```
1: g**************
   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
10:
11: Funclist Function : 11963 //10766 //10165 (7648)
15: Constructlist Constructor Size is: 1231 //995 //
16: def head:max: maXbox7:
                          10.03.2014 19:11:55
17: file E:\maxbox\maxbox3\docs\maxbox_extract_funclist399.txt
18: doc file: maxbox_extract_funclist399_.txt (sort function list)
19:
20: Funclist total Size all is: 20668! Constructor, Function and Procedure
21: AExtraxt of EXE Functions of maxbox3.exe, locs of file = 19510 22: ASize of EXE: 19728384 (16586240) (13511680) (13023744)
23: SHA1 Hash of maXbox 3.9.9.92: 61ECB8AF3FA0C72B6AA6DE8DA4A65E1C30F0EE6C
24:
28:
29:
30: FUNCTION Metric of Script: 256_findfunctions2_of_EXE.txt
31: Function ************Now the Funclist**********
32: function GetResStringChecked(Ident: string; const Args: array of const): string
33: Function ( Index : Longint) : Integer
34: function (Command: Word; Data: Longint; var CallHelp: Boolean): Boolean
35: Function _CheckAutoResult( ResultCode : HResult) : HResult
36: function
             _T(Name: tbtString): Variant;
37: function ABNFToText(const AText : String) : String
38: Function Abs(e : Extended) : Extended;
39: Function Ackermann( const A, B : Integer) : Integer
40: Function AcquireLayoutLock : Boolean
41: Function ActionByName( const AName : string) : TWebActionItem
42: Function ACTIVEBUFFER : PCHAR
43: Function Add : TAggregate
44: function Add : TCollectionItem
45: Function Add : TColumn
46: Function Add : TComboExItem
47: Function Add : TCookie
48: Function Add
                 : TCoolBand
49: Function Add
                  TFavoriteLinkItem
50: Function Add : TFileTypeItem
51: Function Add : THeaderSection
52: Function Add
                 : THTMLTableColumn
53: Function Add
                 : TIdEMailAddressItem
54: Function Add : TIdMessagePart
55: Function Add : TIdUserAccount
56: Function Add
                 : TListColumn
57: Function Add
                 : TListItem
58: Function Add : TStatusPanel
59: Function Add : TTaskDialogBaseButtonItem
60: Function Add : TWebActionItem
61: Function Add : TWorkArea
62: Function Add( AClass : TClass) : Integer
63: Function Add( AComponent : TComponent) : Integer
64: Function Add( AItem, AData : Integer) : Integer
65: Function Add( AItem, AData : Pointer) : Pointer
66: Function Add( AItem, AData : TObject) : TObject
67: Function Add( AObject : TObject) : Integer
68: Function Add( const Access, Count : Cardinal; const Offset : Int64) : Integer
69: Function Add( const S : WideString) : Integer
70: Function Add( Image, Mask : TBitmap) : Integer
71: Function Add( Index : LongInt; const Text : string) : LongInt
72: Function Add( Sibling : TTreeNode; const S : string) : TTreeNode
73: Function Add(const S: string): Integer
74: function Add(S: string): Integer;
75: Function AddAt( const Access, Count : Cardinal; const Offset : Int64; const Address: Pointer) : Integer
76: Function ADDCHILD : TFIELDDEF
77: Function AddChild( Index : LongInt; const Text : string) : LongInt
78: Function AddChild( Parent : TTreeNode; const S : string) : TTreeNode
79: Function AddChildFirst( Parent : TTreeNode; const S : string) : TTreeNode
80: Function AddChildObject( Index : LongInt; const Text : string; const Data : Pointer) : LongInt 81: Function AddChildObject( Parent : TTreeNode; const S : string; Ptr : Pointer) : TTreeNode
82: Function AddChildObjectFirst( Parent : TTreeNode; const S : string; Ptr : Pointer) : TTreeNode
83: Function ADDFIELDDEF : TFIELDDEF
84: Function AddFileExtIfNecessary( AFileName, AExt : string) : string
85: Function AddFirst( Sibling : TTreeNode; const S : string) : TTreeNode
86: Function AddIcon( Image : TIcon) : Integer
87: Function AddImage( Value : TCustomImageList; Index : Integer) : Integer
88: Function ADDINDEXDEF : TINDEXDEF
89: Function AddItem(const Caption:String;const ImageIdx,SelectImageIdx,OverlayImagIdx,
    Indent:Int;Data:Ptr):TComboExItem
```

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90: Function AddItem( Item : TheaderSection; Index : Integer) : TheaderSection
 91: Function AddItem( Item : TListItem; Index : Integer) : TListItem
 92: Function AddItem( Item: TStatusPanel; Index: Integer)
93: Function AddMapping( const FieldName: string): Boolean
 94: Function AddMasked( Image : TBitmap; MaskColor : TColor) : Integer
 95: Function AddModuleClass( AClass : TComponentClass) : TComponent
 96: Function AddModuleName( const AClass : string) : TComponent
 97: Function AddNode(Node, Relative: TTreeNode; const S: string; Ptr: Pointer; Method: TNodeAttachMode): TTreeNode
 98: Function AddObject( const S : WideString; AObject : TObject) : Integer
99: Function AddObject( Index : LongInt; const Text : string; const Data : Pointer) : LongInt 100: Function AddObject( Sibling : TTreeNode; const S : string; Ptr : Pointer) : TTreeNode
101: function AddObject(S:String; AObject:TObject):integer
102: Function AddObjectFirst( Sibling : TTreeNode; const S : string; Ptr : Pointer) : TTreeNode
103: Function AddParameter : TParameter
104: Function AddParamSOLForDetail(Params:TParams;SOL:WideStr;Native:Bool;OuoteChar:WideString):WideString
      Function Addr64ToAddr32(const Value: TJclAddr64): TJclAddr32;
106: Function Addr32ToAddr64(const Value: TJclAddr32): TJclAddr64;
107: function AdjustLineBreaksS(const S: string): string)
108: TTextLineBreakStyle', '(tlbsLF, tlbsCRLF)
109: Function AdjustLineBreaks(const S: string; Style: TTextLineBreakStyle): string;
110: Function AllData : string
111: function AllocMemCount: integer;
112: function AllocMemSize: integer;
113: Function AllocPatternBitmap( BkColor, FgColor : TColor) : TBitmap
114: Function AllowRegKeyForEveryone( Key : HKEY; Path : string) : Boolean
115: Function AlphaComponent( const Color32 : TColor32) : Integer
116: Function AlphaSort : Boolean
117: Function AlphaSort( ARecurse : Boolean) : Boolean
118: Function AnsiCat( const x, y : AnsiString) : AnsiString
119: Function AnsiCompareFileName(S1, S2: string): Integer
120: function AnsiCompareFileName(const S1: string; const S2: string): Integer)
121: Function AnsiCompareStr(S1,S2:string): Integer 122: function AnsiCompareStr(const S1:string; const S2:string): Integer;)
123: Function AnsiCompareText(S1, S2: string): Integer
124: function AnsiCompareText(const S1: string; const S2: string): Integer;
125: Function AnsiContainsStr( const AText, ASubText : string) : Boolean
126: Function AnsiContainsText( const AText, ASubText : string) : Boolean
127: Function AnsiCopy( const src : AnsiString; index, count : Integer) : AnsiString
128: Function AnsiDequotedStr( S : string; AQuote : Char) : string
129: Function AnsiEndsStr( const ASubText, AText : string) : Boolean
130: Function AnsiEndsText( const ASubText, AText : string) : Boolean
131: Function AnsiExtractQuotedStr( var Src : PChar; Quote : Char) : string 132: function AnsiExtractQuotedStr(var Src: PChar; Quote: Char): string)
133: Function AnsiIndexStr( const AText : string; const AValues : array of string) : Integer
134: Function AnsiIndexText( const AText : string; const AValues : array of string) : Integer
135: Function AnsiLastChar(S: string): PChar
136: function AnsiLastChar(const S: string): PChar)
137: Function AnsiLeftStr( const AText : AnsiString; const ACount : Integer) : AnsiString
138: Function AnsiLowerCase( S : string) : string
139: Function AnsiLowercase(s: String): String;
140: Function AnsiLowerCaseFileName(S: string): string
141: Function AnsiMatchStr( const AText : string; const AValues : array of string) : Boolean
142: Function AnsiMatchText( const AText : string; const AValues : array of string) : Boolean
143: Function AnsiMidStr( const AText : AnsiString; const AStart, ACount : Integer) : AnsiString
144: Function AnsiPos( const src, sub : AnsiString) : Integer
145: Function AnsiPos( Substr, S : string) : Integer
146: function AnsiPos(const Substr: string; const S: string): Integer;)
147: Function AnsiQuotedStr( S : string; Quote : Char) : string
148: Function AnsiReplaceStr( const AText, AFromText, AToText: string): string
149: Function AnsiReplaceText( const AText, AFromText, AToText: string): string
150: Function AnsiResemblesText( const AText, AOther: string): Boolean
151: Function AnsiReverseString( const AText : AnsiString) : AnsiString
152: Function AnsiRightStr( const AText : AnsiString; const ACount : Integer) : AnsiString 153: function AnsiSameCaption(const Text1: string; const Text2: string): Boolean)
154: Function AnsiSameStr(S1, S2: string): Boolean
155: function AnsiSameStr(const S1: string; const S2: string): Boolean
156: Function AnsiSameText( const S1, S2: string): Boolean
157: Function AnsiSameText(S1, S2: string): Boolean
158: function AnsiSameText(const S1: string; const S2: string): Boolean)
159: Function AnsiStartsStr( const ASubText, AText : string) : Boolean 160: Function AnsiStartsText( const ASubText, AText : string) : Boolean
161: Function AnsiStrComp( S1, S2 : PChar) : Integer
162: function AnsiStrComp(S1: PChar; S2: PChar): Integer)
163: Function AnsiStrIComp( S1, S2 : PChar) : Integer
164: function AnsiStrIComp(S1: PChar; S2: PChar): Integer)
165: Function AnsiStrLastChar( P : PChar) : PChar
166: function AnsiStrLastChar(P: PChar): PChar)
167: Function AnsiStrLComp( S1, S2 : PChar; MaxLen : Cardinal) : Integer 168: Function AnsiStrLIComp( S1, S2 : PChar; MaxLen : Cardinal) : Integer 169: Function AnsiStrLower( Str : PChar) : PChar
170: Function AnsiStrPos( Str, SubStr : PChar) : PChar
171: function AnsiStrPos(Str: PChar; SubStr: PChar): PChar)
172: Function AnsiStrScan(Str: PChar; Chr: Char): PChar)
173: Function AnsiStrUpper( Str : PChar) : PChar
174: Function AnsiToUtf8( const S : string) : UTF8String
175: Function AnsiToUtf8Ex( const S : string; const cp : integer) : UTF8String
176: Function AnsiUpperCase(S:string): string 177: Function AnsiUppercase(S:String): String; 178: Function AnsiUpperCaseFileName(S:string): string
```

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179: Function ApplyUpdates(const Delta: OleVariant; MaxErrors:Integer; out ErrorCount: Integer): OleVariant
180: Function ApplyUpdates(const Delta:OleVariant; MaxErrors: Integer; out ErrorCount: Integer): OleVariant;
181: Function ApplyUpdates( MaxErrors : Integer) : Integer
182: Function ApplyUpdates1(const Delta:OleVar; MaxErrs:Int; out ErrCount:Int; var OwnerData:OleVar):OleVariant;
183: Function ArcCos( const X : Extended) : Extended
184: Function ArcCosh( const X : Extended) : Extended
185: Function ArcCot( const X : Extended) : Extended
186: Function ArcCotH( const X : Extended) :
187: Function ArcCsc( const X : Extended) : Extended
188: Function ArcCscH( const X : Extended) : Extended
189: Function ArcSec( const X : Extended) : Extended
190: Function ArcSecH( const X : Extended) : Extended
191: Function ArcSin( const X : Extended) : Extended
192: Function ArcSinh( const X : Extended) : Extended
193: Function ArcTan(const X : Extended) : Extended
194: Function ArcTan2( const Y, X : Extended) : Extended
195: Function ArithmeticMean( const X : TDynDoubleArray) : Float
196: function ArrayLength: integer;
197: Function AsHex( const AValue : T4x4LongWordRecord) : string
198: Function AsHex( const AValue : T5x4LongWordRecord) : string
199: Function ASNDecLen( var Start : Integer; const Buffer : string) : Integer
200: Function ASNDecOIDItem( var Start : Integer; const Buffer : string) : Integer
201: Function ASNEncInt( Value : Integer) : string 202: Function ASNEncLen( Len : Integer) : string
203: Function ASNEncOIDItem( Value : Integer) : string
204: Function ASNEncUInt( Value : Integer) : string
205: Function ASNItem( var Start : Integer; const Buffer : string; var ValueType : Integer) : string
206: Function ASNObject( const Data : string; ASNType : Integer) : string 207: Function Assigned(I: Longint): Boolean;
208: Function AspectRatio(aWidth, aHeight: Integer): String
209: Function AsWideString( Field : TField) : WideString
210: Function AtLeast( ACount : Integer) : Boolean
211: Function AttemptToUseSharedMemoryManager : Boolean
212: Function Authenticate : Boolean
213: Function AuthenticateUser( const AUsername, APassword : String) : Boolean
214: Function Authentication : String
215: Function BatchMove( ASource : TBDEDataSet; AMode : TBatchMode) : Longint 216: Function BcdCompare( const bcdl, bcd2 : TBcd) : Integer
217: Function BcdFromBytes( const AValue : TBytes)
                                                           : TBcd
218: Function BcdPrecision( const Bcd : TBcd) : Word
219: Function BcdScale( const Bcd : TBcd) : Word
220: Function BcdToBytes( const Value : TBcd) : TBytes
221: Function BCDToCurr( const BCD : TBcd; var Curr : Currency) : Boolean
222: Function BcdToDouble( const Bcd : TBcd) : Double
223: Function BcdToInteger( const Bcd : TBcd; Truncate : Boolean) : Integer
224: Function BcdToStr( const Bcd : TBcd) : string;
225: Function BcdToStrF(const Bcd : TBcd; Format: TFloatFormat; const Precision, Digits:Integer):string
226: function beep2(dwFreq, dwDuration: integer): boolean;
227: Function BeginPeriod( const Period : Cardinal) : Boolean
228: Function BeginTrans : Integer
229: Function BeginTransaction : TDBXTransaction;
230: Function BeginTransaction1( Isolation : TDBXIsolation) : TDBXTransaction;
231: function BigMulu(aone, atwo: string): string;
232: function BigNumber(aone, atwo: string): string;
233: function BigExp(aone, atwo: string): string; 234: function BigMul(aone, atwo: string): string;
235: function BigAdd(aone, atwo: string): string;
236: function BigSub(aone, atwo: string): string
237: function BigFactorial(aone: string): string;
238: Function BinaryToDouble(ABinary: string; DefValue: Double): Double 239: Function BinomialCoeff(N, R: Cardinal): Float
240: function BinominalCoefficient(n, k: Integer): string;
241: Function BinStrToInt( const ABinary : String) : Integer 242: Function BinToByte(Binary: String): Byte; 243: function BinToHex2(Binary: String): string;
244: function BinToInt(Binary: String): Integer;
245: Function BinToChar(St: String): Char;
246: Function BinToStr(ans: string): string;
247: Function BitBlt(hdcDest:HDC;nXDest,nYDest,nWidth,nHeigh:Int;hdcSrc:HDC;nXSrc,nYSrc:Int;dwRop:DWORD):Bool;
248: Function BitmapsAreIdentical(ABitmap1, ABitmap2: TBitmap): Boolean
249: Function BitsHighest( X : Byte) : Integer;
250: Function BitsHighestl( X : ShortInt) : Integer; 251: Function BitsHighest2( X : SmallInt) : Integer;
252: Function BitsHighest3( X : Word) : Integer;
253: Function BitsHighest4( X : Integer) : Integer;
254: Function BitsHighest5( X : Cardinal) : Integer;
255: Function BitsHighest6( X : Int64) : Integer;
256: Function BitsLowest( X : Byte) : Integer;
257: Function BitsLowest1( X : Shortint) : Integer;
                                               : Integer;
258: Function BitsLowest2( X : Smallint)
259: Function BitsLowest3( X : Word) : Integer;
260: Function BitsLowest4( X : Cardinal) : Integer;
261: Function BitsLowest5( X : Integer) : Integer; 262: Function BitsLowest6( X : Int64) : Integer;
263: Function BitsNeeded( const X : Byte) : Integer;
264: Function BitsNeeded1( const X : Word) : Integer;
265: Function BitsNeeded2( const X : Integer) : Integer;
266: Function BitsNeeded3( const X : Int64) : Integer;
267: Function BlueComponent( const Color32 : TColor32) : Integer
```

