: Integer; State: TDragState; var Accept: Boolean)
16421: procedure (Sender, Source: TObject; X, Y: Integer)
16422: procedure(Sender, Target: Tobject; X, Y: Integer)
16423: procedure(Sender: Tobject; ASection, AWidth: Integer)
16424: procedure (Sender: TObject; ScrollCode: TScrollCode; var ScrollPos: Integer)
16425: procedure(Sender: TObject; Shift: TShiftState; X, Y: Integer);
16426: procedure (Sender: TObject; var Action: TCloseAction)
16427: procedure (Sender: TObject; var CanClose: Boolean)
16428: procedure (Sender: TObject; var Key: Char);
16429: ProcedureName ProcedureNames ProcedureParametersCursor @
16430:
16431: ***********Now Constructors constructor ************
16432: Size is: 1115 996 628 550 544 501 459 (381) (360) (270 246) (235) 16433: Attach( VersionInfoData : Pointer; Size : Integer)
            constructor Create( ABuckets : TBucketListSizes)
16435:
            Create( ACallBackWnd : HWND)
            Create( AClient : TCustomTaskDialog)
Create( AClient : TIdTelnet)
16436:
16437:
            Create( ACollection : TCollection)
Create( ACollection : TFavoriteLinkItems)
16438:
16439:
16440:
            Create( ACollection : TTaskDialogButtons)
16441:
            Create( AConnection : TIdCustomHTTP)
            Create( ACreateSuspended : Boolean)
16442:
            Create( ADataSet : TCustomSQLDataSet)
CREATE( ADATASET : TDATASET)
16443:
16444:
16445:
            Create( Aggregates : TAggregates; ADataSet : TCustomClientDataSet);
            Create( AGrid : TCustomDBGrid)
Create( AGrid : TStringGrid; AIndex : Longint)
16446:
16447:
            Create( AHTTP : TIdCustomHTTP)
16448:
16449:
            Create( AListItems : TListItems)
            Create( AOnBytesRemoved : TIdBufferBytesRemoved)
Create( AOnBytesRemoved : TIdBufferBytesRemoved)
16450:
16451:
16452:
            Create( AOwner : TCommonCalendar)
16453:
                         AOwner :
                                        TComponent)
16454:
            CREATE ( AOWNER : TCOMPONENT
16455:
            Create( AOwner :
                                        TCustomListView
            Create( AOwner :
                                        TCustomOutline)
16456:
16457:
            Create( AOwner :
                                        TCustomRichEdit
            Create( AOwner :
16458:
                                        TCustomRichEdit; AttributeType : TAttributeType)
16459:
            Create( AOwner : TCustomTreeView)
            Create( AOwner :
16460:
                                        TIdUserManager)
16461:
            Create( AOwner : TListItems)
16462: Create( AOwner :
           {\tt TObject; Handle:hDBICur; CBType: CBType; CBBuf: Pointer; CBBufSize: Int; CallbackEvent: TBDECallbackEvent; Chain: CallbackEvent: Chain: CallbackEvent
           Boolean)
16463: CREATE ( AOWNER : TPERSISTENT)
16464:
            Create( AOwner : TPersistent)
16465:
            Create( AOwner : TTable)
16466:
            Create ( AOwner : TTreeNodes)
            Create( AOwner : TWinControl; const ClassName : string)
16467:
            Create( AParent : TIdCustomHTTP)
            Create( AParent : TUpdateTree; AResolver : TCustomResolver)
16469:
            Create( AProvider : TBaseProvider)
Create( AProvider : TCustomProvider);
16470:
16471:
            Create( AProvider : TDataSetProvider)
16472:
16473:
            Create( ASocket : TCustomWinSocket; TimeOut : Longint)
16474:
            Create( ASocket : TSocket)
16475:
            Create( AStrings : TWideStrings)
            Create( AToolBar : TToolBar)
16476:
16477:
            Create( ATreeNodes : TTreeNodes)
16478:
            Create( Autofill : boolean)
            Create( AWebPageInfo : TAbstractWebPageInfo)
Create( AWebRequest : TWebRequest)
Create( Collection : TCollection)
16479:
16480:
16481:
16482:
            Create( Collection : TIdMessageParts; ABody : TStrings)
16483:
            Create( Collection : TIdMessageParts; const AFileName : TFileName)
16484:
            Create( Column : TColumn)
16485:
            Create( const AConvFamily :
                                                          TConvFamily; const ADescription : string)
            Create( const AConvFamily :
                                                          TConvFamily; const ADescription : string; const AFactor : Double)
16486:
             Create ( const AConvFamily : TConvFamily; const ADescription : string; const AToCommonProc
16487:
           AFromCommonProc : TConversionProc)
16488: Create( const AInitialState : Boolean; const AManualReset : Boolean)
16489:
            Create( const ATabSet : TTabSet)
            Create( const Compensate : Boolean)
```

```
16491: Create( const FileMap : TJclCustomFileMapping; Access, Size : Cardinal; ViewOffset : Int64)
16492:
         Create( const FileName : string)
16493:
         Create( const FileName : string; FileMode: Cardinal; const Name: string; Protect: Cardinal; const MaximumSize
         Int64; const SecAttr : PSecurityAttributes);
16494:
         Create( const FileName : string; FileMode : WordfmShareDenyWrite)
16495:
         Create( const MaskValue : string)
16496:
         Create(const Name:string; Protect:Cardinal;const MaximumSize:Int64;const SecAttr:PSecurityAttributes)
16497:
         Create( const Prefix : string)
16498:
         \texttt{Create(} \  \  \textbf{const} \  \  \texttt{sRegularExpression} : \  \  \textbf{string}; \  \  \texttt{xFlags} : \  \  \texttt{TniRegularExpressionMatchFlags)}
         Create( const sRule : string; xFlags : TniRegularExpressionMatchFlags)
Create( const sRule : string; xFlags : TniRegularExpressionMatchFlags)
16499:
16500:
         Create( CoolBar : TCoolBar)
         Create( CreateSuspended : Boolean; ASocket : TServerClientWinSocket)
Create( CreateSuspended : Boolean; ASocket : TServerWinSocket)
16502:
16503:
        Create( DataSet : TDataSet; const
16504:
        Text:Widestring;Options:TFilterOptions;ParserOptions:TParserOptions;const FieldName : Widestring;
        DepFields : TBits; FieldMap : TFieldMap)
16505:
        Create( DBCtrlGrid : TDBCtrlGrid)
         Create( DSTableProducer: TDSTableProducer)
Create( DSTableProducer: TDSTableProducer; ColumnClass: THTMLTableColumnClass)
16506:
16507:
16508:
         Create( ErrorCode : DBIResult)
16509:
         Create( Field : TBlobField; Mode : TBlobStreamMode)
16510:
         Create( Grid : TCustomDBGrid; ColumnClass : TColumnClass)
         Create( HeaderControl : TCustomHeaderControl)
16511:
         Create( HTTPRequest : TWebRequest)
16512:
16513:
         Create( iStart : integer; sText : string)
        Create( iValue : Integer)
Create( Kind : TMmTimerKind; Notification : TMmNotificationKind)
16514:
16515:
16516:
         Create( MciErrNo : MCIERROR; const Msg : string)
         Create(MemoryStream:TCustomMemStream;FreeStream:Boolean;const AIndexOption:TJclMappedTextReaderIndex);
16518:
         Create( Message : string; ErrorCode : DBResult)
16519:
         Create( Msg : string)
         Create( NativeError, Context : string; ErrCode, PrevError : Integer; E : Exception)
16520:
         Create( NativeError, Context : string; ErrorCode, PreviousError : DBResult)
Create( oExpression : TniRegularExpression; eType : TniRegularExpressionStateType)
Create( oOwner : TniRegularExpression; xFlags : TniRegularExpressionMatchFlags)
16521:
16523:
         {\tt Create(oSource:TniRegularExpressState;oDestination:TniRegularExprState;xCharacts:TCharSet;bLambda:bool)}
16524:
16525:
         Create(Owner: EDBEngineError; ErrorCode: DBIResult; NativeError: Longint; Message: PChar)
16526:
         Create( Owner :
                            TCustomComboBoxEx)
16527:
         CREATE( OWNER : TINDEXDEFS; const NAME, FIELDS: String; OPTIONS: TINDEXOPTIONS)
16528:
         Create( Owner : TPersistent)
         Create( Params : TStrings)
16529:
16530:
         Create( Size : Cardinal)
         Create( Socket : TSocket; ServerWinSocket : TServerWinSocket)
16531:
16532:
         Create( StatusBar : TCustomStatusBar)
         Create( WebDispatcher : TCustomWebDispatcher; ItemClass : TCollectionItemClass)
16533:
         Create( WebResponse : TWebResponse; ItemClass : TCollectionItemClass)
16534:
         Create(AHandle:Integer)
16536:
         Create(AOwner: TComponent); virtual;
         Create(const AURI : string)
16537:
16538:
         Create(FileName:String; Mode:Word)
         Create(Instance:THandle;ResName:String;ResType:PChar)
16539:
         Create(Stream : TStream)
16540:
16541:
         Createl( ADataset : TDataset);
16542: Createl(const FileHandle:Thandle;const Name:string;Protect:Cardinal;const MaximumSize:Int64;const
        SecAttr: PSecurityAttributes);
         Createl( const FileName : string; const AIndexOption : TJclMappedTextReaderIndex);
         Create2( Other : TObject);
16544:
16545:
         CreateAt(FileMap: TJclCustomFileMapping; Access,Size:Cardinal;ViewOffset:Int64;Address: Pointer)
         CreateError(const anErrCode: Integer/const asReplyMessage: string/ const asErrorMessage: string)
CreateFmt( MciErrNo : MCIERROR; const Msg : string; const Args : array of const)
16546:
16547:
16548:
         CreateFromId(Instance:THandle;ResId:Integer;ResType:PChar)
16549:
         CreateLinked( DBCtrlGrid : TDBCtrlGrid)
16550:
         CREATENEW(AOWNER:TCOMPONENT; Dummy: Integer
         CreateRes( Ident : Integer);
16551:
         CreateRes( MciErrNo : MCIERROR; Ident : Integer)
         CreateRes( ResStringRec : PResStringRec);
16553:
16554:
         CreateResHelp( Ident : Integer; AHelpContext : Integer);
         CreateResHelp( ResStringRec : PResStringRec; AHelpContext : Integer);
16555:
         CreateShadow( AOwner : TComponent; ControlSide : TControlSide)
16556:
         CreateSize( AWidth, AHeight : Integer)
16557:
16558:
         Open( const Name : string; const InheritHandle : Boolean; const DesiredAccess : Cardinal)
16559:
16560: -
16561: unit uPSI_MathMax;
16562:
         CONSTS
16563:
          Bernstein: Float = 0.2801694990238691330364364912307; // Bernstein constant
16564:
                           = 1.2599210498948731647672106072782; // CubeRoot(2)
16565:
          Cbrt2: Float
                              = 1.4422495703074083823216383107801; // CubeRoot(3)
16566:
          Cbrt3: Float
                             - 1.4422497/0304740382221638310801; // CubeRoot(3)

- 2.1544346900318837217592935665194; // CubeRoot(10)

- 4.6415888336127788924100763509194; // CubeRoot(100)

- 1.4645918875615232630201425272638; // CubeRoot(PI)

- 0.9159655941772190150546035149324; // Catalan constant
16567:
          Cbrt10: Float
16568:
          Cbrt100: Float
16569:
          CbrtPi: Float
16570:
          Catalan: Float
16571:
                                   3.1415926535897932384626433832795; // PI
          PiJ:
                  Float
          PI: Extended =
                              3 1415926535897932384626433832795);
16572:
                             = 1.5707963267948966192313216916398; // PI / 2
= 1.0471975511965977461542144610932; // PI / 3
= 0.78539816339744830961566084581988; // PI / 4
16573:
          PiOn2: Float
PiOn3: Float
16574:
          PiOn4: Float
```

```
16576:
            Sgrt2: Float
                                     = 1.4142135623730950488016887242097; // Sqrt(2)
                                     = 1.7320508075688772935274463415059; // Sqrt(3)
16577:
            Sqrt3: Float
                                      = 2.2360679774997896964091736687313; // Sqrt(5)
16578:
             Sqrt5: Float
             Sqrt10: Float
                                                                                             // Sqrt(10)
// Sqrt(PI)
// Sqrt(2 * PI)
16579:
                                      = 3 1622776601683793319988935444327;
             SgrtPi: Float
                                      = 1.7724538509055160272981674833411;
16580:
                                      = 2.506628274631000502415765284811;
             Sgrt2Pi: Float
16581:
                                     = 2.506628274651000502415765284611; // Sqrt(2

= 6.283185307179586476925286766559; // 2 * PI

= 9.4247779607693797153879301498385; // 3 * PI

= 0.69314718055994530941723212145818; // Ln(2)

= 2.3025850929940456840179914546844; // Ln(10)

= 1.1447298858494001741434273513531; // Ln(PI)
16582:
             TwoPi: Float
16583:
             ThreePi: Float
16584:
             Ln2: Float
16585:
            In10: Float
             LnPi: Float
16586:
                                      = 0.30102999566398119521373889472449; // Log10(2)
             Log2J: Float
16587:
            Log3: Float
LogPi: Float
16588:
                                     = 0.47712125471966243729502790325512; // Log10(3)
                                     = 0.4971498726941338543512682882909; // Log10(PI)
= 0.43429448190325182765112891891661; // Log10(E)
16589:
            LogE: Float
16590:
                                     = 0.91893853320467274178032973640562; // Ln(2*PI)/2
            E: Float
hLn2Pi: Float
16591:
16592:
            Inv2Pi: Float = 0.15915494309189533576888376337251436203445964574046; // 0.5/Pi
TwoToPower63: Float = 9223372036854775808.0; // 2^63
GoldenMean: Float = 1.618033988749894848204586834365638; // GoldenMean
EulerMascheroni: Float = 0.5772156649015328606065120900824; // Euler GAMMA
16593:
16594:
16595:
16596:
            EulerMascheroni: Float = 0.57/215064901532600005120900247 // Euler GAM
RadCor: Double = 57.29577951308232; {number of degrees in a radian}
StDelta : Extended = 0.00001; {delta for difference equations}
StEpsilon : Extended = 0.00001; {epsilon for difference equations}
StMaxIterations : Integer = 100; {max attempts for convergence}
16597:
16598:
16599:
16600:
16601:
16602:
             MaxAngle',( 9223372036854775808.0);
            MaxTanH',(5678.2617031470719747459655389854);
MaxFactorial','LongInt').SetInt(1754);
16603:
16604:
             MaxFloatingPoint',(1.189731495357231765085759326628E+4932);
16605:
16606:
             MinFloatingPoint',(3.3621031431120935062626778173218E-4932);
            MaxTanH',( 354.89135644669199842162284618659);
MaxFactorial','LongInt').SetInt( 170);
16607:
16608:
             MaxFloatingPointD',(1.797693134862315907729305190789E+308);
MinFloatingPointD',(2.2250738585072013830902327173324E-308);
16609:
16610:
16611:
             MaxTanH',( 44.361419555836499802702855773323);
             MaxFactorial', 'LongInt').SetInt( 33);
MaxFloatingPointS',( 3.4028236692093846346337460743177E+38);
MinFloatingPointS',( 1.1754943508222875079687365372222E-38);
16612:
16613:
16614:
16615:
             PiExt',( 3.1415926535897932384626433832795);
16616:
             RatioDegToRad',( PiExt / 180.0);
            RatioDegToRad',(Plext / 100.0),
RatioGradToRad',(PiExt / 200.0);
RatioDegToGrad',(200.0 / 180.0);
RatioGradToDeg',(180.0 / 200.0);
Crc16PolynomCCITT','LongWord').SetUInt($1021);
16617:
16618:
16619:
16620:
           Crc16PolynomIBM','LongWord').SetUInt( $8005);
16621:
           Crc16Bits','LongInt').SetInt( 16);
Crc16Bytes','LongInt').SetInt( 2);
16622:
16624:
           Crc16HighBit','LongWord').SetUInt( $8000);
           NotCrc16HighBit', 'LongWord').SetUInt( $7FFF);
Crc32PolynomIEEE', 'LongWord').SetUInt( $04C11DB7);
16625:
16626:
           Crc32PolynomCastagnoli', 'LongWord').SetUInt( $1EDC6F41);
Crc32Koopman', 'LongWord').SetUInt( $741B8CD7);
16627:
16628:
           Crc32Bits', 'LongInt').SetInt( 32);
Crc32Bytes', 'LongInt').SetInt( 4);
Crc32HighBit', 'LongWord').SetUInt( $80000000);
16629:
16630:
16631:
           NotCrc32HighBit', 'LongWord').SetUInt( $7FFFFFF);
16632:
16633:
16634:
             MinByte
                                 = Low(Byte);
                                 = High(Byte);
16635:
             MaxBvt.e
            MinWord
                                 = Low(Word);
16636:
16637:
             MaxWord
                                 = High(Word);
             MinShortInt
16638:
                                 = Low(ShortInt);
16639:
             MaxShort.Int.
                                 = High(Short.Int.);
16640:
             MinSmallInt
                                 = Low(SmallInt);
             MaxSmallInt
                                  = High(SmallInt);
16641:
16642:
             MinLongWord
                                 = LongWord(Low(LongWord));
16643:
             MaxLongWord
                                 = LongWord(High(LongWord));
16644:
             MinLongInt
                                 = LongInt(Low(LongInt));
                                 = LongInt(High(LongInt));
16645:
             MaxLongInt
             MinInt64
                                 = Int64(Low(Int64));
16646:
16647:
             MaxInt64
                                 = Int64(High(Int64));
16648:
             MinInteger
                                 = Integer(Low(Integer));
                                 = Integer(High(Integer));
16649:
             MaxInteger
16650:
             MinCardinal
                                 = Cardinal(Low(Cardinal));
16651:
             MaxCardinal
                                 = Cardinal(High(Cardinal));
16652:
            MinNativeUInt = NativeUInt(Low(NativeUInt));
             MaxNativeUInt = NativeUInt(High(NativeUInt));
16653:
            MinNativeInt = NativeInt(Low(NativeInt));
16654:
                                 = NativeInt(High(NativeInt));
             MaxNativeInt
           Function CosH( const Z : Float) : Float;
Function SinH( const Z : Float) : Float;
16656:
16657:
           Function TanH( const Z : Float) : Float;
16658:
16659:
16660:
             //******from DMath.Dll Lib of types.inc in source\dmath_dll
16661:
            InvLn2 = 1.44269504088896340736; { 1/Ln(2) }
InvLn10 = 0.43429448190325182765; { 1/Ln(10) }
TwoPi = 6.28318530717958647693; { 2*Pi }
16662:
16663:
```

```
{ Pi/2 }
{ Sqrt(Pi) }
16665:
                  PiDiv2
                                       = 1.57079632679489661923;
16666:
                                       = 1.77245385090551602730;
                  SartPi
                                        = 2.50662827463100050242;
                                                                                                    Sqrt(2*Pi)
16667:
                  Sqrt2Pi
                  InvSqrt2Pi = 0.39894228040143267794;
16668:
                                                                                                     1/Sqrt(2*Pi)
                  LnSqrt2Pi = 0.91893853320467274178;
16669:
                                                                                                    Ln(Sqrt(2*Pi)) }
                  Ln2PiDiv2 = 0.91893853320467274178;
                                                                                                { Ln(2*Pi)/2
{ Sqrt(2) }
{ Sqrt(2)/2 }
{ Golden Mear
{ 2 - GOLD }
16670:
                                                                                                    Ln(2*Pi)/2 }
16671:
                  Sqrt2
                                       = 1.41421356237309504880;
16672:
                  Sqrt2Div2 = 0.70710678118654752440;
                                                                                                    Sqrt(2)/2 }
                  Gold = 1.61803398874989484821;
CGold = 0.38196601125010515179;
16673:
                                                                                                    Golden Mean = (1 + Sqrt(5))/2 }
16674:
                 GGOIG = 0.38196001125010515179; { 2 - GOL MachEp = 2.220446049250313E-16; { 2^(-52) } MaxNum = 1.797693134862315E+308; { 2^1024 } MinNum = 2.225073858507202E-308; { 2^(-1022) } MaxLog = 709.7827128933840; MinLog = -708.3964185322641;
16675:
16676:
16677:
16678:
16679:
16680:
                  MaxFac = 170;
                  MaxGam = 171.624376956302;
16681:
16682:
                  MaxLgm = 2.556348E+305;
                  MaxLgm = 2.556348E+305;

SingleCompareDelta = 1.0E-34;

DoubleCompareDelta = 1.0E-280;
16683:
16684:
                  <mark>{$IFDEF_CLR}</mark>
ExtendedCompareDelta = DoubleCompareDelta;
16685:
16686:
16687:
                  {SELSE}
                  ExtendedCompareDelta = 1.0E-4400;
16688:
16689:
                  { SENDIF }
16690:
                  Bytes1KB = 1024;
                 BytesIRB = 1024 * BytesIKB;
BytesIdB = 1024 * BytesIMB;
Bytes64KB = 64 * BytesIKB;
Bytes64MB = 64 * BytesIMB;
Bytes2GB = 2 * LongWord(BytesIGB);
clBlack32', $FF000000 ));
clDimGray32', $FF3F3F3F ));
16691:
16692:
16693:
16694:
16695:
16696:
16697:
                      clGray32', $FF7F7F7F ));
clLightGray32', $FFBFBFBF ));
16698:
                     clLightGray32', $FFBFBFBF )
clWhite32', $FFFFFFFF ));
clMaroon32', $FF70000 ));
clGreen32', $FF707000 ));
clOlive32', $FF007F00 ));
clNavy32', $FF00007F ));
clPurple32', $FF7007F ));
clTeal32', $FFF007F7 ));
clLime32', $FFF00FF0 ));
clLime32', $FFFFFF00 ));
clBue32', $FFFFFFF0 ));
clFuchsia32', $FFFFFFF ));
clFuchsia32', $FFFFFFF ));
clAqua32', $FFF00FFF ));
clAqua32', $FFF0FFFF ));
16699:
16700:
16701:
16702:
16703:
16704:
16705:
16706:
16707:
16708:
16709:
16710:
16711:
16712:
                      claliceBlue32', $FFF0F8FF ));
clAntiqueWhite32', $FFFAEBD7 ));
clAquamarine32', $FF7FFFD4 ));
16713:
16714:
16715:
                      clazure32', $FFF0FFFF ));
clBeige32', $FFF5F5DC ));
clBisque32', $FFFFE4C4 ));
16716:
16717:
16718:
                      clBlancheDalmond32', $FFFFEBCD ));
clBlueViolet32', $FF8A2BE2 ));
16719:
16720:
                      clBrown32', $FFA52A2A ));
16721:
                      clBrowns2', $FFA5ZAZA ));
clCadetblue32', $FFFFPEA0 ));
clChartReuse32', $FF7FFF00 ));
clChocolate32', $FFD2691E ));
16722:
16723:
16724:
16725:
16726:
                      clCoral32', $FFFF7F50 ));
16727:
                      clCornFlowerBlue32', $FF6495ED ));
                      clCornSilk32', $FFFFF8DC ));
clCrimson32', $FFFF643C ));
clDarkBlue32', $FF00008B ));
clDarkCyan32', $FF008B8B ));
16728:
16729:
16730:
16731:
16732:
                      clDarkGoldenRod32', $FFB8860B ));
                      clDarkGray32', $FFA9A9A9 ));
clDarkGreen32', $FF006400 ));
16733:
16734:
                     clDarkGreen32', $FF006400 ));
clDarkGrey32', $FF49A9A9 ));
clDarkKhaki32', $FFBDB76B ));
clDarkMagenta32', $FF8B008B ));
clDarkOliveGreen32', $FF556B2F ));
clDarkOrange32', $FFFF8C00 ));
clDarkOrchid32', $FF9932CC ));
16735:
16736:
16737:
16738:
16739:
16740:
                      clDarkRed32', $FF8B0000 ));
clDarkSalmon32', $FF89967A ));
clDarkSeaGreen32', $FF8FBC8F ));
clDarkSlateBlue32', $FF483D8B ));
16741:
16742:
16743:
16744:
                      clDarkSlateBlue32', $FF483D8B ));
clDarkSlateGray32', $FF2F4F4F ));
clDarkSlateGrey32', $FF2F4F4F ));
clDarkTurquoise32', $FF00CED1 ));
clDarkViolet32', $FF940D3 ));
16745:
16746:
16747:
16748:
                      clDarkvlote(32', $FFF9400D3 ));
clDeepPink32', $FFFF1493 ));
clDeepSkyBlue32', $FF00BFFF ));
clDodgerBlue32', $FF1E90FF ));
clFireBrick32', $FFB22222 ));
clFloralWhite32', $FFFFFAF0 ));
16749:
16750:
16751:
16752:
```

```
16754:
                          clGainsBoro32', $FFDCDCDC ));
clGhostWhite32', $FFF8F8FF ));
16755:
                          clGold32', $FFFFD700 ));
clGoldenRod32', $FFDAA520 ));
clGreenYellow32', $FFADFF2F ));
16756:
16757:
16758:
                          clGreenYellow32', $FFADFF2F )
clGrey32', $FF808080 ));
clHoneyDew32', $FFF0FFF0 ));
clHotPink32', $FFFF6B4 ));
clIndianRed32', $FFFD5C5C ));
clIndigo32', $FFFD5C5C ));
clIvory32', $FFFFFFF0 ));
clKhaki32', $FFF0E68C ));
16759:
16760:
16761:
16762:
16763:
16764:
16765:
                          clLavender32', $FFE6E6FA ));
clLavenderBlush32', $FFFFF0F5 ));
clLawnGreen32', $FF7CFC00 ));
16766:
16767:
16768:
16769:
                           clLemonChiffon32', $FFFFFACD ));
                          clLightBlue32', $FFFACD //,
clLightCoral32', $FFF08080 ));
clLightCyan32', $FFF0FFFF ));
clLightGoldenRodYellow32', $FFFAFAD2 ));
16770:
16771:
16772:
16773:
                          clLightGoldenRodYellow32', $FFFAFAI
clLightGreen32', $FF90EE90 ));
clLightGrey32', $FF90B3D3 ));
clLightPink32', $FFFB6C1 ));
clLightSalmon32', $FFFFB6C1 ));
clLightSaagreen32', $FF20B2AA ));
clLightSkyblue32', $FF87CEFA ));
clLightSlategrey32', $FF778899 ));
clLightSlategrey32', $FF778899 ));
clLightSteelblue32', $FFF78899 ));
clLightSteelblue32', $FFF78899 ));
16774:
16775:
16776:
16777:
16778:
16779:
16780:
16781:
16782:
16783:
                           clLightYellow32', $FFFFFFE0 ));
                          clLtGray32', $FFC0C0C0 ));
clMedGray32', $FFA0A0A4 ));
clDkGray32', $FF808080 ));
16784:
16785:
16786:
                           clMoneyGreen32', $FFC0DCC0 ));
16787:
                           clLegacySkyBlue32', $FFA6CAF0 ));
16788:
16789:
                           clCream32', $FFFFFBF0 ));
                          clLimeGreen32', $FF32CD32 ));
clLinen32', $FFFAF0E6 ));
16790:
16791:
16792:
                           clMediumAquamarine32',
                          clMediumAquamarine32', $FF66CDAA ));
clMediumBlue32', $FF0000CD ));
clMediumOrchid32', $FF8055D3 ));
clMediumPurple32', $FF9370DB ));
clMediumSeaGreen32', $FF3CB371 ));
clMediumSlateBlue32', $FF7B68EE ));
clMediumSpringGreen32', $FF00FA9A ));
clMediumTurquoise32', $FF48D1CC ));
clMediumVioletRed32', $FFC71585 ));
clMediumVioletRed32', $FFC71585 ));
16793:
16794:
16795:
16796:
16797:
16798:
16799:
16800:
                           clMidnightBlue32', $FF191970 ));
                          clMintCream32', $FFF5FFFA ));
clMistyRose32', $FFFFE4E1 ));
clMoccasin32', $FFFFE4B5 ));
16802:
16803:
16804:
16805:
                           clNavajoWhite32', $FFFFDEAD ));
                          cloadyajownites2 , $ffffbead )
clolidace32', $fffbf5e6 ));
clorange32', $fffb8e23 ));
clorange32', $ffff4500 ));
clorangeRed32', $ffff4500 ));
16806:
16807:
16808:
16809:
                           clOrchid32', $FFDA70D6 ));
16810:
16811:
                           clPaleGoldenRod32', $FFEEE8AA ));
                          clPaleGreen32', $FF98FB98 ));
clPaleTurquoise32', $FFAFEEEE ));
clPaleVioletred32', $FFDB7093 ));
16812:
16813:
16814:
                          clPanayaWhip32', $FFFFFD5 ));
clPeachPuff32', $FFFFDAB9 ));
clPeru32', $FFCD853F ));
clPlum32', $FFDDAODD ));
16815:
16816:
16817:
16818:
                           clPowderBlue32', $FFB0E0E6 ));
16819:
16820:
                           clRosyBrown32', $FFBC8F8F ));
                          clRoyalBlue32', $FFBC6F6F ));
clSaddleBrown32', $FFF8B4513 ));
clSalmon32', $FFFA8072 ));
clSandyBrown32', $FFF4A460 ));
16821:
16822:
16823:
16824:
                          clSandyBrown32', $FFF4A460 ))
clSeaGreen32', $FFF28B57 ));
clSeaShell32', $FFFFF5EE ));
clSienna32', $FFA0522D ));
clSilver32', $FF60C0CO ));
clSkyblue32', $FF67CEEB ));
clSlateBlue32', $FF67AED ));
clSlateBrey32', $FF708090 ));
clSnow32', $FFF7BAFA ));
clSnow32', $FFFFFFAFA ));
16825:
16826:
16827:
16828:
16829:
16830:
16831:
16832:
16833:
                          clsnow32', $FFFFFFAA));
clspringgreen32', $FF00FF7F));
clsteelblue32', $FF4682B4));
clTan32', $FFD2B48C));
clTmistle32', $FFF08FFB8 ));
clTurquoise32', $FFF6347));
clTurquoise32', $FFF6347));
clWheat32', $FFF5DEB3));
clWheat32', $FFF5DEB3));
16834:
16835:
16836:
16837:
16838:
16839:
16840:
16841:
                           clWhitesmoke32', $FFF5F5F5 ));
```

```
16843:
              clYellowgreen32', $FF9ACD32 ));
              cltrwhite32', $FFFFFFF));
cltrBlack32', $7FFFFFFF));
cltrBlack32', $7F000000));
cltrRed32', $7FFF0000));
cltrGreen32', $7F00FF00));
16844:
16845:
16846:
16847:
              clTrBlue32', $7F0000FF ));
16848:
16849:
             // Fixed point math constants
           FixedOne = $10000; FixedHalf = $7FFF;
FixedPI = Round(PI * FixedOne);
16850:
16851:
16852:
           FixedToFloat = 1/FixedOne;
16853:
          Special Types
                           ---
***********************
16855: *
            type Complex = record
16856:
16857:
              X, Y : Float;
16858:
            end;
16859:
            type TVector
                                  = array of Float;
            TIntVector = array of Integer;
TCompVector = array of Complex;
16860:
16861:
            TBoolVector = array of Boolean;
16862:
            TStrVector = array of String;
16863:
            TMatrix
16864:
                            = array of TVector;
16865:
            TIntMatrix = array of TIntVector;
            TCompMatrix = array of TCompVector;
16866:
            TBoolMatrix = array of TBoolVector;
16867:
16868:
            TStrMatrix = array of TStrVector;
16869:
            TByteArray = array[0..32767] of byte; !
            THexArray = array [0..15] of Char; // = '0123456789ABCDEF';
TBitmapStyle = (bsNormal, bsCentered, bsStretched);
T2StringArray = array of array of string;
16870:
16871:
16872:
16873:
            T2IntegerArray = array of array of integer;
           TZIntegerArray = array of array of int
AddTypeS('INT_PTR', 'Integer
AddTypeS('LONG_PTR', 'Integer
AddTypeS('UINT_PTR', 'Cardinal
AddTypeS('ULONG_PTR', 'Cardinal
AddTypeS('DWORD_PTR', 'ULONG_PTR
TIntegerDynArray', 'array of Integer
TCardinalDynArray', 'array of Cardinal
16874:
16875:
16876:
16877:
16878:
16879:
16880:
16881:
            TWordDynArray', 'array of Word
16882:
            TSmallIntDynArray', 'array of SmallInt
            TByteDynArray', 'array of Byte
TShortIntDynArray', 'array of ShortInt
TInt64DynArray', 'array of Int64
16883:
16884:
16885:
           TInt64DynArray', 'array of Into4
TLongWordDynArray', 'array of LongWord
TSingleDynArray', 'array of Single
TDoubleDynArray', 'array of Double
TBooleanDynArray', 'array of Boolean
TStringDynArray', 'array of string
16886:
16887:
16888:
16889:
16891:
            TWideStringDynArray', 'array of WideString
            TDynByteArray = array of Byte;
TDynShortintArray = array of Shortint;
16892:
16893:
16894:
            TDynSmallintArray = array of Smallint;
            TDynWordArray = array of Word;
TDynIntegerArray = array of Integer;
16895:
16896:
16897:
            TDynLongintArray = array of Longint;
16898:
            TDynCardinalArray = array of Cardinal;
16899:
            TDynInt64Array
                                   = array of Int64;
16900:
            TDynExtendedArray = array of Extended;
16901:
            TDynDoubleArray = array of Double;
16902:
            TDvnSingleArray
                                     = array of Single;
16903:
            TDynFloatArray
                                    = array of Float;
16904:
            TDynPointerArray = array of Pointer;
16905:
            TDynStringArray
                                   = array of string;
            TSynSearchOption = (ssoMatchCase, ssoWholeWord, ssoBackwards, ssoEntireScope, ssoSelectedOnly, ssoReplace, ssoReplaceAll, ssoPrompt);
16906:
16907:
            TSynSearchOptions = set of TSynSearchOption;
16908:
16909:
16910:
16911:
16912: //* Project : Base Include RunTime Lib for maXbox *Name: pas includebox.inc
16913:
16914: procedure drawPolygon(vPoints: TXYVector; cFrm: TForm);
16915: procedure drawPlot(vPoints: TXYVector; cFrm: TForm; vcolor: integer); 16916: procedure SaveCanvas(vCanvas: TCanvas; FileName: string);
16917: procedure SaveCanvas2(vCanvas: TCanvas; FileName: string);
16918: function CheckStringSum(vstring: string): integer;
16919: function HexToInt(HexNum: string): LongInt;
16920: function IntToBin(Int: Integer): String;
16921: function BinToInt(Binary: String): Integer;
16922: function HexToBin(HexNum: string): string; external2
16923: function BinToHex(Binary: String): string;
16924: function IntToFloat(i: Integer): double;
16925: function AddThousandSeparator(S: string; myChr: Char): string;
16926: function Max3(const X,Y,Z: Integer): Integer;
16927: procedure Swap(var X,Y: char); // faster without inline
16928: procedure ReverseString(var S: String);
16929: function CharToHexStr(Value: Char): string; 16930: function CharToUniCode(Value: Char): string;
16931: function Hex2Dec(Value: Str002): Byte;
```

```
16932: function HexStrCodeToStr(Value: string): string;
16933: function HexToStr(i: integer; value: string): string;
16934: function UniCodeToStr(Value: string): string;
16935: function CRC16(statement: string): string;
16936: function SearchForSubstrings(aStrList: TStrings; aSearchStr1, aSearchStr2: string): string; 16937: procedure SearchAndReplace(aStrList: TStrings; aSearchStr, aNewStr: string);
16938: procedure ShowInterfaces(myFile: string);
16939: function Fact2(av: integer): extended;
16940: Function BoolToStr(B: Boolean): string;
16941: Function GCD(x, y : LongInt) : LongInt; 16942: function LCM(m,n: longint): longint;
16943: function GetASCII: string;
16944: function GetItemHeight(Font: TFont): Integer;
16945: function myPlaySound(s: pchar; flag,syncflag: integer): boolean; 16946: function myGetWindowsDirectory(lpBuffer: PChar; uSize: longword): longword;
16947: function getHINSTANCE: longword;
16948: function getHMODULE: longword;
16949: function GetASCII: string;
16950: function Byte1sOk(const AByte: string; var VB: Byte): boolean; 16951: function WordIsOk(const AWord: string; var VW: Word): boolean;
16952: function TwentyFourBitValueIsOk(const AValue: string; var VI: Integer): boolean;
16953: function LongIsOk(const ALong: string; var VC: Cardinal): boolean;
16954: function SafeStr(const s: string): string;
16955: function ExtractUrlPath(const FileName: string): string; 16956: function ExtractUrlName(const FileName: string): string;
16957: function IsInternet: boolean;
16958: function RotateLeft1Bit_u32( Value: uint32): uint32;
16959: procedure LinearRegression(const KnownY:array of Double;const KnownX: array of Double;NData:Int;var
        LF:TStLinEst; ErrorStats : Boolean);
16960: procedure getEnvironmentInfo;
16961: procedure AntiFreeze;
16962: function GetCPUSpeed: Double;
16963: function IsVirtualPcGuest : Boolean;
16964: function IsVmWareGuest : Boolean;
16965: procedure StartSerialDialog;
16966: function IsWoW64: boolean;
16967: function IsWow64String(var s: string): Boolean;
16968: procedure StartThreadDemo;
16969: Function RGB(R,G,B: Byte): TColor;
16970: Function Sendln(amess: string): boolean;
16971: Procedure maxbox;
16972: Function AspectRatio(aWidth, aHeight: Integer): String;
16973: Function Aspectation and the string in the general function wget(aURL, afile: string): boolean; 16974: procedure PrintList(Value: TStringList);
16975: procedure PrintImage(aValue: TBitmap; Style: TBitmapStyle);
16976: procedure getEnvironmentInfo;
16977: procedure AntiFreeze;
16978: function getBitmap(apath: string): TBitmap
16979: procedure ShowMessageBig(const aText : string);
16980: function YesNoDialog(const ACaption, AMsg: string): boolean;
16981: procedure SetArrayLength2String(arr: T2StringArray; asize1, asize2: integer);
16982: procedure SetArrayLength2Integer(arr: T2IntegerArray; asize1, asize2: integer);
16983: //function myStrToBytes(const Value: String): TBytes;
16984: //function myBytesToStr(const Value: TBytes): String;
16985: function SaveAsExcelFile(AGrid: TStringGrid; ASheetName, AFileName: string; open: boolean): Boolean;
16986: function getBitmap(apath: string): TBitmap;
16987: procedure ShowMessageBig(const aText : string);
16988: Function StrToBytes(const Value: String): TBytes;
16989: Function BytesToStr(const Value: TBytes): String;
16990: function SaveAsExcelFile(AGrid: TStringGrid; ASheetName, AFileName: string; open: boolean): Boolean;
16991: function ReverseDNSLookup(const IPAdrs:String;const DNSServer:String;Timeout,Retries:Int;var
        HostName:String):Bool;
16992: function FindInPaths(const fileName, paths : String) : String;
16993: procedure initHexArray(var hexn: THexArray);
16994: function josephusG(n,k: integer; var graphout: string): integer;
16995: function isPowerof2(num: int64): boolean;
16996: function powerOf2(exponent: integer): int64;
16997: function getBigPI: string;
16998: procedure MakeSound(Frequency{Hz}, Duration{mSec}: Integer; Volume: TVolumeLevel; savefilePath: string);
16999: function GetASCIILine: string;
17000: procedure MakeComplexSound(N:integer{stream # to use}; freqlist:TStrings; Duration(mSec}: Integer;
17001:
                                        pinknoise: boolean; shape: integer; Volume: TVolumeLevel);
17002 : \textbf{procedure} \ \texttt{SetComplexSoundElements} ( \texttt{freqedt}, \texttt{Phaseedt}, \texttt{AmpEdt}, \texttt{WaveGrp:integer}) ; \\
17003: procedure AddComplexSoundObjectToList(newf,newp,newa,news:integer; freqlist: TStrings);
17004: function mapfunc(ax, in_min, in_max, out_min, out_max: integer): integer; 17005: function mapmax(ax, in_min, in_max, out_min, out_max: integer): integer;
17006: function isKeypressed: boolean;
17007: function Keypress: boolean;
17008: procedure StrSplitP(const Delimiter: Char; Input: string; const Strings: TStrings);
17009: function ReadReg(Base: HKEY; KeyName, ValueName: string): string;
17010: function ReadRegistry(Base: HKEY; KeyName, ValueName: string): string;
17011: function GetOSName: string;
17012: function GetOSVersion: string;
17013: function GetOSNumber: string;
17014: function getEnvironmentString: string;
17015: procedure StrReplace(var Str: String; Old, New: String);
17016: procedure SendEmail(mFrom, mTo, mSubject, mBody, mAttachment: variant); 17017: function getTeamViewerID: string;
17018: Procedure RecurseDirectory(Dir:String; IncludeSubs:boolean; callback:TFileCallbackProcedure);
```

```
17019: Procedure RecurseDirectory2(Dir : String; IncludeSubs : boolean);
17020: procedure WinInet_HttpGet(const Url: string; Stream:TStream);
17021: procedure GetQrCode2(Width, Height: Word; Correct_Level: string; const Data: string; apath: string);
17022: function StartSocketService: Boolean;
17023: procedure StartSocketServiceForm;
17024: function GetFileList(FileList: TStringlist; apath: string): TStringlist;
17025: function GetFileList1(apath: string): TStringlist;
17026: procedure LetFileList(FileList: TStringlist; apath: string);
17027: procedure StartWeb(aurl: string);
17028: function GetTodayFiles(startdir, amask: string): TStringlist; 17029: function PortTCPIsOpen(dwPort : Word; ipAddressStr: String): boolean;
17030: function JavahashCode(val: string): Integer;
17031: procedure PostKeyEx32(key: Word; const shift: TShiftState; specialkey: Boolean); 17032: procedure SaveBytesToFile2(const Data: Sysutils.TBytes; const FileName: string);
17033: Procedure HideWindowForSeconds(secs: integer); {//3 seconds}
17034: Procedure HideWindowForSeconds2(secs: integer; apphandle, aself: TForm);
                                                                                                    {//3 seconds}
17035: Procedure ConvertToGray(Cnv: TCanvas);
17036: function GetFileDate(aFile:string; aWithTime:Boolean):string;
17037: procedure ShowMemory;
17038: function ShowMemory2: string
17039: function getHostIP: string;
17040: procedure ShowBitmap(bmap: TBitmap);
                                                                   //thx to wischnewski
17041: function GetOsVersionInfo: TOSVersionInfo;
17042:
17043:
17044: // News of 3.9.8 up
17045: Halt-Stop Program in Menu, WebServer2, Stop Event Recompile
17046: Conversion Routines, Prebuild Forms, more RCData, DebugOutString
17047: CodeSearchEngine to search code patterns in /examples <Ctrl F3>
17048: JvChart - TJvChart Component - 2009 Public
17049: MemoryLeakReport in ini-file (MEMORYREPORT=Y)
17050: PerlRegEx PCRE obj lib included, Perl & Python Syntax Editor, bitbox3 logic example 17051: TAdoQuery.SQL.Add() fixed, ShLwAPI extensions, Indy HTTPHeader Extensions
17052: DMath DLL included incl. Demos
17053: Interface Navigator menu/View/Intf Navigator
17054: Unit Explorer menu/Debug/Units Explorer
17055: EKON 16 Slides ..\maxbox3\docs\utils Excel Export maXcel 17056: Tutorial 19 WinCOM with Arduino Tutorial 20 RegEx Coding
17057: Script History to 9 Files WebServer light /Options/Addons/WebServer
17058: Full Text Finder, JVSimLogic Simulator Package
17059: Halt-Stop Program in Menu, WebServer2, Stop Event
17050: Rait-Stop Program in Menu, Webserver2, Stop Event, 17060: Conversion Routines, Prebuild Forms, CodeSearch 17061: Halt-Stop Program in Menu, Webserver2, Stop Event Recompile,
17062: Conversion Routines, Prebuild Forms, more RCData, DebugOutString
17063: CodeSearchEngine to search code patterns in /examples <Ctrl F3>
17064: JvChart - TJvChart Component - 2009 Public, mXGames, JvgXMLSerializer, TJvPaintFX
17065: Compress-Decompress Zip, Services Tutorial22, Synopse framework, PFDLib
17066: SynEdit API, Macro, Macro Recorder, DLL Spy, Configuration Tutorial
17067: IDE Reflection API, Session Service Shell S3
17068: additional SynEdit API, isKeyPressed Routine, Bookmarks, OpenToolsAPI Catalog (OTAC)
17069: Class TMonitor, Configuration Tutorial maxbox_starter25.pdf, Chess.dll Game
17070: arduino map() function, PMRandom Generator
17071: StBarCode Lib, StreamReaderClass, BarCode Package, Astro Package
17072: more ShellAPI, add 32 more units, Simulated Annealing, GenAlgo
17073: REST Test Lib, Multilang Component, Forth Interpreter
17074: New Macros, Sendmail (instant email), DevCUnits, Tetris Addon
17075: DCOM, MDAC, MIDI, TLS support, Posmarks, Utils Addon
17076: Routines for LaTeX/PS, Utils Addon, Indy Package3, TAR Archive, @Callbacks
17077: Routines for LaTeX/PS, Utils Addon, Indy Package3, TAR Archive, @Callbacks 17078: First LCL of Lazarus, CmdLine API, ToDo List, 36 more Units preCompiled 17079: QRCode Service, add more CFunctions like CDateTime of Synapse
17080: Gamma Functions, IndyPackage4, HotLog Threadable, FormTemplateLibrary FTL
17081: Nonlinear regression, ADO Workbench Addon, Assign fixing, IntfNavigator fixing, Applet
17082: 30 more Units preCompiled, QRCode Indy Service, more CFunctions like CFill or SRand
17083: RestartDialog, RTF, SQL Scanner, RichEdit, 15 more Units
17084: Tool Section, SOAP Tester, Hot Log Logger2, TCPPortScan, 28 more Units
17085: BOLD Package, Indy Package5, maTRIx. MATHEMAX
17086: SPS Utils WDOS, Plc BitBus (PetriNet), 40 more units
17087 : \verb| emax layers: system-package-component-unit-class-function-block| \\
17088: HighPrecision Timers, Indy Package6, AutoDetect, UltraForms 17089: Reversi, GOL, bugfixing, 8 more units, Tutorial 24 Clean Code
17090: Tutorial 18_3 RGB LED, OpenGL Geometry, maxpix, statictext
17091: OpenGL Game Demo: ..Options/Add Ons/Reversi
17092: IBUtils Refactor, InterBase Package, DotNet Routines (JvExControls)
17093: add 31 units, mX4 Introduction Paper, more Socket&Streams, ShortString Routines
17094: 7% performance gain (hot spot profiling)
17095: PEP -Pascal Education Program , GSM Module, CGI, PHP Runner
17096: add 42 + 22 (64 units), memcached database, autobookmark, Alcinoe PAC, IPC Lib
17097: Orpheus PAC, AsyncFree Library advapi32 samples, FirebirdExp+MySQL units
17098: FBX Lib, psAPI, SMS Cell Module, OpenGL, Borland Tools
17099:
17100: add routines in 3.9.7.5
17101: 097: procedure RIRegister_BarCodeScaner_Routines(S: TPSExec);
17102: 996: procedure RIRegister_DBCtrls_Routines(S: TPSExec);
17103: 069: procedure RIRegister_IdStrings_Routines(S: TPSExec);
17104: 516: procedure RIRegister_JclMultimedia_Routines(S: TPSExec);
17105: 215: procedure RIRegister_PNGLoader_Routines(S: TPSExec);
17106: 374: procedure RIRegister_Serblgs_Routines(S: TPSExec);
17107: 777: procedure RIRegister_LinarBitmap_Routines(S: TPSExec);
```