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268: Function BooleanToInteger( const Pb : Boolean) : Integer
269: Function BoolToStr(B: Boolean; UseBoolStrs: Boolean): string)
270: Function BoolToStrl(value : boolean) : string; 271: Function booltoint( aBool : Boolean) : LongInt
272: Function inttobool( aInt : LongInt) : Boolean
273: Function Bounds( ALeft, ATop, AWidth, AHeight: Integer): TRect 274: function Bounds(ALeft, ATop, AWidth, AHeight: Integer): TRect)
275: Function BreakApart( BaseString, BreakString : string; StringList : TStrings) : TStrings
276: Function BrightColor( const Color: TColor; const Pct: Single): TColor
277: Function BrightColorChannel( const Channel: Byte; const Pct: Single): Byte
278: Function BufferRequest( Length: Integer): TStream
279: Function BuildFileList( const Path : string; const Attr : Integer; const List : TStrings) : Boolean
280: Function Buttons : PTaskDialogButton
281: Function BytesPerScanline( PixelsPerScanline, BitsPerPixel, Alignment : Longint) : Longint
282: Function BytesToCardinal( const AValue : TIdBytes; const AIndex : Integer) : Cardinal
283: Function BytesToChar( const AValue : TIdBytes; const AIndex : Integer) : Char
284: Function BytesToInt64( const AValue : TIdBytes; const AIndex : Integer) : Int64
285: Function BytesToInteger( const AValue : TIdBytes; const AIndex : Integer) : Integer 286: Function BytesToIPv6( const AValue : TIdBytes; const AIndex : Integer) : TIdIPv6Address 287: Function BytesToShort( const AValue : TIdBytes; const AIndex : Integer) : Short
288: Function BytesToString(ABytes:TIdBytes; AStartIndex:Integer; AMaxCount:Integer): string;
289: Function BytesToStr(const Value: TBytes): String;
290: Function BytesToWord( const AValue : TIdBytes; const AIndex : Integer) : Word
291: Function ByteToBin(Int: Byte): String;
292: Function ByteToCharIndex( S : string; Index : Integer) : Integer
293: function ByteToCharIndex(const S: string; Index: Integer): Integer)
294: Function ByteToCharLen( S : string; MaxLen : Integer) : Integer
295: function ByteToCharLen(const S: string; MaxLen: Integer): Integer)
296: Function ByteToHex( const AByte : Byte) : string
297: Function ByteToOctal( const AByte : Byte): string
298: Function ByteType( S: string; Index: Integer): TMbcsByteType
299: function ByteType(S: String; Index: Integer): TMbcsByteType)
300: Function CalcTitleRect(Col: TColumn; ARow: Integer; var MasterCol: TColumn): TRect
301: Function CalculateDFAFingerprint( oStates : TList) : integer
302: function CallTerminateProcs: Boolean)
303: function CANFOCUS: BOOLEAN
304: Function CanLoad( const Ext : string) : Boolean
305: Function CanParse( AWebRequest : TWebRequest) : Boolean
306: Function CanSave( const Ext: string): Boolean 307: Function CanStart( cChar: char): boolean
308: Function CaptureScreen : TBitmap;
309: Function CaptureScreen1( Rec : TRect) : TBitmap;
310: Function CardinalToFourChar( ACardinal : LongWord) : string
311: Function CastSoapToNative(Info:PTypeInfo;const SoapData:WideString;NatData:Pointer;IsNull:Boolean): Boolean
312: Function CastSoapToVariant1( SoapInfo : PTypeInfo; const SoapData : WideString) : Variant;
313: Function Ceil( const X : Extended) : Integer
314: Function Ceill6( X : Integer) : Integer 315: Function Ceil4( X : Integer) : Integer
316: Function Ceil8( X : Integer) : Integer
317: Function Ceiling( const X : Extended) : Integer 318: Function CellRect( ACol, ARow : Longint) : TRect
319: Function CelsiusToFahrenheit( const AValue : Double) : Double
320: Function CenterPoint( const Rect : TRect) : TPoint
321: function CenterPoint(const Rect: TRect): TPoint)
322: Function ChangeFileExt( FileName, Extension : string) : string
323: function ChangeFileExt(const FileName: string; const Extension: string): string)
324: Function CharInSet2( const Ch : Char; const SetOfChar : TSetOfChar) :
325: Function CharInSet( const Ch : Char; const testSet: TSysCharSet): Boolean
326: Function CharlsInEOF( const AString : string; ACharPos : Integer) : Boolean
327: Function CharlsInSet( const AString : string; const ACharPos : Integer; const ASet : String) : Boolean
328: Function CharLength( S : String; Index : Integer) : Integer
329: Function CharRange( const AMin, AMax : Char) : String
330: function CharsetToIdent(Charset: Longint; var Ident: string): Boolean)
331: Function CharToBin(vChr: Char): String;
332: Function Charlest(lpsz: PChar): PChar; stdcall;
333: Function Charlest(lpsz: PChar): PChar; stdcall;
333: Function CharloByteIndex( S : string; Index : Integer) : Integer
334: function CharToByteIndex(const S: string; Index: Integer): Integer)
335: Function ChartoByteLen( S : string; MaxLen : Integer) : Integer
336: function CharToByteLen(const S: string; MaxLen: Integer): Integer)
337: Function CharToHex(const APrefix : String; const cc : Char) : shortstring; 338: function CharToHexStr(Value: char): string);
339: function CharToOem(ins, outs: PChar):boolean;
340: function CharToUniCode(Value: Char): string;
341: Function CheckMenuDropdown : Boolean
342: Function CheckMessages : longint
343: Function CheckOpen( Status : DBIResult) : Boolean
344: Function CheckPassword( const APassword : String) : Boolean
345: Function CheckResponse(const AResponse:SmallInt;const AAllowedResponses:array of SmallInt): SmallInt
346: Function CheckCrc32( var X : array of Byte; N : Integer; Crc : Cardinal) : Integer;
347: function CheckSynchronize(Timeout: Integer): Boolean
348: Function CheckWin32Version( AMajor : Integer; AMinor : Integer) : Boolean
349: function ChrA(const a: byte): char;
350: Function ClassIDToProgID(const ClassID: TGUID): string;
351: Function ClassNameIs(const Name: string): Boolean
352: Function ClearBit( const Value : Byte; const Bit : TBitRange) : Byte;
353: Function ClearBit1( const Value : Shortint; const Bit : TBitRange) : Shortint; 354: Function ClearBit2( const Value : Smallint; const Bit : TBitRange) : Smallint;
355: Function ClearBit3( const Value : Word; const Bit : TBitRange) : Word;
356: Function ClearBit4( const Value : Integer; const Bit : TBitRange) : Integer;
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357: Function ClearBit5( const Value : Cardinal; const Bit : TBitRange) : Cardinal;
358: Function ClearBit6( const Value : Int64; const Bit : TBitRange) : Int64;
359: function CLIENTTOSCREEN(POINT:TPOINT):TPOINT
360: Function Clipboard : TClipboard
361: Function ClipCodes( const X, Y, MinX, MinY, MaxX, MaxY : Float) : TClipCodes;
362: Function ClipCodes( const X, Y : Float; const ClipRect : TRect) : TClipCodes;
363: Function ClipLine( var X1, Y1, X2, Y2 : Integer; const ClipRect : TRect) : Boolean;
364: Function ClipLineToRect( var P1, P2 : TFloatPoint; const Rect : TFloatRect) : Boolean
365: Function Clone( out stm : IStream) : HResult
366: Function CloneConnection : TSQLConnection
367: Function CloneMemoryStream( Original : TMemoryStream) : TMemoryStream
368: function CLOSEQUERY: BOOLEAN
369: Function CloseVolume( var Volume : THandle) : Boolean
370: Function CloseHandle(Handle: Integer): Integer; stdcall;
371: Function CPlApplet(hwndCPl: THandle; uMsg: DWORD; lParaml, lParam2: Longint): Longint
372: Function CmdLine: PChar;
373: function CmdShow: Integer;
374: Function Color32( const R, G, B : Byte; const A : Byte) : TColor32; 375: Function Color32( WinColor : TColor) : TColor32;
376: Function Color321( const Index : Byte; const Palette : TPalette32) : TColor32;
377: Function ColorAdjustLuma( clrRGB: TColor; n: Integer; fScale: BOOLean): TColor
378: Function ColorHLSToRGB( Hue, Luminance, Saturation : Word) : TColorRef
379: Function ColorToHTML( const Color : TColor) : String
380: function ColorToIdent(Color: Longint; var Ident: string): Boolean)
381: Function ColorToRGB(color: TColor): Longint
382: function ColorToString(Color: TColor): string)
383: Function ColorToWebColorName( Color : TColor) : string
384: Function ColorToWebColorStr( Color : TColor) : string
385: Function ColumnAtDepth( Col : TColumn; ADepth : Integer) : TColumn
386: Function Combination(npr, ncr: integer): extended;
387: Function CombinationInt(npr, ncr: integer): Int64;
388: Function CombineInfo( Bitmap : TCustomBitmap32) : TCombineInfo 389: Function CommaAdd( const AStrl, AStr2 : String) : string 390: Function CommercialRound( const X : Extended) : Int64
391: Function Commit( grfCommitFlags : Longint) : HResult
392: Function Compare( const NameExt : string) : Boolean
393: function CompareDate(const A, B: TDateTime): TValueRelationship;
394: Function CompareDateTime( const ADateTime1, ADateTime2 : TDateTime) : Integer
395: Function CompareFiles(const FN1,FN2 :string; Breathe:TNotifyEvent;BreathingSender:TObject): boolean
396: Function CompareMemoryStreams(S1, S2: TMemoryStream): boolean 397: Function CompareStr(S1, S2: string): Integer
398: function CompareStr(const S1: string; const S2: string): Integer)
399: function CompareString(const S1: string; const S2: string): Integer)
400: Function CompareText( S1, S2 : string) : Integer
401: function CompareText(const S1: string; const S2: string): Integer)
402: Function CompareTextLike(cWildStr,cStr:string;const cWildChar:char;lCaseSensitive:boolean): boolean
403: function CompareTime(const A, B: TDateTime): TValueRelationship;
404: Function CompatibleConversionType( const AType: TConvType; const AFamily: TConvFamily): Boolean
405: Function CompatibleConversionTypes( const AFrom, ATo : TConvType) : Boolean
406: Function ComponentTypeToString( const ComponentType : DWORD) : string
407: Function CompToCurrency( Value : Comp) : Currency 408: Function CompToDouble( Value : Comp) : Double
409: function ComputeFileCRC32(const FileName : String) : Integer;
410: function ComputeSHA256(astr: string; amode: char): string) //mode F:File, S:String 411: function ComputeSHA512(astr: string; amode: char): string) //mode F:File, S:String
412: Function Concat(s: string): string
413: Function ConnectAndGetAll: string
414: Function Connected : Boolean
415: function constrain(x, a, b: integer): integer;  
416: Function ConstraintCallBack( Req : DsInfoReq; var ADataSources : DataSources) : DBIResult  
417: Function ConstraintsDisabled : Boolean
418: function CONTAINSCONTROL(CONTROL:TCONTROL):BOOLEAN
419: Function ContainsState( oState : TniRegularExpressionState) : boolean
420: Function ContainsStr( const AText, ASubText: string) : Boolean
421: Function ContainsText( const AText, ASubText: string) : Boolean
422: Function ContainsTransition( oTransition : TniRegularExpressionTransition) : boolean
423: Function Content : string
424: Function ContentFromStream( Stream : TStream) : string 425: Function ContentFromString( const S : string) : string
426: Function CONTROLSDISABLED : BOOLEAN
427: Function Convert( const AValue : Double; const AFrom, ATo : TConvType) : Double;
428: Function Convert1( const AValue : Double; const AFrom1, AFrom2, ATo1, ATo2 : TConvType) : Double;
429: Function ConvertFrom( const AFrom : TConvType; const AValue : Double) : Double
430: Function ConvertReadStream( Stream : TStream; Buffer : PChar; BufSize : Integer) : Integer
431: Function ConvertTo( const AValue : Double; const ATo : TConvType) : Double
432: Function ConvertWriteStream( Stream: TStream; Buffer: PChar; BufSize: Integer): Integer
433: Function ConvFamilyToDescription( const AFamily : TConvFamily) : string
434: Function ConvTypeToDescription( const AType : TConvType) : string
435: Function ConvTypeToFamily( const AFrom, ATo : TConvType) : TConvFamily;
436: Function ConvTypeToFamily( const AType : TConvType) : TConvFamily;
437: Function ConvAdd(const AVal:Double;const AType1:TConvType;const AVal2:Double;const AType2,
      AResultType:TConvType): Double
438: Function ConvCompareValue(const AValue1:Double;const AType1:TConvType;const AValue2:Double;const
      AType2:TConvType): TValueRelationship
439: Function ConvDec( const AValue : Double; const AType, AAmountType : TConvType) : Double;
440: Function ConvDecl(const AValue:Double; const AType: TConvType; const AAmount:Double; const
      AAmountType: TConvType): Double;
441: Function ConvDiff(const AVall:Double;const AType1:TConvType;const AVal2:Double;const AType2,
      AResuType:TConvType):Double
```

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442: Function ConvInc( const AValue : Double; const AType, AAmountType : TConvType) : Double;
443: Function ConvIncl(const AValue:Double;const AType:TConvType;const AAmount:Double;const
         AAmountType:TConvType): Double;
444: Function ConvSameValue(const AValue1:Double;const AType1:TConvType;const AValue2:Double;const
         AType2:TConvType):Boolean
445: Function ConvToStr( const AValue : Double; const AType : TConvType) : string
446: Function ConvWithinNext( const AValue, ATest : Double; const AType : TConvType; const AAmount : Double;
         const AAmountType : TConvType) : Boolean
447: Function ConvWithinPrevious(const AValue, ATest: Double; const AType: TConvType; const AAmount: Double; const
         AAmountType: TConvType) : Boolean
448: function Copy(s: AnyString; iFrom, iCount: Longint): AnyString;
449: Function CopyFile (Source, Dest: string; CanOverwrite: Boolean): Boolean
450: Function CopyFileEx( Source, Dest : string; Flags : FILEOP_FLAGS) : Boolean
451: Function CopyFileTo( const Source, Destination: string): Boolean 452: function CopyFrom(Source:TStream;Count:Int64):LongInt
453: Function CopyPalette( Palette : HPALETTE) : HPALETTE
454: Function CopyTo( Length : Integer) : string
455: Function CopyTo(stm: IStream; cb: Largeint; out cbRead: Largeint; out cbWritten:Largeint): HResult 456: Function CopyToEOF: string 457: Function CopyToEOL: string 458: Function Cos(e: Extended): Extended;
459: Function Cosecant( const X : Extended) : Extended
460: Function Cot( const X : Extended) : Extended 461: Function Cotan( const X : Extended) : Extended
462: Function CotH( const X : Extended) : Extended
463: Function Count : Integer
464: Function CountBitsCleared( X : Byte) : Integer;
465: Function CountBitsCleared1( X : Shortint) : Integer; 466: Function CountBitsCleared2( X : Smallint) : Integer;
467: Function CountBitsCleared3( X : Word) : Integer;
468: Function CountBitsCleared4( X : Integer) : Integer;
469: Function CountBitsCleared5( X : Cardinal) : Integer;
470: Function CountBitsCleared6(X: Int64): Integer;
471: Function CountBitsSet( X : Byte) : Integer; 472: Function CountBitsSet( X : Word) : Integer;
473: Function CountBitsSet2( X : Smallint) : Integer;
474: Function CountBitsSet3( X : ShortInt) : Integer;
475: Function CountBitsSet4( X : Integer) : Integer;
476: Function CountBitsSet5( X : Cardinal) : Integer;
477: Function CountBitsSet6( X : Int64) : Integer
478: function CountGenerations(Ancestor, Descendent: TClass): Integer
479: Function Coversine( X : Float) : Float
480: function CRC32(const fileName: string): LongWord;
481: Function CREATEBLOBSTREAM( FIELD : TFIELD; MODE : TBLOBSTREAMMODE) : TSTREAM
482: Function CreateColumns : TDBGridColumns
483: Function CreateDataLink : TGridDataLink
484: Function CreateDir( Dir : string) : Boolean
485: function CreateDir(const Dir: string): Boolean)
486: Function CreateDOSProcessRedirected const CommandLine, InputFile, OutputFile: string) : Boolean
487: Function CreateEnvironmentBlock(const Options:TEnvironmentOptions;const AdditionalVars:TStrings): PChar 488: Function CREATEFIELD(OWNER:TCOMPONENT;PARENTFIELD:TOBJECTFIELD; const
         FIELDNAME: String; CREATECHILDREN: BOOLEAN): TFIELD
489: Function CreateGlobber( sFilespec : string) : TniRegularExpression
490: Function CreateGrayMappedBmp( Handle : HBITMAP) : HBITMAP
491: Function CreateGrayMappedRes( Instance : THandle; ResName : PChar) : HBITMAP 492: function CreateGUID(out Guid: TGUID): HResult)
493: Function CreateInstance( const unkOuter : IUnknown; const iid : TGUID; out obj) : HResult
494: Function CreateMappedBmp( Handle : HBITMAP; const OldColors, NewColors : array of TColor) : HBITMAP
495: Function CreateMappedRes(Instance:THandle;ResName:PChar;const OldColors,NewColors:array of TColor):HBITMAP
496: Function CreateMessageDialog(const Msg:string; DlgType:TMsgDlgType; Buttons: TMsgDlgButtons) : TForm;
497: Function CreateMessageDialog1(const
         \texttt{Msg:string:} \texttt{DlgType:} \texttt{TMsgDlgType:} \texttt{Btns:} \texttt{TMsgDlgBtns:} \texttt{DefaultBtn:} \texttt{TMsgDlgBtn):} \texttt{TForm:} \texttt{TMsgDlgBtn} \texttt{T
498: function CreateOleObject(const ClassName: String): IDispatch;
499: Function CREATEPARAM( FLDTYPE : TFIELDTYPE; const PARAMNAME : String; PARAMTYPE : TPARAMTYPE) : TPARAM
500: Function CreateParameter(const
         Name:WideString;DataType:TDataType;Direction:TParameterDirection;Size:Integer;Value: OleVariant):TParameter
501: Function CreateLocate( DataSet : TDataSet) : TJvLocateObject
502: Function CreateMappedBmp( Handle : HBITMAP; const OldColors, NewColors : array of TColor) : HBITMAP
503: Function CreateMappedRes(Instance:THandle;ResName:PChar;const OldColors,NewColors:array of TColor):HBITMAP
504: Function CreateRecordBuffer( Length: Integer): TRecordBuffer 505: Function CreateValueBuffer( Length: Integer): TValueBuffer
506: Function CreatePopupCalculator( AOwner : TComponent; ABiDiMode : TBiDiMode) : TWinControl
507: Function CreateRecordBuffer( Length : Integer) : TRecordBuffer 508: Function CreateRotatedFont( Font : TFont; Angle : Integer) : HFONT
509: Function CreateTwoColorsBrushPattern( Color1, Color2 : TColor) : TBitmap 510: Function CreateValueBuffer( Length : Integer) : TValueBuffer
511: Function CreateHexDump( AOwner : TWinControl) : THexDump
512: Function Csc( const X : Extended) : Extended
513: Function CscH( const X : Extended) : Extended
514: function currencyDecimals: Byte
515: function currencyFormat: Byte
516: function currencyString: String
517: Function CurrentProcessId : TIdPID 518: Function CurrentReadBuffer : string
519: Function CurrentThreadId : TIdPID
520: Function CurrentYear : Word
521: Function CurrToBCD(const Curr: Currency; var BCD: TBcd; Precision: Integer; Decimals: Integer): Boolean 522: Function CurrToStr( Value : Currency) : string; 523: Function CurrToStr( Value : Currency; FormatSettings : TFormatSettings; Digits: Integer) : string;
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524: Function CurrToStrFS(Value:Currency;Format:TFloatFormat;Digits:Integer;const
      FormatSettings: TFormatSettings): string;
     function CursorToIdent(cursor: Longint; var Ident: string): Boolean;
526: function CursorToString(cursor: TCursor): string;
527: Function CustomSort( SortProc : TLVCompare; lParam : Longint) : Boolean
528: Function CustomSort( SortProc : TTVCompare; Data : Longint; ARecurse : Boolean) : Boolean
529: Function CycleToDeg( const Cycles : Extended) : Extended
530: Function CycleToGrad( const Cycles : Extended) : Extended
531: Function CycleToRad( const Cycles : Extended) : Extended
532: Function D2H( N : Longint; A : Byte) : string
533: Function DarkColor( const Color: TColor; const Pct : Single) : TColor
534: Function DarkColorChannel( const Channel: Byte; const Pct: Single): Byte
535: Function DataLinkDir: string
536: Function DataRequest( Data: OleVariant): OleVariant
537: Function DataRequest( Input: OleVariant): OleVariant
538: Function DataToRawColumn( ACol : Integer) : Integer
539: Function Date : TDateTime
540: function Date: TDateTime;
541: Function DateIsNull( const pdtValue : TDateTime; const pdtKind : TdtKind) : Boolean
542: Function DateOf( const AValue : TDateTime) : TDateTime
543: function DateSeparator: char;
544: Function DateTimeGMTTOHttpStr( const GMTValue : TDateTime) : String
545: Function DateTimeToFileDate( DateTime : TDateTime) : Integer
546: function DateTimeToFileDate(DateTime: TDateTime): Integer;
547: Function DateTimeToGmtOffSetStr( ADateTime: TDateTime; SubGMT : Boolean) : string
548: Function DateTimeToInternetStr( const Value : TDateTime; const AIsGMT : Boolean)
549: Function DateTimeToJulianDate( const AValue : TDateTime) : Double
550: Function DateTimeToModifiedJulianDate( const AValue : TDateTime) : Double
551: Function DateTimeToStr( DateTime : TDateTime) : string;
552: Function DateTimeToStr2( DateTime: TDateTime; FormatSettings: TFormatSettings): string;
553: function DateTimeToTimeStamp(DateTime: TDateTime): TTimeStamp
554: Function DateTimeToUnix( const AValue : TDateTime) : Int64
555: function DateTimeToUnix(D: TDateTime): Int64;
556: Function DateToStr( DateTime : TDateTime) : string;
557: function DateToStr(const DateTime: TDateTime): string;
558: function DateToStr(D: TDateTime): string;
559: Function DateToStr2( DateTime : TDateTime; FormatSettings : TFormatSettings) : string;
560: Function DayOf( const AValue : TDateTime) : Word
561: Function DayOfTheMonth( const AValue : TDateTime)
562: function DayOfTheMonth(const AValue: TDateTime): Word;
563: Function DayOfTheWeek( const AValue : TDateTime) : Word
564: Function DayOfTheYear( const AValue : TDateTime) : Word
565: function DayOfTheYear(const AValue: TDateTime): Word;
566: Function DayOfWeek( DateTime : TDateTime) : Word
567: function DayOfWeek(const DateTime: TDateTime): Word; 568: Function DayOfWeekStr( DateTime : TDateTime) : string
569: Function DaysBetween( const ANow, AThen : TDateTime) : Integer
570: Function DaysInAMonth( const AYear, AMonth: Word) : Word
571: Function DaysInAYear( const AYear : Word) : Word
572: Function DaysInMonth( const AValue : TDateTime) : Word 573: Function DaysInYear( const AValue : TDateTime) : Word
574: Function DaySpan( const ANow, AThen : TDateTime) : Double
575: Function DBUseRightToLeftAlignment( AControl : TControl; AField : TField) : Boolean
576: function DecimalSeparator: char;
577: Function DecLimit( var B : Byte; const Limit : Byte; const Decr : Byte) : Byte;
578: Function DecLimit1( var B : Shortint; const Limit : Shortint; const Decr : Shortint) : Shortint;
579: Function DecLimit2( var B : Smallint; const Limit : Smallint; const Decr : Smallint) : Smallint;
580: Function DecLimit3( var B : Word; const Limit : Word; const Decr : Word) : Word;
581: Function DecLimit4( var B : Integer; const Limit : Integer; const Decr : Integer) : Integer; 582: Function DecLimit5( var B : Cardinal; const Limit : Cardinal; const Decr : Cardinal) : Cardinal; 583: Function DecLimit6( var B : Int64; const Limit : Int64; const Decr : Int64) : Int64;
584: Function DecLimitClamp( var B : Byte; const Limit : Byte; const Decr : Byte) : Byte;
585: Function DecLimitClamp1( var B : Shortint; const Limit : Shortint; const Decr : Shortint) : Shortint; 586: Function DecLimitClamp2( var B : Smallint; const Limit : Smallint; const Decr : Smallint) : Smallint;
587: Function DecLimitClamp3( var B : Word; const Limit : Word; const Decr : Word) : Word;
588: Function DecLimitClamp4( var B : Integer; const Limit : Integer; const Decr : Integer) : Integer
589: Function DecLimitClamp5( var B : Cardinal; const Limit : Cardinal; const Decr : Cardinal) : Cardinal;
590: Function DecLimitClamp6( var B : Int64; const Limit : Int64; const Decr : Int64) : Int64;
591: Function DecodeDateFully( DateTime: TDateTime; var Year, Month, Day, DOW: Word): Boolean 592: Function DecodeSoundexInt( AValue: Integer): string
593: Function DecodeSoundexWord( AValue : Word) : string
594: Function DefaultAlignment : TAlignment
595: Function DefaultCaption : string
596: Function DefaultColor : TColor
597: Function DefaultFont : TFont
598: Function DefaultImeMode : TImeMode
599: Function DefaultImeName : TImeName
600: Function DefaultReadOnly : Boolean
601: Function DefaultWidth : Integer
602: Function DegMinSecToFloat( const Degs, Mins, Secs : Float) : Float
603: Function DegToCycle( const Degrees : Extended) : Extended 604: Function DegToGrad( const Degrees : Extended) : Extended
605: Function DegToGrad( const Value : Extended) : Extended;
606: Function DegToGrad1( const Value : Double) : Double;
607: Function DegToGrad2( const Value : Single) : Single;
608: Function DegToRad( const Degrees : Extended) : Extended
609: Function DegToRad( const Value : Extended) : Extended; 610: Function DegToRad1( const Value : Double) : Double;
611: Function DegToRad2( const Value : Single) : Single;
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612: Function DelChar( const pStr : string; const pChar : Char) : string
613: Function DelEnvironmentVar( const Name : string) : Boolean
614: Function Delete( const MsgNum : Integer) : Boolean
615: Function DeleteDirectory( const DirectoryName : string; MoveToRecycleBin : Boolean) : Boolean
616: Function DeleteFile(const FileName: string): boolean)
617: Function DeleteFileEx( FileName : string; Flags : FILEOP_FLAGS) : Boolean
618: Function DelimiterPosn( const sString : string; const sDelimiters: string): integer;
619: Function DelimiterPosn1(const sString:string;const sDelimiters:string;out cDelimiter: char) : integer;
620: Function DelSpace( const pStr : string) : string
621: Function DelString( const pStr, pDelStr : string)
622: Function DelTree( const Path : string) : Boolean
623: Function Depth : Integer
                                                                         : string
624: Function Description : string
625: Function DescriptionsAvailable : Boolean
626: Function DescriptionToConvFamily( const ADescription : string; out AFamily : TConvFamily) : Boolean 627: Function DescriptionToConvType( const ADescription : string; out AType : TConvType) : Boolean;
628: Function DescriptionToConvType1(const AFamil:TConvFamily;const ADescr:string;out AType:TConvType):Boolean;
629: Function DetectUTF8Encoding( const s : UTF8String) : TEncodeType
630: Function DialogsToPixelsX( const Dialogs : Word) : Word
631: Function DialogsToPixelsY( const Dialogs : Word) : Word
632: Function Digits (const X : Cardinal) : Integer
633: Function DirectoryExists (const Name : string) : Boolean
634: Function DirectoryExists( Directory: string) : Boolean 635: Function DiskFree( Drive : Byte) : Int64
636: function DiskFree(Drive: Byte): Int64)
637: Function DiskInDrive( Drive : Char) : Boolean
638: Function DiskSize( Drive : Byte) : Int64
639: function DiskSize(Drive: Byte): Int64)
640: Function DISPATCHCOMMAND( ACOMMAND: WORD): BOOLEAN
641: Function DispatchEnabled : Boolean
642: Function DispatchMask : TMask
643: Function DispatchMethodType : TMethodType
644: Function DISPATCHPOPUP( AHANDLE : HMENU) : BOOLEAN
645: Function DispatchRequest( Sender : TObject; Request : TWebRequest; Response : TWebResponse) : Boolean
646: Function DisplayCase( const S : String) : String
647: Function DisplayRect( Code : TDisplayCode) : TRect
648: Function DisplayRect( TextOnly : Boolean) : TRect
649: Function DisplayStream( Stream : TStream) : string
650: TBufferCoord', 'record Char: integer; Line: integer; end
651: TDisplayCoord', 'record Column: integer; Row: integer; end
652: Function DisplayCoord( AColumn, ARow: Integer): TDisplayCoord
653: Function BufferCoord( AChar, ALine: Integer): TBufferCoord
654: Function DomainName( const AHost: String): String
655: Function DosPathToUnixPath( const Path: string): string
656: Function DottedLineTo( const Canvas: TCanvas; const X, Y : Integer) : Boolean;
657: Function DoubleDecliningBalance( const Cost, Salvage : Extended; Life, Period : Integer) : Extended 658: Function DoubleToBcd( const AValue : Double) : TBcd;
659: Function DoubleToHex( const D : Double) : string
660: Function DoUpdates : Boolean
661: function Dragging: Boolean;
662: Function DrawCaption(p1: HWND; p2: HDC; const p3: TRect; p4: UINT): BOOL 663: Function DrawAnimatedRects(hwnd: HWND; idAni: Integer; const lprcFrom, lprcTo
                                                                                                                  : TRect) : BOOL
664: Function DrawEdge( hdc : HDC; var qrc : TRect; edge : UINT; grfFlags : UINT) : BOOL
665: Function DrawFrameControl( DC : HDC; const Rect : TRect; uType, uState : UINT) : BOOL
666: {Works like InputQuery but displays 2edits. If PasswordChar <> #0, the second edit's PasswordChar is set} 667: Function DualInputQuery(const ACapt,Prpt1,Prpt2:string;var AVal1,AVal2:string;PasswrdChar:Char= #0):Bool;
668: Function DupeString( const AText : string; ACount : Integer) : string
669: Function Edit : Boolean
670: Function EditCaption : Boolean
671: Function EditText : Boolean
672: Function EditFolderList(Folders: TStrings): Boolean
673: Function EditQueryParams( DataSet : TDataSet; List : TParams; AHelpContext : THelpContext) : Boolean
674: Function Elapsed( const Update : Boolean) : Cardinal
675: Function EnableProcessPrivilege( const Enable : Boolean; const Privilege : string) : Boolean 676: Function EnableThreadPrivilege( const Enable : Boolean; const Privilege : string) : Boolean
677: Function EncodeDate(Year, Month, Day: Word): TDateTime 678: function EncodeDate(Year, Month, Day: Word): TDateTime;
679: Function EncodeDateDay( const AYear, ADayOfYear : Word) : TDateTime
680: Function EncodeDateMonthWeek( const AYear, AMonth, AWeekOfMonth, ADayOfWeek: Word): TDateTime 681: Function EncodeDateTime(const AYear, AMonth, ADay, AHour, AMinute, ASecond, AMilliSecond: Word): TDateTime
682: Function EncodeDateWeek ( const AYear, AWeekOfYear : Word; const ADayOfWeek : Word) : TDateTime
683: Function EncodeDayOfWeekInMonth( const AYear, AMonth, ANthDayOfWeek, ADayOfWeek: Word) : TDateTime
684: Function EncodeString( s : string) : string 685: Function DecodeString( s : string) : string
686: Function EncodeTime( Hour, Min, Sec, MSec : Word) : TDateTime
687: function EncodeTime(Hour, Min, Sec, MSec: Word): TDateTime;
688: Function EndIP : String
689: Function EndOfADay( const AYear, AMonth, ADay: Word): TDateTime; 690: Function EndOfADay1( const AYear, ADayOfYear: Word): TDateTime; 691: Function EndOfAMonth( const AYear, AMonth: Word): TDateTime
692: Function EndOfAWeek( const AYear, AWeekOfYear : Word; const ADayOfWeek : Word) : TDateTime
693: Function EndOfAYear( const AYear : Word) : TDateTime
694: Function EndOfTheDay( const AValue : TDateTime) : TDateTime
695: Function EndOfTheMonth( const AValue : TDateTime) : TDateTime
696: Function EndOfTheWeek( const AValue : TDateTime) : TDateTime
697: Function EndOfTheYear( const AValue : TDateTime) : TDateTime
698: Function EndPeriod( const Period : Cardinal) : Boolean
699: Function EndsStr( const ASubText, AText : string) : Boolean
700: Function EndsText( const ASubText, AText : string) : Boolean
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701: Function EnsureMsqIDBrackets( const AMsqID : String) : String
702: Function EnsureRange( const AValue, AMin, AMax : Integer) : Integer;
703: Function EnsureRangel (const AValue, AMin, AMax : Int64) : Int64;
704: Function EnsureRange2( const AValue, AMin, AMax : Double) : Double;
705: Function EOF: boolean
706: Function EOln: boolean
707: Function EqualRect( const R1, R2 : TRect) : Boolean 708: function EqualRect(const R1, R2: TRect): Boolean)
709: Function Equals( Strings : TWideStrings) : Boolean
710: function Equals(Strings: TStrings): Boolean;
711: Function EqualState( oState : TniRegularExpressionState) : boolean
712: Function ErrOutput: Text)
713: function ExceptionParam: String;
714: function ExceptionPos: Cardinal;
715: function ExceptionProc: Cardinal;
716: function ExceptionToString(er: TIFException; Param: String): String;
717: function ExceptionType: TIFException;
718: Function ExcludeTrailingBackslash( S : string) : string
719: function ExcludeTrailingBackslash(const S: string): string)
720: Function ExcludeTrailingPathDelimiter( const APath : string) : string
721: Function ExcludeTrailingPathDelimiter(S: string): string
722: function ExcludeTrailingPathDelimiter(const S: string): string)
723: function ExecConsoleApp(const\ AppName,\ Parameters:\ String;\ AppOutput:\ TStrings):\ boolean is
724: Function ExecProc : Integer
725: Function ExecSQL : Integer
726: Function ExecSQL( ExecDirect : Boolean) : Integer
727: Function Execute : _Recordset;
728: Function Execute : Boolean
729: Function Execute : Boolean;
730: Function Execute( const SQL : string; Params : TParams; Cache : Boolean; cursor : phDBICur) : Integer
731: Function Execute( const SQL : WideString; Params : TParams; ResultSet : TPSResult) : Integer
732: Function Execute( ParentWnd : HWND) : Boolean
733: Function Execute1(constCommText:WideString;const CType:TCommType;const
     ExecuteOpts:TExecuteOpts):_Recordset;
734: Function Execute1( const Parameters : OleVariant) : _Recordset;
735: Function Execute1( ParentWnd : HWND) : Boolean;
736: Function Execute2( var RecordsAffected : Integer; const Parameters : OleVariant) : Recordset;
737: Function ExecuteAction( Action : TBasicAction) : Boolean
738: Function ExecuteDirect( const SQL : WideString) : Integer
739: Function ExecuteFile(const FileName:string;const Params:string;const DefDir:string;ShowCmd:Int):THandle
740: Procedure ExecuteThread2(afunc:TThreadFunction2;thrOK:boolean);AddTypeS('TThreadFunction2','procedure
741: Function CreateThread2(ThreadFunc: TThreadFunction2) : THandle
742: function ExeFileIsRunning(ExeFile: string): boolean;
743: function ExePath: string;
744: function ExePathName: string;
745: Function Exists( AItem : Pointer) : Boolean
746: Function ExitWindows( ExitCode : Cardinal) : Boolean
747: function Exp(x: Extended): Extended;
748: Function ExpandEnvironmentVar( var Value : string) : Boolean
749: Function ExpandFileName( FileName : string) : string
750: function ExpandFileName(const FileName: string): string)
751: Function ExpandUNCFileName( FileName : string) : string
752: function ExpandUNCFileName(const FileName: string): string)
753: Function ExpJ( const X : Float) : Float;
754: Function Exsecans( X : Float) : Float
755: Function Extract( const AByteCount : Integer) : string
756: Function Extract ( Item : TClass) : TClass
757: Function Extract ( Item : TComponent) : TComponent
758: Function Extract( Item : TObject) : TObject
759: Function ExtractFileDir( FileName : string) : string
760: function ExtractFileDir(const FileName: string): string)
761: Function ExtractFileDrive(FileName: string)
762: function ExtractFileDrive(const FileName: string): string)
763: Function ExtractFileExt( FileName : string) : string
764: function ExtractFileExt(const FileName: string): string)
765: Function ExtractFileExtNoDot( const FileName : string)
766: Function ExtractFileExtNoDotUpper( const FileName : string) : string
767: Function ExtractFileName(FileName: string): string
768: function ExtractFileName(const filename: string):string;
769: Function ExtractFilePath( FileName : string) : string
770: function ExtractFilePath(const filename: string):string;
771: Function ExtractRelativePath( BaseName, DestName : string) : string
772: function ExtractRelativePath(const BaseName: string; const DestName: string): string)
773: Function ExtractShortPathName(FileName: string): string
774: function ExtractShortPathName(const FileName: string): string)
775: function ExtractStrings(Separators, WhiteSpace: TSysCharSet; Content: PChar;Strings: TStrings): Integer
776: function ExtractStrings(Separators:TSysCharSet;WhiteSpace:TSysCharSet;Content:PChar;Str:TStrings): Integer)
777: Function Fact(numb: integer): Extended;
778: Function FactInt(numb: integer): int64;
779: Function Factorial( const N : Integer) : Extended 780: Function FahrenheitToCelsius( const AValue : Double) : Double
781: function FalseBoolStrs: array of string
782: Function Fetch(var AInput:string;const ADelim:string;const ADelete:Bool;const ACaseSensitive:Bool):string
783: Function FetchCaseInsensitive(var AInput:string; const ADelim:string; const ADelete:Boolean): string
784: Function Fibo(numb: integer): Extended;
785: Function FiboInt(numb: integer): Int64;
786: Function Fibonacci( const N : Integer) : Integer 787: Function FIELDBYNAME( const FIELDNAME : STRING) : TFIELD
788: Function FIELDBYNAME( const FIELDNAME : WIDESTRING) : TFIELD
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789: Function FIELDBYNAME( const NAME : String) : TFIELD
790: Function FIELDBYNAME( const NAME : String) : TFIELDDEF
791: Function FIELDBYNUMBER( FIELDNO : INTEGER) : TFIELD
792: Function FileAge( FileName : string) : Integer
793: Function FileAge(const FileName: string): integer)
794: Function FileCompareText( const A, B : String) : Integer
795: Function FileContains(const FileName:string;Text:string;CaseSensitive:Bool;ExceptionOnError:Bool): Boolean
796: Function FileCreate( FileName : string)
                                                     : Integer;
797: Function FileCreate(const FileName: string): integer)
798: Function FileCreateTemp( var Prefix: string): THandle
799: Function FileDateToDateTime(FileDate: Integer): TDateTime
800: function FileDateToDateTime(FileDate: Integer): TDateTime;
801: Function FileExists( const FileName : string) : Boolean
802: Function FileExists( FileName : string) : Boolean
803: function fileExists(const FileName: string): Boolean;
804: Function FileGetAttr(FileName: string): Integer
805: Function FileGetAttr(const FileName: string): integer)
806: Function FileGetDate( Handle : Integer) : Integer 807: Function FileGetDate(handle: integer): integer
808: Function FileGetDisplayName( const FileName : string) : string
809: Function FileGetSize( const FileName : string) : Integer
810: Function FileGetTempName( const Prefix : string) : string
811: Function FileGetTypeName( const FileName : string) : string
812: Function FileIsReadOnly( FileName : string) : Boolean
813: Function FileLoad( ResType: TResType; const Name: string; MaskColor: TColor): Boolean
814: Function FileOpen(FileName: string; Mode: LongWord): Integer
815: Function FileOpen(const FileName: string; mode:integer): integer)
816: Function FileRead(handle: integer; Buffer: PChar; count: LongWord): integer 817: Function FileSearch( Name, DirList: string): string
818: Function FileSearch(const Name, dirList: string): string)
819: Function FileSeek( Handle : Integer; Offset : Int64; Origin : Integer) : Int64;
820: Function FileSeek( Handle, Offset, Origin : Integer) : Integer; 821: Function FileSeek(handle, offset, origin: integer): integer
822: Function FileSetAttr( FileName : string; Attr : Integer) : Integer
823: function FileSetAttr(const FileName: string; Attr: Integer): Integer)
824: Function FileSetDate(FileName : string; Age : Integer) : Integer;
825: Function FileSetDate(handle: integer; age: integer): integer
826: Function FileSetDate2(FileHandle: Integer; Age: Integer): Integer;
827: Function FileSetDateH( Handle : Integer; Age : Integer) :
                                                                           Integer;
828: Function FileSetReadOnly( FileName : string; ReadOnly : Boolean) : Boolean 829: Function FileSize( const FileName : string) : int64
830: Function FileSizeByName ( const AFilename : string) : Longint
831: function FileWrite(Handle: Integer; const Buffer: pChar; Count: LongWord): Integer)
832: Function FilterSpecArray: TComdlgFilterSpecArray
833: Function FIND( ACAPTION: String): TMENUITEM
834: Function Find( AItem : Pointer; out AData : Pointer) : Boolean
835: Function FIND( const ANAME : String) : TNAMEDITEM
836: Function Find( const DisplayName : string) : TAggregate
837: Function Find( const Item: TBookmarkStr; var Index: Integer): Boolean 838: Function FIND( const NAME: String): TFIELD 839: Function FIND( const NAME: String): TFIELDDEF
840: Function FIND( const NAME : String) : TINDEXDEF
841: Function Find( const S : WideString; var Index : Integer) : Boolean
842: function Find(S:String; var Index:Integer):Boolean
843: Function FindAuthClass( AuthName : String) : TIdAuthenticationClass 844: Function FindBand( AControl : TControl) : TCoolBand
845: Function FindBoundary( AContentType : string) : string
846: Function FindButton( AModalResult : TModalResult) : TTaskDialogBaseButtonItem
847: Function FindCaption(StartIndex: Integer; Value: string; Partial, Inclusive, Wrap: Boolean): TListItem
848: Function FindCdLineSwitch( Switch: string; IgnoreCase: Boolean): Boolean;
849: Function FindCloseW(FindFile: Integer): LongBool; stdcall;
850: Function FindCmdLineSwitch( Switch: string; Chars: TSysCharSet; IgnoreCase: Boolean): Boolean;
851: Function FindCmmdLineSwitch( Switch : string) : Boolean;
852: function FindComponent(AName: String): TComponent;
853: function FindComponent(vlabel: string): TComponent;
854: function FindComponent2(vlabel: string): TComponent;
855: function FindControl(Handle: HWnd): TWinControl;
856: Function FindData( StartIndex : Integer; Value : Pointer; Inclusive, Wrap : Boolean) : TListItem
857: Function FindDatabase( const DatabaseName : string) : TDatabase
858: function FindDragTarget(const Pos: TPoint; AllowDisabled: Boolean): TControl;
859: Function FINDFIELD( const FIELDNAME : STRING) : TFIELD
860: Function FINDFIELD( const FIELDNAME : WideString) : TFIELD
861: Function FindFirst2(const Path: string; Attr: Integer; var F: TSearchRec):Integer) 862: Function FindNext2(var F: TSearchRec): Integer)
863: procedure FindClose2(var F: TSearchRec)
     Function FINDFIRST : BOOLEAN
865: TJvSpecialFolder = (sfRecycleBin, sfControlPanel, sfDesktop, sfDesktopDirectory,
       sfMyComputer, sfFonts, sfNetHood, sfNetwork, sfPersonal, sfPrinters, sfPrograms, sfRecent, sfSendTo,
866:
    sfStartMenu, stStartUp, sfTemplates);
867: FFolder: array [TJvSpecialFolder] of Integer =
868:
          (CSIDL_BITBUCKET, CSIDL_CONTROLS, CSIDL_DESKTOP, CSIDL_DESKTOPDIRECTORY,
869:
            CSIDL_DRIVES, CSIDL_FONTS, CSIDL_NETHOOD, CSIDL_NETWORK, CSIDL_PERSONAL
            CSIDL_PRINTERS, CSIDL_PROGRAMS, CSIDL_RECENT, CSIDL_SENDTO, CSIDL_STARTMENU,
870:
            CSIDL_STARTUP, CSIDL_TEMPLATES);
872: Function FindFilesDlg(StartIn: string; SpecialFolder: TJvSpecialFolder; UseFolder: Boolean); Boolean);
873: function Findfirst(const filepath: string; attr: integer): integer;
874: function FindFirst2(const Path: string; Attr: Integer; var F: TSearchRec): Integer) 875: Function FindFirstNotOf( AFind, AText : String) : Integer
876: Function FindFirstOf( AFind, AText : String) : Integer
```

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

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

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

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

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1399: Function HashValue128(const ASrc: string): T4x4LongWordRecord;
1400: Function HashValue128Stream(AStream: TStream): T4x4LongWordRecord;
1401: Function HashValue16( const ASrc : string) : Word;
1402: Function HashValue16stream( AStream: TStream): Word;
1403: Function HashValue32( const ASrc : string) : LongWord;
1404: Function HashValue32Stream( AStream : TStream) : LongWord;
1405: Function HasMergeConflicts : Boolean
1406: Function hasMoreTokens : boolean
1407: Function HASPARENT : BOOLEAN
1408: function HasParent: Boolean
1409: Function HasTransaction( Transaction: TDBXTransaction): Boolean
1410: Function HasUTF8BOM( S : TStream) : boolean;
1411: Function HasUTF8BOM1( S : AnsiString) : boolean;
1412: Function Haversine( X : Float) : Float
1413: Function Head( s : string; const subs : string; var tail : string) : string
1414: function HELPCOMMAND(COMMAND:INTEGER; DATA:LONGINT):BOOLEAN
1415: function HELPCONTEXT(CONTEXT:THELPCONTEXT):BOOLEAN
1416: function HELPJUMP(JUMPID:STRING):BOOLEAN
1417: Function HeronianMean(const a, b : Float) : Float
1418: function HexStrToStr(Value: string): string;
1419: function HexToBin(Text, Buffer: PChar; BufSize: Integer): Integer;
1420: function HexToBin2(HexNum: string): string;
1421: Function HexToDouble( const Hex : string) : Double
1422: function HexToInt(hexnum: string): LongInt;
1423: function HexToStr(Value: string): string;
1424: Function HexifyBlock( var Buffer, BufferSize : Integer) : string
1425: function Hi(vdat: word): byte; 1426: function HiByte(W: Word): Byte)
1427: function High: Int64;
1428: Function HighlightCell(DataCol,DataRow: Integer; const Value:string; AState:TGridDrawState): Boolean
1429: function HINSTANCE: longword;
1430: function HiWord(1: DWORD): Word)
1431: function HMODULE: longword;
1432: Function HourOf( const AValue : TDateTime) : Word
1433: Function HourOfTheDay( const AValue : TDateTime)
1434: Function HourOfTheMonth( const AValue : TDateTime) : Word
1435: Function HourOfTheWeek( const AValue : TDateTime) : Word 1436: Function HourOfTheYear( const AValue : TDateTime) : Word
1437: Function HoursBetween( const ANow, AThen : TDateTime) :
1438: Function HourSpan( const ANow, AThen : TDateTime) : Double
1439: Function HSLToRGB1( const H, S, L : Single) : TColor32;
1440: Function HTMLDecode( const AStr : String) : String
1441: Function HTMLEncode( const AStr : String) : String
1442: Function HTMLEscape( const Str : string) : string
1443: Function HtmlTable( DataSet : TDataSet; DataSetHandler : TDSTableProducer; MaxRows : Integer) : string
1444: Function HTTPDecode( const AStr : String) : string 1445: Function HTTPEncode( const AStr : String) : string
1446: Function Hypot( const X, Y : Extended) : Extended
1447: Function IBMax( n1, n2 : Integer) : Integer
1448: Function IBMin( n1, n2 : Integer) : Integer
1449: Function IBRandomString( iLength : Integer) : String
1450: Function IBRandomInteger( iLow, iHigh : Integer) : Integer
1451: Function IBStripString( st : String; CharsToStrip : String) : String
1452: Function IBFormatIdentifier( Dialect : Integer; Value : String) : String
1453: Function IBFormatIdentifierValue( Dialect : Integer; Value : String) : String 1454: Function IBExtractIdentifier( Dialect : Integer; Value : String) : String 1455: Function IBQuoteIdentifier( Dialect : Integer; Value : String) : String
1456: Function IBAddIBParamSQLForDetail(Params:TParams;SQL:string;Native:Boolean;Dialect:Integer):string
1457: \textbf{ Procedure} \ \ \texttt{IBDecomposeDatabaseName} ( \texttt{DatabaseName} : \textbf{String}; \textbf{var} \ \ \texttt{ServerName}, \texttt{Protocol}, \texttt{DatabasePath} : \textbf{String}) \\
1458: Function 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: function IDispatchInvoke(Self:IDispatch;ProperSet:Boolean;const Name:String;Par:array of variant):variant
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(S1: 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; 1487: Function IncLimitClamp2( var B : Smallint; const Limit : Smallint; const Incr : Smallint) : Smallint;
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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) : Integer
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) : Integ 1527: Function IndexOfFloat( AList : TStringList; Value : Variant) : Integer 1528: Function IndexOfDate( AList : TStringList; Value : Variant) : Integer
                                                                                      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 A1 : 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) : TCollectionItem 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 : Totolor32): Integer;
1570: Function Intensity( const R, G, B : Single) : Single;
1571: Function InterestPayment(const Rate:Extended;Period,NPeriods:Integer;const PresentValue,
      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
1574: Function InternalRateOfReturn( const Guess: Extended; const CashFlows: array of Double): Extended
```

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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): Boolean
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: TParameters): Boolean
1613: 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;
                                                         : Boolean
1655: Function IsRectEmpty( const Rect : TRect)
1656: function IsRectEmpty(const Rect: TRect): 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
```

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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 IsValidDateDay( const AYear, ADayOfYear : Word) : Boolean
1675: Function IsValidDateTime(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 IsZerol(const A: Double; Epsilon: Double): Boolean //overload;
1697: function IsZero2(const A: Single; Epsilon: Single): Boolean //overload;
1698: Function ItemAtPos( Pos : TPoint; IgnoreTabHeight : 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 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 P1, 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
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:Bool):Bool;
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: \textbf{Function} \hspace{0.1cm} \texttt{MapDateTime}(\textbf{const} \hspace{0.1cm} \texttt{DateFormatType}: \textbf{string}; \hspace{0.1cm} \texttt{DateFormatString}; \hspace{0.1cm} \texttt{Value}: \textbf{string}; \texttt{ToCds}: \texttt{Boolean}): \hspace{0.1cm} \textbf{string}; \hspace{0.1cm} \texttt{String}; \hspace{0.1cm} \texttt{String}; \hspace{0.1cm} \texttt{DateFormatString}; \hspace{0.1cm} \texttt{
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 MaskIntlLiteralToChar( IChar : Char) : Char
1797: 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) : TniRegularExpressionMatchResul
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: Function MessageDlg(const Msg:string;DlgType:TMsgDlgType;Buttons:TMsgDlgButtons;HelpCtx:Longint): Integer;
1833: Function MessageDlg1(const
             {\tt Msg:string:} {\tt DlgType:TMsgDlgType:Buttons:TMsgDlgButtons:HelpCtx:Longint:DefaultButton:TMsgDlgBtn): Integer:{\tt Integer:DefaultButton:TMsgDlgBtn):DefaultButton:TMsgDlgBtn):DefaultButton:TMsgDlgBtn):DefaultButton:TMsgDlgBtn):DefaultButton:TMsgDlgBtn):DefaultButton:TMsgDlgBtn):DefaultButton:TMsgDlgBtn):DefaultButton:TMsgDlgBtn):DefaultButton:TMsgDlgBtn):DefaultButton:TMsgDlgBtn):DefaultButton:TMsgDlgBtn):DefaultButton:TMsgDlgBtn):DefaultButton:TMsgDlgBtn):DefaultButton:TMsgDlgBtn):DefaultButton:TMsgDlgBtn):DefaultButton:TMsgDlgBtn):DefaultButton:TMsgDlgBtn):DefaultButton:TMsgDlgBtn):DefaultButton:TMsgDlgBtn):DefaultButton:TMsgDlgBtn):DefaultButton:TMsgDlgBtn):DefaultButton:TMsgDlgBtn):DefaultButton:TMsgDlgBtn):DefaultButton:TMsgDlgBtn):DefaultButton:TMsgDlgBtn):DefaultButton:TMsgDlgBtn):DefaultButton:TMsgDlgBtn):DefaultButton:TMsgDlgBtn):DefaultButton:TMsgDlgBtn):DefaultButton:TMsgDlgBtn):DefaultButton:TMsgDlgBtn):DefaultButton:TMsgDlgBtn):DefaultButton:TMsgDlgBtn):DefaultButton:TMsgDlgBtn):DefaultButton:TMsgDlgBtn):DefaultButton:TMsgDlgBtn):DefaultButton:TMsgDlgBtn):DefaultButton:TMsgDlgBtn):DefaultButton:TMsgDlgBtn):DefaultButton:TMsgDlgBtn):DefaultButton:TMsgDlgBtn):DefaultButton:TMsgDlgBtn):DefaultButton:TMsgDlgBtn):DefaultButton:TMsgDlgBtn):DefaultButton:TMsgDlgBtn):DefaultButton:TMsgDlgBtn):DefaultButton:TMsgDlgBtn):DefaultButton:TMsgDlgBtn):DefaultButton:TMsgDlgBtn):DefaultButton:TMsgDlgBtn):DefaultButton:TMsgDlgBtn):DefaultButton:TMsgDlgBtn):DefaultButton:TMsgDlgBtn):DefaultButton:TMsgDlgBtn):DefaultButton:TMsgDlgBtn):DefaultButton:TMsgDlgBtn):DefaultButton:TMsgDlgBtn):DefaultButton:TMsgDlgBtn):DefaultButton:TMsgDlgBtn):DefaultButton:TMsgDlgBtn):DefaultButton:TMsgDlgBtn):DefaultButton:TMsgDlgBtn):DefaultButton:TMsgDlgBtn):DefaultButton:TMsgDlgBtn):DefaultButton:TMsgDlgBtn):DefaultButton:TMsgDlgBtn):DefaultButton:TMsgDlgBtn):DefaultButton:TMsgDlgBtn):DefaultButton:TMsgDlgBtn):DefaultButton:TMsgDlgBtn):DefaultButton:TMsgDlgBtn):DefaultButton:TMsgDlgBtn):DefaultButton:TMsgDlgBtn):DefaultButton:TMsgDlgB
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;