```
17108:
17110:
                SelftestPEM;
17111:
                SelfTestCFundamentUtils;
17112:
                SelfTestCFileUtils;
17113:
                SelfTestCDateTime;
                SelfTestCTimer;
17114:
17115:
                SelfTestCRandom
               17116:
17117:
17118:
17119:
                // Note: There's no need for installing a client certificate in the
17120:
                               webbrowser. The server asks the webbrowser to send a certificate but
                                if nothing is installed the software will work because the server
17121:
                //
                11
17122:
                               doesn't check to see if a client certificate was supplied. If you want you can install:
17123:
                11
17124:
17125:
                               password: c_cakey
17126:
17127:
                TGraphicControl = class(TControl)
17128:
                private
                   FCanvas: TCanvas;
17129:
17130:
                   procedure WMPaint(var Message: TWMPaint); message WM_PAINT;
17131:
                protected
17132:
                  procedure Paint; virtual;
                   property Canvas: TCanvas read FCanvas;
17133:
17134:
                public
                   constructor Create(AOwner: TComponent); override;
17135:
17136:
                   destructor Destrov; override;
17137:
                end;
17138:
17139:
                TCustomControl = class(TWinControl)
17140:
                private
17141:
                   FCanvas: TCanvas;
17142:
                   procedure WMPaint(var Message: TWMPaint); message WM_PAINT;
17143:
                protected
17144:
                   procedure Paint; virtual;
                   procedure PaintWindow(DC: HDC); override;
17145:
17146:
                   property Canvas: TCanvas read FCanvas;
17147:
                public
17148:
                   constructor Create(AOwner: TComponent); override;
17149:
                   destructor Destroy; override;
17150:
                end;
17151:
                   RegisterPublishedProperties;
                    ('ONCHANGE', 'TNotifyEvent', iptrw);
('ONCLICK', 'TNotifyEvent', iptrw);
17152:
                    ('ONCLICK'.
17153:
                    ('ONDBLCLICK', 'TNotifyEvent', iptrw);
17154:
                   ('ONDBLCLICK', 'TNotifyEvent', iptrw);
('ONENTER', 'TNotifyEvent', iptrw);
('ONEXIT', 'TNotifyEvent', iptrw);
('ONKEYDOWN', 'TKeyEvent', iptrw);
('ONKEYPRESS', 'TKeyPressEvent', iptrw);
('ONMOUSEDOWN', 'TMouseEvent', iptrw);
('ONMOUSEMOVE', 'TMouseMoveEvent', iptrw);
17155:
17156:
17157:
17158:
17159:
17160:
// To stop the while loop, click on Options/Show Include (boolean switch)! Control a loop in a script with a form event:
17163:
17164:
17165:
                IncludeON; //control the while loop
17166:
                while maxforml.ShowIncludel.checked do begin //menu event Options/Show Include
17167:
17168: //
17170: //----
                                                                                   menu/Help/Config File
17171:
                using config file maxboxdef.ini
17172:
17173: //*** Definitions for maXbox mX3 ***
17174: [FORM]
17175: \ LAST\_FILE=E: \\ \textbf{maXbox} \\ \text{maxbox} \\ \text{leading files} \\ \textbf{140\_drive\_typedemo.txt} \ // \\ \textit{history up to 10 files} \\ \textbf{120\_drive\_typedemo.txt} \\ \text{120\_drive\_typedemo.txt} \\ \text{120\_drive\_
17176: FONTSIZE=14
17177: EXTENSION=txt
17178: SCREENX=1386
17179: SCREENY=1077
17180: MEMHETGHT=350
17181: PRINTFONT=Courier New //GUI Settings
17182: LINENUMBERS=Y //line numbers at gutter in editor at left side
17183: EXCEPTIONLOG=Y //store excepts and success in 2 log files see below! - menu Debug/Show Last Exceptions
17184: EXECUTESHELL=Y //prevents execution of ExecuteShell() or ExecuteCommand()
17185: BOOTSCRIPT=Y
                                        //enabling load a boot script
17186: MEMORYREPORT=Y //shows memory report on closing maxbox
17187: MACRO=Y
                                        //expand macros (see below) in code e.g. #path:E:\maxbox\maxbox3\docs\
17188: NAVIGATOR=N
                                        //shows function list at the right side of editor
17189: NAVWIDTH=350
                                        //width of the right side interface list <CTRL L>
17190: AUTOBOOKMARK=Y //sets on all functions a bookmark to jump
17191: [WEB]
17192: IPPORT=8080
                                        //for internal webserver - menu /Options/Add Ons/WebServer
17193: IPHOST=192.168.1.53
17194: ROOTCERT=filepathY
17195: SCERT=filepathY
17196: RSAKEY=filepathY
```

```
17197: VERSIONCHECK=Y
17198:
17199: using Logfile: maxboxlog.log , Exceptionlogfile: maxboxerrorlog.txt
17200:
17201: Also possible to set report memory in script to override ini setting
17202: procedure Set_ReportMemoryLeaksOnShutdown(abo: boolean)
17203:
17204:
17205: After Change the ini {\bf file} you can reload the {\bf file} with ../Help/Config Update
17206:
17207: //
17209: //-----
17212: [MAXMAIL]
17213: HOST=getmail.softwareschule.ch
17214: USER=mailusername
17215: PASS=password
17216: PORT=110
17217: SSL=Y
17218: BODY=Y
17219: LAST=5
17220:
17221: ADO Connection String:
17222: Provider=MSDASQL;DSN=mx3base;Uid=sa;Pwd=admin
17223:
17224: OpenSSL Lib: unit ssl_openssl_lib;
17225: {$IFDEF CIL}
17226: const
         \frac{\$IFDEF LINUX}
DLLSSLName = 'libssl.so';
17227:
17228:
         DLLUtilName = 'libcrypto.so';
17229:
17230:
         DLLSSLName = 'ssleay32.dll';
17231:
17232:
         DLLUtilName = 'libeay32.dll';
17233:
         { $ENDIF }
17234: { $ELSE }
17235: var
        {$IFNDEF MSWINDOWS}
17236:
17237:
           { $IFDEF DARWIN }
           DLLSSLName: string = 'libssl.dvlib';
17238:
           DLLUtilName: string = 'libcrypto.dylib';
17239:
17240:
           DLLSSLName: string = 'libssl.so';
DLLUtilName: string = 'libcrypto.so';
17241:
17242:
17243:
           { $ENDIF }
17244:
         DLLSSLName: string = 'ssleay32.dll';
DLLSSLName2: string = 'libssl32.dll';
DLLUtilName: string = 'libeay32.dll';
17245:
17246:
17247:
17248:
         { $ENDIF }
17249: { $ENDIF }
17250:
17251:
17252:
17253: //-
17255: //----
17256:
17257:
         asm #name #hostmAPSN2APSN211le, #head, max: APSN21: 04.01.2014 19:05:50
       E:\maxbox\maxbox3\docs\maxbox_extract_funclist399.txt end
17258 .
17259: //Tag Macros
17260:
         asm #name, #date, #host, #path, #file, #head, #sign #tech #net end
17261:
17262:
17263: //Tag Macros
17264: 10188: SearchAndCopy(memol.lines, '#name', getUserNameWin, 11);
17265: 10189: SearchAndCopy(memol.lines, '#date', datetimetoStr(now), 11);
17266: 10190: SearchAndCopy(memol.lines, '#host', getComputernameWin, 11);
17267: 10191: SearchAndCopy(memol.lines, '#path', fpath, 11);
17270: 10193: SearchAndCopy(memol.lines, '#locs', intToStr(getCodeEnd), 11);
17271: 10194: SearchAndCopy(memol.lines, '#perf', perftime, 11);
17272: 10195: SearchAndCopy(memol.lines, '#sign', Format('%s: %s: %s'
              [getUserNameWin, getComputernameWin, datetimetoStr(now),
17273:
17274: 10196: SearchAndCopy(memol.lines, '#head',Format('%s: %s: %s %s
17275: 10197: [getUserNameWin, getComputernameWin, datetimetoStr(now), Act_Filename]),11);
17276:
              [getUserNameWin, getComputernameWin, datetimetoStr(now), Act_Filename]),11);
17277: 10198: SearchAndCopy(memol.lines, '#tech', Format('perf: %s threads: %d %s %s'
17278: [perftime, numprocessthreads, getIPAddress(getComputerNameWin), timetoStr(time), mbversion]), 11);
17279: 10298: SearchAndCopy(memol.lines, '#net',Format('DNS: %s; local IPs: %s; local IP: %s',
17280:
              [getDNS, GetLocalIPs, getIPAddress(getComputerNameWin)]), 10);
17281:
17282: //#tech!perf: 0:0:29.297 threads: 3 192.168.174.1 19:26:30
17283:
17284: //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);
17285:
17286:
17287:
17288:
              SearchAndCopy(memol.lines, '<FILE>', fname, 6);
SearchAndCopy(memol.lines, '<FILE>', fname, 6);
SearchAndCopy(memol.lines, '<SOURCE>', ExePath+'Source', 8);
17289:
17290:
17291:
17292: 10198: SearchAndCopy(memol.lines, '#tech'perf: threads: 2 192.168.1.53 19:05:50 3.9.9.84
17293:
                     [perftime, numprocess threads, getIPAddress(getComputerNameWin), timetoStr(time), mbversion]), \\ 11); \\
17294: //#tech!84perf: threads: 2 192.168.1.53 19:05:50 3.9.9.84
              SearchAndCopy(memol.lines, 'maxbox_extract_funclist399.txt
17295:
17296:
17297: /
17299: //----
17300:
17301:
                 while I < sl.Count do begin
17302: //
                    if MatchesMask(s1[I], '*/? TODO ([a-z0-9_]*#[1-9]#)*:*') then if MatchesMask(s1[I], '*/? TODO (?*#?#)*:*') then
17303:
                    BreakupToDo(Filename, sl, I, 'TODO', True, True) // full info TODO else if MatchesMask(sl[I], '*/? DONE (?*#?#)*:*') then
17304:
17305:
17306:
                       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
17307:
17308:
17309:
                                                                               , False, True) // only priority info DONE
17310:
                       BreakupToDo(Filename, sl, I, 'DONE'
17311:
                    else if MatchesMask(sl[I], '*/?*TODO*:*') then
                    BreakupToDo(Filename, sl, I, 'TODO', False, False) // custom TODO
else if MatchesMask(sl[I], '*/?*DONE*:*') then
BreakupToDo(Filename, sl, I, 'DONE', False, False); // custom DONE
17312:
17313:
17314:
17315:
                    Inc(I);
17316:
                 end:
17317:
17318:
17321: //-----
             file : unit uPSI fMain.pas;
                                                                               {$OTAP} Open Tools API Catalog
17322:
17323:
             // Those functions concern the editor and preprocessor, all of the IDE
17324:
            Example: Call it with maxform1.InfolClick(self)
            Note: Call all Methods with maxForm1., e.g.:
17325:
17326:
                                              maxForm1.ShellStyle1Click(self);
17327:
17328: procedure SIRegister_fMain(CL: TPSPascalCompiler);
17329:
          Const('BYTECODE','String').SetString('bytecode.txt
Const('PSTEXT','String').SetString('PS Scriptfiles (*.txt)|*.TXT
Const('PSMODEL','String').SetString('PS Modelfiles (*.uc)|*.UC
17330:
17331:
17332:
            Const('PSPASCAL','String').SetString('PS Pascalfiles (*.pas)|*.PAS
Const('PSINC','String').SetString('PS Includes (*.inc)|*.INC
17333:
17334:
            Const('DEFFILENAME', 'String').SetString( 'firstdemo.txt
17335:
            Const('DEFINIFILE','String').SetString( 'maxboxdef.ini
17336:
            Const('EXCEPTLOGFILE','String').SetString( 'maxboxerrorlog.txt
17337:
            Const('ALLFUNCTIONSLIST','String').SetString( 'upsi_allfunctionslist.txt
Const('ALLFUNCTIONSLISTPDF','String').SetString( 'maxbox_functions_all.pdf
Const('ALLOBJECTSLIST','String').SetString( 'docs\VCL.pdf
Const('ALLRESOURCELIST','String').SetString( 'docs\upsi_allresourcelist.txt
17338:
17339:
17340:
17341:
17342:
            Const('ALLUNITLIST','String').SetString('docs\maxbox3_9.xml');
            Const('INCLUDEBOX','String').SetString( 'pas_includebox.inc
Const('BOOTSCRIPT','String').SetString( 'maxbootscript.txt
Const('MBVERSION','String').SetString( '3.9.9.91
17343:
17344:
17345:
            Const('VERSION','String').SetString('3.9.9.91
Const('MBVER','String').SetString('399
Const('MBVERI','Integer').SetInt(399);
17346:
17347:
17348:
            Const('MBVERIALL','Integer').SetInt(39991);
Const('EXENAME','String').SetString( 'maXbox3.exe
Const('MXSITE','String').SetString( 'http://www.softwareschule.ch/maxbox.htm
17349:
17350:
17351:
            Const('MXVERSIONFILE','String').SetString('http://www.softwareschule.ch/maxvfile.txt
Const('MXVERSIONFILE','String').SetString('http://www.softwareschule.ch/maxvfile.txt
Const('MXINTERNETCHECK','String').SetString('www.ask.com
Const('MXMAIL','String').SetString('max@kleiner.com
Const('TAB','Char').SetString(#$09);
Const('CODECOMPLETION','String').SetString('bds_delphi.dci
17352:
17353:
17354:
17355:
17356:
17357:
           SIRegister_TMaxForm1(CL);
17358:
          end;
17359:
17360:
              with FindClass('TForm'), 'TMaxForm1') do begin
                memo2', 'TMemo', iptrw);
memo1', 'TSynMemo', iptrw);
17361:
17362:
                 CB1SCList', 'TComboBox', iptrw);
mxNavigator', 'TComboBox', iptrw);
17363:
17364:
                 TPHOST', 'string', iptrw);

IPPORT', 'integer', iptrw);

COMPort', 'integer', iptrw);

Splitterl', 'TSplitter', iptrw);

PSScript', 'TPSScript', iptrw);
17365:
17366:
                                                                     //3.9.6.4
17367:
17368:
17369:
                PS3DllPlugin', 'TPSDllPlugin', iptrw);
MainMenul', 'TMainMenu', iptrw);
Programl', 'TMenuItem', iptrw);
Compilel', 'TMenuItem', iptrw);
17370:
17371:
17372:
```

```
Files1', 'TMenuItem', iptrw);
open1', 'TMenuItem', iptrw);
Save2', 'TMenuItem', iptrw);
17374:
17375:
17376:
                            Options1', 'TMenuItem', iptrw);
17377:
                            Savebeforel', 'TMenuItem', iptrw);
Largefontl', 'TMenuItem', iptrw);
sBytecodel', 'TMenuItem', iptrw);
17378:
17379:
17380:
                            Saveas3', 'TMenuItem', iptrw);
Clear1', 'TMenuItem', iptrw);
17381:
17382:
17383:
                            Slinenumbers1', 'TMenuItem', iptrw);
                            About1', 'TMenuItem', iptrw);
Search1', 'TMenuItem', iptrw);
17384:
17385:
                            SynPasSyn1', 'TSynPasSyn', iptrw);
memo1', 'TSynMemo', iptrw);
SynEditSearch1', 'TSynEditSearch', iptrw);
17386:
17387:
17388:
                           SynEditSearch1', 'TSynEditSearch', iptrw);
WordWrap1', 'TMenuItem', iptrw);
XPManifest1', 'TXPManifest', iptrw);
SearchNext1', 'TMenuItem', iptrw);
Replace1', 'TMenuItem', iptrw);
PSImport_Controls1', 'TPSImport_Controls', iptrw);
PSImport_Classes1', 'TPSImport_Classes', iptrw);
17389:
17390:
17391 .
17392:
17393:
17394:
                            ShowIncludel', 'TMenuItem', iptrw);
SynEditPrintl', 'TSynEditPrint', iptrw);
17395:
17396:
                           SynEditPrint1', 'TSynEditPrint', iptrw);
Printout1', 'TMenuItem', iptrw);
mnPrintColors1', 'TMenuItem', iptrw);
dlgFilePrint', 'TPrintDialog', iptrw);
dlgPrintFont1', 'TFontDialog', iptrw);
mnuPrintFont1', 'TMenuItem', iptrw);
Include1', 'TMenuItem', iptrw);
CodeCompletionList1', 'TMenuItem', iptrw);
The ludeList1', 'TMenuItem', iptrw);
17397:
17398:
17399:
17400:
17401:
17402:
17403:
                           CodeCompletionList1', 'TMenuItem',:
IncludeList1', 'TMenuItem', iptrw);
ImageList1', 'TImageList', iptrw);
ImageList2', 'TImageList', iptrw);
CoolBar1', 'TCoolBar', iptrw);
ToolBar1', 'TToolBar', iptrw);
tbtnLoad', 'TToolButton', iptrw);
17404:
17405:
17406:
17407:
17408:
17409:
                            ToolButton2', 'TToolButton', iptrw);
tbtnFind', 'TToolButton', iptrw);
17410:
17411:
                            tbtnCompile', 'TToolButton', iptrw);
tbtnTrans', 'TToolButton', iptrw);
tbtnUseCase', 'TToolButton', iptrw);
17412:
17413:
17414:
                            toolbtnTutorial', 'TToolButton', iptrw);
tbtn6res', 'TToolButton', iptrw);
17415:
17416:
                           ToolButton5', 'TToolButton', iptrw);
ToolButton1', 'TToolButton', iptrw);
ToolButton3', 'TToolButton', iptrw);
SatusBar1', 'TStatusBar', iptrw);
SaveOutput1', 'TMenuItem', iptrw);
17417:
17418:
17419:
17420:
                           Saveoutput1 , Imenditem , Iptrw);
ExportClipboard1', 'TMenuItem', iptrw);
Close1', 'TMenuItem', iptrw);
Manual1', 'TMenuItem', iptrw);
About2', 'TMenuItem', iptrw);
17422:
17423:
17424:
17425:
17426:
                             loadLastfile1', 'TMenuItem', iptrw);
                           indidatastifier , imministed , iptrw);
imglogo', 'TImage', iptrw);
cedebug', 'TPSScriptDebugger', iptrw);
debugPopupMenul', 'TPopupMenu', iptrw);
BreakPointMenu', 'TMenuItem', iptrw);
17427:
17428:
17429:
17430:
                            Decompile1', 'TMenuItem', iptrw);
StepIntol', 'TMenuItem', iptrw);
StepOut1', 'TMenuItem', iptrw);
Reset1', 'TMenuItem', iptrw);
17431:
17432:
17433:
17434:
17435:
                            DebugRun1', 'TMenuItem', iptrw);
                            PSImport_ComObjl', 'TPSImport_ComObj', iptrw);
PSImport_StdCtrls', 'TPSImport_StdCtrls', iptrw);
PSImport_Forms1', 'TPSImport_Forms', iptrw);
PSImport_DateUtils1', 'TPSImport_DateUtils', iptrw);
17436:
17437:
17438:
17440:
                            tutorial4', 'TMenuItem', iptrw);
                            ExporttoClipboardl', 'TMenuItem', iptrw);
ImportfromClipboardl', 'TMenuItem', iptrw);
17441:
17442:
                            N4', 'TMenuItem', iptrw);
N5', 'TMenuItem', iptrw);
17443:
17444:
17445:
                            N6', 'TMenuItem', iptrw);
                           ImportfromClipboard2', 'TMenuItem', iptrw);
tutoriall', 'TMenuItem', iptrw);
N7', 'TMenuItem', iptrw);
ShowSpecCharsl', 'TMenuItem', iptrw);
OpenDirectoryl', 'TMenuItem', iptrw);
17446:
17447:
17448:
17449:
                           OpenDirectoryl', 'TMenuItem', iptrw);
procMess', 'TMenuItem', iptrw);
tbtnUseCase', 'TToolButton', iptrw);
ToolButton7', 'TToolButton', iptrw);
EditFont1', 'TMenuItem', iptrw);
UseCase1', 'TMenuItem', iptrw);
tutorial21', 'TMenuItem', iptrw);
OpenUseCase1', 'TMenuItem', iptrw);
PSImport_DB1', 'TPSImport_DB', iptrw);
tutorial31', 'TMenuItem', iptrw);
tynHTMLSyn1', 'TSynHTMLSyn', iptrw);
HTMLSyntax1', 'TMenuItem', iptrw);
17450:
17451:
17452:
17453:
17454:
17455:
17456:
17457:
17458:
17459:
17460:
17461:
17462:
                            ShowInterfaces1', 'TMenuItem', iptrw);
```

```
17463:
                           Tutorial5', 'TMenuItem', iptrw);
                           AllFunctionsListl', 'TMenuItem', iptrw);
ShowLastExceptionl', 'TMenuItem', iptrw);
17464:
17465:
                           Showbastbaception; intended ; PlayMP31', 'TMenuItem', iptrw); SynTexSyn1', 'TSynTexSyn', iptrw); texSyntax1', 'TMenuItem', iptrw);
17466:
17467:
17468:
17469:
                                         'TMenuItem', iptrw);
                           No', 'IMenuItem', iptrw);
GetEMails1', 'TMenuItem', iptrw);
SynCppSyn1', 'TSynCppSyn', iptrw);
CSyntax1', 'TMenuItem', iptrw);
Tutorial6', 'TMenuItem', iptrw);
17470:
17471:
17472:
17473:
                            New1', 'TMenuItem', iptrw);
17474:
                           AllObjectsList1', 'TMenuItem', iptrw);
LoadBytecodel', 'TMenuItem', iptrw);
CipherFile1', 'TMenuItem', iptrw);
17475:
17476:
17477:
                           N9', 'TMenuItem', iptrw);
N10', 'TMenuItem', iptrw);
17478:
17479:
                           Tutorial11', 'TMenuItem', iptrw);
Tutorial71', 'TMenuItem', iptrw);
17480:
17481:
                           UpdateService1', 'TMenuItem', iptrw);
PascalSchool1', 'TMenuItem', iptrw);
17482:
17483:
                           rascalschooll', 'TMenuItem', iptrw);
Tutorial81', 'TMenuItem', iptrw);
DelphiSite1', 'TMenuItem', iptrw);
Output1', 'TMenuItem', iptrw);
TerminalStyle1', 'TMenuItem', iptrw);
17484:
17485:
17486:
17487:
                           Terminalstyle1', 'ImenuItem', iptrw);
ReadOnly1', 'TMenuItem', iptrw);
Shellstyle1', 'TMenuItem', iptrw);
BigScreen1', 'TMenuItem', iptrw);
Tutorial91', 'TMenuItem', iptrw);
SaveOutput2', 'TMenuItem', iptrw);
17488:
17489:
17490:
17491:
17492:
                           SaveOutput2', 'TMenuItem', iptrw);
N11', 'TMenuItem', iptrw);
SaveScreenshot', 'TMenuItem', iptrw);
Tutorial101', 'TMenuItem', iptrw);
SQLSyntax1', 'TMenuItem', iptrw);
SynSQLSyn1', 'TSynSQLSyn', iptrw);
Consolel', 'TMenuItem', iptrw);
SynXMLSyn1', 'TSynXMLSyn', iptrw);
XMLSyntax1', 'TMenuItem', iptrw);
XMLSyntax1', 'TMenuItem', iptrw);
17493:
17494:
17495:
17496:
17497:
17498:
17499:
17500:
                           ComponentCount1', 'TMenuItem', iptrw);
NewInstance1', 'TMenuItem', iptrw);
17501:
17502:
                            toolbtnTutorial', 'TToolButton', iptrw);
17503:
                           Memoryl', 'TMenuItem', iptrw);
SynJavaSynl', 'TSynJavaSyn', iptrw);
JavaSyntaxl', 'TMenuItem', iptrw);
SyntaxCheckl', 'TMenuItem', iptrw);
17504:
17505:
17506:
17507:
                           SyntaxCheck1', 'IMenuItem', iptrw);
Tutorial10Statistics1', 'TMenuItem', iptrw);
ScriptExplorer1', 'TMenuItem', iptrw);
FormOutput1', 'TMenuItem', iptrw);
ArduinoDump1', 'TMenuItem', iptrw);
AndroidDump1', 'TMenuItem', iptrw);
GotoEnd1', 'TMenuItem', iptrw);
17508:
17509:
17511:
17512:
17513:
                            AllResourceList1', 'TMenuItem', iptrw);
17514:
                            ToolButton4', 'TToolButton', iptrw);
17515:
                           ToolButton4', 'TToolButton', iptrw);
tbtn6res', 'TToolButton', iptrw);
Tutorial11Forms1', 'TMenuItem', iptrw);
Tutorial12SQL1', 'TMenuItem', iptrw);
ResourceExplore1', 'TMenuItem', iptrw);
Info1', 'TMenuItem', iptrw);
N12', 'TMenuItem', iptrw);
CryptoBox1', 'TMenuItem', iptrw);
Tutorial13Ciphering1', 'TMenuItem', iptrw);
CiphorPilo2', 'TMenuItem', iptrw);
17516:
17517:
17518:
17519:
17520:
17521:
17522:
17523:
                            CipherFile2', 'TMenuItem', iptrw);
17524:
                           N13', 'TMenuItem', iptrw);
ModulesCount1', 'TMenuItem', iptrw);
17525:
17526:
                           Nodurescontr, 'menuitem', iptrw);
N4GewinntGamel', 'TMenuItem', iptrw);
DocuforAddOnsl', 'TMenuItem', iptrw);
17527:
17529:
                           Tutorial14Asyncl', 'TMenuItem', iptrw);
Lessons15Reviewl', 'TMenuItem', iptrw);
17530:
17531:
                           Lessons1bRevlew1', 'Imenuitem', iptrw);
SynPHPSyn1', 'TSynPHPSyn', iptrw);
PHPSyntax1', 'TMenuItem', iptrw);
Breakpoint1', 'TMenuItem', iptrw);
SerialRS2321', 'TMenuItem', iptrw);
17532:
17533:
17534:
17535:
                           N14', 'TMenuItem', iptrw);
17536:
                           SynCSSyn1', 'TSynCSSyn', iptrw);
CSyntax2', 'TMenuItem', iptrw);
17537:
17538:
                           Csyntax2', 'TMenuItem', iptrw);
Calculator1', 'TMenuItem', iptrw);
tbtnSerial', 'TToolButton', iptrw);
ToolButton8', 'TToolButton', iptrw);
Tutorial151', 'TMenuItem', iptrw);
N15', 'TMenuItem', iptrw);
N16', 'TMenuItem', iptrw);
17539:
17540:
17541:
17543:
17544:
                           N16', 'TMenuItem', iptrw);
ControlBarl', 'TControlBar', iptrw);
ToolBar2', 'TToolBar', iptrw);
BtnOpen', 'TToolButton', iptrw);
BtnSave', 'TToolButton', iptrw);
BtnPrint', 'TToolButton', iptrw);
BtnColors', 'TToolButton', iptrw);
17545:
17546:
17547:
17548:
17549:
17550:
                           btnClassReport', 'TToolButton', iptrw);
```