1836: Function MessageDlgPosHelp( const Msg : string; DlgType : TMsgDlgType; Buttons : TMsgDlgButtons; HelpCtx :
             Longint; X, Y : Integer; const HelpFileName : string) : Integer;
```

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1837: Function MessageDlgPosHelp1( 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): Int64
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) :
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
1917: Function NEWBOTTOMLINE : 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
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
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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
1955: 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
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 PadLCh( 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 PacthPredictor(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
```

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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)
2040: Function PointAssign( const X, Y : Integer) : TPoint 2042: Function PointDist( const P1, P2 : TPoint) : Double;
2043: function PointDist(const P1,P2: TFloatPoint): Double;
2044: Function PointDist(const P1, P2: TFloatPoint): Double;
2045: function PointDist2(const P1, P2: TPoint): Double;
2046: Function PointEqual( const P1, P2: TPoint): Boolean
2047: Function PointTsNull( 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: \textbf{Function} \ \texttt{PosInStrArray} (\textbf{const} \ \texttt{SearchStr:string}; \texttt{Contents:array} \ \textbf{of} \ \textbf{string}; \textbf{const} \ \texttt{CaseSensitive:Boolean}) : \texttt{Integer} \ \textbf{ontents:array} \ \textbf{of} \ \textbf{string}; \textbf{const} \ \texttt{CaseSensitive:Boolean}) : \texttt{Integer} \ \textbf{ontents:array} \ \textbf{ontents:array} \ \textbf{of} \ \textbf{string}; \textbf{const} \ \texttt{CaseSensitive:Boolean}) : \texttt{Integer} \ \textbf{ontents:array} \ \textbf{of} \ \textbf{ontents:array} \ \textbf{on
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,
          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;
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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 OuervPerformanceCounter1(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 RectEqual( const R: TRect): Boolean
2176: Function RectIncludesPoint( 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
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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( Altem : 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
       {\tt HostName: String): Bool;}
2252: Function Revert : HResult
2253: Function RGB(R,G,B: Byte): TColor;
2254: Function RGB2BGR( const Color: TColor): TColor 2255: Function RGB2TColor( R, G, B: Byte): TColor
2256: Function RGBTOWebColorName( 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
2265: Function ROR (AVal : LongWord; AShift : Byte) : LongWord
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;
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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: \textbf{Function} \ \texttt{RunDLL32} \\ \textbf{(const} \ \texttt{ModuleNa,FuncName,CmdLine:string;WaitForCompletion:Bool;CmdShow:Integer):Boolean} \\ \textbf{(const} \ \texttt{ModuleNa,FuncName,CmdLine:string;WaitForCompletion:Boolean):Boolean} \\ \textbf{(const} \ \texttt{ModuleNa,FuncName,CmdLine:string;WaitForCompletion:Boolean):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
2280: Function S_DecryptCRC32( const Cr: string; StartKey, MultKey, AddKey: integer): 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 SameDateTime(sonst A, B: TDateTime): 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: Function SearchBuf(Buf:PChar; BufLen:Integer;SelStart,SelLength:Integer;SearchString:String;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 2352: Function SecondOfTheWeek( const AValue : TDateTime) : LongWord 2353: Function SecondOfTheYear( const AValue : TDateTime) : LongWord
2354: Function SecondsBetween( const ANow, AThen : TDateTime) : Int64
```

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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
2360: Function SelectDirectory( var Directory: string; Options: TSelectDirOpts; HelpCtx:Longint): Boolean; 2361: Function SelectDirectory1( const Caption: string; const Root: WideString; var Directory: string;
Options: TSelectDirExtOpts; Parent: TWinControl): Boolean;
2362: Function SelectImage( var AFileName: string; const Extensions, Filter: string): Boolean
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 SendCmd1( 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 SetBit( const Value : Shortint; const Bit : TBitRange) : Shortint;
2379: Function SetBit2( const Value : Smallint; const Bit : TBitRange) : 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): TC
2388: Function SetColorRed( const Color: TColor; const Red: Byte): TColor
                                                                                                                           : 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: \textbf{ function } Shell \texttt{Execute} (\texttt{hWnd:HWND;Operation,FileN,Parameters,Dir:\textbf{string};ShowCmd:Integer):integer;\textbf{stdcall}; \\ \texttt{ShowCmd:Integer):integer;\textbf{stdcall};} \\ \texttt{ShowCmd:Integer;\textbf{stdcall};} \\ \texttt{S
2417: function Shellexecute2(hwnd: HWND; const FileName: string):integer; stdcall;
2418: Function ShellExecute3(aFilename: string; aParameters: string; aCommand:TS_ShellExecuteCmd): string; 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
2439: Function SleepEx( dwMilliseconds : DWORD; bAlertable : BOOL) : DWORD
2440: Function SmallPoint(X, Y: Integer): TSmallPoint)
2441: Function Soundex( const AText : string; ALength : TSoundexLength) : string
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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 StartOfADay1( const AYear, ADayOfYear: Word): TDateTime;
2458: Function StartOfAMonth( const AYear, AMonth : Word) : TDateTime
2459: Function StartOfAWeek( const AYear, AWeekOfYear: Word; const ADayOfWeek: Word): TDateTime 2460: Function StartOfAYear( 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
2466: Function StartsStr( const ASubText, AText : string) : Boolean 2466: Function StartsText( 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 Stream?WideString(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) : string; const sSuffix : string) : boolean
2511: Function StrHtmlEncode( 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
2528: Function StringToStringArray( const str : string; const delim : string) : TStringDynArray
2529: Function StringWidth( S : string) : Integer
2530: Function StrInternetToDateTime( Value : string) : TDateTime
```

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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 \colon \textbf{Function} \ \ \texttt{StrLessPrefix} ( \ \textbf{const} \ \ \textbf{sString} : \ \textbf{string} ; \ \textbf{const} \ \ \texttt{sPrefix} : \ \textbf{string}) : \ \textbf{string} ) 
2540: Function StrLessSuffix( const sString: string; const sSuffix: string): string
2541: Function StrLiComp( Strl, 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 StrToBod( 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(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; PofmatSettings: TrotmatSettings): Extended;
2581: Function StrToFloatDef2(S:string; Default: Extended): Extended;
2582: Function StrToCurr(S:string): Currency;
2583: Function StrToCurr2(S:string; FormatSettings: TFormatSettings): Currency;
2584: Function StrToCurrDef(S: string; Default: Currency): Currency;
2585: Function StrToCurrDef(S: string; Default: Currency; FormatSettings: TFormatSettings): Currency;
2586: Function StrToTime2(S: string; Default: Currency; FormatSettings: TFormatSettings): Currency;
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: Function StrToDateTime2(S: string; FormatSettings: TFormatSettings): TDateTime;
2592: Function StrToDateTimeDef(S: string; Default: TDateTime): TDateTime;
2593: \textbf{Function} \ \texttt{StrToFloatRegionalIndependent} (\texttt{aValue: String}; \texttt{aDecimalSymbol: Char}; \texttt{aDigitGroupSymbol: Char}) : \ \texttt{Extended String}; \texttt{aDigitGroupSymbol: Char}; \texttt{aDigitGroupSymbo
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
2617: Function SumPairProductFloatArray( const X, Y: TDynFloatArray): Float
2618: Function SumSquareDiffFloatArray( const B: TDynFloatArray; Diff: Float): Float
2619: Function SumSquareFloatArray( const B : TDynFloatArray) : Float
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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
       Function TaskMessageDlg(const Title,
       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;
2645: 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
2700: Function TokenSymbolIs( const S : string) : Boolean
2701: function TokenSymbolIs(S:String):Boolean
2702: Function Tomorrow : TDateTime
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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;
2700: 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: Function TryEncodeDateMonthWeek(const AY, AMonth, AWeekOfMonth, ADayofWeek: Word; var AValue: TDateTime): Boolean
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: \textbf{ Function } \texttt{TryEncodeDayOfWeekInMonth} \\ (\textbf{const.} \ \texttt{AYear,AMonth,ANthDayOfWeek,ADayOfWeek:Word}) \\ \textbf{out} \\ (\textbf{const.} \ \texttt{AYear,AMonth,ANthDayOfWeek,ADayOfWeek:Word}) \\ \textbf{out} \\ \textbf{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: Function UnixDateTimeToDelphiDateTime( UnixDateTime : Cardinal) : 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 UnlockRegion( liboriset : Longitation CB : Large. 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 URLEncode( 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 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
2785: Function UTF8UpperCase( const S: UTF8string): UTF8string
2786: Function ValidFieldIndex(FieldIndex: Integer): Boolean
2787: Function ValidParentForm(control: TControl): TForm
```

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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)
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 VarlsType( const V : Variant; AVarType : TVarType) : Variant 2826: Function VarlsType( 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; 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;
2874: Function VectorDot( const V1, V2: TFloatPoint): Double
2875: function VectorDot(const V1,V2: TFloatPoint): Double;
2876: Function VectorLengthSqr( const V : TFloatPoint) : Double
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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 WebColorToRGBG (WebColor : Integer): Integer 2897: Function wGet(aURL, afile: string): boolean;
2898: Function wGet2(aURL, afile: string): boolean;
                                                                               //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
2906: Function WeeksInAYear( const ANow, AThen: TDateTime): Integer
2907: Function WeeksInAYear( const AYear: Word): Word
2908: Function WeeksInYear( const AYear: TDateTime): Word
2909: Function WeeksInYear( 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 xrc : 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
2920: 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 AMinutes : 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
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
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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;
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
3001:
3003: from JvVCLUtils;
3005: { Windows resources (bitmaps and icons) VCL-oriented routines }
3006: procedure DrawBitmapTransparent(Dest:TCanvas;DstX,DstY:Integer;Bitmap:TBitmap;TransparentColor:TColor);
3007: procedure DrawBitmapRectTransparent(Dest: TCanvas;DstX,
      DstY:Int;SrcRect:TRect;Bitmap:TBitmap;TransparColor:TColor);
3008: procedure StretchBitmapRectTransparent(Dest: TCanvas; DstX, DstX, 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,
        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;
      X, Y, Index: Integer; HighlightColor, GrayColor: TColor; DrawHighlight: Boolean);
3021:
3022: {
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;
3027: {STEDEF WIN32}
3028: function CreateIconFromBitmap(Bitmap: TBitmap; TransparentColor: TColor): TIcon;
3029: { $ENDIF }
3030: { Service routines }
3031: procedure NotImplemented;
3032: procedure ResourceNotFound(ResID: PChar);
3033: function PointInRect(const P: TPoint; const R: TRect): Boolean;
3034: function PointInPolyRgn(const P: TPoint; const Points: array of TPoint): Boolean;
3035: function PaletteColor(Color: TColor): Longint;
3036: function WidthOf(R: TRect): Integer; 3037: function HeightOf(R: TRect): Integer;
3038: procedure PaintInverseRect(const RectOrg, RectEnd: TPoint);
3039: procedure DrawInvertFrame(ScreenRect: TRect; Width: Integer);
3040: procedure CopyParentImage(Control: TControl; Dest: TCanvas);
3041: procedure Delay(MSecs: Longint);
3042: procedure CenterControl(Control: TControl);
3043: Function PaletteEntries( Palette : HPALETTE) : Integer
3044: Function WindowClassName( Wnd : HWND) : string
3045: Function ScreenWorkArea : TRect
3046: Procedure MoveWindowOrg( DC : HDC; DX, DY : Integer)
3047: Procedure SwitchToWindow( Wnd : HWND; Restore : Boolean)
3048: Procedure ActivateWindow( Wnd : HWND)
3049: Procedure ShowWinNoAnimate( Handle : HWND; CmdShow : Integer)
3050: Procedure CenterWindow( Wnd : HWND)
3051: Procedure ShadeRect( DC : HDC; const Rect : TRect)
3052: Procedure KillMessage( Wnd : HWND; Msg : Cardinal)
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3053: Function DialogsToPixelsX( Dlgs : Word) : Word
3054: Function DialogsToPixelsY( Dlgs : Word) : Word
3055: Function PixelsToDialogsX( Pixs : Word)
                                                             Word
3056: Function PixelsToDialogsY( Pixs : Word)
                                                          : Word
3057: {$IFDEF WIN32}
3058: procedure ShowMDIClientEdge(ClientHandle: THandle; ShowEdge: Boolean);
3059: function MakeVariant(const Values: array of Variant): Variant;
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;
3065: function FindPrevInstance(const MainFormClass: ShortString; const ATitle: string): HWND;
3066: function ActivatePrevInstance(const MainFormClass: ShortString; const ATitle: string): Boolean;
3067:
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: {STENDER WIN32}
3081: function IsLibrary: Boolean;
3082: <mark>($ENDIF)</mark>
3083: { Gradient filling routine }
3084: type TFillDirection = (fdTopToBottom, fdBottomToTop, fdLeftToRight, fdRightToLeft);
3085: procedure GradientFillRect(Canvas: TCanvas; ARect: TRect; StartColor, EndColor: TColor; Direction:
       TFillDirection; Colors: Byte);
3086: { String routines }
3087: function GetEnvVar(const VarName: string): string;
3088: function AnsiUpperFirstChar(const S: string): string;
3089: function StringToPChar(var S: string): PChar;
3090: function StrPAlloc(const S: string): PChar;
3091: procedure SplitCommandLine(const CmdLine: string; var ExeName, Params: string);
3092: function DropT(const S: string): string;
3093: { Memory routines }
3094: function AllocMemo(Size: Longint): Pointer;
3095: function ReallocMemo(fpBlock: Pointer; Size: Longint): Pointer;
3096: procedure FreeMemo(var fpBlock: Pointer);
3097: function GetMemoSize(fpBlock: Pointer): Longint;
3098: function CompareMem(fpBlock1, fpBlock2: Pointer; Size: Cardinal): Boolean;
3099: {$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 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
       AddDelphiFunction('Function IsAnAllResult( const AModalResult : TModalResult) : Boolean
3108:
3109:
         Function InitWndProc( HWindow : HWnd; Message, WParam : Longint; LParam : Longint) : Longint
        AddConstantN('CTL3D_ALL', 'LongWord').SetUInt( $FFFF);

//Procedure ChangeBiDiModeAlignment( var Alignment: TAlignment)
3110:
3111:
3112:
        //Function SendAppMessage( Msg : Cardinal; WParam, LParam : Longint) : Longint
        //Procedure MoveWindowOrg( DC : HDC; DX, DY : Integer)
Procedure SetImeMode( hWnd : HWND; Mode : TImeMode)
Procedure SetImeName( Name : TImeName)
3113:
3114:
3115:
        Function Win32NLSEnableIME( hWnd : HWND; Enable : Boolean) : Boolean
        Function Imm32GetContext( hWnd : HWND) : HIMC
3117:
        Function Imm32ReleaseContext( hWnd : HWND; hImc : HIMC) : Boolean
3118:
        Function Imm32GetConversionStatus( hImc : HIMC; var Conversion, Sentence : longword) : Boolean Function Imm32SetConversionStatus( hImc : HIMC; Conversion, Sentence : longword) : Boolean Function Imm32SetOpenStatus( hImc : HIMC; fOpen : Boolean) : Boolean
3119:
3120:
3121:
3122: // Function Imm32SetCompositionWindow( hImc : HIMC; lpCompForm : PCOMPOSITIONFORM) : Boolean
        //Function Imm32SetCompositionFont( hImc : HIMC; lpLogfont : PLOGFONTA) : Boolean
Function Imm32GetCompositionString(hImc:HIMC;dWord1:longword;lpBuf:string;dwBufLen:longint):Longint
3123:
3124:
        Function Imm32IsIME( hKl : longword) : Boolean
Function Imm32NotifyIME( hImc : HIMC; dwAction, dwIndex, dwValue:longword):Boolean
3125:
3126:
3127:
        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;
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
```

```
3140: // calculate the desktop icon text color based on the desktop background color
3141: function SelectColorByLuminance(AColor, DarkColor, BrightColor: TColor): TColor;
3142: type TJvHTMLCalcType = (htmlShow, htmlCalcWidth, htmlCalcHeight, htmlHyperLink);
3143:
3144: procedure HTMLDrawTextEx(Canvas: TCanvas; Rect: TRect;
        const State: TOwnerDrawState; const Text: string; var Width: Integer;
3145:
         CalcType: TJvHTMLCalcType; MouseX, MouseY: Integer; var MouseOnLink: Boolean;
3146:
         var LinkName: string; Scale: Integer = 100); overload;
3148: procedure HTMLDrawTextEx(Canvas: TCanvas; Rect: TRect;
3149:
        const State: TOwnerDrawState; const Text: string; var Width, Height: Integer;
3150:
         CalcType: TJvHTMLCalcType; MouseX, MouseY: Integer; var MouseOnLink: Boolean;
         var LinkName: string; Scale: Integer = 100); overload;
3151:
3152: function HTMLDrawText(Canvas: TCanvas; Rect: TRect;
3153: const State: TOwnerDrawState; const Text: string; Scale: Integer = 100): string; 3154: function HTMLDrawTextHL(Canvas: TCanvas; Rect: TRect;
3155:
        const State: TOwnerDrawState; const Text: string; MouseX, MouseY: Integer;
         Scale: Integer = 100): string;
3157: function HTMLPlainText(const Text: string): string;
3158: function HTMLTextExtent(Canvas: TCanvas; Rect: TRect;
        const State: TOwnerDrawState; const Text: string; Scale: Integer = 100): TSize;
3159:
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
3175: //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 RefreshOuery( Ouery: 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: \textbf{ Procedure } \texttt{InternalRestoreFields(DataSet:TDataSet;IniFile:TObject; \textbf{const} \; \texttt{Section:string}; \texttt{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 StrMaskSOL( 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)
3224: Const('TrueExpr','String').SetString( '0=0
3225: Const('sdfStandard16','String').SetString( '''"'mm''/''dd''/''yyyy''"''
3226: Const('sdfStandard32','String').SetString( '''''''dd/mm/yyyy''''''
```

```
Const('sdfOracle','String').SetString('"TO_DATE(''"dd/mm/yyyy"'', ''DD/MM/YYYY'')"
3227:
        Const('sdfInterbase','String').SetString('"CAST(''"mm"/"dd"/"yyyy"'' AS DATE)
3228:
                                                         "CONVERT(datetime, ''"mm"/"dd"/"yyyy"
        Const('sdfMSSQL','String').SetString('
3230:
        AddTypeS('Largeint', 'Longint
3231:
        addTypeS('TIFException', '(ErNoError, erCannotImport, erInvalidType, ErInternalError, '+
           'erInvalidHeader, erInvalidOpcode, erInvalidOpcodeParameter, erNoMainProc, erOutOfGlobalVarsRange, '+
'erOutOfProcRange, ErOutOfRange, erOutOfStackRange, ErTypeMismatch, erUnexpectedEof, '+
3232:
3233:
          'erVersionError, ErDivideByZero, ErMathError,erCouldNotCallProc, erOutofRecordRange, '+
'erOutOfMemory,erException,erNullPointerException,erNullVariantErrorerInterfaceNotSupportederError);
3234:
3235:
3236: (*
3237: procedure SIRegister_JclIniFiles(CL: TPSPascalCompiler);
3239:
        Function JIniReadBool( const FileName, Section, Line : string) : Boolean
        Function JIniReadInteger( const FileName, Section, Line : string) : Integer
Function JIniReadString( const FileName, Section, Line : string) : string
3240:
3241:
3242:
        Procedure JIniWriteBool( const FileName, Section, Line : string; Value : Boolean)
        Procedure JIniWriteInteger( const FileName, Section, Line : string; Value : Integer)
3244:
        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:
3248:
3249: (* === compile-time registration functions === *)
3250: (*----
3251:
      procedure SIRegister_JclDateTime(CL: TPSPascalCompiler);
3252:
       begin
3253:
        'UnixTimeStart','LongInt').SetInt( 25569);
        Function JEncodeDate( const Year : Integer; Month, Day : Word) : TDateTime
3254:
        Procedure JDecodeDate( Date : TDateTime; var Year, Month, Day : Word);
3255:
        Procedure DecodeDate1( Date : TDateTime; var Year : Integer; var Month, Day : Word);
        Procedure DecodeDate2( Date : TDateTime; var Year, Month, Day : Integer);
3257:
3258:
        \textbf{Function} \ \texttt{CenturyOfDate}(\ \textbf{const}\ \texttt{DateTime}\ :\ \texttt{TDateTime})\ :\ \texttt{Integer}
        Function CenturyBaseYear( const DateTime : TDateTime) : Integer
3259:
        Function DayOfDate( const DateTime: TDateTime): Integer
Function MonthOfDate( const DateTime: TDateTime): Integer
3260:
3261:
        Function YearOfDate( const DateTime : TDateTime) : Integer
3262:
3263:
        Function JDayOfTheYear( const DateTime : TDateTime; var Year : Integer) : Integer;
Function DayOfTheYearl( const DateTime : TDateTime) : Integer;
3264:
        Function DayOfTheYearToDateTime( const Year, Day : Integer) : TDateTime
Function HourOfTime( const DateTime : TDateTime) : Integer
3265:
3266:
3267:
        Function MinuteOfTime( const DateTime : TDateTime) : Integer
        Function SecondOfTime( const DateTime : TDateTime) : Integer
3268:
        Function GetISOYearNumberOfDays( const Year : Word) : Word
3269:
        Function IsISOLongYear( const Year : Word) : Boolean;
3270:
3271:
        Function IsISOLongYearl( const DateTime : TDateTime) : Boolean;
Function IsODayOfWeek( const DateTime : TDateTime) : Word
3272:
        Function JISOWeekNumber( DateTime : TDateTime; var YearOfWeekNumber, WeekDay : Integer) : Integer;
3273:
        Function ISOWeekNumber1( DateTime : TDateTime; var YearOfWeekNumber : Integer) : Integer;
3275:
        Function ISOWeekNumber2( DateTime : TDateTime) : Integer;
        Function ISOWeekToDateTime( const Year, Week, Day : Integer) : TDateTime
Function JIsLeapYear( const Year : Integer) : Boolean;
3276:
3277:
3278:
        Function IsLeapYear1( const DateTime : TDateTime) : Boolean;
        Function JDaysInMonth( const DateTime : TDateTime) : Integer
3279:
3280:
        Function Make4DigitYear( Year, Pivot : Integer) : Integer
        Function JMakeYear4Digit( Year, WindowsillYear: Integer): Integer
Function JEasterSunday( const Year: Integer): TDateTime // TDosDateTime', 'Integer
3281:
3282:
        Function JFormatDateTime( Form : string; DateTime : TDateTime) : string
3283:
        Function FATDatesEqual( const FileTime1, FileTime2 : Int64) : Boolean;
3284:
3285:
        \textbf{Function} \ \ \texttt{FATDatesEqual1( const FileTime1, FileTime2 : TFileTime) : Boolean;} \\
3286:
        Function HoursToMSecs( Hours : Integer) : Integer
3287:
        Function MinutesToMSecs( Minutes : Integer) : Integer
3288:
        Function SecondsToMSecs( Seconds : Integer) : Integer
3289:
        Function TimeOfDateTimeToSeconds( DateTime : TDateTime) : Integer
3290:
        Function TimeOfDateTimeToMSecs( DateTime : TDateTime) : Integer
        Function DateTimeToLocalDateTime( DateTime : TDateTime) : TDateTime
Function LocalDateTimeToDateTime( DateTime : TDateTime) : TDateTime
3291:
        Function DateTimeToDosDateTime( const DateTime : TDateTime) : TDosDateTime
3293:
3294:
        \textbf{Function} \  \, \texttt{JDateTimeToFileTime(DateTime:TDateTime):TFileTime}
3295:
        Function JDateTimeToSystemTime( DateTime: TDateTime): TSystemTime;
        Procedure DateTimeToSystemTime1( DateTime : TDateTime; var SysTime : TSystemTime);
3296:
        Function LocalDateTimeToFileTime( DateTime : TDateTime) : FileTime
3297:
3298:
        Function DosDateTimeToDateTime( const DosTime : TDosDateTime) : TDateTime
        Function JDosDateTimeToFileTime( DosTime : TDosDateTime) : TFileTime;
Procedure DosDateTimeToFileTime1( DTH, DTL : Word; FT : TFileTime);
3299:
3300:
3301:
        Function DosDateTimeToSystemTime( const DosTime: TDosDateTime): TSystemTime
        Function DosDateTimeToSystemInne( const FileTime: TFileTime) : TDateTime

Function JFileTimeToDateTime( const FileTime: TFileTime) : TDateTime
3302:
3303:
        Function FileTimeToLocalDateTime( const FileTime : TFileTime) : TDateTime
Function JFileTimeToDosDateTime( const FileTime : TFileTime) : TDosDateTime;
3304:
3305:
        Procedure FileTimeToDosDateTime1( const FileTime : TFileTime; var Date, Time : Word);
3307:
        \textbf{Function} \  \, \texttt{JFileTimeToSystemTime(} \  \, \textbf{const} \  \, \texttt{FileTime:} \  \, \texttt{TFileTime)} \  \, \texttt{:} \  \, \texttt{TSystemTime;}
        Procedure FileTimeToSystemTime1( const FileTime : TFileTime; var ST : TSystemTime);
3308:
        Function FileTimeToStr( const FileTime : TFileTime) : string
3309:
        Function SystemTimeToDosDateTime( const SystemTime: TSystemTime): TDosDateTime
3310:
        Function JSystemTimeToFileTime( const SystemTime : TSystemTime) : TFileTime
3311:
        Procedure SystemTimeToFileTime1( const SystemTime : TSystemTime; FTime : TFileTime);
3312:
        Function SystemTimeToStr( const SystemTime : TSystemTime) : string
Function CreationDateTimeOfFile( const Sr : TSearchRec) : TDateTime
3313:
3314:
        Function LastAccessDateTimeOfFile( const Sr : TSearchRec) : TDateTime
```