```
BtnRotateRight', 'TToolButton', iptrw);
BtnFullSize', 'TToolButton', iptrw);
17552:
17553:
                       BtnFitToWindowSize', 'TToolButton', iptrw);
BtnZoomMinus', 'TToolButton', iptrw);
BtnZoomPlus', 'TToolButton', iptrw);
17555
17556:
                       Panell', 'TPanel', iptrw);
LabelBrettgroesse', 'TLabel', iptrw);
17557:
17558:
                       CBlSCList', 'TComboBox', iptrw);

TageListNormal', 'TTmageList', iptrw);

Spbtnexplore', 'TSpeedButton', iptrw);

Spbtnexample', 'TSpeedButton', iptrw);
17559:
17560:
17561:
17562:
                       spbtnexample , 'TspeedButton', iptr
spbsaveas', 'TSpeedButton', iptrw);
imglogobox', 'TImage', iptrw);
EnlargeFont1', 'TMenuItem', iptrw);
EnlargeFont2', 'TMenuItem', iptrw);
ShrinkFont1', 'TMenuItem', iptrw);
17563:
17564:
17565:
17566:
17567:
                       ThreadDemo1', 'TMenuItem', iptrw);
HEXEditor1', 'TMenuItem', iptrw);
HEXView1', 'TMenuItem', iptrw);
17568:
17569:
17570:
                       HEXInspect1', 'TMenuItem', iptrw);
17571:
                       HEXINSPECT!, 'TMENUITEM', iptrw);
SynExporterHTML1', 'TSynExporterHTML', iptrw);
ExporttoHTML1', 'TMenuItem', iptrw);
ClassCount1', 'TMenuItem', iptrw);
HTMLOutput1', 'TMenuItem', iptrw);
HEXEditor2', 'TMenuItem', iptrw);
17572:
17573:
17574:
17575:
17576:
                       Minesweeper1', 'TMenuItem', iptrw);
17577:
17578:
                       N17', 'TMenuItem', iptrw);
PicturePuzzle1', 'TMenuItem', iptrw);
sbvclhelp', 'TSpeedButton', iptrw);
17579:
17580:
                       DependencyWalker1', 'TMenuItem', iptrw);
17581:
                      DependencyWalkerl', 'TMenuItem', ip

WebScannerl', 'TMenuItem', iptrw);

Viewl', 'TMenuItem', iptrw);

mnToolbarl', 'TMenuItem', iptrw);

mnStatusbar2', 'TMenuItem', iptrw);

mnConsole2', 'TMenuItem', iptrw);

mnSplitter2', 'TMenuItem', iptrw);

WebServerl', 'TMenuItem', iptrw);

Thtornial175cyrorl', 'TMenuItem', iptrw);
17582:
17583:
17584:
17585:
17586:
17587:
17588:
17589:
                       Tutorial17Server1', 'TMenuItem', iptrw);
Tutorial18Arduino1', 'TMenuItem', iptrw);
17590:
17591:
                       SynPerlSyn1', 'TSynPerlSyn', iptrw);
PerlSyntax1', 'TMenuItem', iptrw);
SynPythonSyn1', 'TSynPythonSyn', iptrw);
PythonSyntax1', 'TMenuItem', iptrw);
DMathLibrary1', 'TMenuItem', iptrw);
IntfNavigator1', 'TMenuItem', iptrw);
17592:
17593:
17594:
17595:
17596:
17597:
                       EnlargeFontConsolel', 'TMenuItem', iptrw);
ShrinkFontConsolel', 'TMenuItem', iptrw);
SetInterfaceListl', 'TMenuItem', iptrw);
17598:
17600:
                       popintfList', 'TPopupMenu', iptrw);
intfAdd1', 'TMenuItem', iptrw);
17601:
17602:
                       intfDelete1', 'TMenuItem', iptrw);
intfRefactor1', 'TMenuItem', iptrw);
17603:
17604:
                       Defactor1', 'TMenuItem', iptrw);
Tutorial19COMArduino1', 'TMenuItem', iptrw);
17605:
17606:
                       Tutorial20Regex', 'TMenuItem', iptrw);
N18', 'TMenuItem', iptrw);
17607:
17608:
17609:
                       ManualE1', 'TMenuItem', iptrw);
                       FullTextFinder1', 'TMenuItem', iptrw);
Move1', 'TMenuItem', iptrw);
FractalDemol', 'TMenuItem', iptrw);
17610:
17611:
17612:
                       Tutorial2lAndroid1', 'TMenuItem', iptrw);
Tutorial0Function1', 'TMenuItem', iptrw);
17613:
17614:
                       SimuLogBox1', 'TMenuItem', iptrw);
OpenExamples1', 'TMenuItem', iptrw);
SynJScriptSyn1', 'TSynJScriptSyn', iptrw);
17615:
17616:
                       JavaScriptSyntax1', 'TMenuItem', iptrw);
Halt1', 'TMenuItem', iptrw);
17618:
17619:
                       CodeSearch1', 'TMenuItem', iptrw);
SynRubySyn1', 'TSynRubySyn', iptrw);
RubySyntax1', 'TMenuItem', iptrw);
17620:
17621:
17622:
                       Undol', 'TMenuItem', iptrw);
SynUNIXShellScriptSyn', 'TSynUNIXShellScriptSyn', iptrw);
17623:
17624:
                       LinuxShellScriptl', 'TMenuItem', iptrw);
Renamel', 'TMenuItem', iptrw);
17625:
17626:
17627:
                       spdcodesearch', 'TSpeedButton', iptrw);
                       Preview1', 'TMenuItem', iptrw);
Tutorial22Services1', 'TMenuItem', iptrw);
Tutorial23RealTime1', 'TMenuItem', iptrw);
17628:
17629:
17630:
                       Configuration1', 'TMenuItem', iptrw);
MP3Player1', 'TMenuItem', iptrw);
DLLSpy1', 'TMenuItem', iptrw);
17631:
17632:
17633:
                       SynuRiOpener1', 'TSynuRiOpener', iptrw);
SynuRiSyn1', 'TSynuRiSyn', iptrw);
17634:
17635:
                       URILinksClicksl', 'TMenuItem', iptrw);
EditReplacel', 'TMenuItem', iptrw);
GotoLinel', 'TMenuItem', iptrw);
17636:
17637:
17638:
                       ActiveLineColor1', 'TMenuItem', iptrw);
17639:
                       ConfigFile1', 'TMenuItem', iptrw);
```

```
Sort1Intflist', 'TMenuItem', iptrw);
17641:
             Redol', 'TMenuItem', iptrw);
Tutorial24CleanCodel', 'TMen
17642:
17643:
                                         'TMenuItem'
             Tutorial25Configuration1', 'TMenuItem', iptrw);
17644:
             IndentSelection1', 'TMenuItem', iptrw);
UnindentSection1', 'TMenuItem', iptrw);
17645:
17646:
             SkyStyle1', 'TMenuItem', iptrw);
N19', 'TMenuItem', iptrw);
17647:
17648:
             CountWords1', 'TMenuItem', iptrw);
17649:
17650:
             imbookmarkimages', 'TImageList', iptrw);
             Bookmark11', 'TMenuItem', iptrw); N20', 'TMenuItem', iptrw);
17651:
             Bookmark21', 'TMenuItem', iptrw);
Bookmark31', 'TMenuItem', iptrw);
17653:
             Bookmark31', 'TMenuItem', iptrw);
Bookmark41', 'TMenuItem', iptrw);
17654:
17655:
17656:
             SynMultiSyn1', 'TSynMultiSyn', iptrw);
17657:
             Procedure IFPS3ClassesPlugin1CompImport( Sender : TObject; x : TPSPascalCompiler)
Procedure IFPS3ClassesPlugin1ExecImport(Sender: TObject; Exec: TPSExec; x:TPSRuntimeClassImporter);
Procedure PSScriptCompile( Sender : TPSScript)
17658:
17659:
17660:
             Procedure Compile1Click( Sender : TObject)
17661:
17662:
             Procedure PSScriptExecute( Sender : TPSScript)
             Procedure open1Click( Sender : TObject)
Procedure Save2Click( Sender : TObject)
17663:
17664:
             Procedure SavebeforelClick( Sender : TObject)
17665:
17666:
             Procedure LargefontlClick( Sender : TObject)
17667:
             Procedure FormActivate( Sender : TObject)
17668:
             Procedure SBvtecodelClick( Sender : TObject)
             Procedure FormKeyPress( Sender : Tobject; var Key : Char)
17669:
             Procedure Saveas3Click( Sender : TObject)
17670:
17671:
             Procedure Clear1Click( Sender : TObject)
17672:
             Procedure Slinenumbers1Click( Sender : TObject)
             Procedure About1Click( Sender : TObject)
17673:
17674:
             Procedure Search1Click( Sender : TObject)
17675:
             Procedure FormCreate( Sender : TObject)
17676:
             Procedure MemolReplaceText(Sender:TObject;const ASearch,AReplace:String;Line,Column:Integer;
17677:
                                                                       var Action : TSynReplaceAction)
             Procedure MemolStatusChange( Sender : TObject; Changes : TSynStatusChanges)
17678:
17679:
             Procedure WordWrap1Click( Sender : TObject)
17680:
             Procedure SearchNext1Click( Sender : TObject)
17681:
             Procedure Replace1Click( Sender : TObject)
             Function PSScriptNeedFile(Sender:TObject;const OrginFileName:String;var FName,Output:String):Bool;
17682:
17683:
             Procedure ShowIncludelClick( Sender : TObject)
             Procedure PrintoutlClick( Sender : TObject)
17684:
17685:
             Procedure mnuPrintFont1Click( Sender : TObject)
             Procedure Include1Click( Sender : TObject)
Procedure FormDestroy( Sender : TObject)
Procedure FormClose( Sender : TObject; var Action : TCloseAction)
17686:
17687:
17688:
             Procedure UpdateViewlClick( Sender : TObject)
17689:
17690:
             Procedure CodeCompletionList1Click( Sender : TObject)
             Procedure SaveOutput1Click( Sender : TObject)
17691:
17692:
             Procedure ExportClipboard1Click( Sender : TObject)
             Procedure CloselClick( Sender : TObject)
17693:
17694:
             Procedure ManuallClick( Sender : TObject)
             Procedure LoadLastFile|Click( Sender : TObject)
Procedure MemolChange( Sender : TObject)
17695:
17696:
             Procedure Decompile1Click( Sender : TObject)
17697:
17698:
             Procedure StepIntolClick( Sender : TObject)
             Procedure StepOut1Click( Sender : TObject)
Procedure Reset1Click( Sender : TObject)
Procedure cedebugAfterExecute( Sender : TPSScript)
17699:
17700:
17701:
17702:
             Procedure cedebugBreakpoint(Sender:TObject; const FileName:String; Position,Row, Col: Cardinal)
             Procedure cedebugCompile( Sender : TPSScript)
Procedure cedebugExecute( Sender : TPSScript)
17703:
17704:
17705:
             Procedure cedebugIdle( Sender : TObject)
             Procedure cedebugLineInfo( Sender:TObject;const FileName:String; Position, Row, Col : Cardinal)
17706:
17707:
             Procedure MemolSpecialLineColors(Sender: TObject; Line:Int; var Special:Boolean; var FG, BG:TColor);
             Procedure BreakPointMenuClick( Sender : TObject)
17708:
17709:
             Procedure DebugRun1Click( Sender : TObject)
Procedure tutorial4Click( Sender : TObject)
17710:
             Procedure ImportfromClipboardlClick( Sender : TObject)
17711:
17712:
             Procedure ImportfromClipboard2Click( Sender : TObject)
17713:
             Procedure tutorial1Click( Sender : TObject)
Procedure ShowSpecChars1Click( Sender : TObject)
17714:
             Procedure StatusBarlDblClick( Sender : TObject)
17715:
17716:
             Procedure PSScriptLine( Sender : TObject)
17717:
             Procedure OpenDirectorylClick( Sender : TObject)
17718:
             Procedure procMessClick( Sender : TObject)
             Procedure tbtnUseCaseClick( Sender : TObject)
17719:
             Procedure EditFont1Click( Sender : TObject)
17720:
17721:
             Procedure tutorial21Click( Sender : TObject)
17722:
             Procedure tutorial31Click( Sender : TObject)
17723:
             Procedure HTMLSvntax1Click( Sender : TObject)
             Procedure ShowInterfaces1Click( Sender : TObject)
17724:
17725:
             Procedure Tutorial5Click( Sender : TObject)
17726:
             Procedure ShowLastException1Click( Sender : TObject)
17727:
             Procedure PlayMP31Click( Sender : TObject)
Procedure AllFunctionsList1Click( Sender : TObject)
17728:
             Procedure texSyntax1Click( Sender : TObject)
```

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17730:
           Procedure GetEMails1Click( Sender : TObject)
17731:
           procedure DelphiSitelClick(Sender: TObject);
17732:
           procedure TerminalStyle1Click(Sender: TObject);
17733:
           procedure ReadOnly1Click(Sender: TObject)
           procedure ShellStyle1Click(Sender: TObject);
17734:
17735:
           procedure ConsolelClick(Sender: TObject);
                                                             //3.2
17736:
           procedure BigScreen1Click(Sender: TObject);
17737:
           procedure Tutorial91Click(Sender: TObject);
           procedure SaveScreenshotClick(Sender: TObject);
17738:
17739:
           procedure Tutorial101Click(Sender: TObject);
17740:
           procedure SQLSyntax1Click(Sender: TObject);
           procedure XMLSyntax1Click(Sender: TObject);
17741:
17742:
           procedure ComponentCount1Click(Sender: TObject);
            procedure NewInstancelClick(Sender: TObject);
17743:
17744:
           procedure CSyntax1Click(Sender: TObject);
17745:
           procedure Tutorial6Click(Sender: TObject);
17746:
           procedure New1Click(Sender: TObject);
17747:
           procedure AllObjectsList1Click(Sender: TObject);
           procedure LoadBytecodelClick(Sender: TObject);
17748:
           procedure CipherFile1Click(Sender: TObject);
17749:
17750:
           procedure NewInstancelClick(Sender: TObject);
17751:
           procedure toolbtnTutorialClick(Sender: TObject);
17752:
           procedure MemorylClick(Sender: TObject);
           procedure JavaSyntax1Click(Sender: Tobject);
procedure SyntaxCheck1Click(Sender: Tobject);
17753:
17754:
           procedure ScriptExplorer1Click(Sender: TObject);
17755:
17756:
           procedure FormOutput1Click(Sender: TObject); //V3.6
           procedure GotoEnd1Click(Sender: TObject);
procedure AllResourceList1Click(Sender: TObject);
17757:
17758:
17759:
           procedure tbtn6resClick(Sender: TObject); //V3.7
17760:
           procedure InfolClick(Sender: TObject);
           procedure Tutorial10Statistics1Click(Sender: TObject);
17761:
17762:
           procedure Tutorial11Forms1Click(Sender: TObject);
17763:
           procedure Tutorial12SQL1Click(Sender: TObject);
           procedure ResourceExplore1Click(Sender: TObject);
17764:
17765:
            procedure InfolClick(Sender: TObject);
17766:
           procedure CryptoBox1Click(Sender: TObject);
           procedure ModulesCount1Click(Sender: TObject);
17767:
17768:
           procedure N4GewinntGame1Click(Sender: TObject);
17769:
           procedure PHPSyntax1Click(Sender: TObject)
17770:
            procedure SerialRS2321Click(Sender: TObject);
           procedure CSyntax2Click(Sender: TObject);
17771:
           procedure Calculator1Click(Sender: TObject);
17772:
17773:
           procedure Tutorial13Ciphering1Click(Sender: TObject);
17774:
           procedure Tutorial14Async1Click(Sender: TObject);
17775:
           procedure PHPSyntax1Click(Sender: TObject);
           procedure BtnZoomPlusClick(Sender: TObject);
17776:
           procedure BtnZoomMinusClick(Sender: TObject);
17777:
17778:
           procedure btnClassReportClick(Sender: TObject);
17779:
           procedure ThreadDemolClick(Sender: TObject);
           procedure HEXViewlClick(Sender: TObject);
17780:
           procedure ExporttoHTML1Click(Sender: TObject);
procedure MinesweeperlClick(Sender: TObject);
17781:
17782:
17783:
           procedure PicturePuzzle1Click(Sender: TObject); //V3.9
           procedure sbvclhelpClick(Sender: TObject);
procedure DependencyWalkerlClick(Sender: TObject);
17784:
17785:
17786:
           procedure CBlSCListDrawItem(Control:TWinControl;Index:Int;aRect:TRect;State:TOwnerDrawState);
17787:
           procedure WebScanner1Click(Sender: TObject);
17788:
            procedure mnToolbar1Click(Sender: TObject);
           procedure mnStatusbar2Click(Sender: TObject);
17789:
           procedure mnConsole2Click(Sender: TObject);
17790:
17791:
           procedure mnCoolbar2Click(Sender: TObject);
17792:
           procedure mnSplitter2Click(Sender: TObject);
           procedure WebServer1Click(Sender: TObject);
17793:
           procedure PerlSyntax1Click(Sender: TObject);
17794:
           procedure PythonSyntax1Click(Sender: TObject);
17795:
17796:
           procedure DMathLibrary1Click(Sender: TObject);
           procedure IntfNavigator1Click(Sender: TObject);
procedure FullTextFinder1Click(Sender: TObject);
17797:
17798:
17799:
            function AppName: string;
17800:
            function ScriptName: string;
17801:
            function LastName: string;
            procedure FractalDemo1Click(Sender: TObject);
17802:
           procedure SimuLogBox1Click(Sender: TObject);
17803:
17804:
           procedure OpenExamples1Click(Sender: TObject);
17805:
           procedure Halt1Click(Sender: TObject);
            procedure Stop;
17806:
           procedure CodeSearch1Click(Sender: TObject);
17807:
           procedure RubySyntax1Click(Sender: TObject);
17808:
17809:
           procedure Undo1Click(Sender: TObject);
           procedure LinuxShellScript1Click(Sender: TObject);
17810:
17811:
            procedure WebScannerDirect(urls: string);
17812:
            procedure WebScanner(urls: string);
17813:
           procedure LoadInterfaceList2;
17814:
           procedure DLLSpy1Click(Sender: TObject);
17815:
            procedure MemolDblClick(Sender: TObject);
           procedure URILinksClicks1Click(Sender: TObject);
17816:
17817:
            procedure GotoLinelClick(Sender: TObject);
17818:
           procedure ConfigFile1Click(Sender: TObject);
```

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17819:
                 Procedure Sort1IntflistClick( Sender : TObject)
17820:
                 Procedure RedolClick( Sender : TObject)
                 Procedure Tutorial24CleanCode1Click( Sender
                 Procedure IndentSelection1Click( Sender : Tobject)
Procedure UnindentSection1Click( Sender : Tobject)
17822:
17823:
17824:
                 Procedure SkyStyle1Click( Sender : TObject)
17825:
                 Procedure CountWords1Click( Sender : TObject)
                 Procedure MemolPlaceBookmark( Sender : TObject; var Mark : TSynEditMark)
17826:
17827:
                 Procedure MemolGutterClick(Sender:TObject;Button:TMouseButton;X,Y,Line:Integer;Mark:TSynEditMark);
17828:
                 Procedure Bookmark11Click( Sender : TObject)
Procedure Bookmark21Click( Sender : TObject)
17829:
                 Procedure Bookmark31Click( Sender : TObject)
17831:
                 Procedure Bookmark41Click( Sender : TObject)
17832:
                 Procedure SynMultiSyn1CustomRange(Sender:TSynMultiSyn;Operation:TRangeOperation;var Range:Pointer);
                 'STATMemoryReport', 'boolean', iptrw);
'IPPort', 'integer', iptrw);
'COMPort', 'integer', iptrw);
17833:
17834:
17835:
                 'lbintflist', 'TListBox', iptrw);
Function GetStatChange : boolean
17836:
17837:
17838:
                 Procedure SetStatChange( vstat : boolean)
17839:
                 Function GetActFileName : string
17840:
                 Procedure SetActFileName( vname : string)
17841:
                 Function GetLastFileName : string
                 Procedure SetLastFileName( vname : string)
17842:
                 Procedure WebScannerDirect( urls : string)
17843:
17844:
                 Procedure LoadInterfaceList2
17845:
                 Function GetStatExecuteShell : boolean
                 Procedure DoEditorExecuteCommand( EditorCommand : word)
function GetActiveLineColor: TColor
17846:
17847:
                 procedure SetActiveLineColor(acolor: TColor)
17848:
17849:
                 procedure ScriptListbox1Click(Sender: TObject);
17850:
                 procedure Memo2KeyPress(Sender: TObject; var Key: Char);
17851:
                 procedure EnlargeGutter1Click(Sender: TObject);
17852:
                 procedure Tetris1Click(Sender: TObject);
                procedure ToDoList1Click(Sender: TObject);
17853:
                 procedure ProcessList1Click(Sender: TObject);
17854:
17855:
                 procedure MetricReport1Click(Sender: TObject);
                procedure ProcessList1Click(Sender: TObject);
17856:
17857:
                 procedure TCPSockets1Click(Sender: TObject);
17858:
                 procedure ConfigUpdate1Click(Sender: TObject);
17859:
                 procedure ADOWorkbench1Click(Sender: TObject);
                 procedure SocketServer1Click(Sender: TObject);
17860:
17861:
                 procedure FormDemolClick(Sender: TObject);
                 procedure Richedit1Click(Sender: TObject);
17862:
17863:
                 procedure SimpleBrowser1Click(Sender: TObject);
                 procedure DOSShell1Click(Sender: TObject);
17864:
                 procedure SynExport1Click(Sender: TObject);
17865:
17866:
                procedure ExporttoRTF1Click(Sender: TObject);
17867:
                 procedure FormCloseQuery(Sender: TObject; var CanClose: Boolean);
17868:
                 procedure SOAPTester1Click(Sender: TObject);
17869:
                 procedure Sniffer1Click(Sender: TObject);
17870:
                 procedure AutoDetectSyntax1Click(Sender: TObject);
                procedure FPlot1Click(Sender: TObject);
17871:
17872:
                 procedure PasStyle1Click(Sender: TObject);
                 procedure Tutorial183RGBLED1Click(Sender: TObject);
17873:
                 procedure ReversilClick(Sender: TObject);
17874:
17875:
                 procedure ManualmaXbox1Click(Sender: TObject);
17876:
                 procedure BlaisePascalMagazine1Click(Sender: TObject);
17877:
                 procedure AddToDolClick(Sender: TObject);
                 procedure CreateGUID1Click(Sender: TObject);
17878:
                 procedure Tutorial27XML1Click(Sender: TObject);
17879:
17880:
                 procedure CreateDLLStub1Click(Sender: TObject);
17881:
                 procedure Tutorial28DLL1Click(Sender: TObject);');
                 procedure ResetKeyPressed;');
17882:
                 procedure FileChanges1Click(Sender: TObject);');
17883:
                 procedure OpenGLTry1Click(Sender: TObject);');
17884:
17885:
                 procedure AllUnitList1Click(Sender: TObject);');
17886:
17887:
17888: /
          17889:
17890:
17891: (*----
17892: procedure SIRegister_TCustomSynEdit(CL: TPSPascalCompiler);
17893: begin
17894:
              //with RegClassS(CL, 'TCustomControl', 'TCustomSynEdit') do
17895:
             with FindClass('TCustomControl'),'TCustomSynEdit') do begin
  Constructor Create( AOwner : TComponent)
17896:
                 SelStart', 'Integer', iptrw);
SelEnd', 'Integer', iptrw); AlwaysShowCaret', 'Boolean', iptrw);
17897:
17898:
17899:
                 Procedure UpdateCaret
17900:
                 Procedure AddKey(Command: TSynEditorCommand;Key1:word;SS1:TShiftState; Key2:word;SS2:TShiftState);
                 \textbf{Procedure} \ \ \texttt{AddKey} (\texttt{Command: TSynEditorCommand: Key1:word: SS1: TShiftState: Key2: word: SS2: TShiftState): \texttt{Monthstate: Key2: word: SS2: TShiftState: Monthstate: Key2: word: SS2: TShiftState: \texttt{Monthstate: Monthstate: Monthstate: Monthstate: Monthstate: Monthstate: Monthstate: \texttt{Monthstate: Monthstate: Monthstate: Monthstate: Monthstate: Monthstate: Monthstate: Monthstate: \texttt{Monthstate: Monthstate: Monthstate
17901:
17902:
                 Procedure BeginUndoBlock
17903:
                 Procedure BeginUpdate
                 Function CaretInView : Boolean
17904:
17905:
                 Function CharIndexToRowCol( Index : integer) : TBufferCoord
17906:
                 Procedure Clear
                 Procedure ClearAll
```