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3316:
        Function LastWriteDateTimeOfFile( const Sr : TSearchRec) : TDateTime
          TJclUnixTime32', 'Longword
3317:
        Function JDateTimeToUnixTime( DateTime : TDateTime) : TJclUnixTime32
3319:
        Function JUnixTimeToDateTime( const UnixTime : TJclUnixTime32) : TDateTime
        Function FileTimeToUnixTime( const AValue : TFileTime) : TJclUnixTime32
3320:
        Function UnixTimeToFileTime( const AValue : TJclUnixTime32) : TFileTime
3321:
        Function JNullStamp : TTimeStamp
3322:
        Function JCompareTimeStamps( const Stamp1, Stamp2 : TTimeStamp) : Int64
3323:
        Function JEqualTimeStamps (const Stamp1, Stamp2 : TTimeStamp) :
Function JIsNullTimeStamp( const Stamp : TTimeStamp) : Boolean
3324:
                                                                                         : Boolean
3325:
        Function TimeStampDOW( const Stamp : TTimeStamp) : Integer
3326:
        Function FirstWeekDay( const Year, Month : Integer; var DOW : Integer) : Integer;
3328:
        Function FirstWeekDay1( const Year, Month : Integer) : Integer;
        Function LastWeekDay( const Year, Month : Integer; var DOW : Integer) : Integer;
Function LastWeekDay1( const Year, Month : Integer) : Integer;
3329:
3330:
3331:
        Function IndexedWeekDay( const Year, Month : Integer; Index : Integer) : Integer
        Function FirstWeekendDay( const Year, Month : Integer; var DOW : Integer) : Integer;
3333:
        Function FirstWeekendDayl( const Year, Month : Integer) : Integer;
        Function LastWeekendDay( const Year, Month : Integer; var DOW : Integer) : Integer; Function LastWeekendDay1( const Year, Month : Integer) : Integer;
3334:
3335:
         Function IndexedWeekendDay( const Year, Month : Integer; Index : Integer) : Integer
        Function FirstDayOfWeek( const Year, Month, DayOfWeek: Integer): Integer
3337:
        Function LastDayOfWeek( const Year, Month, DayOfWeek: Integer): Integer
Function IndexedDayOfWeek( const Year, Month, DayOfWeek, Index: Integer): Integer
FindClass('TOBJECT'),'EJclDateTimeError
3338:
3339:
3340:
3341: end;
3342:
3343:
       procedure SIRegister_JclMiscel2(CL: TPSPascalCompiler);
3344: begin
       Function SetDisplayResolution( const XRes, YRes : DWORD) : Longint
        Function CreateDOSProcessRedirected( const CommandLine, InputFile, OutputFile: string): Boolean Function WinExec32( const Cmd : string; const CmdShow: Integer): Boolean
3346:
3347:
        Function WinExec32AndWait( const Cmd : string; const CmdShow : Integer) : Cardinal
3348:
        Function WinExec32AndRedirectOutput(const Cmd: string; var Output: string; RawOutput:Boolean):Cardinal
3349:
          TJclKillLevel', '( klNormal, klNoSignal, klTimeOut )
        Function ExitWindows( ExitCode : Cardinal) : Boolean Function LogOffOS( KillLevel : TJclKillLevel) : Boolean
3351:
3352:
        Function PowerOffOS( KillLevel : TJclKillLevel) : Boolean
Function ShutDownOS( KillLevel : TJclKillLevel) : Boolean
3353:
3354:
3355:
        Function RebootOS( KillLevel : TJclKillLevel) : Boolean
3356:
        Function HibernateOS( Force, DisableWakeEvents : Boolean) : Boolean
        Function SuspendOS( Force, DisableWakeEvents : Boolean) : Boolean
3357:
        Function ShutDownDialog( const DialogMessage:string;TimeOut:DWORD;Force,Reboot:Boolean):Boolean;
3358:
        Function ShutDownDialog1(const MachineName,DialogMessage:string;TimeOut:DWORD;Force,Reboot:Bool):Bool;
        \textbf{Function} \ \texttt{AbortShutDown} \ : \ \texttt{Boolean};
3360:
        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)
3365:
3366:
        Procedure CreateProcAsUserEx(const UserDomain, UserName, Password, CommandLine: string; const
3367:
       Environment: PChar);
3368:
         // with Add(EJclCreateProcessError) do
3369:
        end;
3370:
3371:
3372: procedure SIRegister_JclAnsiStrings(CL: TPSPascalCompiler);
3373: begin
        //'AnsiSigns','Set').SetSet(['-', '+']);
'C1_UPPER','LongWord').SetUInt( $0001);
'C1_LOWER','LongWord').SetUInt( $0002);
3374:
3375:
3376:
3377:
        'C1_DIGIT', 'LongWord').SetUInt( $0004);
3378:
         'C1 SPACE', 'LongWord').SetUInt( $0008);
3379:
         'C1_PUNCT', 'LongWord').SetUInt( $0010);
        'C1_CNTRL', 'LongWord').SetUInt( $0020);
         'C1_BLANK', 'LongWord').SetUInt( $0040);
3381:
        'C1_XDIGIT','LongWord').SetUInt( $0080);
3382:
         'C1_ALPHA','LongWord').SetUInt( $0100);
3383:
         AnsiChar',
                        'Char
3384:
        Function StrIsAlpha( const S : AnsiString) : Boolean
3385:
3386:
        Function StrIsAlphaNum( const S : AnsiString) : Boolean
3387:
        \textbf{Function} \  \, \texttt{StrIsAlphaNumUnderscore}( \  \, \textbf{const} \  \, \texttt{S} \  \, \texttt{:} \  \, \texttt{AnsiString}) \  \, \texttt{:} \  \, \texttt{Boolean}
3388:
        Function StrContainsChars(const S:AnsiString;Chars:TSysCharSet; CheckAll : Boolean) : Boolean
        Function StrConsistsOfNumberChars( const S : AnsiString) : Boolean Function StrIsDigit( const S : AnsiString) : Boolean
3389:
3390:
3391:
        Function StrIsSubset( const S : AnsiString; const ValidChars : TSysCharSet) : Boolean
Function StrSame( const S1, S2 : AnsiString) : Boolean
//Function StrCenter( const S : AnsiString; L : Integer; C : AnsiChar) : AnsiString
3392:
3393:
        Function StrCharPosLower( const S : AnsiString; CharPos : Integer) : AnsiString Function StrCharPosUpper( const S : AnsiString; CharPos : Integer) : AnsiString
3395:
        Function StrDoubleQuote( const S : AnsiString) : AnsiString
3396:
        Function StrEnsureNoPrefix( const Prefix, Text : AnsiString) : AnsiString
Function StrEnsureNoSuffix( const Suffix, Text : AnsiString) : AnsiString
3397:
3398:
        Function StrEnsurePrefix( const Prefix, Text : AnsiString) : AnsiString
Function StrEnsureSuffix( const Suffix, Text : AnsiString) : AnsiString
3399:
3400:
        Function StrEscapedToString( const S : AnsiString) : AnsiString
Function JStrLower( const S : AnsiString) : AnsiString
3401:
3402:
        Procedure StrLowerInPlace( var S : AnsiString)
```

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3404:
         ///Procedure StrLowerBuff( S : PAnsiChar)
        Procedure JStrMove( var Dest:AnsiString; const Source:AnsiString; const ToIndex,FromIndex,Count:Integer;
3405:
        Function StrPadLeft( const S : AnsiString; Len : Integer; C : AnsiChar) : AnsiString
Function StrPadRight( const S : AnsiString; Len : Integer; C : AnsiChar) : AnsiString
3407:
3408:
        Function StrProper( const S : AnsiString) : AnsiString
        //Procedure StrProperBuff( S : PAnsiChar)
Function StrQuote( const S : AnsiString; C : AnsiChar) : AnsiString
3409:
3410:
        Function StrRemoveChars(const S: AnsiString; const Chars: TSysCharSet): AnsiString Function StrKeepChars(const S: AnsiString; const Chars: TSysCharSet): AnsiString
3411:
3412:
3413:
        Procedure JStrReplace(var S:AnsiString; const Search, Replace : AnsiString; Flags : TReplaceFlags)
Function StrReplaceChar( const S : AnsiString; const Source, Replace : AnsiChar) : AnsiString
3414:
         Function StrReplaceChars(const S:AnsiString;const Chars:TSysCharSet;Replace:AnsiChar):AnsiString
3416:
        Function StrReplaceButChars(const S:AnsiString;const Chars:TSysCharSet;Replace:AnsiChar):AnsiString;
        Function StrRepeat( const S : AnsiString; Count : Integer) : AnsiString
Function StrRepeatLength( const S : AnsiString; const L : Integer) : AnsiString
3417:
3418:
3419:
        Function StrReverse( const S : AnsiString) : AnsiString
         Procedure StrReverseInPlace( var S : AnsiString)
3421:
        \textbf{Function} \  \, \texttt{StrSingleQuote}(\  \, \textbf{const} \  \, \texttt{S} \  \, \texttt{:} \  \, \texttt{AnsiString}) \  \, \texttt{:} \  \, \texttt{AnsiString}
        Function StrSmartCase( const S : AnsiString; Delimiters : TSysCharSet) : AnsiString
3422:
3423:
        Function StrStringToEscaped( const S : AnsiString) : AnsiString
         Function StrStripNonNumberChars( const S : AnsiString) : AnsiString
        Function StrToHex( const Source : AnsiString) : AnsiString
3425:
        Function StrTrimCharLeft( const S : AnsiString; C : AnsiChar) : AnsiString
Function StrTrimCharsLeft( const S : AnsiString; const Chars : TSysCharSet) : AnsiString
3426:
3427:
        Function StrTrimCharRight( const S : AnsiString; C : AnsiChar) : AnsiString
3428:
3429:
         Function StrTrimCharsRight( const S : AnsiString; const Chars : TSysCharSet) : AnsiString
3430:
        Function StrTrimQuotes( const S : AnsiString) : AnsiString
3431:
        Function JStrUpper( const S : AnsiString) : AnsiString
3432:
        Procedure StrUpperInPlace( var S : AnsiString)
         //Procedure StrUpperBuff( S : PAnsiChar)
3434:
        Function StrOemToAnsi( const S : AnsiString) : AnsiString
        Function StrAnsiToOem( const S : AnsiString) : AnsiString
3435:
3436:
        Procedure StrAddRef( var S : AnsiString)
3437:
        Function StrAllocSize( const S : AnsiString) : Longint
        Procedure StrDecRef( var S : AnsiString)
3439:
         //Function StrLen( S : PAnsiChar) : Integer
        Function StrLength( const S : AnsiString) : Longint
Function StrRefCount( const S : AnsiString) : Longint
3440:
3441:
3442:
        Procedure StrResetLength( var S : AnsiString)
3443:
        Function StrCharCount( const S : AnsiString; C : AnsiChar) : Integer
        Function StrCharsCount( const S : AnsiString; Chars : TSysCharSet) : Integer
Function StrStrCount( const S, SubS : AnsiString) : Integer
Function StrCompare( const S1, S2 : AnsiString) : Integer
3444:
3445:
3446:
         Function StrCompareRange( const S1, S2 : AnsiString; const Index, Count : Integer) : Integer
        //Function StrFillChar( const C : AnsiChar; Count : Integer) : AnsiString; Function StrFillCharl( const C : Char; Count : Integer) : AnsiString;
3448:
3449:
        Function StrFillChar(const C: Char; Count: Integer): string)');
3450:
         Function IntFillChar(const I: Integer; Count: Integer): string)')
3451:
3452:
        Function ByteFillChar(const B: Byte; Count: Integer): string)
3453:
        Function ArrFillChar(const AC: Char; Count: Integer): TCharArray; ');
        Function ArrByteFillChar(const AB: Char; Count: Integer): TByteArray;
3454:
        Function StrFind( const Substr, S : AnsiString; const Index : 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 Function StrILastPos( const SubStr, S : AnsiString) : Integer Function StrIPos( const SubStr, S : AnsiString) : Integer
3457:
3458:
3459:
         Function StrIsOneOf( const S : AnsiString; const List : array of AnsiString) : Boolean
3460:
        Function StrLastPos( const SubStr, S : AnsiString) : Integer
3461:
3462:
        Function StrMatch( const Substr, S : AnsiString; const Index : Integer) : Integer
        Function StrMatches(const Substr, S : AnsiString; const Index : Integer) : Boolean
Function StrNIPos(const S, SubStr : AnsiString; N : Integer) : Integer
3463:
3464:
         Function StrNPos( const S, SubStr : AnsiString; N : Integer) : Integer
3466:
        \textbf{Function} \ \ \texttt{StrPrefixIndex}( \ \ \textbf{const} \ \ \texttt{S} \ : \ \ \texttt{AnsiString}; \ \ \textbf{const} \ \ \texttt{Prefixes} \ : \ \ \textbf{array} \ \ \textbf{of} \ \ \texttt{AnsiString}) \ : \ \ \texttt{Integer}
        Function StrSearch( const Substr, S : AnsiString; const Index : Integer) : Integer
3467:
        //Function StrAfter( const SubStr, S : AnsiString) : AnsiString
//Function StrBefore( const SubStr, S : AnsiString) : AnsiString
3468:
3469:
        Function StrBetween( const S : AnsiString; const Start, Stop : AnsiChar) : AnsiString
3470:
        Function StrBetween const S · AnsiString; Const Start, Stop · AnsiChar) · Afficient StrBetween const S · AnsiString; N · Integer) · AnsiString Function StrLeft( const S · AnsiString; Count · Integer) · AnsiString Function StrMid( const S · AnsiString; Start, Count · Integer) · AnsiString Function StrRestOf( const S · AnsiString; N · Integer) · AnsiString
3471:
3472:
3473:
3474:
3475:
        Function StrRight( const S : AnsiString; Count : Integer) : AnsiString
3476:
        Function CharEqualNoCase( const C1, C2 : AnsiChar) : Boolean
Function CharIsAlpha( const C : AnsiChar) : Boolean
3477:
        Function CharlsAlphaNum( const C : AnsiChar) : Boolean
3478:
3479:
        Function CharlsBlank( const C : AnsiChar) : Boolean
3480:
        Function CharlsControl( const C : AnsiChar) : Boolean
        Function CharIsDelete( const C : AnsiChar) : Boolean
3481:
        Function CharlsDigit( const C : AnsiChar) : Boolean
3482:
         Function CharlsLower( const C : AnsiChar) : Boolean
3483:
3484:
        Function CharlsNumberChar( const C : AnsiChar) : Boolean
3485:
        Function CharlsPrintable( const C : AnsiChar) : Boolean
        Function CharlsPunctuation( const C : AnsiChar) : Boolean
3486:
        Function CharlsReturn( const C : AnsiChar) : Boolean
3487:
        Function CharlsSpace(const C : AnsiChar) : Boolean
Function CharlsUpper(const C : AnsiChar) : Boolean
3488:
3489:
        3490:
3491:
        Function CharHex( const C : AnsiChar) : Byte
```

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3493:
            Function CharLower( const C : AnsiChar) : AnsiChar
             Function CharUpper( const C : AnsiChar) : AnsiChar
3494:
             Function CharToggleCase( const C : AnsiChar) : AnsiChar
3496:
             Function CharPos( const S : AnsiString; const C : AnsiChar; const Index : Integer) : Integer
            Function CharLastPos(const S : AnsiString; const C : AnsiChar; const Index : Integer) : Integer Function CharlPos(const S : AnsiString; C : AnsiChar; const Index : Integer) : Integer Function CharReplace(var S : AnsiString; const Search, Replace : AnsiChar) : Integer
3497:
3498:
3499:
            Procedure StrToStrings(S, Sep: AnsiString; const List: TStrings; const AllowEmptyString: Boolean)

Procedure StrToStrings(S, Sep: AnsiString; const List: TStrings; const AllowEmptyString: Boolean)
3500:
3501:
             \textbf{Function} \ \texttt{StringsToStr}(\textbf{const} \ \texttt{List:TStrings}; \textbf{const} \ \texttt{Sep:AnsiString}; \textbf{const} \ \texttt{AllowEmptyString:Bool):AnsiString}; \textbf{const} \ \texttt{AllowEmptyString:Bool):AnsiString}; \textbf{const} \ \texttt{AllowEmptyString:Bool}; \textbf{const} \ \texttt{AnsiString}; \textbf{const} \ \texttt{AllowEmptyString:Bool}; \textbf{const} \ \texttt{AnsiString}; \textbf{const} \ \texttt{AllowEmptyString:Bool}; \textbf{const} \ \texttt{AnsiString}; \textbf{co
3502:
            Procedure TrimStrings( const List: TStrings; DeleteIfEmpty: Boolean)
Procedure TrimStringsRight( const List: TStrings; DeleteIfEmpty: Boolean)
3503:
            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
3508:
             Function FileToString( const FileName : AnsiString) : AnsiString
            Procedure StringToFile( const FileName, Contents : AnsiString; Append : Boolean)
Function StrToken( var S : AnsiString; Separator : AnsiChar) : AnsiString
3509:
3510:
            Procedure StrTokens( const S : AnsiString; Separator : AnsiChar; AnsiChar; Const List : TStrings)