```
17908:
             Procedure ClearBookMark( BookMark: Integer)
17909:
             Procedure ClearSelection
17910:
             Procedure CommandProcessor( Command : TSynEditorCommand; AChar : char; Data : pointer)
             Procedure ClearUndo
17911:
17912:
             Procedure CopyToClipboard
17913:
             Procedure CutToClipboard
17914:
             Procedure DoCopyToClipboard( const SText : string)
17915:
             Procedure EndUndoBlock
17916:
             Procedure EndUpdate
17917:
             Procedure EnsureCursorPosVisible
-
17918:
             Procedure EnsureCursorPosVisibleEx( ForceToMiddle : Boolean)
17919:
             Procedure FindMatchingBracket
17920:
             Function GetMatchingBracket : TBufferCoord
             Function GetMatchingBracketEx( const APoint : TBufferCoord) : TBufferCoord

Procedure ExecuteCommand( Command : TSynEditorCommand; AChar : char; Data : pointer)
17921:
17922:
17923:
             Function GetBookMark( BookMark: integer; var X, Y: integer): boolean
             Function GetHighlighterAttriAtRowCol( const XY: TBufferCoord; var Token : string; var Attri
17924:
             : TSynHighlighterAttributes) : boolean
Function GetHighlighterAttriAtRowColEx( const XY : TBufferCoord; var Token : string;
17925 .
17926:
                         var TokenType, Start : Integer; var Attri:TSynHighlighterAttributes):boolean
17927:
             Function GetPositionOfMouse( out aPos : TBufferCoord) : Boolean
17928:
17929:
             Function GetWordAtRowCol( const XY : TBufferCoord) : string
17930:
             Procedure GotoBookMark( BookMark : Integer)
17931:
             Procedure GotoLineAndCenter( ALine : Integer)
             Function IdentChars : TSynIdentChars
17932:
17933:
             Procedure InvalidateGutter
17934:
             Procedure InvalidateGutterLine( aLine : integer)
             Procedure InvalidateGutterLines( FirstLine, LastLine : integer)
Procedure InvalidateLine( Line : integer)
17935:
17936:
             Procedure InvalidateLines( FirstLine, LastLine : integer)
17937:
17938:
             Procedure InvalidateSelection
             Function IsBookmark( BookMark: integer): boolean
Function IsPointInSelection( const Value: TBufferCoord): boolean
17939:
17940:
17941:
             Procedure LockUndo
             Function BufferToDisplayPos( const p : TBufferCoord) : TDisplayCoord
17942:
             Function DisplayToBufferPos( const p : TDisplayCoord) : TBufferCoord
17943:
             Function LineToRow( aLine : integer) : integer
Function RowToLine( aRow : integer) : integer
17944:
17945:
             Function NextWordPos: TBufferCoord
Function NextWordPosEx( const XY: TBufferCoord): TBufferCoord
17946:
17947:
17948:
             Procedure PasteFromClipboard
             Function WordStart : TBufferCoord
Function WordStartEx( const XY : TBufferCoord) : TBufferCoord
17949:
17950:
17951:
             Function WordEnd : TBufferCoord
17952:
             Function WordEndEx( const XY : TBufferCoord) : TBufferCoord
             Function PrevWordPos : TBufferCoord
17953:
             Function PrevWordPosEx( const XY : TBufferCoord) : TBufferCoord
Function PrevWordPosEx( aX, aY : integer) : TDisplayCoord
17954:
17955:
17956:
             Function PixelsToNearestRowColumn( aX, aY : integer) : TDisplayCoord
17957:
             Procedure Redo
17958:
             Procedure RegisterCommandHandler(const AHandlerProc:ThookedCommandEvent;AHandlerData:pointer));
             Function RowColumnToPixels( const RowCol : TDisplayCoord) : TPoint
17959:
             Function RowColToCharIndex( RowCol : TBufferCoord) : integer
17960:
17961:
             Function SearchReplace( const ASearch, AReplace:string; AOptions:TSynSearchOptions): integer
17962:
             Procedure SelectAll
             Procedure SetBookMark( BookMark: Integer; X: Integer; Y: Integer)
17963:
17964:
             Procedure SetCaretAndSelection( const ptCaret, ptBefore, ptAfter: TBufferCoord)
17965:
             Procedure SetDefaultKeystrokes
17966:
             Procedure SetSelWord
             Procedure SetWordBlock( Value : TBufferCoord)
17967:
17968:
             Procedure Undo
17969:
             Procedure UnlockUndo
17970:
             Procedure UnregisterCommandHandler( AHandlerProc : THookedCommandEvent)
17971:
             Procedure AddKeyUpHandler( aHandler: TKeyEvent)
             Procedure RemoveKeyUpHandler( aHandler: TKeyEvent)

Procedure AddKeyDownHandler( aHandler: TKeyEvent)
17972:
17973:
17974:
             Procedure RemoveKeyDownHandler( aHandler : TKeyEvent)
17975:
             Procedure AddKeyPressHandler( aHandler : TKeyPressEvent)
17976:
             Procedure RemoveKeyPressHandler( aHandler : TKeyPressEvent)
             Procedure AddFocusControl( aControl: TWinControl)
Procedure RemoveFocusControl( aControl: TWinControl)
17977:
17978:
17979:
             Procedure AddMouseDownHandler( aHandler : TMouseEvent)
17980:
             Procedure RemoveMouseDownHandler( aHandler : TMouseEvent)
             Procedure AddMouseUpHandler( aHandler: TMouseEvent)
17981:
             Procedure RemoveMouseUpHandler( aHandler: TMouseEvent)

Procedure AddMouseCursorHandler( aHandler: TMouseCursorEvent)
17982:
17983:
             Procedure RemoveMouseCursorHandler( aHandler : TMouseCursorEvent)
Procedure SetLinesPointer( ASynEdit : TCustomSynEdit)
17984:
17985:
             Procedure RemoveLinesPointer
17986:
17987:
             Procedure HookTextBuffer( aBuffer: TSynEditStringList; aUndo, aRedo: TSynEditUndoList)
             Procedure UnHookTextBuffer
17988:
            Procedure UnHookTextBuffer
BlockBegin', 'TBufferCoord', iptrw);
BlockEnd', 'TBufferCoord', iptrw);
CanPaste', 'Boolean', iptr);
CanRedo', 'boolean', iptr);
CanUndo', 'boolean', iptr);
CaretX', 'Integer', iptrw);
CaretY', 'Integer', iptrw);
CaretXY', 'TBufferCoord', iptrw);
17989:
17990:
17991:
17992:
17993:
17994:
17995:
17996:
```

```
ActiveLineColor', 'TColor', iptrw);
17997:
                      ActiveLineColor', 'TColor', iptrw);
DisplayX', 'Integer', iptr);
DisplayY', 'Integer', iptr);
DisplayYY', 'TDisplayCoord', iptr);
DisplayLineCount', 'integer', iptr);
CharsInWindow', 'Integer', iptr);
CharWidth', 'integer', iptr);
Font', 'TFont', iptrw);
GutterWidth', 'Integer', iptr);
Highlighter', 'TSynCustomHighlighter', iptrw);
LeftChar', 'Integer', iptrw);
LineSInWindow', 'Integer', iptr);
17998:
17999:
18000:
18001:
18002:
18003:
18004:
18005:
18006:
18007:
18008:
                      LinesInWindow', 'Integer', iptr);
LineFext', 'string', iptrw);
Lines', 'TStrings', iptrw);
Marks', 'TSynEditMarkList', iptr);
18009:
18010:
18011:
18012:
                       MaxScrollWidth', 'integer', iptrw);
18013:
                      Modified', 'Boolean', iptrw);
PaintLock', 'Integer', iptr);
ReadOnly', 'Boolean', iptrw);
18014 .
18015:
18016:
                                                      'TSynEditSearchCustom', iptrw);
18017:
                       SearchEngine',
18018:
                       SelAvail', 'Boolean', iptr); SelLength', 'integer', iptrw);
                      SelTabBlock', 'Boolean', iptr);
SelTabLine', 'Boolean', iptr);
SelText', 'string', iptrw);
18019:
18020:
18021:
18022:
                       StateFlags', 'TSynStateFlags', iptr);
                      Text', 'string', iptrw);
TopLine', 'Integer', iptrw);
WordAtCursor', 'string', iptr);
WordAtMouse', 'string', iptr);
18023:
18024:
18025:
18026:
                      UndoList', 'TSynEditUndoList', iptr);
RedoList', 'TSynEditUndoList', iptr);
18027:
18028:
                      OnProcessCommand', 'TProcessCommandEvent', iptrw);
BookMarkOptions', 'TSynBookMarkOpt', iptrw);
18029:
18030:
                       BorderStyle', 'TSynBorderStyle', iptrw);
18032:
                       ExtraLineSpacing', 'integer', iptrw);
                      Gutter', 'TSynGutter', iptrw);
HideSelection', 'boolean', iptrw);
InsertCaret', 'TSynEditCaretType', iptrw);
18033:
18034:
                      HideSelection', 'boolean', iptrw);
InsertCaret', 'TSynEditCaretType', iptrw);
InsertMode', 'boolean', iptrw);
IsScrolling', 'Boolean', iptr);
Keystrokes', 'TSynEditKeyStrokes', iptrw);
MaxUndo', 'Integer', iptrw);
Options', 'TSynEditorOptions', iptrw);
ConvertingCaret', 'TSynEditCaretType', iptrw
18035:
18036:
18037:
18038:
18039:
18040:
                      Operions , TsynEditCaretTops', iptrw);

RightEdge', 'Integer', iptrw);

ScrollHintColor', 'TColor', iptrw);

ScrollHintFormat', 'TScrollHintFormat', iptrw);
18041:
18042:
18043:
                      ScrollBars', 'TScrollStyle', iptrw);
SelectedColor', 'TSynSelectedColor', iptrw);
SelectionMode', 'TSynSelectionMode', iptrw);
18045:
18046:
18047:
                      ActiveSelectionMode', 'TSynSelectionMode', iptrw);
TabWidth', 'integer', iptrw); WantReturns', 'boolean', iptrw);
WantTabs', 'boolean', iptrw); WordWrap', 'boolean', iptrw);
18048:
18049:
18050:
                      WordWrapGlyph', 'TSynGlyph', iptrw);
OnChange', 'TNotifyEvent', iptrw);
18051:
18052:
                      OnClearBookmark', 'TPlaceMarkEvent', iptrw);
OnCommandProcessed', 'TProcessCommandEvent', iptrw);
18053:
18054:
                      OnCommandProcessed', 'TProcessCommandEvent', 1pt
OnContextHelp', 'TContextHelpEvent', iptrw);
OnDopFiles', 'TDropFilesEvent', iptrw);
OnGutterClick', 'TGutterClickEvent', iptrw);
OnGutterGetText', 'TGutterGetTextEvent', iptrw);
OnGutterPaint', 'TGutterPaintEvent', iptrw);
OnMouseCursor', 'TMouseCursorEvent', iptrw);
OnMouseCursor', 'TMouseCursorEvent', iptrw);
18055:
18056:
18057:
18058:
18059
18060:
                      OnPaint', 'TPaintEvent', iptrw);
OnPlaceBookmark', 'TPlaceMarkEvent', iptrw);
18061:
18062:
18063:
                      OnProcessUserCommand', 'TProcessCommandEvent', iptrw);
18064:
                      OnReplaceText', 'TReplaceTextEvent', iptrw);
                      OnSpecialLineColors', 'TSpecialLineColorsEvent', iptrw);
OnStatusChange', 'TStatusChangeEvent', iptrw);
OnPaintTransient', 'TPaintTransient', iptrw);
18065:
18066:
18067:
18068:
                      OnScroll', 'TScrollEvent', iptrw);
18069:
                    end;
18070:
                  end;
18071:
                Procedure RegisterPlaceableHighlighter(highlighter : TSynCustomHighlighterClass)
                Function GetPlaceableHighlighters: TSynHighlighterList
Function EditorCommandToDescrString( Cmd : TSynEditorCommand) : string
Function EditorCommandToCodeString( Cmd : TSynEditorCommand) : string
18072:
18073:
18074:
18075:
                Procedure GetEditorCommandValues( Proc : TGetStrProc)
                Procedure GetEditorCommandExtended( Proc : TGetStrProc)
18076:
18077:
                \textbf{Function} \  \, \texttt{IdentToEditorCommand(} \  \, \textbf{const} \  \, \texttt{Ident:} \  \, \textbf{string;} \  \, \textbf{var} \  \, \texttt{Cmd:} \  \, \texttt{longint)} \  \, \texttt{:} \  \, \texttt{boolean}
                Function EditorCommandToIdent( Cmd : longint; var Ident : string) : boolean Function ConvertCodeStringToExtended( AString : String) : String Function ConvertExtendedToCodeString( AString : String) : String
18078:
18079:
18080:
                Function ConvertExtendedToCommand( AString: String): TSynEditorCommand
Function ConvertCodeStringToCommand( AString: String): TSynEditorCommand
Function IndexToEditorCommand( const AIndex: Integer): Integer
18081:
18082:
18083:
18084:
                  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 \,
18086:
           eoAltSetsColumnMode,
18087:
           eoAutoIndent,
18088:
                                       // preceding line
18089
           eoAutoSizeMaxScrollWidth.
                                       //Automatically resizes the MaxScrollWidth property when inserting text
18090:
           eoDisableScrollArrows,
                                        //Disables the scroll bar arrow buttons when you can't scroll in that
18091:
                                       //direction any more
           eoDragDropEditing,
18092:
                                       //Allows to select a block of text and drag it within document to another
18093:
18094:
           eoDropFiles.
                                       //Allows the editor accept OLE file drops
18095:
           eoEnhanceHomeKey,
                                       //enhances home key positioning, similar to visual studio
                                       //enhances End key positioning, similar to JDeveloper
//When undoing/redoing actions, handle all continous changes the same kind
18096:
           eoEnhanceEndKey,
18097:
           eoGroupUndo,
18098:
                                        // in one call
18099:
                                        //instead undoing/redoing each command separately
18100:
           eoHalfPageScroll.
                                       //When scrolling with page-up and page-down commands, only scroll a half
18101:
                                       //page at a time
                                        //if enabled, then scrollbars will only show if necessary
18102:
           eoHideShowScrollbars,
18103:
           If you have ScrollPastEOL, then it the horizontal bar will always be there (it uses MaxLength instead)
                                       //When moving through lines w/o cursor Past EOL, keeps X position of cursor
           eoKeepCaretX,
18104:
18105:
           eoNoCaret,
                                       //Makes it so the caret is never visible
18106:
           eoNoSelection.
                                       //Disables selecting text
18107:
           eoRightMouseMovesCursor,
                                       //When clicking with right mouse for popup menu, moves cursor to location
           eoScrollByOneLess,
18108:
                                       //Forces scrolling to be one less
18109:
           eoScrollHintFollows.
                                       //The scroll hint follows the mouse when scrolling vertically
18110:
           eoScrollPastEof,
                                       //Allows the cursor to go past the end of file marker
18111:
           eoScrollPastEol,
                                       //Allows cursor to go past last character into white space at end of a line
18112:
           eoShowScrollHint,
                                       //Shows a hint of the visible line numbers when scrolling vertically
18113:
           eoShowSpecialChars.
                                       //Shows the special Characters
18114:
           eoSmartTabDelete,
                                       //similar to Smart Tabs, but when you delete characters
                                       //When tabbing, cursor will go to non-white space character of previous line
18115:
           eoSmartTabs,
18116:
           eoSpecialLineDefaultFg,
                                       //disables the foreground text color override using OnSpecialLineColor event
           eoTabIndent,
18117:
                                       //If active <Tab>and<Shift><Tab> act block indent,unindent when text select
                                       //Converts a tab character to a specified number of space characters
           eoTabsToSpaces.
18118:
                                       //Spaces at the end of lines will be trimmed and not saved
18119:
           eoTrimTrailingSpaces
           18121:
           Double click {f to} select a word {f and} count words {f with} highlightning.
18122:
18123:
           Triple click to select a line.
18124:
           CTRL+SHIFT+click to extend a selection.
18125:
           Drag with the ALT key down to select columns of text !!!
18126:
           Drag and drop is supported.
           Type CTRL+Z to undo and SHIFT+CTRL+Z to redo.
18127:
18128:
           Type CTRL+A to select all.
           Type CTRL+N to set a new line.
18129:
18130:
           Type CTRL+T to delete a line or token. //Tokenizer
           Type CTRL+C to copy to clipboard. Type CTRL+V to paste from clipboard.
18131:
           Type CTRL+Shift+T to add ToDo in line and list.
18132:
           Type CTRL+Shift+[0..9] to set bookmarks.
                                                       //Bookmark
18134:
           Type CTRL[0..9] to jump or get to bookmarks.
18135:
           Type Home to position cursor at beginning of current line and End to position it at end of line.
18136:
           Type CTRL+Home to position cursor at start of doc and CTRL+End to position it at end of document.
           Page Up and Page Down work as expected.
18137:
           CTRL+Page Up sends cursor to top of viewed portion and CTRL+Page Down sends it to bottom.
18138:
18139:
           using http://pp4s.co.uk/main/tu-form2-help-demo-laz.html
18140:
18141: {$ Short Key Positions Ctrl<A-Z>: }
18142: def
18143:
          <A> Select All
18144:
          <B> Count Words
          <C> Copy
18145:
18146:
          <D> Internet Start
18147:
          <E> Script List
18148:
          <F> Find
18149:
          <G> Goto
          <H>> Mark Line
18150:
18151:
          <I> Interface List
18152:
          <J> Code Completion
18153:
          <K> Console
18154:
          <L> Interface List Box
18155:
          <M> Font Larger -
18156:
          <N> New Line
18157:
          <0> Open File
18158:
          <P> Font Smaller +
18159:
          <O> Ouit
18160:
          <R> Replace
18161:
          <S> Save!
18162:
          <T> Delete Line
          <U>> Use Case Editor
18163:
          <V> Paste
18164:
18165:
          <W> URI Links
18166:
          <X> Reserved for coding use internal
18167:
          <Y> Delete Line
18168:
          <Z> Undo
18169:
18170: ref
18171:
         F1 Help
          F2 Syntax Check
18172:
18173:
          F3 Search Next
18174:
          F4 New Instance
```

```
18175:
            F5 Line Mark /Breakpoint
18176:
            F6 Goto End
             F7 Debug Step Into
18178:
             F8 Debug Step Out
18179:
             F9 Compile
18180:
             F10 Menu
18181:
             F11 Word Count Highlight
18182:
             F12 Reserved for coding use internal
18183:
          def ReservedWords: array[0..78] 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'
AllowedChars: array[0..5] of string = ('(',',')', '[', ']', ', 't,t1,t2,t3: boolean;
18184:
          def ReservedWords: array[0..78] of string =
18185:
18186:
18187:
18188:
18189:
18190:
18191:
18192
18193:
18194:
18195:
18196:
18197:
18198: //---
18200: //----
18201:
18202: Amount of Functions: 11818
18203: Amount of Procedures: 7421
18204: Amount of Constructors: 1219
18205: Totals of Calls: 20458
18206: SHA1: Win 3.9.9.91 8099E25F2508B262E909B76EDF7BB301AFFA1864
18207:
18208:
18209:
18211: Short Manual with 50 Tips!
18212:
18213: -
           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>
18214: -
18215: - Menu: With <F2> you check syntax with <F8> you debug and <F9> you compile!
18216: -
           Menu: With <Crtl><F3> you can search for code on examples
           Menu: Open in menu Output a new instance <F4> of the box to compare or prepare your scripts
18217: -
           Menu: Set Interface Naviagator in menu /View/Intf Navigator
18218: -
18219: -
           Menu: Switch or toogle between the last 2 scripts in menu File/LoadLast (History is set to 9 files)
18220:
           Inifile: Set memory report in ini: MEMORYREPORT=Y : report on memory leaks on shutdown by dialog
18221: -
18222: - Inifile: Refresh (reload) the inifile after edit with ../Help/Config Update
18223: -
           Context Menu: You can printout your scripts as a pdf-file or html-export
18224: - Context: You do have a context menu with the right mouse click
18225:
18226: -
           Menu: With the UseCase Editor you can convert graphic formats too.
           Menu: On menu Options you find Addons as compiled scripts
18227: -
18228: -
           IDE: You don't need a mouse to handle maxbox, use shortcuts
           18229:
           IDE: Dragndrop your scripts in box or the model in use case editor (Cut,Copy,Paste always available) Editor: You can get templates as code completion with <ctrl j> in editor like classp or iinterface
18230:
18231:
                     or ttimer (you type classp and then CTRL J), or you type tstringlist and <Ctrl><J>
18232:
18233:
18234: -
           Menu: In menu output (console) you can set output menu in edit mode by unchecking <read only output>
18235:
           Editor: After the end. you can write or copy notes or descriptions concerning the app or code
18236:
           Code: If you code a loop till key-pressed use function: isKeyPressed;
18237: -
           Code: Macro set the macros #name, #date, #host, #path, #file, #head #sign, Tutorial maxbox_starter25.pdf
18238: -
           Code: change Syntax in autoboot macro 'maxbootscript.txt'
           Editor: - <F11> Click on Word in Editor search amount of words with highlighting, Dbl Click on Bookmarks
18239:
                    to delete and Click and mark to drag a bookmark
18241: -
           Menu: To start handling from CD-ROM (read only mode) uncheck in Menu /Options/Save before Compile
18242: -
           IDE: A file info with system and script information you find in menu Program/Information
           IDE: After change the config file in help you can update changes in menu Help/Config Update IDE: Make a screenshot of the content and environment in menu Output/Save Screenshot IDE: Use a boot loader script 'maxbootscript.txt' (as auto start) to change box each time you start it.
18243: -
18244:
18245:
18246: -
           IDE: With escape or <Ctrl> Q you can also leave the box or stop a script in menu program -
        - Editor: Set Bookmarks to check your work in app or code
- Editor: With <Ctrl H> you set {$Active Line Color} and F11 you get Word Count Statistic on Output too
- Editor: With {//TODO: some description} or DONE you set code entries for ToDo List in ../Help/ToDo List
18247: -
18248:
18249:
18250: - Editor: With <Ctrl W> you set active URL links in your code to test availability in Context Menu
18251:
18252: - IDE with menu /Options/ADO SQL Workbench you can manage your Database
18253: - 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
18255:
           Toolbar: In menu /View switch Off Toolbar and Coolbar to get more coding space
18256:
           Code: Put some resources in your code /Help/Resource Explorer like bitbtn, forms, dialogs;
18257: - Code Editor: Compile with <F9> but also Alt C in case <F9> isnt available; 18258: - IDE set bookmarks with <Ctrl Shift> (0...9) and jump with <Ctrl> (0...9)
18259: - IDE menu /Help/Tools/ write with RTF Editor or open a DOS Shell or brows
18260:
18261: - Add on write your Requirements in RTF Docu with <CTRL ALT R> in context menu 18262: - Add on when no browser is available start /Options/Add ons/Easy Browser
18263: - Add on SOAP Tester with SOP POST File
```