Procedure StrTokenToStrings( S : AnsiString; Separator : AnsiChar; const List : TStrings)
3511:
3512:
            //Function StrWord(\ var\ S: PAnsiChar;\ out\ Word: AnsiString): Boolean Function <math>StrToFloatSafe(\ const\ S: AnsiString): Float
3514:
3515:
            \textbf{Function} \ \texttt{StrToIntSafe}( \ \textbf{const} \ \texttt{S} \ : \ \texttt{AnsiString}) \ : \ \texttt{Integer}
            Procedure StrNormIndex( const StrLen : Integer; var Index : Integer; var Count : Integer);
Function ArrayOf( List : TStrings) : TDynStringArrav;
3516:
3517:
3518:
               EJclStringError', 'EJclError
3519:
             function IsClass(Address: TObject): Boolean;
             function IsObject(Address: TObject): Boolean;
3520:
3521:
             // Console Utilities
             //function ReadKey: Char;
3522:
3523:
             function IntToStrZeroPad(Value, Count: Integer): AnsiString;
3524:
             function JclGUIDToString(const GUID: TGUID): string;
3525:
            function JclStringToGUID(const S: string): TGUID;
3526:
3527:
3528:
3529:
3530: ******* uPSI_JvDBUtil;
3531: Procedure ExecuteSQLScript(Base:TDataBase; const Script: string; const
           Commit:TCommit;OnProgress:TOnProgress; const UserData : Integer)
3532: Function GetQueryResult( const DatabaseName, SQL: string): Variant
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 CopyRecord( Dataset : IDataset)
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
3548: //JVBDEUtils
3549: Function CreateDbLocate : TJVLocateObject
           //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)
3576: Procedure ReindexTable( Table : TTable)
3577: Procedure BdeFlushBuffers
3578: Function GetNativeHandle( Database : TDatabase; Buffer : Pointer; BufSize : Integer) : Pointer
```

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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: const
       AsciiCharSet: string; AsciiDelimited: Boolean; AsciiDelimiter, AsciiSeparator: Char; MaxRecordCount: Longint);
3583: Procedure
       ImportDataSet(Source:TBDEDataSet;DestTable:TTable;MaxRecordCount:Longint;Mappings:TStrings;Mode:TBatchMode);
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(Date1, 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 }
3612: { 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;
3620:
3621: ****
           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
         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 }
       function GetLineByPos(const S: string; const Pos: Integer): Integer;
      \{\ \textit{GetXYByPos is same to previous function, but returns}\ \textit{X position in line too}\}
3638:
3639: procedure GetXYByPos(const S: string; const Pos: Integer; var X, Y: Integer);
      ReplaceString searches for all substrings, OldPattern, in a string, S, and replaces them with NewPattern } function ReplaceString(S: string; const OldPattern, NewPattern: string): string;
3640:
         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.
         This functions are needed because Oem2Ansi and Ansi2Oem functions sometimes works sucks \}
3649:
3650: procedure Dos2Win(var S: string);
      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} 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;
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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 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);
           { 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: <mark>{$IFNDEF BCB1}</mark>
3712: { BrowseForFolder displays Browse For Folder dialog
           function BrowseForFolder(const Handle: HWND; const Title: string; var Folder: string): Boolean;
3714:
          {$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: \textbf{Function} \ \texttt{BrowseDirectory} \\ (\textbf{var} \ \texttt{AFolderName:string;const} \ \texttt{DlgText:string;} \\ \texttt{AHelpContext:} \\ \texttt{ThelpContext):} \\ \texttt{Boolean} \\ \texttt{Boo
3718: Function BrowseComputer(var AComputerName:string;const DlgText:string;AHelpContext:THelpContext):Boolean
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;
3726: { ExePath returns ExtractFilePath(ParamStr(0)) }
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 }
            { TTFontSelected returns True, if True Type font is selected in specified device context }
3732:
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 }
3737: { SetWindowTop put window to top without recreating window
3738: procedure SetWindowTop(const Handle: HWND; const Top: Boolean);
           {**** other routines }
3739:
            \{ KeyPressed returns True, if Key VK is now pressed \}
3740:
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: {SIRNDEF 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
3748:
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;
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3752: { $ENDIF }
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);
3766:
       {# from FileCtrl}
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; PosBeg, 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.
3781:
         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);
         **** files routines - }
3783:
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;
       { Execute executes other program and waiting for it terminating, then return its Exit Code
3789:
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.
         Note: TIninFile.ReadSection function reads only strings with '=' symbol.}
3793:
3794: function IniReadSection(const IniFileName: TFileName; const Section: string; Ss: TStrings): Boolean;
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: {SENDIF 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);
       { RATextOutEx same with RATextOut function, but can calculate needed height for correct output
3812:
3813:
       function RATextOutEx(Canvas: TCanvas: const R,RClip:TRect;const S: string;const CalcHeight:Boolean):Integer;
       { RATTextCalcHeight calculate needed height to correct output, using RATTextOut or RATTextOutEx functions } function RATTextCalcHeight(Canvas: TCanvas; const R: TRect; const S: string): Integer;
3814:
3816:
       { Cinema draws some visual effect }
3817: 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;
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 }
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3838: function AppMinimized: Boolean;
3839: { MessageBox is Application.MessageBox with string (not PChar) parameters.
                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: TMsgDlgButtons; DefButton:TMsgDlgBtn; 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);
3851: 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: Rect: TRect; const State: TOwnerDrawState; const Text: string; 3857: const HideSelColor: Boolean; var PlainItem: string; var Width: Integer; CalcWidth: Boolean);
3858: {ex. Text parameter: Item 1 <bbookd://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;
               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 }
3869: 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);
3874:
           { following functions are not documented because they are don't work properly, so don't use them } {SIFDEF COMPILER2}
3875:
3876: function CompareMem(Pl, P2: Pointer; Length: Integer): Boolean; assembler;
3877:
3878:
3879: procedure SIRegister JvBoxProcs(CL: TPSPascalCompiler);
3880: begin
             Procedure BoxMoveSelectedItems( SrcList, DstList : TWinControl)
             Procedure BoxMoveAllItems( SrcList, DstList : TWinControl)
Procedure BoxDragOver(List:TWinControl;Source:TObject;X,Y:Int;State:TDragState;var
3882:
3883:
           Accept:Bool;Sorted:Bool;
3884: Procedure BoxMoveFocusedItem( List : TWinControl; DstIndex : Integer)
             Procedure BoxMoveSelected( List: TWinControl; Items: TStrings)
Procedure BoxSetItem( List: TWinControl; Index: Integer)
Function BoxGetFirstSelection( List: TWinControl): Integer
3885:
3886:
3887:
             Function BoxCanDropItem( List : TWinControl; X, Y : Integer; var DragIndex : Integer) : Boolean
3888:
3889: end;
3890:
3891:
           procedure SIRegister_JvCsvParse(CL: TPSPascalCompiler);
3892: begin
3893:
             Const('MaxInitStrNum','LongInt').SetInt( 9);
3894: Function JvAnsiStrSplit( const InString: AnsiString; const SplitChar, QuoteChar:AnsiChar; var OutStrings
            : array of AnsiString; MaxSplit : Integer) : Integer
3895: Function JuStrSplit( const InString: string; const SplitChar, QuoteChar: Char; var OutStrings: array of string; MaxSplit: Integer): Integer
3896: \textbf{Function} \  \, \text{JvAnsiStrSplitStrings} \\ (\textbf{const} \  \, \text{InStr:AnsiString}) \\ \textbf{const} \  \, \text{SplitChar}, \\ \textbf{const} \\ \textbf
            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 3920: Procedure JvGetVarReference(S1, S2, SIdx: PAnsiChar); 3921: Procedure JvEatWhitespaceChars(S1: PAnsiChar); 3922: Procedure JvEatWhitespaceChars(S1: PWideChar);
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3923: Function GetTokenCount : Integer
3924: Procedure ResetTokenCount
3925: end
3926:
3927: procedure SIRegister_JvDBQueryParamsForm(CL: TPSPascalCompiler);
3928: begin
3929: SIRegister TJvOueryParamsDialog(CL);
3930: Function EditQueryParams( DataSet : TDataSet; List : TParams; AHelpContext : THelpContext) : Boolean
3931: end;
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);
       ar\{ AddSlash returns string with added slash char to Dir parameter, if needed \}
3953:
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);
       \{ 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.
         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;
       { EmptyStr returns true if the given string contains only character from the EmptyChars. }
3975:
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;
3985: { 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 DelSpace1(const S: string): string;
       { DelSpace1 return a string with all non-single white spaces removed. }
3989:
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. } 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. } 4011: function Copy2Symb(const S: string; Symb: Char): string;
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4012: { Copy2Symb returns a substring of a string S from begining to first character Symb. } 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. }
       function Copy2Space(const S: string): string;
4015:
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
         white space and removes this substring from S.
4019:
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;
4024: { WordCount given a set of word delimiters, returns number of words in S. }
4025: 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;
4029: function ExtractDelimited(N: Integer; const S: string; const Delims: TCharSet): string;
4030: { ExtractWord, ExtractWordPos and ExtractDelimited given a set of word
         delimiters, return the N'th word in S. }
4031:
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;
4035: { IsWordPresent given a set of word delimiters, returns True if word W is present in string S. } 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 to a single character. } 4041: function FindPart(const HelpWilds, InputStr: string): Integer;
       { FindPart compares a string with '?' and another, returns the position of HelpWilds in InputStr. }
4042:
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
4047: function XorDecode(const Key, Source: string): string: 4048: { ** Command line routines ** }
       4049:
4050: function FindCmdLineSwitch(const Switch: string; SwitchChars: TCharSet; IgnoreCase: Boolean): Boolean;
4051:
4052: function GetCmdLineArg(const Switch: string; SwitchChars: TCharSet): string;
      { ** Numeric string handling routines ** }
function Numb2USA(const S: string): string;
4053:
4054:
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.
4065:
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. }
4070: 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
4074 .
         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);
4079:
      \textbf{procedure} \ \texttt{CopyFileEx(const} \ \ \texttt{FileName,DestName:string;OverwriteReadOnly,ShellDialog:Boolean;ProgressControl:} \\
       TControl);
4080: procedure MoveFile(const FileName, DestName: TFileName);
4081: procedure MoveFileEx(const FileName, DestName: TFileName; ShellDialog: Boolean);
        $IFDEF COMPILER4_UP
4082:
4083: function GetFileSize(const FileName: string): Int64;
4084:
4085: function GetFileSize(const FileName: string): Longint;
4086: {$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);
4097: function FileLock(Handle: Integer; Offset, LockSize: Longint): Integer; 4098: {$IFDEF COMPILER4_UP} overload; {$ENDIF} 4099: {$IFDEF COMPILER4_UP}
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4100: function FileLock(Handle: Integer; Offset, LockSize: Int64): Integer; overload;
4101: { SENDIF
4102: function FileUnlock(Handle: Integer; Offset, LockSize: Longint): Integer;
4103: {$IFDEF COMPILER4_UP} overload; {$ENDIF} 4104: {$IFDEF COMPILER4_UP}
4105: function FileUnlock(Handle: Integer; Offset, LockSize: Int64): Integer; overload;
4106: { $ENDIF }
4107: function GetTempDir: string;
4108: function GetWindowsDir: string;
4109: function GetSystemDir: string
4110: function BrowseDirectory(var AFolderName:string; const DlgText:string; AHelpContext:THelpContext): Boolean;
4111: { $ I F D E F W I N 3 2 }
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:
4129: Procedure VariantClear( var V : Variant)
4130: Procedure VariantArrayRedim( var V : Variant; High : Integer)
       Procedure VariantCast( const src : Variant; var dst : Variant; vt : Integer)
4131:
       Procedure VariantCpy( const src : Variant; var dst : Variant)
4132:
4133:
       Procedure VariantAdd( const src : Variant; var dst : Variant)
       Procedure VariantSub( const src : Variant; var dst : Variant
4135:
       Procedure VariantMul( const src : Variant; var dst : Variant)
4136:
       Procedure VariantDiv( const src : Variant; var dst : Variant)
       Procedure VariantMod( const src : Variant; var dst : Variant
4137:
4138:
       Procedure VariantAnd( const src : Variant; var dst : Variant)
       Procedure VariantOr( const src : Variant; var dst : Variant)
4139:
4140:
       Procedure VariantXor( const src : Variant; var dst : Variant)
       Procedure VariantShl( const src : Variant; var dst : Variant)
4141:
4142:
       Procedure VariantShr( const src : Variant; var dst : Variant)
4143:
       Function VariantAdd2( const V1 : Variant; const V2 : Variant)
4144:
       Function VariantSub2( const V1 : Variant; const V2 : Variant) : Variant
4145:
       Function VariantMul2( const V1 : Variant; const V2 : Variant)
                                                                          : Variant
       Function VariantDiv2( const V1 : Variant; const V2 : Variant) : Variant
4146:
4147:
       Function VariantMod2( const V1 : Variant; const V2 : Variant)
                                                                           : Variant
       Function VariantAnd2( const V1 : Variant; const V2 : Variant)
4149:
       Function VariantOr2( const V1 : Variant; const V2 : Variant) : Variant
       Function VariantXor2( const V1 : Variant; const V2 : Variant) : Variant
4150:
       Function VariantShl2( const V1 : Variant; const V2 : Variant) : Variant
4151:
       Function VariantShr2( const V1 : Variant; const V2 : Variant) : Variant
       Function VariantNot( const V1 : Variant) : Variant
4153:
4154:
       Function VariantNeg( const V1 : Variant) : Variant
       Function VariantGetElement( const V : Variant; i1 : integer) : Variant;
4155:
       Function VariantGetElement1( const V : Variant; i1, i2 : integer) : Variant;
4156:
       Function VariantGetElement2( const V : Variant; i1, i2, i3 : integer) : Variant;
4157:
      Function VariantGetElement3( const V : Variant; i1, i2, i3, i4 : integer) : Variant;
Function VariantGetElement4( const V : Variant; i1, i2, i3, i4, i5 : integer) : Variant;
Procedure VariantPutElement( var V : Variant; const data : Variant; i1 : integer);
4158:
4159:
4160:
       Procedure VariantPutElement1( var V : Variant; const data : Variant; i1, i2 : integer);
       Procedure VariantPutElement2( var V : Variant; const data : Variant; i1, i2, i3 : integer);
4162:
4163: 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;
       HAlign: TglHorAlign: VAlign: TglVertAlign; Style: TglTextStyle; Fnt: TFont; Flags: UINT);
4182:
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;
      Style: TglTextStyle; ADelineated, ASupress3D: Boolean; FontColor, DelinColor, HighlightColor, ShadowColor: TColor; Illumination: TJvgIllumination; Gradient: TJvgGradient; Font: TFont);
4185:
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;
4188:
4189: procedure GradientBox(DC: HDC; R: TRect; Gradient: TJvgGradient; PenStyle, PenWidth: Integer);
4190: procedure ChangeBitmapColor(Bitmap: TBitmap; FromColor, ToColor: TColor);
       procedure DrawBitmapExt(DC: HDC: { DC - background & result} SourceBitmap: TBitmap; R: TRect; X, Y: Integer; //...X,Y _in_ rect!
4101 .
4192:
          BitmapOption: TglWallpaperOption; DrawState: TglDrawState;
4193:
          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!
          BitmapOption: TglWallpaperOption; DrawState: TglDrawState;
4197:
4198:
          ATransparent: Boolean; TransparentColor: TColor; DisabledMaskColor: TColor);
4199: procedure BringParentWindowToTop(Wnd: TWinControl);
4200: function GetParentForm(Control: TControl): TForm;
4201: procedure GetWindowImageFrom(Control: TWinControl; X,Y:Integer; ADrawChildWindows: Boolean; DC: HDC) 4202: procedure GetWindowImage(Control: TWinControl; ADrawSelf, ADrawChildWindows: Boolean; DC: HDC);
4203: procedure GetParentImageRect(Control: TControl; Rect: TRect; DC: HDC);
       function CreateRotatedFont(F: TFont; Escapement: Integer): HFONT;
4205: function FindMainWindow(const AWndClass, AWndTitle: string): THandle;
4206: procedure CalcShadowAndHighlightColors(BaseColor: TColor; Colors: TJvgLabelColors);
4206: procedure CalcShadowAndHighIIghtColors(BaseColor: TColor; Colors: TJvgLabelColors);
4207: 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);
4215: procedure SaveComponentToTextFile(Component: TComponent; const FileName: string);
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): TglFileType;
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;
          4231:
4232: function LineStart(Buffer, BufPos: PChar): PChar
4233: function ExtractStrings(Separators, WhiteSpace: TSysCharSet; Content: PChar; +
           'Strings: TStrings): Integer
         Function TestStreamFormat( Stream : TStream) : TStreamOriginalFormat
4235:
4236:
         Procedure RegisterClass( AClass : TPersistentClass)
         Procedure RegisterClasses( AClasses: array of TPersistentClass)

Procedure RegisterClassAlias( AClass: TPersistentClass; const Alias: string)
4237:
4238:
         Procedure UnRegisterClass( AClass : TPersistentClass)
4239:
4240:
         Procedure UnRegisterClasses( AClasses : array of TPersistentClass)
         Procedure UnRegisterModuleClasses( Module : HMODULE)
Function FindGlobalComponent( const Name : string) : TComponent
Function IsUniqueGlobalComponentName( const Name : string) : Boolean
4241:
4242:
4243:
         Function InitInheritedComponent( Instance : TComponent; RootAncestor : TClass) : Boolean
4244:
         Function InitComponentRes( const ResName : string; Instance : TComponent) : Boolean Function ReadComponentRes( const ResName : string; Instance : TComponent) : TComponent Function ReadComponentResEx( HInstance : THandle; const ResName : string) : TComponent
4245:
4246:
4247:
         Function ReadComponentResFile( const FileName : string; Instance : TComponent) :
                                                                                                                  TComponent
4249:
          \textbf{Procedure} \ \texttt{WriteComponentResFile(} \ \textbf{const} \ \texttt{FileName} \ : \ \textbf{string:} \ \texttt{Instance} \ : \ \texttt{TComponent)} 
4250:
         Procedure GlobalFixupReferences
         Procedure GetFixupReferenceNames( Root : TComponent; Names : TStrings)
4251:
         Procedure GetFixupInstanceNames(Root: TComponent; const ReferenceRootName string; Names: TStrings)
4252:
         Procedure RedirectFixupReferences( Root: TComponent; const OldRootName, NewRootName: string)
4253:
         Procedure RemoveFixupReferences( Root : TComponent; const RootName : string)
4254:
4255:
         \textbf{Procedure} \ \texttt{RemoveFixups} ( \ \texttt{Instance} \ : \ \texttt{TPersistent})
         Function FindNestedComponent( Root : TComponent; const NamePath : string) : TComponent
4256:
         Procedure BeginGlobalLoading
4257:
4258:
         Procedure NotifyGlobalLoading
         Procedure EndGlobalLoading
Function GetUltimateOwner1( ACollection : TCollection) : TPersistent;
4259:
4260:
         Function GetUltimateOwner( APersistent : TPersistent) : TPersistent;

// AddTypeS('TWndMethod', 'Procedure (var Message : TMessage)
4261:
4262:
4263:
          //Function MakeObjectInstance( Method : TWndMethod) : Pointer
         Procedure FreeObjectInstance( ObjectInstance : Pointer)
4264:
       // Function AllocateHWnd( Method : TWndMethod) : HWND
4265:
         Procedure DeallocateHWnd( Wnd : HWND)
        4267:
4268:
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 \colon \mathbf{Function} \  \, \mathsf{VarSQLTimeStampCreate}( \  \, \mathbf{const} \  \, \mathsf{ASQLTimeStamp} \  \, : \  \, \mathsf{TSQLTimeStamp}) \  \, : \  \, \mathsf{Variant}; 
4274: Function VarSQLTimeStamp : 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: string; var Pos: Integer): string;
4287: Function ExtractFieldName( const Fields: WideString; var Pos: Integer): WideString;
4288: //'Procedure RegisterFields( const FieldClasses : array of TFieldClass)
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: \textbf{Function} \ \ \texttt{GetFieldProperty}(\texttt{DataSet}: \texttt{TDataSet}; \ \texttt{Control}: \texttt{TComponent}; \ \textbf{const} \ \ \texttt{FieldName}: \ \texttt{WideString}): \ \ \texttt{TFieldname}: \
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;
         {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;
         {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);
         {selects akey=avalue from Src and returns recordset in Dst}
         procedure ListFilter(Src: TStringList; const AKey, AValue: string);
4338:
4339:
         {filters Src for akey=avalue}
4340: procedure ListOrderBy(Src: TStringList; const AKey: string; Numeric: Boolean);
         forders a tagged Src list by akey}
function PosStr(const FindString, SourceString: string;
4342:
4343:
            StartPos: Integer = 1): Integer;
4344: { PosStr searches the first occurrence of a substring FindString in a string
            given by SourceString with case sensitivity (upper and lower case characters are differed). This function returns the index value of the first character
4345:
4346:
4347:
            of a specified substring from which it occurs in a given string starting with
4348:
            StartPos character index. If a specified substring is not found Q_PosStr 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}
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
         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
4355:
         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);
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="jan1 dott verhoeven att wxx dott nl"
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;
4395: // same for an Integer
4396: function GetFloatValue(const AText, AName: string; ADefault: Extended): Extended;
         // 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;
         // 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;
            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;
            var RangeBegin: Integer; var RangeEnd: Integer): Boolean;
4418:
          // 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;
4422: // finds a text range backward, e.g. <TD>....</TD> case sensitive
4423: function BackPosRangeText(Start: Integer; const HeadString, TailString, SourceString: string;
            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;
         // 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;
         // 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]
{ PosIdx returns the index of the following the index of the following the index of the i
4445:
            PosIdx returns the index of the first appearance of SubStr in Str. The search starts at index "Index". }
4446:
4447: function PosIdx(const SubStr, S: string; Index: Integer = 0): Integer;
4448: function PosIdxW(const SubStr, S: WideString; Index: Integer = 0): Integer; 4449: function PosLastCharldx(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);
         GetEndPosCaret returns the caret position of the last char. For the position after the last char of Text you must add 1 to the returned X value. }
{ SubStrBySeparator returns substring from string, S, separated with Separator string} function SubStrBySeparator(const S:string:const Index:Integer:const
4465:
4466:
4467:
         Separator: string; StartIndex: Int=1): string;
4469: function SubStrBySeparatorW(const S:WideString;const Index:Int;const
         Separator:WideString;StartIndex:Int:WideString;
           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;
4477: { GetXYByPos is same as GetLineByPos, but returns X position in line as well} 4478: procedure GetXYByPos(const S: string; const Pos: Integer; var X, Y: Integer); 4479: procedure GetXYByPosW(const S: WideString; const Pos: Integer; var X, Y: Integer);
         { ReplaceString searches for all substrings, OldPattern,
4480:
4481:
             in a string, S, and replaces them with NewPattern }
4482: function ReplaceString(S: string; const OldPattern, NewPattern: string; StartIndex:Integer = 1):string;
4483: function ReplaceStringW(S: WideString; const OldPattern, NewPattern:
         WideString; StartIndex: Integer=1): WideString;
4484: { ConcatSep concatenate S1 and S2 strings with Separator. if S = '' then separator not included } 4485: function ConcatSep(const S1, S2, Separator: string): string; { SIFDEF SUPPORTS_INLINE } inline; { SENDIF
          SUPPORTS_INLINE }
           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
         SUPPORTS INLINE }
4488:
4489: { Next 4 function for russian chars transliterating.
            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 DosZWinRes(const S: AnsiString): AnsiString; inline; ($ENDIF SUPPORTS_INLINE 4494: function Win2DosRes(const S: AnsiString): AnsiString; inline; ($ENDIF SUPPORTS_INLINE 4494: function Win2DosRes(const S: AnsiString): AnsiString; inline; ($ENDIF SUPPORTS_INLINE 4494: function Win2DosRes(const S: AnsiString): AnsiString; inline; ($ENDIF SUPPORTS_INLINE 4494: function Win2DosRes(const S: AnsiString): AnsiString; inline; ($ENDIF SUPPORTS_INLINE 4494: function Win2DosRes(const S: AnsiString): AnsiString; inline; ($ENDIF SUPPORTS_INLINE 4494: function Win2DosRes(const S: AnsiString): AnsiString; inline; ($ENDIF SUPPORTS_INLINE 4494: function Win2DosRes(const S: AnsiString): AnsiString; inline; ($ENDIF SUPPORTS_INLINE 4494: function Win2DosRes(const S: AnsiString): AnsiString; inline; ($ENDIF SUPPORTS_INLINE 4494: function Win2DosRes(const S: AnsiString): AnsiString; inline; ($ENDIF SUPPORTS_INLINE 4494: function Win2DosRes(const S: AnsiString): AnsiString; inline; ($ENDIF SUPPORTS_INLINE 4494: function Win2DosRes(const S: AnsiString): AnsiString; inline; ($ENDIF SUPPORTS_INLINE 4494: function Win2DosRes(const S: AnsiString): AnsiString; inline; ($ENDIF SUPPORTS_INLINE 4494: function Win2DosRes(const S: AnsiString): AnsiString; inline; ($ENDIF SUPPORTS_INLINE 4494: function Win2DosRes(const S: AnsiString): AnsiString; inline; ($ENDIF SUPPORTS_INLINE 4494: function Win2DosRes(const S: AnsiString): AnsiString Windows Win2DosRes(const S: AnsiString): AnsiString Windows Win
         function Win2Koi(const S: AnsiString): AnsiString;
4496: { FillString fills the string Buffer with Count Chars }
4497: procedure FillString(var Buffer: string; Count: Integer; const Value: Char); overload;
4498: procedure FillString(var Buffer: string; StartIndex, Count: Integer; const Value: Char); overload;
         { MoveString copies Count Chars from Source to Dest }
         procedure MoveString(const Source: string; var Dest: string; Count: Integer); {$IFDEF SUPPORTS_INLINE}
4500:
inline; {$ENDIF SUPPORTS_INLINE} overload;
4501: procedure MoveString(const Source: string; SrcStartIdx: Integer; var Dest: string;
         DstStartIdx: Integer; Count: Integer); SIFDEF SUPPORTS_INLINE; inline; { SENDIF SUPPORTS_INLINE } overload; { FillWideChar fills Buffer with Count WideChars (2 Bytes) }
4504: procedure FillWideChar(var Buffer; Count: Integer; const Value: WideChar);
4505:
         { MoveWideChar copies Count WideChars from Source to Dest
4506: procedure MoveWideChar(const Source; var Dest;Count:Integer); ($IFDEF SUPPORTS_INLINE) inline; ($ENDIF
           SUPPORTS_INLINE }
4507: { FillNativeChar fills Buffer with Count NativeChars }
4508: procedure FillNativeChar(var Buffer; Count: Integer; const Value: Char); // D2009 internal error {$IFDEF SUPPORTS_INLINE} inline; {$ENDIF SUPPORTS_INLINE}
4509: { MoveWideChar copies Count WideChars from Source to Dest }
4510: procedure MoveNativeChar(const Source; var Dest; Count: Integer); // D2009 internal error ($IFDEF
         SUPPORTS_INLINE | inline; { $ENDIF SUPPORTS_INLINE }
         { IsSubString() compares the sub string to the string. Indices are 1th based. }
4512: function IsSubString(const S: string; StartIndex: Integer; const SubStr: string): Boolean;
         { Spaces returns string consists on N space chars }
4513:
         function Spaces(const N: Integer): string;
4514:
         { AddSpaces adds spaces to string S, if its Length is smaller than N } function AddSpaces(const S: string; const N: Integer): string; function SpacesW(const N: Integer): WideString;
4515:
4516:
4518: function AddSpacesW(const S: WideString; const N: Integer): WideString;
4519: { function LastDateRUS for russian users only } 4520: { returns date relative to current date: 'äâà ãíÿ íàçàã' } 4521: function LastDateRUS(const Dat: TDateTime): string;
4522: { CurrencyToStr format Currency, Cur, using ffCurrency float format}
4523: function CurrencyToStr(const Cur: Currency): string;
4524: { HasChar returns True, if Char, Ch, contains in string, S } 4525: function HasChar(const Ch: Char; const S: string): Boolean;
4526: function HasCharW(const Ch: WideChar; const S: WideString): Boolean; inline; ($ENDIF SUPPORTS_INLINE)
4527: function HasAnyChar(const Chars: string; const S: string): Boolean;
4528:
4529: function CharInSet(const Ch: AnsiChar;const SetOfChar:TSysCharSet):Boolean;inline; (SENDIF SUPPORTS_INLINE)
4530:
         {SENDIF ~COMPILER12 UP
4531: function CharInSetW(const Ch: WideChar; const SetOfChar: TSysCharSet):Boolean; inline; ($ENDIF
         SUPPORTS_INLINE }
```