```
18264: - Add on IP Protocol Sniffer with List View
18265: - Add on OpenGL mX Robot Demo for android
18267: -
         Menu: Help/Tools as a Tool Section with DOS Opener
18268: -
         Menu Editor: export the code as RTF File
        Menu: Help/Tools/Syn Export your code as available in HTML or RTF Menu: Help/Tools/ with <Alt H-S-D> you start the DOS Shell
18269: -
18271: -
         Context: Auto Detect of Syntax depending on file extension
18272: - Code: some Windows API function start with w in the name like wGetAtomName();
18273: - IDE Close - \mathbf{if} you cant close the box \mathbf{then} reset it <Ctrl F2> \mathbf{in} menu /Debug
18274: - IDE File Check with menu .. View/File Changes/...
18276: -
         Function GetProcessMemoryInfo(Process: THandle; var MemoryCounters: TProcessMemoryCounters; cb: DWORD): BOOL; //stdcall;;
18277:
18278:
18279:
            External 'GetProcessMemoryInfo@psapi.dll stdcall';
18280:
18281:
         Function OpenProcess(dwDesiredAccess:DWORD; bInheritHandle:BOOL; dwProcessId: DWORD):THandle;
            External
18282:
                      'OpenProcess@kernel32.dll stdcall';
18283:
18284: PCT Precompile Technology , mX4 ScriptStudio
18285: Indy, JCL, Jedi, VCL, Systools, TurboPower, Fundamentals, ExtendedRTL, Synedit
18286: DMath, devC, Graphics32, ExtPascal, mX4, LCL, CLX, FCL, CPort and more 18287: emax layers: system-package-component-unit-class-function-block 18288: new keywords def ref using maxCalcF
18289: UML: use case act class state seq pac comp dep - lib lab
18290: FBX Lib, psAPI, SMS Cell Module, OpenGL, Borland Tools
18291: Tutorials, 30 Units add, VCL constructors, controls plus, unit list
18292: 2 Tutorials, 36 Units add, Synapse V40, LDAP, OpenSSL, AVScan
18293: https://unibe-ch.academia.edu/MaxKleiner
18294: www.slideshare.net/maxkleiner1
18295: http://www.scribd.com/max_kleiner
18296:
18297:
18299: unit List asm internal end
18301: 01 unit RIRegister_StrUtils_Routines(exec); //Delphi
18302: 02 unit SIRegister_IdStrings
                                                       //Indy Sockets
18303: 03 unit RIRegister_niSTRING_Routines(Exec);
                                                       //from RegEx
18304: 04 unit uPSI_fMain Functions;
                                                        //maXbox Open Tools API
18305: 05 unit IFSI WinFormlpuzzle;
                                                        //maXbox
18306: 06 unit RIRegister_LinarBitmap_Routines(Exec); //ImageFileLibBCB
18307: 07 unit RegisterDateTimeLibrary_R(exec);
                                                        //Delphi
18308: 08 unit RIRegister_MathMax_Routines(exec);
                                                        //Jedi & Delphi
18309: 09 unit RIRegister_IdGlobal_Routines(exec);
                                                        //Indy Sockets
18310: 10 unit RIRegister_SysUtils_Routines(Exec);
                                                        //Delphi
18311: 11 unit uPSI_IdTCPConnection;
                                                        //Indy some functions
18312: 12 unit uPSCompiler.pas;
                                                        //PS kernel functions
18313: 13 unit uPSI DBCommon;
                                                        //DB Common Routines and Types
18314: 14 unit uPSI Printers.pas
                                                        //Delphi VCL
18315: 15 unit uPSI_MPlayer.pas
                                                        //Delphi VCL
18316: 16 unit uPSC_comobj;
                                                        //COM Functions
18317: 17 unit uPSI_Clipbrd;
                                                        //Delphi VCL
18318: 18 unit Filectrl in IFSI_SysUtils_max;
18319: 19 unit uPSI_SqlExpr;
                                                        //VCL Runtime
                                                        //DBX3
18320: 20 unit uPSI_ADODB;
                                                        //ADODB
18321: 21 unit uPSI_StrHlpr;
                                                        //String Helper Routines
18322: 22 unit uPSI_DateUtils;
                                                        //Expansion to DateTimeLib
18323: 23 unit uPST FileUtils;
                                                        //Expansion to Sys/File Utils
18324: 24 unit JUtils / gsUtils;
                                                        //Jedi / Metabase
18325: 25 unit JvFunctions max;
                                                        //Jedi Functions
18326: 26 unit HTTPParser;
                                                        //Delphi VCL
18327: 27 unit HTTPUtil;
                                                        //Delphi VCL
18328: 28 unit uPSI_XMLUtil;
                                                        //Delphi VCL
18329: 29 unit uPSI_SOAPHTTPClient;
                                                        //Delphi VCL SOAP WebService V3.5
18330: 30 unit uPSI_Contnrs;
                                                        //Delphi RTL Container of Classes
18331: 31 unit uPSI_MaskUtils;
                                                        //RTL Edit and Mask functions
18332: 32 unit uPSI MyBigInt;
                                                        //big integer class with Math
18333: 33 unit uPSI_ConvUtils;
                                                        //Delphi VCL Conversions engine
18334: 34 unit Types_Variants;
                                                        //Delphi\Win32\rt1\sys
18335: 35 unit uPSI_IdHashSHA1;
                                                        //Indy Crypto Lib
                                                        //Indy Crypto;
//Indy ASN1Utility Routines;
18336: 36 unit uPSI_IdHashMessageDigest
18337: 37 unit uPST TdASN1Util;
                                                        //Indy Logger from LogBase
18338: 38 unit uPSI_IdLogFile;
18339: 39 unit uPSI_IdIcmpClient;
                                                        //Indy Ping ICMP
18340: 40 unit uPSI_IdHashMessageDigest_max
                                                        //Indy Crypto &OpenSSL;
                                                        //Delphi RTL
//Delphi VCL
18341: 41 unit uPSI FileCtrl;
18342: 42 unit uPSI_Outline;
18343: 43 unit uPSI_ScktComp;
                                                        //Delphi RTL
18344: 44 unit uPSI_Calendar;
                                                        //Delphi VCL
                                                        //VListView;
18345: 45 unit uPSI VListView
18346: 46 unit uPSI DBGrids;
                                                        //Delphi VCL
18347: 47 unit uPSI_DBCtrls;
                                                        //Delphi VCL
18348: 48 unit ide_debugoutput;
                                                        //maXbox
18349: 49 unit uPSI_ComCtrls;
                                                        //Delphi VCL
18350: 50 unit uPSC_stdctrls+;
18351: 51 unit uPSI_Dialogs;
                                                        //Delphi VCL
                                                        //Delphi VCL
18352: 52 unit uPSI_StdConvs;
                                                        //Delphi RTL
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18353: 53 unit uPSI DBClient;
                                                        //Delphi RTL
18354: 54 unit uPSI_DBPlatform;
                                                       //Delphi RTL
18355: 55 unit uPSI_Provider;
                                                        //Delphi RTL
18356: 56 unit uPSI_FMTBcd;
                                                        //Delphi RTL
18357: 57 unit uPST DBCGrids;
                                                        //Delphi VCL
18358: 58 unit uPSI CDSUtil;
                                                        //MTDAS
18359: 59 unit uPSI_VarHlpr;
                                                        //Delphi RTL
18360: 60 unit uPSI_ExtDlgs;
                                                        //Delphi VCL
18361: 61 unit sdpStopwatch;
                                                        //maXbox
18362: 62 unit uPSI_JclStatistics;
                                                        //JTCT.
18363: 63 unit uPSI_JclLogic;
                                                        //JCTi
18364: 64 unit uPSI_JclMiscel;
                                                        //JCL
18365: 65 unit uPSI_JclMath_max;
                                                        //JCL RTL
18366: 66 unit uPSI_uTPLb_StreamUtils;
                                                        //LockBox 3
18367: 67 unit uPSI MathUtils;
                                                        //BCB
18368: 68 unit uPSI_JclMultimedia;
                                                        //JCL
18369: 69 unit uPSI_WideStrUtils;
                                                        //Delphi API/RTL
18370: 70 unit uPSI_GraphUtil;
                                                        //Delphi RTL
18371: 71 unit uPSI_TypeTrans;
                                                        //Delphi RTL
18372:
       72 unit uPSI_HTTPApp;
                                                        //Delphi VCL
18373: 73 unit uPSI_DBWeb;
                                                        //Delphi VCL
18374: 74 unit uPSI_DBBdeWeb;
                                                        //Delphi VCL
18375: 75 unit uPSI_DBXpressWeb;
                                                        //Delphi VCL
18376: 76 unit uPSI_ShadowWnd;
                                                        //Delphi VCL
18377: 77 unit uPSI_ToolWin;
                                                        //Delphi VCL
18378: 78 unit uPSI_Tabs;
                                                        //Delphi VCL
18379: 79 unit uPSI_JclGraphUtils;
                                                        //JCL
18380: 80 unit uPSI_JclCounter;
                                                        //JTCT.
18381: 81 unit uPSI_JclSysInfo;
                                                        //JCL
18382: 82 unit uPSI_JclSecurity;
                                                        //JCL
18383: 83 unit uPSI_JclFileUtils;
                                                        //JCL
18384: 84 unit uPSI_IdUserAccounts;
                                                        //Indy
18385: 85 unit uPSI IdAuthentication;
                                                        //Indv
18386: 86 unit uPSI_uTPLb_AES;
                                                        //LockBox 3
18387: 87 unit uPSI_IdHashSHA1;
                                                        //LockBox 3
18388: 88 unit uTPLb_BlockCipher;
                                                        //LockBox 3
18389: 89 unit uPSI_ValEdit.pas;
                                                        //Delphi VCL
18390: 90 unit uPSI_JvVCLUtils;
                                                        //JCL
18391: 91 unit uPSI_JvDBUtil;
                                                        //JCL
18392: 92 unit uPSI_JvDBUtils;
                                                        //JCL
18393: 93 unit uPSI_JvAppUtils;
                                                        //JCL
18394: 94 unit uPSI_JvCtrlUtils;
                                                        //JTCT
18395: 95 unit uPSI_JvFormToHtml;
                                                        //JCL
18396: 96 unit uPSI_JvParsing;
                                                        //JCL
18397: 97 unit uPSI_SerDlgs;
                                                        //Toolbox
18398: 98 unit uPSI_Serial;
                                                        //Toolbox
18399: 99 unit uPSI_JvComponent;
                                                        //JCL
18400: 100 unit uPSI_JvCalc;
                                                        //JCL
18401: 101 unit uPSI_JvBdeUtils;
                                                        //JCL
18402: 102 unit uPSI_JvDateUtil;
                                                        //JCL
18403: 103 unit uPSI JvGenetic;
                                                        //JCL
18404:
       104 unit uPSI_JclBase;
                                                        //JCL
18405: 105 unit uPSI_JvUtils;
                                                        //JCL
18406: 106 unit uPSI_JvStrUtil;
                                                        //JCL
18407: 107 unit uPSI_JvStrUtils;
                                                        //JCL
18408: 108 unit uPSI_JvFileUtil;
                                                        //JCL
18409: 109 unit uPSI_JvMemoryInfos;
                                                        //JCL
18410: 110 unit uPSI_JvComputerInfo;
                                                        //JCL
18411: 111 unit uPSI_JvgCommClasses;
                                                        //JCL
18412:
       112 unit uPST JvgLogics;
                                                        //JTCT
18413: 113 unit uPSI_JvLED;
                                                        //JCL
18414: 114 unit uPSI_JvTurtle;
                                                        //JCL
18415: 115 unit uPSI_SortThds; unit uPSI_ThSort;
                                                        //maXbox
18416: 116 unit uPSI JvgUtils;
                                                        //JCL
18417: 117 unit uPSI_JvExprParser;
                                                        //JCL
18418: 118 unit uPSI_HexDump;
                                                        //Borland
18419: 119 unit uPSI_DBLogDlg;
                                                        //VCL
18420: 120 unit uPSI_SqlTimSt;
                                                        //RTL
18421: 121 unit uPSI JvHtmlParser;
                                                        //JCTi
18422: 122 unit uPSI_JvgXMLSerializer;
                                                        //JCL
18423: 123 unit uPSI_JvJCLUtils;
                                                        //JCL
18424: 124 unit uPSI_JvStrings;
                                                        //JCL
18425: 125 unit uPSI_uTPLb_IntegerUtils;
                                                        //TurboPower
18426: 126 unit uPSI uTPLb HugeCardinal;
                                                        //TurboPower
       127 unit uPSI_uTPLb_HugeCardinalUtils;
                                                        //TurboPower
18428: 128 unit uPSI_SynRegExpr;
                                                        //SynEdit
18429: 129 unit uPSI StUtils;
                                                        //SysTools4
18430: 130 unit uPSI_StToHTML;
                                                        //SysTools4
18431: 131 unit uPSI_StStrms;
                                                        //SysTools4
       132 unit uPSI_StFIN;
                                                        //SysTools4
18433: 133 unit uPSI_StAstroP;
                                                        //SysTools4
18434: 134 unit uPSI StStat;
                                                        //SysTools4
18435: 135 unit uPSI StNetCon;
                                                        //SysTools4
18436: 136 unit uPSI_StDecMth;
                                                        //SysTools4
18437: 137 unit uPSI_StOStr;
                                                        //SysTools4
18438: 138 unit uPSI_StPtrns;
                                                        //SysTools4
18439: 139 unit uPSI StNetMsq;
                                                        //SvsTools4
18440: 140 unit uPSI_StMath;
                                                        //SysTools4
18441: 141 unit uPSI_StExpEng;
                                                        //SysTools4
```

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18442: 142 unit uPSI StCRC;
                                                         //SvsTools4
18443: 143 unit uPSI_StExport,
                                                         //SysTools4
18444: 144 unit uPSI_StExpLog,
                                                         //SvsTools4
18445: 145 unit uPSI_ActnList;
                                                         //Delphi VCL
18446: 146 unit uPSI_jpeg;
                                                         //Borland
18447: 147 unit uPSI StRandom;
                                                         //SysTools4
18448: 148 unit uPSI_StDict;
                                                         //SysTools4
18449: 149 unit uPSI_StBCD;
                                                         //SvsTools4
18450: 150 unit uPSI_StTxtDat;
                                                         //SysTools4
18451: 151 unit uPST StRegEx;
                                                         //SvsTools4
18452: 152 unit uPSI_IMouse;
                                                         //VCL
18453: 153 unit uPSI_SyncObjs;
                                                         //VCL
18454: 154 unit uPSI_AsyncCalls;
                                                         //Hausladen
18455: 155 unit uPSI ParallelJobs;
                                                         //Saraiva
18456: 156 unit uPSI Variants;
                                                         //VCT
18457: 157 unit uPSI_VarCmplx;
                                                         //VCL Wolfram
18458: 158 unit uPSI_DTDSchema;
18459: 159 unit uPSI_ShLwApi;
                                                         //Brakel
18460: 160 unit uPSI_IBUtils;
                                                         //VCL
18461: 161 unit uPSI_CheckLst;
                                                         //VCL
18462: 162 unit uPSI_JvSimpleXml;
                                                         //JCL
18463: 163 unit uPSI_JclSimpleXml;
                                                         //JCL
18464: 164 unit uPSI_JvXmlDatabase;
                                                         //JCL
18465: 165 unit uPSI_JvMaxPixel;
                                                         //JCL
18466: 166 unit uPSI_JvItemsSearchs;
                                                         //JCL
18467: 167 unit uPSI_StExpEng2;
                                                         //SysTools4
18468: 168 unit uPSI_StGenLog;
                                                         //SysTools4
18469: 169 unit uPSI_JvLogFile; 18470: 170 unit uPSI_CPort;
                                                         //.Tc1
                                                         //ComPort Lib v4.11
18471: 171 unit uPSI_CPortCtl;
                                                         //ComPort
18472: 172 unit uPSI_CPortEsc;
                                                         //ComPort
                                                         //ComPort
18473: 173 unit BarCodeScaner;
18474: 174 unit uPSI JvGraph;
                                                         //JCL
18475: 175 unit uPSI_JvComCtrls;
                                                         //JCL
       176 unit uPSI_GUITesting;
                                                         //D Unit
18477: 177 unit uPSI_JvFindFiles;
                                                         //JCL
18478: 178 unit uPSI StSystem;
                                                         //SvsTools4
18479: 179 unit uPSI_JvKeyboardStates;
                                                         //JCL
18480:
       180 unit uPSI_JvMail;
                                                         //JCL
18481: 181 unit uPSI_JclConsole;
                                                         //JCL
18482: 182 unit uPSI_JclLANMan;
                                                         //JCL
18483: 183 unit uPSI IdCustomHTTPServer;
                                                         //Tndv
18484: 184 unit IdHTTPServer
                                                         //Indy
18485: 185 unit uPSI_IdTCPServer;
                                                         //Indy
18486: 186 unit uPSI_IdSocketHandle;
                                                         //Indy
18487: 187 unit uPSI IdIOHandlerSocket;
                                                         //Tndv
18488: 188 unit IdIOHandler;
                                                         //Indv
                                                         //Bloodshed
18489: 189 unit uPSI_cutils;
18490: 190 unit uPSI_BoldUtils;
                                                         //boldsoft
                                                         //Indy
18491: 191 unit uPSI_IdSimpleServer;
18492: 192 unit uPSI_IdSSLOpenSSL;
                                                         //Tndv
18493:
       193 unit uPSI_IdMultipartFormData;
                                                         //Indv
18494: 194 unit uPSI_SynURIOpener;
                                                         //SynEdit
18495: 195 unit uPSI_PerlRegEx;
                                                         //PCRE
18496: 196 unit uPSI_IdHeaderList;
18497: 197 unit uPSI_StFirst;
                                                         //Indv
                                                         //SysTools4
18498: 198 unit uPSI_JvCtrls;
                                                         //JCL
18499: 199 unit uPSI_IdTrivialFTPBase;
                                                         //Indy
18500: 200 unit uPSI_IdTrivialFTP;
                                                         //Indy
18501: 201 unit uPST IdUDPBase;
                                                         //Tndv
18502: 202 unit uPSI_IdUDPClient;
                                                         //Indy
18503: 203 unit uPSI_utypes;
                                                         //for DMath.DLL
18504: 204 unit uPSI_ShellAPI;
                                                         //Borland
18505: 205 unit uPSI IdRemoteCMDClient;
                                                         //Tndv
18506: 206 unit uPSI_IdRemoteCMDServer;
                                                         //Indv
18507: 207 unit IdRexecServer;
                                                         //Indy
18508: 208 unit IdRexec; (unit uPSI_IdRexec;)
                                                         //Indy
18509: 209 unit IdUDPServer;
18510: 210 unit IdTimeUDPServer;
                                                         //Tndv
18511: 211 unit IdTimeServer;
                                                         //Indv
18512: 212 unit IdTimeUDP; (unit uPSI_IdUDPServer;)
                                                         //Indy
18513: 213 unit uPSI_IdIPWatch;
                                                         //Indy
18514: 214 unit uPSI_IdIrcServer;
                                                         //Indy
//Indy
18515: 215 unit uPSI IdMessageCollection;
18516: 216 unit uPSI_cPEM;
                                                         //Fundamentals 4
18517: 217 unit uPSI_cFundamentUtils;
                                                         //Fundamentals 4
18518: 218 unit uPSI_uwinplot;
                                                         //DMath
18519: 219 unit uPSI_xrtl_util_CPUUtils;
18520: 220 unit uPSI_gR32_System;
                                                         //ExtentedRTL
                                                         //Graphics32
18521: 221 unit uPSI_cFileUtils;
                                                         //Fundamentals 4
                                                         //Fundamentals 4
18522: 222 unit uPSI_cDateTime; (timemachine)
18523: 223 unit uPSI_cTimers; (high precision timer)
                                                         //Fundamentals 4
18524: 224 unit uPSI cRandom;
                                                         //Fundamentals 4
       225 unit uPSI_ueval;
                                                         //DMath
18526: 226 unit uPSI_xrtl_net_URIUtils;
                                                         //ExtendedRTL
18527: 227 unit xrtl_net_URIUtils;
                                                         //ExtendedRTL
18528: 228 unit uPSI ufft; (FFT)
                                                         //DMath
18529: 229 unit uPSI_DBXChannel;
                                                         //Delphi
18530: 230 unit uPSI_DBXIndyChannel;
                                                         //Delphi Indy
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18531: 231 unit uPSI_xrtl_util_COMCat;
                                                          //ExtendedRTT.
18532: 232 unit uPSI_xrtl_util_StrUtils;
                                                          //ExtendedRTL
18533: 233 unit uPSI_xrtl_util_VariantUtils;
18534: 234 unit uPSI_xrtl_util_FileUtils;
                                                          //ExtendedRTL
                                                          //ExtendedRTL
18535: 235 unit xrtl_util_Compat;
                                                          //ExtendedRTL
18536: 236 unit uPSI OleAuto;
                                                          //Borland
       237 unit uPSI_xrtl_util_COMUtils;
18537:
                                                          //ExtendedRTL
18538: 238 unit uPSI_CmAdmCtl;
                                                          //Borland
18539: 239 unit uPSI_ValEdit2;
                                                          //VCL
18540: 240 unit uPSI_GR32; //Graphics32
                                                          //Graphics32
18541: 241 unit uPSI_GR32_Image;
                                                          //Graphics32
18542: 242 unit uPSI_xrtl_util_TimeUtils;
                                                          //ExtendedRTL
18543: 243 unit uPSI_xrtl_util_TimeZone;
                                                          //ExtendedRTL
18544: 244 unit uPSI_xrtl_util_TimeStamp;
                                                          //ExtendedRTL
18545: 245 unit uPSI xrtl util Map;
                                                          //ExtendedRTL
18546: 246 unit uPSI_xrtl_util_Set;
                                                          //ExtendedRTL
18547: 247 unit uPSI_CPortMonitor;
                                                            /ComPort
18548: 248 unit uPSI_StIniStm;
                                                          //SysTools4
18549: 249 unit uPSI_GR32_ExtImage;
18550: 250 unit uPSI_GR32_OrdinalMaps;
                                                          //Graphics32
                                                          //Graphics32
18551: 251 unit uPSI_GR32_Rasterizers;
                                                          //Graphics32
18552: 252 unit uPSI_xrtl_util_Exception;
                                                          //ExtendedRTL
18553: 253 unit uPSI_xrtl_util_Value;
18554: 254 unit uPSI_xrtl_util_Compare;
                                                          //ExtendedRTL
                                                          //ExtendedRTL
       255 unit uPSI_FlatSB;
18555:
                                                          //VCL
18556: 256 unit uPSI_JvAnalogClock;
                                                          //JCL
18557: 257 unit uPSI_JvAlarms;
                                                          //JCL
18558: 258 unit uPSI_JvSQLS;
18559: 259 unit uPSI_JvDBSecur;
                                                          //JTCT
                                                          //JCL
18560: 260 unit uPSI_JvDBQBE;
                                                          //JCL
18561: 261 unit uPSI_JvStarfield;
                                                          //JCL
18562: 262 unit uPSI_JVCLMiscal;
                                                          //JCL
18563: 263 unit uPSI JvProfiler32;
                                                          //JCL
18564: 264 unit uPSI_JvDirectories,
                                                          //JCL
       265 unit uPSI_JclSchedule,
                                                          //JCL
18566: 266 unit uPSI_JclSvcCtrl,
                                                          //JCL
18567: 267 unit uPSI JvSoundControl,
                                                          //JCL
18568: 268 unit uPSI_JvBDESQLScript,
                                                          //JCL
18569:
       269 unit uPSI_JvgDigits,
                                                          //JCL>
18570:
       270 unit uPSI_ImgList;
                                                          //TCustomImageList
18571: 271 unit uPSI_JclMIDI;
                                                          //JCL>
18572: 272 unit uPSI_JclWinMidi;
                                                          //.TCT.>
18573:
       273 unit uPSI_JclNTFS;
                                                          //JCL>
18574: 274 unit uPSI_JclAppInst;
                                                          //JCL>
18575: 275 unit uPSI_JvRle;
                                                          //JCL>
18576: 276 unit uPSI_JvRas32;
                                                          //JCT.>
18577: 277 unit uPSI_JvImageDrawThread,
                                                          //JCL>
18578: 278 unit uPSI_JvImageWindow,
                                                          //JCL>
18579: 279 unit uPSI_JvTransparentForm;
                                                          //JCL>
18580: 280 unit uPSI_JvWinDialogs;
                                                          //JCL>
18581: 281 unit uPSI JvSimLogic.
                                                          //JCT.>
18582: 282 unit uPSI_JvSimIndicator,
                                                          //JCL>
18583: 283 unit uPSI_JvSimPID,
                                                          //JCL>
18584: 284 unit uPSI_JvSimPIDLinker,
                                                          //JCL>
18585: 285 unit uPSI_IdRFCReply; 18586: 286 unit uPSI_IdIdent;
                                                          //Indv
                                                          //Tndv
18587: 287 unit uPSI_IdIdentServer;
                                                          //Indy
18588: 288 unit uPSI_JvPatchFile;
                                                          //JCL
18589: 289 unit uPSI_StNetPfm;
                                                          //SysTools4
18590: 290 unit uPSI_StNet;
                                                          //SysTools4
18591: 291 unit uPSI_JclPeImage;
                                                          //JCL
18592: 292 unit uPSI_JclPrint;
                                                          //JCL
18593: 293 unit uPSI_JclMime;
                                                          //JCL
18594: 294 unit uPSI JvRichEdit;
                                                          //JCL
18595: 295 unit uPSI_JvDBRichEd;
                                                          //JCL
       296 unit uPSI_JvDice;
                                                          //JCL
18597: 297 unit uPSI_JvFloatEdit;
                                                          //JCL 3.9.8
18598: 298 unit uPSI_JvDirFrm;
                                                          //JCL
18599: 299 unit uPSI JvDualList;
                                                          //JCL
18600: 300 unit uPSI_JvSwitch;
                                                          ////JCL
18601: 301 unit uPSI_JvTimerLst;
                                                          ////JCL
18602: 302 unit uPSI_JvMemTable;
                                                          //JCL
18603: 303 unit uPSI_JvObjStr;
                                                          //JCL
18604: 304 unit uPST StLArr;
                                                          //SysTools4
18605: 305 unit uPSI_StWmDCpy;
                                                          //SysTools4
18606: 306 unit uPSI_StText;
                                                          //SysTools4
18607: 307 unit uPSI StNTLog;
                                                          //SysTools4
18608: 308 unit uPSI_xrtl_math_Integer;
                                                          //ExtendedRTL
18609: 309 unit uPSI_JvImagPrvw;
                                                          //JCL
       310 unit uPSI_JvFormPatch;
18610:
                                                          //JCL
18611: 311 unit uPSI_JvPicClip;
                                                          //JCL
18612: 312 unit uPSI JvDataConv;
                                                          //JCL
18613: 313 unit uPSI JvCpuUsage;
                                                          //JCL
18614: 314 unit uPSI_JclUnitConv_mX2;
                                                          //JCL
18615: 315 unit JvDualListForm;
                                                          //JCL
18616: 316 unit uPSI_JvCpuUsage2;
                                                          //JCL
18617: 317 unit uPSI JvParserForm;
                                                          //JCL
18618: 318 unit uPSI_JvJanTreeView;
                                                          //JCL
18619: 319 unit uPSI_JvTransLED;
                                                          //JCL
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18620: 320 unit uPSI_JvPlaylist;
                                                        //JCTi
18621: 321 unit uPSI_JvFormAutoSize;
                                                        //JCL
18622: 322 unit uPSI_JvYearGridEditForm;
                                                        //JCL
18623: 323 unit uPSI_JvMarkupCommon;
                                                        //JCL
18624: 324 unit uPSI JvChart;
                                                        //JCL
18625: 325 unit uPSI JvXPCore;
                                                        //JCL
18626:
       326 unit uPSI_JvXPCoreUtils;
                                                        //JCL
      327 unit uPSI_StatsClasses;
18627:
                                                        //mX4
18628: 328 unit uPSI_ExtCtrls2;
                                                        //VCL
18629: 329 unit uPSI_JvUrlGrabbers;
                                                        //JCL
18630: 330 unit uPSI_JvXmlTree;
                                                        //JCL
18631: 331 unit uPSI_JvWavePlayer;
                                                        //JCL
18632: 332 unit uPSI_JvUnicodeCanvas;
                                                        //JCL
18633: 333 unit uPSI_JvTFUtils;
                                                        //JCL
18634: 334 unit uPSI IdServerIOHandler;
                                                        //Tndv
18635: 335 unit uPSI_IdServerIOHandlerSocket;
                                                        //Indy
18636: 336 unit uPSI_IdMessageCoder;
                                                        //Indy
18637: 337 unit uPSI_IdMessageCoderMIME;
                                                        //Indv
18638: 338 unit uPSI_IdMIMETypes;
                                                        //Tndv
18639: 339 unit uPSI_JvConverter;
                                                        //JCL
18640: 340 unit uPSI_JvCsvParse;
                                                        //JCL
18641: 341 unit uPSI_umath; unit uPSI_ugamma;
                                                        //DMath
18642: 342 unit uPSI_ExcelExport;(Nat:TJsExcelExport) //JCL
18643: 343 unit uPSI JvDBGridExport;
                                                        //JCTi
18644: 344 unit uPSI_JvgExport;
                                                        //JCL
18645: 345 unit uPSI_JvSerialMaker;
                                                        //JCL
18646: 346 unit uPSI_JvWin32;
                                                        //JCL
18647: 347 unit uPSI_JvPaintFX;
                                                        //JTCT
18648: 348 unit uPSI_JvOracleDataSet; (beta)
                                                        //JCL
18649: 349 unit uPSI_JvValidators; (preview)
                                                        //JCL
18650: 350 unit uPSI_JvNTEventLog;
                                                        //JCL
18651: 351 unit uPSI_ShellZipTool;
                                                        //mX4
18652: 352 unit uPSI_JvJoystick;
                                                        //JCL
18653: 353 unit uPSI_JvMailSlots;
                                                        //JCL
       354 unit uPSI_JclComplex;
                                                        //JCL
18655: 355 unit uPSI_SynPdf;
                                                        //Synopse
18656: 356 unit uPSI Registry;
                                                        //VCL
//VCL
      357 unit uPSI_TlHelp32;
18657:
18658:
       358 unit uPSI_JclRegistry;
                                                        //JCL
18659: 359 unit uPSI_JvAirBrush;
                                                        //JCL
18660: 360 unit uPSI_mORMotReport;
                                                        //Synopse
18661: 361 unit uPSI JclLocales;
                                                        //JTCT.
18662: 362 unit uPSI_SynEdit;
                                                        //SynEdit
18663: 363 unit uPSI_SynEditTypes;
                                                        //SynEdit
                                                        //SynEdit
18664: 364 unit uPSI_SynMacroRecorder;
18665: 365 unit uPSI_LongIntList;
                                                        //SynEdit
18666: 366 unit uPSI_devcutils;
                                                        //DevC
                                                        //SynEdit
18667: 367 unit uPSI_SynEditMiscClasses;
18668: 368 unit uPSI_SynEditRegexSearch;
                                                        //SynEdit
18669: 369 unit uPSI_SynEditHighlighter;
                                                        //SvnEdit
18670: 370 unit uPSI_SynHighlighterPas;
                                                        //SynEdit
18671:
       371 unit uPSI_JvSearchFiles;
                                                        //JCL
18672: 372 unit uPSI_SynHighlighterAny;
                                                        //Lazarus
18673: 373 unit uPSI_SynEditKeyCmds;
                                                        //SynEdit
18674: 374 unit uPSI_SynEditMiscProcs,
                                                        //SynEdit
       375 unit uPSI_SynEditKbdHandler
18675:
                                                        //SynEdit
       376 unit uPSI_JvAppInst,
                                                        //JCL
18677: 377 unit uPSI_JvAppEvent;
                                                        //JCL
18678: 378 unit uPSI_JvAppCommand;
                                                        //JCL
18679: 379 unit uPSI_JvAnimTitle;
                                                        //JTCT
18680: 380 unit uPSI_JvAnimatedImage;
                                                        //JCL
18681: 381 unit uPSI_SynEditExport;
                                                        //SynEdit
18682: 382 unit uPSI_SynExportHTML;
                                                        //SynEdit
18683: 383 unit uPSI SynExportRTF;
                                                        //SynEdit
18684: 384 unit uPSI_SynEditSearch;
                                                        //SvnEdit
18685: 385 unit uPSI_fMain_back
                                                        //maXbox;
18686: 386 unit uPSI_JvZoom;
                                                        //JCL
18687: 387 unit uPSI_PMrand;
                                                        //PM
18688: 388 unit uPSI JvSticker;
                                                        //JCT
18689: 389 unit uPSI_XmlVerySimple;
                                                        //mX4
18690: 390 unit uPSI_Services;
                                                        //ExtPascal
18691: 391 unit uPSI_ExtPascalUtils;
                                                        //ExtPascal
18692: 392 unit uPSI_SocketsDelphi;
                                                        //ExtPascal
18693: 393 unit uPST StBarC;
                                                        //SysTools
18694: 394 unit uPSI_StDbBarC;
                                                        //SysTools
18695: 395 unit uPSI_StBarPN;
                                                        //SysTools
18696: 396 unit uPSI StDbPNBC;
                                                        //SysTools
18697: 397 unit uPSI_StDb2DBC;
                                                        //SysTools
18698: 398 unit uPSI_StMoney;
                                                        //SysTools
18699: 399 unit uPSI_JvForth;
                                                        //JCL
18700: 400 unit uPSI_RestRequest;
                                                        //mX4
18701: 401 unit uPSI_HttpRESTConnectionIndy;
                                                        //mX4
18702: 402 unit uPSI_JvXmlDatabase; //update
                                                        //JCL
18703: 403 unit uPSI_StAstro;
                                                        //SysTools
18704: 404 unit uPSI_StSort;
                                                        //SysTools
18705: 405 unit uPSI_StDate;
                                                        //SysTools
18706: 406 unit uPSI_StDateSt;
                                                        //SvsTools
18707: 407 unit uPSI_StBase;
                                                        //SysTools
18708: 408 unit uPSI_StVInfo;
                                                        //SysTools
```

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18709: 409 unit uPSI_JvBrowseFolder;
                                                          //JCT
18710: 410 unit uPSI_JvBoxProcs;
                                                          //JCL
18711: 411 unit uPSI_urandom; (unit uranuvag;)
18712: 412 unit uPSI_usimann; (unit ugenalg;)
                                                          //DMath
                                                          //DMath
18713: 413 unit uPSI JvHighlighter;
                                                          //JCL
18714: 414 unit uPSI Diff;
                                                          //mX4
18715: 415 unit uPSI_SpringWinAPI;
                                                          //DSpring
18716: 416 unit uPSI_StBits;
                                                          //SysTools
18717: 417 unit uPSI_TomDBQue;
                                                          //mX4
18718: 418 unit uPSI MultilangTranslator;
                                                          //mX4
18719: 419 unit uPSI_HyperLabel;
                                                          //mX4
18720: 420 unit uPSI_Starter;
18721: 421 unit uPSI_FileAssocs;
                                                          //devC
18722: 422 unit uPSI_devFileMonitorX;
                                                          //devC
18723: 423 unit uPSI devrun;
                                                          //devC
18724: 424 unit uPSI_devExec;
                                                          //devC
18725: 425 unit uPSI_oysUtils;
18726: 426 unit uPSI_DosCommand;
                                                          //devC
18727: 427 unit uPSI_CppTokenizer;
                                                          //devC
18728: 428 unit uPSI_JvHLParser;
                                                          //devC
18729: 429 unit uPSI_JclMapi;
                                                          //JCL
18730: 430 unit uPSI_JclShell;
                                                          //JCL
18731: 431 unit uPSI_JclCOM;
                                                          //JCL
18732: 432 unit uPSI_GR32_Math;
                                                          //Graphics32
18733: 433 unit uPSI_GR32_LowLevel;
                                                          //Graphics32
18734: 434 unit uPSI_SimpleHl;
                                                          //mX4
18735: 435 unit uPSI_GR32_Filters,
                                                          //Graphics32
18736: 436 unit uPSI GR32 VectorMaps;
                                                          //Graphics32
18737: 437 unit uPSI_cXMLFunctions;
                                                          //Fundamentals 4
18738: 438 unit uPSI_JvTimer;
                                                          //JCL
18739: 439 unit uPSI_cHTTPUtils;
                                                          //Fundamentals 4
18740: 440 unit uPSI_cTLSUtils;
                                                          //Fundamentals 4
18741: 441 unit uPSI_JclGraphics;
                                                          //JCL
18742: 442 unit uPSI_JclSynch;
                                                          //JCL
18743: 443 unit uPSI_IdTelnet;
                                                          //Indy
18744: 444 unit uPSI_IdTelnetServer,
                                                          //Indy
18745: 445 unit uPSI_IdEcho,
18746: 446 unit uPSI_IdEchoServer,
                                                          //Indv
                                                          //Indy
18747: 447 unit uPSI_IdEchoUDP,
                                                          //Tndv
18748: 448 unit uPSI_IdEchoUDPServer,
18749: 449 unit uPSI_IdSocks,
                                                          //Indy
18750: 450 unit uPSI_IdAntiFreezeBase;
18751: 451 unit uPSI_IdHostnameServer;
                                                          //Tndv
                                                          //Indy
18752: 452 unit uPSI_IdTunnelCommon,
                                                          //Indy
18753: 453 unit uPSI_IdTunnelMaster,
                                                          //Indy
18754: 454 unit uPSI IdTunnelSlave.
                                                          //Tndv
18755: 455 unit uPSI_IdRSH,
                                                          //Indv
18756: 456 unit uPSI_IdRSHServer,
                                                          //Indy
18757: 457 unit uPSI_Spring_Cryptography_Utils;
                                                          //Spring4Delphi
18758: 458 unit uPSI MapReader,
                                                          //devC
18759: 459 unit uPSI LibTar.
                                                          //devC
18760: 460 unit uPSI_IdStack;
                                                          //Indv
18761: 461 unit uPSI_IdBlockCipherIntercept;
18762: 462 unit uPSI_IdChargenServer;
                                                          //Indy
18763: 463 unit uPSI_IdFTPServer, 18764: 464 unit uPSI_IdException,
                                                          //Indv
                                                          //Tndv
18765: 465 unit uPSI_utexplot;
                                                          //DMath
18766: 466 unit uPSI_uwinstr;
                                                          //DMath
18767: 467 unit uPSI_VarRecUtils;
18768: 468 unit uPSI JvStringListToHtml,
                                                          //devC
                                                          //JTCT
18769: 469 unit uPSI_JvStringHolder,
                                                          //JCL
18770: 470 unit uPSI_IdCoder;
                                                          //Indv
18771: 471 unit uPSI_SynHighlighterDfm;
                                                          //Synedit
18772: 472 unit uHighlighterProcs; in 471
                                                          //Synedit
18773: 473 unit uPSI_LazFileUtils,
                                                          //LCL
18774: 474 unit uPSI_IDECmdLine;
                                                          //LCL
18775: 475 unit uPSI_lazMasks;
                                                          //LCL
18776: 476 unit uPSI_ip_misc;
                                                          //mX4
18777: 477 unit uPSI_Barcode;
                                                          //LCL
18778: 478 unit uPSI_SimpleXML;
                                                          //LCL
18779: 479 unit uPSI_JclIniFiles;
                                                          //JCL
18780: 480 unit uPSI_D2XXUnit; {$X-}
                                                          //FTDI
18781: 481 unit uPSI_JclDateTime;
                                                          //JCL
18782: 482 unit uPST JclEDI;
                                                          //JCTi
18783: 483 unit uPSI_JclMiscel2;
                                                          //JCL
18784: 484 unit uPSI_JclValidation;
18785: 485 unit uPSI_JclAnsiStrings; {-PString}
                                                          //JCL
18786: 486 unit uPSI_SynEditMiscProcs2;
                                                          //Synedit
18787: 487 unit uPSI_JclStreams;
                                                          //JCL
18788: 488 unit uPSI_QRCode;
                                                          //mX4
18789: 489 unit uPSI_BlockSocket;
                                                          //ExtPascal
18790: 490 unit uPSI Masks, Utils
                                                          //VCL
18791: 491 unit uPSI_synautil;
                                                          //Synapse!
18792: 492 unit uPSI_JclMath_Class;
                                                          //JCL RTL
18793: 493 unit ugamdist; //Gamma function
                                                          //DMath
18794: 494 unit uibeta, ucorrel; //IBeta
                                                          //DMath
18795: 495 unit uPSI SRMgr;
                                                          //mX4
18796: 496 unit uPSI_HotLog;
                                                          //mX4
18797: 497 unit uPSI_DebugBox;
                                                          //mX4
```

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18798: 498 unit uPSI_ustrings;
                                                          //DMath
18799: 499 unit uPSI_uregtest;
                                                          //DMath
18800: 500 unit uPSI_usimplex;
                                                          //DMath
                                                          //DMath
18801: 501 unit uPSI_uhyper;
18802: 502 unit uPSI IdHL7;
                                                          //Indv
18803: 503 unit uPSI_IdIPMCastBase,
                                                          //Tndv
       504 unit uPSI_IdIPMCastServer;
18804:
                                                          //Indy
18805: 505 unit uPSI_IdIPMCastClient;
18806: 506 unit uPSI_unlfit; //nlregression
                                                          //DMath
18807: 507 unit uPSI_IdRawHeaders;
18808: 508 unit uPSI_IdRawClient;
                                                          //Indv
                                                          //Tndv
18809: 509 unit uPSI_IdRawFunctions;
                                                          //Indy
18810: 510 unit uPSI_IdTCPStream;
                                                          //Indy
18811: 511 unit uPSI_IdSNPP;
                                                          //Indy
18812:
       512 unit uPST St2DBarC;
                                                          //SysTools
18813: 513 unit uPSI_ImageWin;
                                 //FTL
                                                          //VCL
18814: 514 unit uPSI_CustomDrawTreeView; //FTL
18815: 515 unit uPSI_GraphWin; //FTL
18816: 516 unit uPSI_actionMain; //FTL
                                                          //VCL
                                                          //VCL
       517 unit uPSI_StSpawn;
18817:
                                                          //SvsTools
18818: 518 unit uPSI_CtlPanel;
                                                          //VCL
18819: 519 unit uPSI_IdLPR;
                                                          //Indy
18820: 520 unit uPSI_SockRequestInterpreter;
                                                          //Indy
18821: 521 unit uPSI ulambert;
                                                          //DMath
       522 unit uPSI_ucholesk;
                                                          //DMath
18823: 523 unit uPSI_SimpleDS;
                                                          //VCL
18824: 524 unit uPSI_DBXSqlScanner;
                                                          //VCL
18825: 525 unit uPSI_DBXMetaDataUtil;
                                                          //VCT
18826: 526 unit uPSI_Chart;
                                                          //TEE
18827: 527 unit uPSI_TeeProcs;
                                                          //TEE
18828: 528 unit mXBDEUtils;
18829: 529 unit uPSI_MDIEdit;
                                                          //VCL
18830: 530 unit uPSI_CopyPrsr;
                                                          //VCL
18831: 531 unit uPSI_SockApp;
                                                          //VCL
       532 unit uPSI_AppEvnts;
                                                          //VCL
18833: 533 unit uPSI_ExtActns;
                                                          //VCL
18834: 534 unit uPSI TeEngine;
                                                          //TEE
18835:
       535 unit uPSI CoolMain; //browser
                                                          //VCL
18836:
       536 unit uPSI_StCRC;
                                                          //SysTools
18837:
       537 unit uPSI_StDecMth2;
                                                          //SysTools
18838: 538 unit uPSI_frmExportMain;
                                                          //Synedit
       539 unit uPSI_SynDBEdit;
18839:
                                                          //Synedit
       540 unit uPSI_SynEditWildcardSearch;
18840:
                                                          //Synedit
18841: 541 unit uPSI_BoldComUtils;
                                                          //BOLD
18842: 542 unit uPSI_BoldIsoDateTime;
18843: 543 unit uPSI_BoldGUIDUtils; //inCOMUtils
                                                          //BOTID
18844: 544 unit uPSI_BoldXMLRequests;
                                                          //BOLD
18845: 545 unit uPSI_BoldStringList;
18846: 546 unit uPSI_BoldFileHandler;
                                                          //BOLD
18847: 547 unit uPSI BoldContainers;
                                                          //BOLD
18848: 548 unit uPSI BoldOuervUserDlg;
                                                          //BOLD
18849:
       549 unit uPSI_BoldWinINet;
                                                          //BOLD
18850:
       550 unit uPSI_BoldQueue;
                                                          //BOLD
18851: 551 unit uPSI_JvPcx;
                                                          //JCL
18852:
       552 unit uPSI_IdWhois;
553 unit uPSI_IdWhoIsServer;
                                                          //Indv
18853:
                                                          //Tndv
       554 unit uPSI_IdGopher;
                                                          //Indy
18855: 555 unit uPSI_IdDateTimeStamp;
18856: 556 unit uPSI_IdDayTimeServer;
                                                          //Indy
18857:
       557 unit uPSI IdDayTimeUDP;
                                                          //Tndv
18858: 558 unit uPSI_IdDayTimeUDPServer;
                                                          //Indy
18859:
       559 unit uPSI_IdDICTServer;
                                                          //Indy
18860: 560 unit uPSI_IdDiscardServer;
18861: 561 unit uPSI IdDiscardUDPServer;
                                                          //Indy
18862: 562 unit uPSI_IdMappedFTP;
                                                          //Indv
       563 unit uPSI_IdMappedPortTCP;
                                                          //Indy
18864: 564 unit uPSI_IdGopherServer;
                                                          //Indv
18865: 565 unit uPSI_IdQotdServer;
                                                          //Indy
18866: 566 unit uPSI JvRqbToHtml;
                                                          //JCL
18867: 567 unit uPSI_JvRemLog,
                                                          //JCL
18868: 568 unit uPSI_JvSysComp;
                                                          //JCL
18869: 569 unit uPSI_JvTMTL;
                                                          //JCL
18870: 570 unit uPSI_JvWinampAPI;
                                                          //JCL
18871:
       571 unit uPST MSvsUtils;
                                                          //mX4
18872:
       572 unit uPSI_ESBMaths;
                                                          //ESB
18873: 573 unit uPSI_ESBMaths2;
                                                          //ESB
18874: 574 unit uPSI_uLkJSON;
                                                          //Lk
18875: 575 unit uPSI_ZURL; //Zeos
18876: 576 unit uPSI_ZSysUtils;
                                                          //Zeos
                                                          //Zeos
       577 unit unaUtils internals
18878: 578 unit uPSI_ZMatchPattern;
                                                          //Zeos
18879: 579 unit uPSI ZClasses;
                                                          //Zeos
18880: 580 unit uPSI_ZCollections;
                                                          //Zeos
18881: 581 unit uPSI_ZEncoding;
                                                          //Zeos
18882: 582 unit uPSI_IdRawBase;
                                                          //Indy
18883: 583 unit uPSI_IdNTLM;
                                                          //Indy
18884: 584 unit uPSI_IdNNTP;
                                                          //Indv
18885: 585 unit uPSI_usniffer; //PortScanForm
18886: 586 unit uPSI_IdCoderMIME;
                                                          //mX4
                                                          //Indy
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18887: 587 unit uPSI_IdCoderUUE;
18888: 588 unit uPSI_IdCoderXXE;
                                                          //Tndv
                                                          //Indy
18889: 589 unit uPSI_IdCoder3to4;
                                                          //Indv
18890: 590 unit uPSI_IdCookie;
                                                          //Indy
18891: 591 unit uPSI IdCookieManager;
                                                           //Indy
18892: 592 unit uPSI_WDosSocketUtils;
                                                           //WDos
18893:
       593 unit uPSI_WDosPlcUtils;
                                                          //WDos
18894: 594 unit uPSI_WDosPorts;
                                                          //WDos
18895: 595 unit uPSI_WDosResolvers;
                                                           //WDos
18896: 596 unit uPSI_WDosTimers;
                                                          //WDos
18897: 597 unit uPSI_WDosPlcs;
                                                          //WDos
18898: 598 unit uPSI_WDosPneumatics;
                                                          //WDos
18899: 599 unit uPSI_IdFingerServer;
                                                           //Indy
18900: 600 unit uPSI_IdDNSResolver;
                                                           //Indy
18901: 601 unit uPSI IdHTTPWebBrokerBridge;
                                                          //Tndv
18902: 602 unit uPSI_IdIntercept;
                                                           //Indy
18903: 603 unit uPSI_IdIPMCastBase;
                                                          //Indy
18904: 604 unit uPSI_IdLogBase;
                                                           //Indv
18905: 605 unit uPSI_IdlOHandlerStream;
18906: 606 unit uPSI_IdMappedPortUDP;
                                                           //Indy
                                                          //Indv
18907: 607 unit uPSI_IdQOTDUDPServer;
                                                          //Indy
18908: 608 unit uPSI_IdQOTDUDP;
18909: 609 unit uPSI_IdSysLog;
18910: 610 unit uPSI_IdSysLogServer;
                                                          //Indv
                                                          //Tndv
       611 unit uPSI_IdSysLogMessage;
18911:
                                                          //Indv
18912: 612 unit uPSI_IdTimeServer;
                                                          //Indy
18913: 613 unit uPSI_IdTimeUDP;
                                                           //Indy
18914: 614 unit uPSI_IdTimeUDPServer;
18915: 615 unit uPSI_IdUserAccounts;
                                                          //Tndv
                                                          //Tndv
18916: 616 unit uPSI_TextUtils;
                                                          //mX4
18917: 617 unit uPSI_MandelbrotEngine;
                                                          //mX4
18918: 618 unit uPSI_delphi_arduino_Unit1;
                                                           //mX4
18919: 619 unit uPSI DTDSchema2;
                                                          //mX4
18920: 620 unit uPSI_fplotMain;
                                                          //DMath
       621 unit uPSI_FindFileIter;
                                                          //mX4
18922: 622 unit uPSI_PppState; (JclStrHashMap)
18923: 623 unit uPSI_PppParser;
                                                           //PPP
                                                          //PPP
//PPP
18924: 624 unit uPSI_PppLexer;
18925:
       625 unit uPSI_PCharUtils;
                                                          //PPP
18926: 626 unit uPSI_uJSON;
                                                          //WU
18927: 627 unit uPSI_JclStrHashMap;
                                                           //JCL
18928: 628 unit uPSI_JclHookExcept;
                                                          //JTCT
                                                           //VCL
18929: 629 unit uPSI_EncdDecd;
18930: 630 unit uPSI_SockAppReg;
                                                           //VCL
18931: 631 unit uPSI_PJFileHandle;
                                                          //PJ
18932: 632 unit uPSI PJEnvVars;
                                                           //PJ
18933: 633 unit uPSI_PJPipe;
                                                          //PJ
18934: 634 unit uPSI_PJPipeFilters;
                                                          //PJ
18935: 635 unit uPSI_PJConsoleApp;
                                                           //PJ
18936: 636 unit uPSI_UConsoleAppEx;
                                                           //PJ
18937: 637 unit uPSI_DbxSocketChannelNative,
                                                           //VCI
18938: 638 unit uPSI_DbxDataGenerator,
                                                           //VCL
18939: 639 unit uPSI_DBXClient;
18940: 640 unit uPSI_IdLogEvent;
                                                           //Indy
18941: 641 unit uPSI_Reversi;
                                                           //mX4
18942: 642 unit uPSI_Geometry;
                                                          //mX4
18943: 643 unit uPSI_IdSMTPServer;
                                                           //Indv
18944: 644 unit uPSI_Textures;
                                                           //mX4
18945: 645 unit uPSI_IBX;
                                                           //VCL
18946: 646 unit uPSI_IWDBCommon;
                                                          //VCT
18947: 647 unit uPSI_SortGrid;
                                                          //mX4
18948: 648 unit uPSI_IB;
                                                           //VCL
18949: 649 unit uPSI_IBScript;
                                                           //VCL
18950: 650 unit uPSI JvCSVBaseControls;
                                                           //JCL
18951: 651 unit uPSI_Jvg3DColors;
                                                           //JCL
18952: 652 unit uPSI_JvHLEditor; //beat
                                                           //JCL
18953: 653 unit uPSI_JvShellHook;
                                                          //JCL
18954: 654 unit uPSI_DBCommon2
                                                           //VCL
18955: 655 unit uPSI_JvSHFileOperation;
                                                           //JCL
18956: 656 unit uPSI_uFilexport;
                                                           //mX4
18957: 657 unit uPSI_JvDialogs;
                                                          //JCL
18958: 658 unit uPSI_JvDBTreeView;
                                                           //JCL
18959: 659 unit uPSI_JvDBUltimGrid;
                                                           //JCL
18960: 660 unit uPST JvDBOuervParamsForm;
                                                           //JCL
18961: 661 unit uPSI_JvExControls;
                                                           //JCL
18962: 662 unit uPSI_JvBDEMemTable;
                                                          //JCL
18963: 663 unit uPSI_JvCommStatus;
                                                           //JCL
18964: 664 unit uPSI_JvMailSlots2;
                                                          //JCTi
18965: 665 unit uPSI_JvgWinMask;
                                                          //JCL
18966: 666 unit uPSI_StEclpse;
                                                          //SysTools
18967: 667 unit uPSI_StMime;
                                                           //SysTools
18968: 668 unit uPSI_StList;
                                                           //SysTools
18969: 669 unit uPSI StMerge;
                                                          //SysTools
18970: 670 unit uPSI_StStrS;
                                                          //SysTools
18971: 671 unit uPSI_StTree,
                                                           //SysTools
18972: 672 unit uPSI_StVArr;
                                                           //SysTools
18973: 673 unit uPSI_StRegIni;
                                                           //SvsTools
18974: 674 unit uPSI_urkf;
                                                          //DMath
18975: 675 unit uPSI_usvd;
                                                          //DMath
```