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4532: function CountOfChar(const Ch: Char; const S: string): Integer;
4533: function DefStr(const S: string; Default: string): string; ($IFDEF SUPPORTS_INLINE) inline; ($ENDIF
         UPPORTS_INLINE }
4534 .
          StrLICompW2 is a faster replacement for JclUnicode.StrLICompW
4535: function StrLICompW2(S1, S2: PWideChar; MaxLen: Integer; 4536: function StrPosW(S, SubStr: PWideChar): PWideChar; 4537: function StrLenW(S: PWideChar): Integer;
4538: function TrimW(const S: WideString): WideString; (SIFDEF SUPPORTS_INLINE) inline; (SENDIF SUPPORTS_INLINE)
4539: function TrimLeftW(const S: WideString): WideString; {$IFDEF SUPPORTS_INLINE} inline; {$ENDIF
                TS TNLINE }
4540: function TrimRightW(const S: WideString): WideString; inline; ($ENDIF SUPPORTS_INLINE
4541: TPixelFormat', '( pfDevice, pf1bit, pf4bit, pf8bit, pf24bit )
4542: TMappingMethod',
                              '( mmHistogram, mmQuantize, mmTrunc784, mmTrunc666, mmTripel, mmGrayscale )
4543: Function GetBaletteBitmapFormat( Bitmap : TBitmap) : TPixelFormat 4544: Function GetPaletteBitmapFormat( Bitmap : TBitmap) : TPixelFormat
4545: Procedure SetBitmapPixelFormat( Bitmap: TBitmap; PixelFormat: TPixelFormat; Method: TMappingMethod)
4546: Function BitmapToMemoryStream(Bitmap:TBitmap;PixelFormat:TPixelFormat;Method:TMappingMethod):TMemoryStream;
4547: Procedure GrayscaleBitmap( Bitmap: TBitmap)
4548: Function BitmapToMemory( Bitmap: TBitmap; Colors: Integer): TStream
4549: Procedure SaveBitmapToFile( const Filename : string; Bitmap : TBitmap; Colors : Integer)
4550: Function ScreenPixelFormat :
                                             TPixelFormat
4551: Function ScreenColorCount : Integer
4552: Procedure TileImage( Canvas : TCanvas; Rect : TRect; Image : TGraphic)
4553: Function ZoomImage( ImageW, ImageH, MaxW, MaxH : Integer; Stretch : Boolean) : TPoint
            SIRegister_TJvGradient(CL);
4555:
4557: procedure SetDelimitedText(List: TStrings; const Text: string; Delimiter: Char);
4558: const
4559: {$IFDEF
          DefaultCaseSensitivity = False;
4560:
          {$ENDIF MSWINDOWS}
{$IFDEF UNIX}
4561:
4562:
4563:
          DefaultCaseSensitivity = True;
4564:
          { SENDIF UNIX }
4565: {
          GenTempFileName returns temporary file name on
4566: drive, there FileName is placed }
4567: function GenTempFileName(FileName: string): string;
4568: { GenTempFileNameExt same to previous function, but
          returning filename has given extension, FileExt )
4569:
4570: function GenTempFileNameExt(FileName: string; const FileExt: string): string;
       { ClearDir clears folder Dir } function ClearDir(const Dir: string): Boolean;
4571:
4572:
       { DeleteDir clears and than delete folder Dir
4574: 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;
4580:
          CaseSensitive: Boolean = DefaultCaseSensitivity): Boolean;
4581: function DeleteFiles(const Folder: TFileName; const Masks: string): Boolean;
       { LZFileExpand expand file, FileSource,
4583:
4584: into FileDest. Given file must be compressed, using MS Compress program } 4585: function LZFileExpand(const FileSource, FileDest: string): Boolean;
          FileGetInfo fills SearchRec record for specified file attributes}
4587:
4588: function FileGetInfo(FileName: TFileName; var SearchRec: TSearchRec): Boolean; 4589: { HasSubFolder returns True, if folder APath contains other folders } 4590: function HasSubFolder(APath: TFileName): Boolean;
4591: { IsEmptyFolder returns True, if there are no files or
4592.
          folders in given folder, APath}
4593: function IsEmptyFolder(APath: TFileName): Boolean;
       { AddSlash returns string with added slash Char to Dir parameter, if needed } function AddSlash(const Dir: TFileName): string; {\$IFDEF SUPPORTS_INLINE} inline; {\$ENDIF SUPPORTS_INLINE} { AddPath returns FileName with Path, if FileName not contain any path }
4594:
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 }
4602: function DeleteReadOnlyFile(const FileName: TFileName): Boolean;
       { HasParam returns True, if program running with specified parameter, Param }
4603:
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; {$IFDEF SUPPORTS_INLINE} inline; {$ENDIF 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;
4616: function KeyPressed(VK: Integer): Boolean;
4617: Function isKeypressed: boolean; //true if key on memo2 (shell output) is pressed
4618: { TrueInflateRect inflates rect in other method, than InflateRect API function }
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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;
       {**** string routines }
4640:
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,
         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,
4648:
         each line must be separated from another with CrLf sequence }
4649: function CountOfLines(const S: string): Integer;
4650: { DeleteLines deletes all lines from strings which in the words, words.
      The word of will be deleted from strings. }
procedure DeleteOfLines(Ss: TStrings; const Words: array of string);
4651:
4653: { DeleteEmptyLines deletes all empty lines from strings, Ss.
4654: Lines contained only spaces also deletes. } 4655: procedure DeleteEmptyLines(Ss: TStrings);
4656: { SQLAddWhere addes or modifies existing where-statement, where,
         to the strings, SQL. Note: If strings SQL allready contains where-statement,
4657:
4658:
         it must be started on the begining of any line }
4659: procedure SQLAddWhere(SQL: TStrings; const Where: string);
4660: {**** files routines - }
       { $IFDEF MSWINDOWS }
4662: { ResSaveToFile save resource named as Name with Typ type into file FileName.
4663: 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):
4666: function ResSaveToString(Instance: HINST; const Typ, Name: string; var S: string): Boolean;
4667: { $ENDIF MSWINDOWS }
4668: { IniReadSection read section, Section, from ini-file,
         IniFileName, into strings, Ss.This function reads ALL strings from specified section.
         Note: TIninFile.ReadSection function reads only strings with '=' symbol.}
4670:
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);
4675: { 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. }
       procedure RATextOut(Canvas: TCanvas; const R, RClip: TRect; const S: string);
4679:
4680:
       { 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
         correct output, using RATextOut or RATextOutEx functions }
4683:
4684: function RATextCalcHeight(Canvas: TCanvas; const R: TRect; const S: string): Integer;
4685: { Cinema draws some visual effect }
4686: procedure Cinema(Canvas: TCanvas; rS {Source}, rD {Dest}: TRect);
       { Roughed fills rect with special 3D pattern }
4688: procedure Roughed(ACanvas: TCanvas; const ARect: TRect; const AVert: Boolean);
4689: { 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;
4693: { TextHeight calculate text height for writing using standard desktop font } 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>iitalic ITALIC <c:Red>red<c:Green>green<c:blue>blue</i>' }
4700: function ItemHtDraw(Canvas: TCanvas; Rect: TRect;
4701: const State: TOwnerDrawState; const Text: string; const HideSelColor: Boolean): string; 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);
4709:
       { 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; { $ENDIF }
4732: function InvalidateRect(hWnd: HWND; lpRect: PRect; bErase: BOOL): BOOL; overload;
4733: { begin JvRLE } // (rom) changed API for inclusion in JCL
4734: procedure RleCompressTo(InStream, OutStream: TStream);
4735: procedure RleDecompressTo(InStream, OutStream: TStream);
4736: procedure RleCompress(Stream: TStream);
4737: procedure RleDecompress(Stream: TStream);
      { end JvRLE } { begin JvDateUtil }
4739: function CurrentYear: Word; [$IFDEF SUPPORTS_INLINE] inline; [$ENDIF SUPPORTS_INLINE] 4740: function IsLeapYear(AYear: Integer): Boolean;
4741: function DaysInAMonth(const AYear, AMonth: Word): Word;
4742: function DaysPerMonth(AYear, AMonth: Integer): Integer;
4743: function FirstDayOfPrevMonth: TDateTime;
4744: function LastDayOfPrevMonth: TDateTime;
4745: function FirstDayOfNextMonth: TDateTime;
4746: function ExtractDay(ADate: TDateTime): Word;
4747: function ExtractMonth(ADate: TDateTime): Word;
4748: function ExtractYear(ADate: TDateTime): Word;
4749: function IncDate(ADate: TDateTime; Days, Months, Years: Integer): TDateTime;
4750: function IncDay(ADate: TDateTime:Delta:Integer):TDateTime: inline: ($ENDIF SUPPORTS_INLINE)
4751: 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
4757: { 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 IncTime(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 ** }
4780:
        ($IFDEF UNIX)
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;
4787: { $ENDIF UNIX }
4788: function StrToOem(const AnsiStr: AnsiString): AnsiString;
4789: { StrToOem translates a string from the Windows character set into the OEM character set. } 4790: function OemToAnsiStr(const OemStr: AnsiString): AnsiString;
4791: { OemToAnsiStr translates a string from the OEM character set into the Windows character set. } 4792: function IsEmptyStr(const S: string; const EmptyChars: TSysCharSet): Boolean;
```

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4793: { EmptyStr returns True if the given string contains only character from the EmptyChars. } 4794: function ReplaceStr(const S, Srch, Replace: string): string;
          { Returns string with every occurrence of Srch string replaced with Replace string. }
          function DelSpace(const S: string): string;
4796 .
4797:
          { 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. }
4799:
          function DelBSpace(const S: string): string;
4800:
4801:
          { DelBSpace trims leading spaces from the given string. }
4802: function DelESpace(const S: string): string;
4803:
          { DelESpace trims trailing spaces from the given string. } function DelRSpace(const S: string): string;
4805:
          { DelRSpace trims leading and trailing spaces from the given string. }
4806: function DelSpacel(const S: string): string;
4807: { DelSpacel return a string with all non-single white spaces removed. }
4808: function Tab2Space(const S: string; Numb: Byte): string;
4809: { Tab2Space converts any tabulation character in the given string to the
4810 .
             Numb spaces characters.
4811: function NPos(const C: string; S: string; N: Integer): Integer;
          { NPos searches for a N-th position of substring C in a given string. } function MakeStr(C: Char; N: Integer): string; overload;
4812:
4814: {\(\sigma \) \(\sigma \)
4816: <mark>{$ENDIF !COMPILER12_UP}</mark>
4817: function MS(C: Char; N: Integer): string; <mark>{$IFDEF SUPPORTS_INLINE}</mark> inline; <mark>{$ENDIF SUPPORTS_INLINE}</mark>
4818:
          { MakeStr return a string of length N filled with character
4819: function AddChar(C: Char; const S: string; N: Integer): string;
4820: { AddChar return a string left-padded to length N with characters C. } 4821: function AddCharR(C: Char; const S: string; N: Integer): string;
          { AddCharR return a string right-padded to length N with characters C. }
4823: function LeftStr(const S: string; N: Integer): string;
4824: { LeftStr return a string right-padded to length N with blanks. } 4825: function RightStr(const S: string; N: Integer): string;
4826: { RightStr return a string left-padded to length N with blanks. } 4827: function CenterStr(const S: string; Len: Integer): string;
4828: { CenterStr centers the characters in the string based upon the Len specified.
4829: function CompStr(const S1, S2: string): Integer: [$IFDEF SUPPORTS_INLINE] inline; [$ENDIF SUPPORTS_INLINE] 4830: { CompStr compares S1 to S2, with case-sensitivity. The return value is
4831: -1 if S1 < S2, 0 if S1 = S2, or 1 if S1 > S2. }
4832: function CompText(const S1, S2: string):Integer; {$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;
          { Copy2SymbDel returns a substring of a string S from begining to first
4837:
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. }
          function Copy2SpaceDel(var S: string): string;
4842: { Copy2SpaceDel returns a substring of a string S from begining to first
4843:
             white space and removes this substring from S. }
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.
4846:
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. }
4851: function ExtractWord(N: Integer; const S: string; const WordDelims: TSysCharSet): string;
4852: function ExtractWordPos(N: Integer; const S: string; const WordPolims: TSysCharSet; var Pos: Integer): string; 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. }
4855:
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;
4860:
          \{ 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;
          { QuotedString returns the given string as a quoted string, using the provided Quote character. } function ExtractQuotedString(const S: string; Quote: Char): string;
4862:
4864: { ExtractQuotedString removes the Quote characters from the beginning and
4865: 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;
4869:
          { 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 ** }
4874: 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}
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;
```