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18976: 676 unit uPSI_DepWalkUtils;
                                                         //JCTi
18977: 677 unit uPSI_OptionsFrm;
                                                         //JCL
18978: 678 unit yuvconverts;
                                                         //mX4
18979: 679 uPSI_JvPropAutoSave;
                                                         //JCL
18980: 680 uPSI AclAPI;
                                                         //alcinoe
18981: 681 uPSI_AviCap;
                                                         //alcinoe
18982: 682 uPSI_ALAVLBinaryTree;
                                                         //alcinoe
18983: 683 uPSI_ALFcnMisc;
                                                         //alcinoe
18984: 684 uPSI_ALStringList;
                                                         //alcinoe
18985: 685 uPSI_ALQuickSortList;
                                                         //alcinoe
18986: 686 uPSI_ALStaticText;
                                                         //alcinoe
18987: 687 uPSI_ALJSONDoc;
                                                         //alcinoe
18988: 688 uPSI_ALGSMComm;
                                                         //alcinoe
18989: 689 uPSI_ALWindows;
                                                         //alcinoe
18990: 690 uPSI ALMultiPartFormDataParser;
                                                         //alcinoe
18991: 691 uPSI_ALHttpCommon;
                                                         //alcinoe
18992: 692 uPSI_ALWebSpider,
                                                           /alcinoe
18993: 693 uPSI_ALHttpClient;
                                                         //alcinoe
18994: 694 uPSI_ALFCnHTML;
                                                         //alcinoe
18995: 695 uPSI_ALFTPClient;
                                                         //alcinoe
18996: 696 uPSI_ALInternetMessageCommon;
                                                         //alcinoe
18997: 697 uPSI_ALWininetHttpClient;
                                                         //alcinoe
18998: 698 uPSI_ALWinInetFTPClient;
                                                         //alcinoe
18999: 699 uPSI_ALWinHttpWrapper;
                                                         //alcinoe
19000: 700 uPSI_ALWinHttpClient;
                                                         //alcinoe
19001: 701 uPSI_ALFcnWinSock;
                                                         //alcinoe
19002: 702 uPSI_ALFcnSQL;
                                                         //alcinoe
19003: 703 uPSI_ALFcnCGI;
19004: 704 uPSI_ALFcnExecute;
                                                         //alcinoe
                                                         //alcinoe
19005: 705 uPSI_ALFcnFile;
                                                         //alcinoe
19006: 706 uPSI_ALFcnMime;
                                                         //alcinoe
19007: 707 uPSI_ALPhpRunner;
                                                         //alcinoe
19008: 708 uPSI ALGraphic;
                                                         //alcinoe
19009: 709 uPSI_ALIniFiles;
                                                         //alcinoe
19010:
       710 uPSI_ALMemCachedClient;
                                                         //alcinoe
19011:
       711 unit uPSI_MyGrids;
                                                         //mX4
19012: 712 uPSI ALMultiPartMixedParser
                                                         //alcinoe
19013:
       713 uPSI_ALSMTPClient
                                                         //alcinoe
19014:
       714 uPSI_ALNNTPClient;
                                                         //alcinoe
19015:
       715 uPSI_ALHintBalloon;
                                                         //alcinoe
19016: 716 unit uPSI_ALXmlDoc;
                                                         //alcinoe
       717 unit uPSI_IPCThrd;
19017:
                                                         //VCT
       718 unit uPSI_MonForm;
19018:
                                                         //VCL
19019: 719 unit uPSI_TeCanvas;
                                                         //Orpheus
19020: 720 unit uPSI_Ovcmisc;
                                                         //Orpheus
19021:
       721 unit uPSI ovcfiler;
                                                         //Orpheus
19022:
       722 unit uPSI_ovcstate;
                                                         //Orpheus
19023: 723 unit uPSI_ovccoco;
                                                         //Orpheus
19024:
       724 unit uPSI_ovcrvexp;
                                                         //Orpheus
19025:
       725 unit uPSI OvcFormatSettings;
                                                         //Orpheus
19026:
       726 unit uPSI OvcUtils;
                                                         //Orpheus
19027:
       727 unit uPSI_ovcstore;
                                                         //Orpheus
19028:
       728 unit uPSI_ovcstr;
                                                           Orpheus
19029:
       729 unit uPSI_ovcmru;
                                                         //Orpheus
19030:
       730 unit uPSI_ovccmd;
                                                         //Orpheus
19031:
       731 unit uPSI_ovctimer;
                                                         //Orpheus
19032:
       732 unit uPSI_ovcintl;
                                                         //Orpheus
19033: 733 uPSI_AfCircularBuffer;
                                                         //AsyncFree
19034: 734 uPSI_AfUtils;
                                                         //AsyncFree
19035:
       735 uPST AfSafeSync;
                                                         //AsvncFree
19036: 736 uPSI_AfComPortCore;
                                                         //AsyncFree
       737 uPSI_AfComPort;
19037:
                                                         //AsyncFree
19038: 738 uPSI_AfPortControls;
                                                           /AsyncFree
19039: 739 uPSI AfDataDispatcher;
                                                         //AsyncFree
19040: 740 uPSI_AfViewers;
                                                         //AsvncFree
19041: 741 uPSI_AfDataTerminal;
                                                         //AsyncFree
19042: 742 uPSI_SimplePortMain;
                                                         //AsyncFree
19043: 743 unit uPSI_ovcclock;
                                                         //Orpheus
19044: 744 unit uPSI_o32intlst;
                                                         //Orpheus
19045: 745 unit uPSI_o32ledlabel;
                                                         //Orpheus
19046: 746 unit uPSI_AlMySqlClient;
                                                         //alcinoe
19047: 747 unit uPSI_ALFBXClient;
                                                         //alcinoe
19048: 748 unit uPSI_ALFcnSQL;
                                                         //alcinoe
19049:
       749 unit uPST AsyncTimer;
                                                         //mX4
19050:
       750 unit uPSI_ApplicationFileIO;
                                                         //mX4
19051: 751 unit uPSI_PsAPI;
                                                         //VCLé
19052:
       752 uPSI_ovcuser;
                                                         //Orpheus
19053: 753 uPSI_ovcurl;
19054: 754 uPSI_ovcvlb;
                                                         //Orpheus
                                                         //Orpheus
19055:
       755 uPSI_ovccolor;
                                                         //Orpheus
19056: 756 uPSI_ALFBXLib,
                                                         //alcinoe
19057: 757 uPSI_ovcmeter;
                                                         //Orpheus
19058: 758 uPSI_ovcpeakm;
                                                         //Orpheus
19059: 759 uPSI_032BGSty;
                                                         //Orpheus
19060: 760 uPSI_ovcBidi;
                                                         //Orpheus
19061: 761 uPSI_ovctcary;
                                                         //Orpheus
19062: 762 uPST DXPUtils;
                                                         //mX4
19063: 763 uPSI_ALMultiPartBaseParser;
                                                         ..
//alcinoe
19064: 764 uPSI_ALMultiPartAlternativeParser;
                                                         //alcinoe
```

```
19065: 765 uPSI_ALPOP3Client;
                                                           //alcinoe
19066: 766 uPSI_SmallUtils;
                                                           //mX4
19067: 767 uPSI_MakeApp;
                                                           //mX4
19068: 768 uPSI_032MouseMon;
                                                           //Orpheus
19069: 769 uPSI OvcCache;
                                                           //Orpheus
19070: 770 uPSI_ovccalc;
                                                           //Orpheus
       771 uPSI_Joystick,
19071:
                                                           //OpenGL
19072:
       772 uPSI_ScreenSaver;
                                                           //OpenGL
19073: 773 uPSI_XCollection,
                                                           //OpenGL
19074:
       774 uPSI_Polynomials,
                                                           //OpenGL
19075: 775 uPSI_PersistentClasses, //9.86
                                                           //OpenGI
19076: 776 uPSI_VectorLists;
                                                           //OpenGL
19077: 777 uPSI_XOpenGL,
                                                           //OpenGL
19078: 778 uPSI_MeshUtils;
                                                           //OpenGL
       779 unit uPSI JclSysUtils;
19079:
                                                           //JTCT
19080: 780 unit uPSI_JclBorlandTools;
                                                           //JCL
19081: 781 unit JclFileUtils_max;
19082: 782 uPSI_AfDataControls,
19083: 783 uPSI_GLSilhouette;
19084: 784 uPSI_JclSysUtils_class;
                                                           //AsyncFree
                                                           //OpenGL
                                                           //JCL
19085: 785 uPSI_JclFileUtils_class;
                                                           //JCL
19086: 786 uPSI_FileUtil;
                                                           //JCL
19087: 787 uPSI_changefind;
                                                           //mX4
19088: 788 uPSI_cmdIntf;
                                                           //mX4
19089: 789 uPSI_fservice
                                                           //mX4
19090: 790 uPSI_Keyboard;
                                                           //OpenGL
19091: 791 uPSI_VRMLParser,
                                                           //OpenGL
19092: 792 uPSI GLFileVRML.
                                                           //OpenGL
19093: 793 uPSI_Octree;
                                                           //OpenGL
19094: 794 uPSI_GLPolyhedron,
                                                           //OpenGL
19095: 795 uPSI_GLCrossPlatform;
                                                           //OpenGL
19096: 796 uPSI_GLParticles;
                                                           //OpenGL
19097: 797 uPSI_GLNavigator;
                                                           //OpenGL
19098: 798 uPSI_GLStarRecord;
                                                           //OpenGL
19099: 799 uPSI_GLTextureCombiners;
                                                           //OpenGL
19100: 800 uPSI GLCanvas;
                                                           //OpenGL
19101: 801 uPSI GeometryBB;
                                                           //OpenGL
19102: 802 uPSI_GeometryCoordinates;
                                                           //OpenGL
19103: 803 uPSI_VectorGeometry;
                                                           //OpenGL
19104: 804 uPSI_BumpMapping;
                                                           //OpenGL
19105: 805 uPSI TGA;
                                                           //OpenGL
19106: 806 uPSI_GLVectorFileObjects;
                                                           //OpenGL
//VCL
19107: 807 uPSI_IMM;
19108: 808 uPSI_CategoryButtons;
                                                           //VCL
19109: 809 uPSI_ButtonGroup;
                                                           //VCL
19110: 810 uPSI_DbExcept;
                                                           //VCL
19111: 811 uPSI_AxCtrls;
                                                           //VCL
19112: 812 uPSI_GL_actorUnit1;
                                                           //OpenGL
19113: 813 uPSI_StdVCL;
                                                           //VCL
19114: 814 unit CurvesAndSurfaces;
                                                           //OpenGL
19115: 815 uPSI DataAwareMain;
                                                           //AsyncFree
19116: 816 uPSI_TabNotBk;
                                                           //VCL
19117: 817 uPSI_udwsfiler
                                                           //mX4
19118: 818 uPSI_synaip;
                                                           //Synapse!
19119: 819 uPSI_synacode;
                                                           //Synapse
19120: 820 uPSI_synachar;
                                                           //Synapse
19121: 821 uPSI_synamisc;
                                                           //Synapse
19122: 822 uPSI_synaser;
19123: 823 uPSI_synaicnv;
                                                           //Synapse
19124: 824 uPST tlntsend;
                                                           //Synapse
19125: 825 uPSI_pingsend;
                                                           //Synapse
19126: 826 uPSI_blcksock;
                                                           //Synapse
19127: 827 uPSI_asnlutil;
                                                            /Synapse
19128: 828 uPSI dnssend;
                                                           //Synapse
19129: 829 uPSI_clamsend;
                                                           //Synapse
19130: 830 uPSI_ldapsend;
                                                           //Synapse
19131: 831 uPSI_mimemess;
                                                           //Synapse
19132: 832 uPSI_slogsend;
                                                           //Synapse
19133: 833 uPSI mimepart;
                                                           //Synapse
19134: 834 uPSI_mimeinln;
                                                           //Synapse
19135: 835 uPSI_ftpsend,
                                                           //Synapse
19136: 836 uPSI_ftptsend;
                                                           //Synapse
19137: 837 uPSI_httpsend;
                                                           //Synapse
19138: 838 uPST sntpsend;
                                                           //Synapse
19139: 839 uPSI_smtpsend;
                                                           //Synapse
19140: 840 uPSI_snmpsend;
                                                            'Synapse
19141: 841 uPSI_imapsend;
                                                           //Synapse
19142: 842 uPSI_pop3send;
                                                           //Synapse
19143: 843 uPSI_nntpsend;
                                                           //Synapse
19144: 844 uPSI_ssl_cryptlib;
                                                           //Synapse
19145: 845 uPSI_ssl_openssl;
                                                           //Synapse
19146: 846 uPSI_synhttp_daemon;
                                                           //Synapse
19147: 847 uPSI NetWork;
                                                           //mX4
19148: 848 uPSI_PingThread;
                                                           //Synapse
19149: 849 uPSI_JvThreadTimer;
                                                           //JCL
19150: 850 unit uPSI_wwSystem;
                                                           //InfoPower
19151: 851 unit uPSI_IdComponent;
19152: 852 unit uPSI_IdIOHandlerThrottle;
19153: 853 unit uPSI_Themes;
                                                           //Indv
                                                           //Tndv
                                                           //VCL
```

```
19154: 854 unit uPSI StdStvleActnCtrls;
                                                     //VCL
19155: 855 unit uPSI_UDDIHelper;
                                                     //VCL
19156: 856 unit uPSI_IdIMAP4Server;
                                                     //Indy
19157:
19158:
19159:
19160:
19161:
19165:
19166: 26 FTL For Form Building out of the Script, eg. 399_form_templates.txt
19167:
19168: 045 unit uPSI_VListView
                                                     TFormListView;
19169: 263 unit uPSI_JvProfiler32;
                                                     TProfReport
19170: 270 unit uPSI_ImgList;
                                                     TCustomImageList
19171: 278 unit uPSI_JvImageWindow;
                                                     TJvImageWindow
19172: 317 unit uPSI_JvParserForm;
                                                     TJvHTMLParserForm
19173: 497 unit uPSI_DebugBox;
                                                     TDebugBox
19174: 513 unit uPSI_ImageWin;
                                                     TImageForm, TImageForm2
19175: 514 unit uPSI_CustomDrawTreeView;
                                                     TCustomDrawForm
19176: 515 unit uPSI_GraphWin;
                                                     TGraphWinForm
19177: 516 unit uPSI_actionMain;
                                                     TActionForm
19178: 518 unit uPSI_CtlPanel;
                                                     TAppletApplication
19179: 529 unit uPSI_MDIEdit;
                                                     TEditForm
19180: 535 unit uPSI_CoolMain; {browser}
                                                     TWebMainForm
19181: 538 unit uPSI_frmExportMain;
                                                     TSvnexportForm
19182: 585 unit uPSI_usniffer; {//PortScanForm}
                                                     TSniffForm
19183: 600 unit uPSI_ThreadForm;
                                                     TThreadSortForm;
                                                     TLEDForm
19184: 618 unit uPSI_delphi_arduino_Unit1;
19185: 620 unit uPSI_fplotMain;
                                                     TfplotForm1
19186: 660 unit uPSI_JvDBQueryParamsForm;
                                                     TJvOuervParamsDialog
19187: 677 unit uPSI_OptionsFrm;
                                                     TfrmOptions;
19188: 718 unit uPSI_MonForm;
                                                     TMonitorForm
19189: 742 unit uPSI_SimplePortMain;
                                                     TPortForm1
19190: 770 unit uPSI ovccalc;
                                                     TOvcCalculator //widget
19191: 810 unit uPSI DbExcept;
                                                     TDbEngineErrorDlg
19192: 812 unit uPSI_GL_actorUnit1;
                                                     TglActorForm1 //OpenGL Robot
19193: 846 unit uPSI_synhttp_daemon;
                                                     TTCPHttpDaemon, TTCPHttpThrd, TPingThread
19194:
19195:
19196:
19197: ex.:with TEditForm.create(self) do begin
            caption:= 'Template Form Tester'
FormStyle:= fsStayOnTop;
19198:
19199:
             with editor do begin
19200:
              Lines.LoadFromFile(Exepath+'\docs\Readme_rus_mX2.rtf
19201:
              SelStart:= 0;
Modified:= False;
19202:
19203:
19204:
             end;
19205:
           end;
19206:
        with TWebMainForm.create(self) do begin
          URLs.Text:= 'http://www.kleiner.ch';
URLsClick(self); Show;
19207:
19208:
19209:
         end;
19210:
         with TSynexportForm.create(self) do begin
19211:
           Caption:= 'Synexport HTML RTF tester'
19212:
           Show;
19213:
        end;
19214:
        with TThreadSortForm.create(self) do begin
            showmodal; free;
19215:
19216:
         end;
19217:
19218:
        with TCustomDrawForm.create(self) do begin
19219:
             width:=820; height:=820;
19220:
              image1.height:= 600; //add properties
              image1.picture.bitmap:= image2.picture.bitmap;
19221:
19222:
              //SelectionBackground1Click(self) CustomDraw1Click(self);
              Background1.click;
19223:
19224:
              bitmap1.click;
19225:
              Tile1.click;
19226:
              Showmodal;
19227:
             Free;
19228:
            end
19229:
19230:
         with TfplotForm1.Create(self) do begin
            BtnPlotClick(self);
19231:
19232:
            Showmodal; Free;
19233:
19234:
19235:
       with TOvcCalculator.create(self) do begin
19236:
         parent:= aForm;
//free;
19237:
19238:
           setbounds(550,510,200,150);
19239:
           displaystr:= 'maxcalc';
19240:
         end;
19241:
```

```
19243:
19244:
19246
19250:
          Tutorial 00 Function-Coding (Blix the Programmer)
          Tutorial 01 Procedural-Coding
Tutorial 02 00-Programming
19251:
19252:
          Tutorial 03 Modular Coding
19253:
          Tutorial 04 UML Use Case Coding
19255:
          Tutorial 05 Internet Coding
          Tutorial 06 Network Coding
19256:
          Tutorial 07 Game Graphics Coding
19257:
19258:
          Tutorial 08 Operating System Coding
19259:
          Tutorial 09 Database Coding
19260:
          Tutorial 10 Statistic Coding
19261:
          Tutorial 11 Forms Coding
          Tutorial 12 SQL DB Coding
19262:
19263:
          Tutorial 13 Crypto Coding
19264:
          Tutorial 14 Parallel Coding
19265:
          Tutorial 15 Serial RS232 Coding
19266:
          Tutorial 16 Event Driven Coding
          Tutorial 17 Web Server Coding
19267:
19268:
          Tutorial 18 Arduino System Coding
19269:
          Tutorial 18_3 RGB LED System Coding
          Tutorial 19 WinCOM /Arduino Coding
Tutorial 20 Regular Expressions RegEx
19270:
19271:
19272:
          Tutorial 21 Android Coding (coming 2013)
19273:
          Tutorial 22 Services Programming
19274:
          Tutorial 23 Real Time Systems
19275:
          Tutorial 24 Clean Code
19276:
          Tutorial 25 maXbox Configuration I+II
19277:
          Tutorial 26 Socket Programming with TCP
19278:
          Tutorial 27 XML & TreeView
19279:
          Tutorial 28 DLL Coding (available)
          Tutorial 29 UML Scripting (coming 2014)
19280:
19281:
          Tutorial 30 Web of Things (coming 2014)
19282:
          Tutorial 31 Closures (coming 2014
19283:
          Tutorial 32 SQL Firebird (coming 2014)
19284:
19285:
19286: ref Docu for all Type Class and Const in maXbox_types.pdf
19287: using Docu for this file is maxbox_functions_all.pdf
19288: PEP - Pascal Education Program Lib Lab
19289:
19291: http://stackoverflow.com/tags/pascalscript/hot
19292: \ \texttt{http://www.jrsoftware.org/ishelp/index.php?topic=scriptfunctions}
19293: http://sourceforge.net/projects/maXbox #locs:15162
19294: http://sourceforge.net/apps/mediawiki/maXbox
19295: http://www.blaisepascal.eu/
19296: https://github.com/maxkleiner/maXbox3.git
19297: http://www.heise.de/download/maxbox-1176464.html
19298: http://www.softpedia.com/get/Programming/Other-Programming-Files/maXbox.shtml
19299: https://www.facebook.com/pages/Programming-maXbox/166844836691703
19300:
19301:
        ---- bigbitbox code_cleared_checked----
```