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base equal to B and with the minimum number of digits (A) specified. }
4885 .
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: { $ IFDEF UNIX }
4907: function GetTempFileName(const Prefix: AnsiString): AnsiString;
4908: { $ENDIF UNIX }
4909: { begin JvFileUtil }
4910: function FileDateTime(const FileName: string): TDateTime;
4911: function HasAttr(const FileName: string; Attr: Integer): Boolean;
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;
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: { $ENDIF MSWINDOWS } 4932: { end JvFileUtil }
4933:
       // Works like PtInRect but includes all edges in comparision
4934: function PtInRectInclusive(R: TRect; Pt: TPoint): Boolean;
4935: // Works like PtInRect but excludes all edges from comparision
4936: function PtInRectExclusive(R: TRect; Pt: TPoint): Boolean;
4937: function FourDigitYear: Boolean; {$IFDEF SUPPORTS_DEPRECATED} deprecated; {$ENDIF}
4938: function IsFourDigitYear: Boolean;
4939: { moved from JvJVCLUTils }
4940: //Open an object with the shell (url or something like that) 4941: function OpenObject(const Value: string): Boolean; overload; 4942: function OpenObject(Value: PChar): Boolean; overload;
4943: {$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: <mark>{$ENDIF MSWINDOWS}</mark>
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 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
```

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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: \ // \ (\textit{rom}) \ \textit{SC\_MONITORPOWER} \ \textit{is documented as Win 95 only} (\textit{rom}) \ \textit{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);
4986: function GetRecentDocs: TStringList;
4987: { $ENDIF MSWINDOWS }
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;
5005: { returns the fractional value of pcValue} 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}
        NullEquivalentDate: TDateTime = 0.0;
5012: function DateIsNull(const pdtValue: TDateTime; const pdtKind: TdtKind): Boolean;
      // Replacement for Win32Check to avoid platform specific warnings in D6
5013:
5014: function OSCheck(RetVal: Boolean): Boolean;
5015: { Shortens a fully qualified Path name so that it can be drawn with a specified length limit.
         Same as FileCtrl.MinimizeName in functionality (but not implementation). Included here to
         not be forced to use FileCtrl unnecessarily }
5017:
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 RunD1132Internal(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: { SENDIF 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;
5052: procedure FreeMemo(var fpBlock: Pointer);
5053: function GetMemoSize(fpBlock: Pointer): Longint;
5054: function CompareMem(fpBlock1, fpBlock2: Pointer; Size: Cardinal): Boolean;
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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: { $$IFDEF 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
5076: { $ENDIF 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}
5086:
        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
5094:
5095: function TextToValText(const AValue: string): string;
5096: Function ExecRegExpr( const ARegExpr, AInputStr : RegExprString) : 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) :
5103: Function JExtractYear( ADate : TDateTime) : Word 5104: Function JExtractMonth( ADate : TDateTime) : Word
        Function JExtractDay( ADate : TDateTime) : Word
5105:
        Function ExtractHours( ATime : TDateTime) : Word
5106:
        Function ExtractMins( ATime : TDateTime) : Word
Function ExtractSecs( ATime : TDateTime) : Word
5107:
5108:
        Function ExtractMSecs( ATime : TDateTime) : Word
5109:
        Function FirstOfMonth( ADate : TDateTime) : TDateTime
5110:
        \textbf{Function} \ \ \texttt{GetDayOfNthDOW}(\ \ \texttt{Year}, \ \ \texttt{Month}, \ \ \texttt{DOW}, \ \ \texttt{N} \ : \ \ \texttt{Word}) \ : \ \ \texttt{Word}
5111:
        Function GetWeeksInMonth( Year, Month : Word; StartOfWeek : Integer) : Word
Procedure IncBorlDOW( var BorlDOW : Integer; N : Integer)
Procedure IncDOW( var DOW : TTFDayOfWeek; N : Integer)
5112:
5113:
5114:
5115:
        Procedure IncDays( var ADate : TDateTime; N : Integer)
5116:
        Procedure IncWeeks( var ADate : TDateTime; N : Integer)
        Procedure IncMonths( var ADate : TDateTime; N : Integer)
Procedure IncYears( var ADate : TDateTime; N : Integer)
Function EndOfMonth( ADate : TDateTime) : TDateTime
5117:
5118:
        Function IsFirstOfMonth( ADate : TDateTime) : Boolean
5120:
        Function IsEndOfMonth( ADate : TDateTime) : Boolean Procedure EnsureMonth( Month : Word)
5121:
5122:
        Procedure EnsureDOW( DOW : Word)
5123:
5124:
        Function EqualDates( D1, D2 : TDateTime) : Boolean
5125:
        Function Lesser( N1, N2 : Integer) : Integer
        Function Greater( N1, N2 : Integer) : Integer
Function GetDivLength( TotalLength, DivCount, DivNum : Integer) : Integer
Function GetDivNum( TotalLength, DivCount, X : Integer) : Integer
5126:
5127:
5128:
5129:
        Function GetDivStart( TotalLength, DivCount, DivNum : Integer) : Integer
5130:
        \textbf{Function} \  \, \texttt{DOWToBorl} \, ( \  \, \texttt{ADOW} \, : \, \, \texttt{TTFDayOfWeek} \, ) \, \, : \, \, \texttt{Integer}
        Function BorlToDOW( BorlDOW: Integer): Through Week
Function DateToDOW( ADate: TDateTime): TTFDayOf Week
5131:
5132:
        Procedure CalcTextPos( HostRect : TRect; var TextLeft, TextTop:Integer; var TextBounds : TRect;
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: TJyTFVAlignment; ATxt: string)
5135: Function JRectWidth( ARect: TRect): Integer
        Function JRectHeight (ARect : TRect) : Integer
Function JEmptyRect : TRect
5136:
5137:
        Function IsClassByName(Obj: TObject; ClassName: string): Boolean
5138:
5139:
5140: procedure SIRegister_MSysUtils(CL: TPSPascalCompiler);
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5141: begin
         Procedure HideTaskBarButton( hWindow : HWND)
5142:
         Function msLoadStr( ID : Integer) : String
Function msFormat( fmt : String; params : array of const) : String
5144:
5145:
         Function msFileExists( const FileName : String) : Boolean
         Function msIntToStr( Int : Int64) : String
5146:
5147:
         Function msStrPas( const Str : PChar) : String
         Function msRenameFile( const OldName, NewName : String) : Boolean
5148:
5149:
         Function CutFileName( s : String) : String
         Function GetVersionInfo( var VersionString : String) : DWORD
5150:
         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
5156:
         Function msDirectoryExists( const Directory : String) : Boolean
         Function GetFolder( hWnd: hWnd; RootDir: Integer; Caption: String): String
5157:
         Function SetBlendWindow( hWnd : HWND; AlphaBlend : Byte) : LongBool
Function EditWindowProc( hWnd : HWND; Msg : UINT; wParam : WPARAM; lParam : LPARAM) : LRESULT
Procedure SetEditWndProc( hWnd : HWND; ptr : TObject)
5158 .
5159:
5160:
         Function GetTextFromFile( Filename : String) : string
         Function IsTopMost( hWnd : HWND) : Bool // 'LWA_ALPHA', 'LongWord').SetUInt( $00000002);
5162:
5163:
         \textbf{Function} \ \texttt{msStrToIntDef(} \ \textbf{const} \ \texttt{s} \ : \ \textbf{String;} \ \textbf{const} \ \texttt{i} \ : \ \texttt{Integer)} \ : \ \texttt{Integer}
         Function msStrToInt( s : String) : Integer
5164:
         Function GetItemText( hDlg : THandle; ID : DWORD) : String
5165:
5166: end;
5167:
5168:
        procedure SIRegister_ESBMaths2(CL: TPSPascalCompiler);
5169:
        begin
5170:
           //TDynFloatArray', 'array of Extended
          TDynLWordArray', 'array of LongWord
TDynLIntArray', 'array of LongInt
5171:
5172:
          TDynLintArray', array of TDynFloatArray
TDynFloatMatrix', 'array of TDynLWordArray
TDynLIntMatrix', 'array of TDynLWordArray
TDynLIntMatrix', 'array of TDynLIntArray
5173:
5174:
5175:
         Function SquareAll( const X : TDynFloatArray) : TDynFloatArray
5176:
         Function InverseAll( const X : TDynFloatArray) : TDynFloatArray
5177:
         Function LnAll( const X : TDynFloatArray) : TDynFloatArray
5178:
5179:
         Function Log10All( const X : TDynFloatArray) : TDynFloatArray
5180:
         Function LinearTransform( const X : TDynFloatArray; Offset, Scale : Extended) : TDynFloatArray
5181:
         Function AddVectors( const X, Y : TDynFloatArray) : TDynFloatArray Function SubVectors( const X, Y : TDynFloatArray) : TDynFloatArray
5182:
         Function MultVectors( const X, Y : TDynFloatArray) : TDynFloatArray
5183:
         Function DotProduct( const X, Y : TDynFloatArray) : Extended
5184:
         \textbf{Function} \ \texttt{MNorm(} \ \textbf{const} \ \texttt{X} \ : \ \texttt{TDynFloatArray)} \ : \ \texttt{Extended}
5185:
         \textbf{Function} \ \texttt{MatrixIsRectangular}(\ \textbf{const}\ \texttt{X}\ :\ \texttt{TDynFloatMatrix})\ :\ \texttt{Boolean}
5186:
         Procedure MatrixDimensions(const X:TDynFloatMatrix;var Rows,Columns:LongWord;var Rectangular:Boolean;
5187:
         Function MatrixIsSquare( const X : TDynFloatMatrix) : Boolean
5188:
         Function MatricesSameDimensions( const X, Y : TDynFloatMatrix) : Boolean
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);

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

Function TransposeMatrix( const X : TDynFloatMatrix) : TDynFloatMatrix;
5194:
5195:
5196:
5197:
         Function GrandMean( const X : TDynFloatMatrix; var N : LongWord) : Extended
5198:
5199:
        end;
5200:
5201: procedure SIRegister_ESBMaths(CL: TPSPascalCompiler);
5202:
        begin
5203:
         'ESBMinSingle', 'Single').setExtended( 1.5e-45);
          'ESBMaxSingle','Single').setExtended( 3.4e+38);
'ESBMinDouble','Double').setExtended( 5.0e-324);
5204:
5205:
          'ESBMaxDouble', 'Double').setExtended( 1.7e+308);
5206:
          'ESBMinExtended', 'Extended').setExtended( 3.6e-4951);
5207:
5208:
         'ESBMaxExtended','Extended').setExtended( 1.1e+4932);
          'ESBMinCurrency','Currency').SetExtended( - 922337203685477.5807);
5209:
          'ESBMaxCurrency','Currency').SetExtended( 922337203685477.5807);
5210:
5211:
         'ESBSqrt2','Extended').setExtended( 1.4142135623730950488);
5212:
          'ESBSqrt3','Extended').setExtended( 1.7320508075688772935);
         'ESBSqrt5','Extended').setExtended( 2.2360679774997896964);
'ESBSqrt10','Extended').setExtended( 3.1622776601683793320);
5213:
5214:
                          'Extended').setExtended( 1.77245385090551602729);
5215:
           ESBSqrtPi',
5216:
          'ESBCbrt2','Extended').setExtended( 1.2599210498948731648);
         'ESBCbrt3','Extended').setExtended( 1.4422495703074083823);
'ESBCbrt10','Extended').setExtended( 2.1544346900318837219);
5217:
5218:
          'ESBCbrt100','Extended').setExtended( 4.6415888336127788924);
5219:
         'ESBCbrt100', 'Extended').setExtended( 4.041580833612776924), 'ESBCbrtPi', 'Extended').setExtended( 1.4645918875615232630); 'ESBInvSqrt2', 'Extended').setExtended( 0.70710678118654752440); 'ESBInvSqrt3', 'Extended').setExtended( 0.57735026918962576451); 'ESBInvSqrt5', 'Extended').setExtended( 0.44721359549995793928); 'ESBInvSqrtPi', 'Extended').setExtended( 0.56418958354775628695);
5221:
5222:
5223:
5224:
          'ESBInvCbrtPi', 'Extended').setExtended( 0.68278406325529568147);
5225:
         'ESBe','Extended').setExtended( 2.7182818284590452354);
'ESBe2','Extended').setExtended( 7.3890560989306502272);
'ESBePi','Extended').setExtended( 23.140692632779269006);
5226:
5227:
5228:
        'ESBePiOn2','Extended').setExtended( 4.8104773809653516555);
```

```
5230:
         'ESBePiOn4','Extended').setExtended( 2.1932800507380154566);
         'ESBLn2','Extended').setExtended( 0.69314718055994530942);
5231:
          ESBLn10', 'Extended').setExtended( 2.30258509299404568402);
5232:
5233:
         'ESBLnPi', 'Extended').setExtended( 1.14472988584940017414);
         '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);
5238:
         'ESBPi','Extended').setExtended( 3.1415926535897932385);
5239:
         ESBITyPi', 'Extended').setExtended( 3.1830988618379067154e-1);
'ESBITWPi', 'Extended').setExtended( 6.2831853071795864769);
5240:
5241:
         'ESBThreePi','Extended').setExtended( 9.4247779607693797153);
'ESBPi2','Extended').setExtended( 9.8696044010893586188);
'ESBPiToE','Extended').setExtended( 22.459157718361045473);
5242:
5243:
5244:
5245:
          ESBPiOn2','Extended').setExtended( 1.5707963267948966192);
         'ESBPiOn3','Extended').setExtended( 1.0471975511965977462);
5246:
5247 .
         'ESBPiOn4', 'Extended').setExtended( 0.7853981633974483096);
         'ESBThourePiOn3', 'Extended').setExtended('0.763396163974483097),
'ESBThreePiOn3', 'Extended').setExtended('4.1887902047863909846);
5248:
5249:
          ESBTwoToPower63','Extended').setExtended( 9223372036854775808.0);
5250:
        'ESBOneRadian','Extended').setExtended( 57.295779513082320877);
'ESBOneDegree','Extended').setExtended( 1.7453292519943295769E-2);
5251:
5252:
          ESBOneMinute', 'Extended').setExtended( 2.9088820866572159615E-4);
5253:
          ESBOneSecond', 'Extended').setExtended( 4.8481368110953599359E-6);
5254:
5255:
         'ESBGamma', 'Extended').setExtended( 0.57721566490153286061);
5256:
        'ESBLnRt2Pi', 'Extended').setExtended( 9.189385332046727E-1);
          //LongWord', 'Cardinal
TBitList', 'Word
5257:
          TBitList',
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:
        Function UMulMod( const Num1, Num2, Modulus : LongWord) : LongWord
5262:
        Function SameFloat( const X1, X2 : Extended) : Boolean Function FloatIsZero( const X : Extended) : Boolean
5263:
5264:
5265:
        \textbf{Function} \ \texttt{FloatIsPositive}( \ \textbf{const} \ \texttt{X} \ : \ \texttt{Extended}) \ : \ \texttt{Boolean}
5266:
        Function FloatIsNegative( const X : Extended) : Boolean
        Procedure IncLim( var B : Byte; const Limit : Byte)
5267:
5268:
        Procedure IncLimSI( var B :
                                            ShortInt; const Limit :
                                                                          Short.Int.)
        Procedure IncLimW( var B : Word; const Limit : Word)
5269:
5270:
        Procedure IncLimI( var B : Integer; const Limit : Integer)
        Procedure IncLimL( var B : LongInt; const Limit : LongInt)
5271:
        Procedure DecLim( var B : Byte; const Limit : Byte)
5272:
        Procedure DecLimSI( var B : ShortInt; const Limit : ShortInt)
5273:
5274:
        Procedure DecLimW( var B : Word; const Limit : Word)
5275:
        Procedure DecLimI( var B : Integer; const Limit : Integer)
        Procedure DecLimL( var B : LongInt; const Limit : LongInt)
5276:
5277:
        Function MaxB( const B1, B2 : Byte) : Byte
5278:
        Function MinB( const B1, B2 : Byte) : Byte
5279:
        Function MaxSI( const B1, B2 : ShortInt) : ShortInt
Function MinSI( const B1, B2 : ShortInt) : ShortInt
5280:
        Function MaxW( const B1, B2 : Word) : Word
5281:
        Function MinW( const B1, B2 : Word) : Word
5282:
        Function esbMaxI( const B1, B2 : Integer) : Integer Function esbMinI( const B1, B2 : Integer) : Integer Function MaxL( const B1, B2 : LongInt) : LongInt
5283:
5284:
5285:
        Function MinL( const B1, B2 : LongInt) : LongInt
5286:
        Procedure SwapB( var B1, B2 : Byte)
5287:
        Procedure SwapSI( var B1, B2 : ShortInt)
Procedure SwapW( var B1, B2 : Word)
5288:
5289:
        Procedure SwapI( var B1, B2 : SmallInt)
5290:
        Procedure SwapL( var B1, B2 : LongInt)
5291:
5292:
        Procedure SwapI32( var B1, B2 : Integer)
        Procedure SwapC( var B1, B2 : LongWord)
Procedure SwapInt64( var X, Y : Int64)
5293:
5294:
        Function esbSign( const B : LongInt) : ShortInt
5295:
        Function Max4Word( const X1, X2, X3, X4 : Word) : Word
5296:
5297:
        Function Min4Word( const X1, X2, X3, X4 : Word) : Word
        Function Max3Word( const X1, X2, X3 : Word) : Word
5298:
        Function Min3Word( const X1, X2, X3 : Word) : Word
5299:
        Function MaxBArray( const B : array of Byte) : Byte
5300:
5301:
        Function MaxWArray( const B : array of Word) : Word
5302:
        \textbf{Function} \  \, \texttt{MaxSIArray}( \  \, \textbf{const} \  \, \texttt{B} \  \, : \  \, \textbf{array of} \  \, \texttt{ShortInt}) \  \, : \  \, \texttt{ShortInt}
        Function MaxIArray( const B : array of Integer) : Integer
5303:
        Function MaxLArray( const B : array of LongInt) : LongInt
5304:
        Function MinBArray( const B : array of Byte) : Byte
Function MinWArray( const B : array of Word) : Word
5305:
5306:
        Function MinSIArray( const B : array of ShortInt) : ShortInt
Function MinIArray( const B : array of Integer) : Integer
5307:
5308:
        Function MinLArray( const B : array of LongInt) : LongInt
5309:
5310:
        Function SumBArray( const B : array of Byte) : Byte
        Function SumBArray2( const B : array of Byte) : Word
Function SumSIArray( const B : array of ShortInt) : ShortInt
5311:
5312:
5313:
        Function SumSIArray2( const B : array of ShortInt) : Integer
        Function SumWArray( const B : array of Word) : Word
Function SumWArray( const B : array of Word) : LongInt
5314:
5315:
        Function SumIArray( const B : array of Integer) : Integer
Function SumLArray( const B : array of LongInt) : LongInt
5316:
5317:
        Function SumLWArray( const B : array of LongWord) : LongWord
```

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5319:
        Function ESBDigits ( const X : LongWord) : Byte
        Function BitsHighest( const X : LongWord) : Integer
5320:
         Function ESBBitsNeeded( const X : LongWord) : Integer
        Function esbGCD( const X, Y : LongWord) : LongWord
Function esbLCM( const X, Y : LongInt) : Int64
5322:
5323:
        //Function esbLCM( const X, Y : LongInt) : LongInt
Function RelativePrime( const X, Y : LongWord) : Boolean
5324:
5325:
        Function Get87ControlWord : TBitList
5326:
        Procedure Set87ControlWord( const CWord : TBitList)
5327:
5328:
        Procedure SwapExt( var X, Y : Extended)
Procedure SwapDbl( var X, Y : Double)
5329:
        Procedure SwapSing( var X, Y : Single)
Function esbSgn( const X : Extended) : ShortInt
5331:
        Function Distance( const X1, Y1, X2, Y2 : Extended) : Extended Function ExtMod( const X, Y : Extended) : Extended Function ExtRem( const X, Y : Extended) : Extended
5332:
5333:
5334:
        Function CompMOD( const X, Y : Comp) : Comp
5335:
        Procedure PolarZXY( const Rho, Theta: Extended; var X, Y: Extended)
Procedure XY2Polar( const X, Y: Extended; var Rho, Theta: Extended)
5336:
5337:
        Function DMS2Extended( const Degs, Mins, Secs : Extended) : Extended
5338:
        Procedure Extended2DMS( const X : Extended; var Degs, Mins, Secs : Extended)
        Function MaxExt( const X, Y : Extended) : Extended
5340:
        Function MinExt( const X, Y : Extended) : Extended
5341:
        Function MaxEArray( const B : array of Extended) : Extended
Function MinEArray( const B : array of Extended) : Extended
5342:
5343:
5344:
        Function MaxSArray( const B : array of Single) : Single
5345:
        Function MinSArray( const B : array of Single) : Single
        Function MaxCArray( const B : array of Comp) : Comp
Function MinCArray( const B : array of Comp) : Comp
5346:
5347:
        Function SumSArray( const B : array of Single) : Single
5348:
        Function SumEArray( const B : array of Extended) : Extended
5349:
5350:
        Function SumSqEArray( const B : array of Extended) : Extended
        \textbf{Function} \  \, \texttt{SumSqDiffEArray}( \  \, \textbf{const} \  \, \texttt{B} \  \, \textbf{: array of} \  \, \texttt{Extended}; \  \, \texttt{Diff} \  \, \textbf{: Extended}) \  \, \textbf{: Extended}
5351:
        Function SumXYEArray( const X, Y : array of Extended) : Extended
5352:
        Function SumCArray( const B : array of Comp) :
Function FactorialX( A : LongWord) : Extended
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:
5359:
        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:
5364:
        Procedure esbPopulationVarianceAndMean( const X : array of Extended; var Variance, Mean : Extended)
        Function GetMedian( const SortedX : array of Extended) : Extended
5365:
        Function GetMode( const SortedX : array of Extended; var Mode : Extended) : Boolean
5366:
        Procedure GetQuartiles( const SortedX : array of Extended; var Q1, Q3 : Extended)
5367:
5368:
        Function ESBMagnitude( const X : Extended) : Integer
        Function ESBTan( Angle : Extended) : Extended
5369:
        Function ESBCot( Angle : Extended) : Extended
5370:
        Function ESBCosec( const Angle : Extended) : Extended
5371:
5372:
        Function ESBSec( const Angle : Extended) : Extended
5373:
        Function ESBArcTan( X, Y : Extended) : Extended
Procedure ESBSinCos( Angle : Extended; var SinX, CosX : Extended)
5374:
        Function ESBArcCos( const X : Extended) : Extended
5375:
        Function ESBArcSin( const X : Extended) : Extended
5376:
5377:
        Function ESBArcSec( const X : Extended) : Extended
        Function ESBArcCosec( const X : Extended) : Extended
5378:
5379:
        Function ESBLog10( const X : Extended) : Extended
5380:
        Function ESBLog2( const X : Extended) : Extended
        Function ESBLogBase( const X, Base : Extended) : Extended
Function Pow2( const X : Extended) : Extended
5381:
5382:
        Function IntPow( const Base : Extended; const Exponent : LongWord) : Extended Function ESBIntPower( const X : Extended; const N : LongInt) : Extended
5383:
5384:
        Function XtoY( const X, Y : Extended) : Extended
Function esbTenToY( const Y : Extended) : Extended
Function esbTwoToY( const Y : Extended) : Extended
5385:
5386:
5387:
        Function LogXtoBaseY( const X, Y : Extended) : Extended
5388:
        Function esbISqrt( const I : LongWord) : Longword
5389:
5390:
        Function ILog2( const I : LongWord) : LongWord
        Function IGreatestPowerOf2( const N : LongWord) : LongWord
5391:
        Function ESBArCosh( X : Extended) : Extended
5392:
        Function ESBArSinh( X : Extended) : Extended
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)
5399:
        Function esbGamma( const X : Extended) : Extended
        Function esbLnGamma( const X : Extended) : Extended
Function esbBeta( const X, Y : Extended) : Extended
Function IncompleteBeta( X : Extended; P, Q : Extended) : Extended
5400:
5401:
5402:
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
```

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5408: Function Subtract_uint64_WithBorrow( x, y : uint64; var Borrow : Boolean) : uint64
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',
           Procedure ( CountPrimalityTests : integer)
5415:
           Function gcd(a, b : ThugeCardinal) : ThugeCardinal

Function lcm(a, b : ThugeCardinal) : ThugeCardinal
5416:
5417:
           Function isCoPrime( a, b : THugeCardinal) : boolean
5418:
           Function isProbablyPrime(p: THugeCardinal;OnProgress: TProgress; var wasAborted: boolean): boolean
5420:
           Function hasSmallFactor( p : THugeCardinal) : boolean
         //Function GeneratePrime( NumBits : integer; OnProgress : TProgress; OnPrimalityTest: TPrimalityTestNoticeProc; PassCount: integer; Pool1:TMemoryStreamPool;var Prime: THugeCardinal; var
5421:
         NumbersTested: integer) : boolean
          Function Inverse( Prime, Modulus : THugeCardinal) : THugeCardinal
5422.
           Const('StandardExponent','LongInt').SetInt( 65537);
         //Procedure Compute_RSA_Fundamentals_PFactors(RequiredBitLengthOfN:integer;Fixed_e:uint64;var N,e,d,
5424:
          Totient:TProgress:OnPrimalityTest:TPrimalityTestNoticeProc:GeneratePrimePassCount:int:Pool1:TMemoryStreamPo
5425:
           Function Validate_RSA_Fundamentals( var N, e, d, Totient : THugeCardinal) : boolean')
5426:
5427:
         procedure SIRegister xrtl math Integer(CL: TPSPascalCompiler);
5428:
         begin
5429:
             AddTypeS('TXRTLInteger', 'array of Integer
             AddClassN(FindClass('TOBJECT'),'EXRTLMathException (FindClass('TOBJECT'),'EXRTLExtendInvalidArgument AddClassN(FindClass('TOBJECT'),'EXRTLDivisionByZero
5430:
5431:
5432:
             AddClassN(FindClass('TOBJECT'), 'EXRTLExpInvalidArgument
5433:
5434:
             AddClassN(FindClass('TOBJECT'), 'EXRTLInvalidRadix
             AddClassN(FindClass('TOBJECT'),'EXRTLInvalidRadixDigit AddClassN(FindClass('TOBJECT'),'EXRTLRootInvalidArgument
5435:
5436:
             'BitsPerByte', 'LongInt').SetInt( 8);
BitsPerDigit', 'LongInt').SetInt( 32);
SignBitMask', 'LongWord').SetUInt( $80000000);
5437:
5438:
5439:
5440:
           Function XRTLAdjustBits( const ABits : Integer) : Integer
Function XRTLLength( const AInteger : TXRTLInteger) : Integer
5441:
5442:
            Function XRTLDataBits( const AInteger : TXRTLInteger) : Integer
5443:
            Procedure XRTLBitPosition( const BitIndex : Integer; var Index, Mask : Integer)
5444:
           Procedure XRTLBitSet( var AInteger : TXRTLInteger; const BitIndex : Integer)
           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
5448:
           \textbf{Function} \ \texttt{XRTLExtend} \\ (\textbf{const} \ \texttt{AInteger} : \texttt{TXRTLInteger}; \texttt{ADataBits} : \texttt{Integer} : \texttt{Sign} : \texttt{Int}; \\ \textbf{var} \ \texttt{AResult} : \texttt{TXRTLInteger}) : \texttt{Int}; \\ \textbf{total} \\ \texttt{Alteger} : \texttt{ADataBits} : \texttt{A
5449:
           Function XRTLZeroExtend(const AInteger: TXRTLInteger; ADataBits: Integer; var AResult: TXRTLInteger): Integer;
            Function XRTLSignExtend(const AInteger:TXRTLInteger; ADataBits:Integer;var AResult:TXRTLInteger):Integer;
5450:
5451:
            Function XRTLSignStrip(const AInteger: TXRTLInteger; var AResult: TXRTLInteger; const AMinDataBits: Int): Int;
5452:
           Procedure XRTLNot( const AInteger : TXRTLInteger; var AResult : TXRTLInteger)
           Procedure XRTLAnd( const AInteger1, AInteger2 : TXRTLInteger; var AResult : TXRTLInteger)
Procedure XRTLAnd( const AInteger1, AInteger2 : TXRTLInteger; var AResult : TXRTLInteger)
5453:
5454:
            Procedure XRTLXor( const AInteger1, AInteger2 : TXRTLInteger; var AResult : TXRTLInteger)
5455:
            Function XRTLSign( const AInteger : TXRTLInteger) : Integer
5456:
           Procedure XRTLZero( var AInteger : TXRTLInteger)
Procedure XRTLOne( var AInteger : TXRTLInteger)
5457:
5458:
           Procedure XRTLMOne( var AInteger : TXRTLInteger)
5459:
            Procedure XRTLTwo( var AInteger : TXRTLInteger)
5460:
           Function XRTLNeg( const AInteger : TXRTLInteger; var AResult : TXRTLInteger) : Integer
5461:
           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;
5462:
5463:
5464:
5465:
            Function XRTLAddl(const AInteger1:TXRTLInteger;const AInteger2:Int64;var AResult:TXRTLInteger):Integer;
5466:
           Function XRTLSub( const AInteger1, AInteger2 : TXRTLInteger; var AResult : TXRTLInteger) : Integer;
5467:
           Function XRTLSub1( const AInteger1:TXRTLInteger;const AInteger2:Int64;var AResult:TXRTLInteger):Integer;
           Function XRTLCompare( const AInteger1, AInteger2: TXRTLInteger): Integer;
Function XRTLCompare1( const AInteger1 : TXRTLInteger; const AInteger2: Int64): Integer;
5468:
5469:
            Function XRTLUMul( const AInteger1, AInteger2 : TXRTLInteger; var AResult : TXRTLInteger) : Integer
5470:
           Function XRTLMulAdd(const AInteger1, AInteger2, AInteger3:TXRTLInteger; var AResult:TXRTLInteger):Integer
5471:
5472:
           Function XRTLMul( const AInteger1, AInteger2 : TXRTLInteger; var AResult : TXRTLInteger) : Integer
           Procedure XRTLDivMod( const AInteger1, AInteger2 : TXRTLInteger; var QResult : TXRTLInteger)

Procedure XRTLSqr( const AInteger : TXRTLInteger; var AResult : TXRTLInteger)
5473:
5474:
5475:
           Procedure XRTLSqrt( const AInteger : TXRTLInteger; var AResult : TXRTLInteger)
5476:
           Procedure XRTLRoot( const AInteger1, AInteger2 : TXRTLInteger; var AResult : TXRTLInteger)
           Procedure XRTLRootApprox(const AInteger1.AInteger2:TXRTLInteger; var ALowApproxResult.
5477:
         AHighApproxResult:TXRTLInteger)
5478:
           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)

Procedure XRTLSLBL(const AInteger: TXRTLInteger; const BitCount:Integer; var AResult: TXRTLInteger)

Procedure XRTLSABL(const AInteger: TXRTLInteger; const BitCount:Integer; var AResult: TXRTLInteger)
5480:
5482:
5483:
           Procedure XRTLRCBL(const AInteger: TXRTLInteger; const BitCount:Integer; var AResult: TXRTLInteger)
           Procedure XRTLSLDL(const AInteger:TXRTLInteger;const DigitCount:Integer; var AResult:TXRTLInteger)
5484:
           Procedure XRTLSADL(const AInteger: TXRTLInteger; const DigitCount:Integer; var AResult: TXRTLInteger)
5485:
            Procedure XRTLRCDL(const AInteger:TXRTLInteger; const DigitCount:Integer; var AResult: TXRTLInteger)
5486:
5487:
           Procedure XRTLSLBR(const AInteger: TXRTLInteger; const BitCount:Integer; var AResult: TXRTLInteger)
           Procedure XRTLSABR(const AInteger: TXRTLInteger; const BitCount:Integer; var AResult: TXRTLInteger)
Procedure XRTLRCBR(const AInteger: TXRTLInteger; const BitCount:Integer; var AResult: TXRTLInteger)
5488:
5489:
           Procedure XRTLSLDR(const AInteger: TXRTLInteger; const DigitCount:Integer; var AResult: TXRTLInteger)
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5491:
           Procedure XRTLSADR(const AInteger: TXRTLInteger; const DigitCount:Integer; var AResult: TXRTLInteger)
           Procedure XRTLRCDR(const Ainteger: TXRTLInteger; const DigitCount:Integer; var AResult: TXRTLInteger)
5492:
           Function XRTLToHex( const AInteger: TXRTLInteger; Digits: Integer): string
Function XRTLToBin( const AInteger: TXRTLInteger; Digits: Integer): string
5494:
5495:
           Function XRTLToString( const AInteger: TXRTLInteger; Radix: Integer; Digits: Integer): string
           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:
5499:
           Procedure XRTLAssign( const AInteger : TXRTLInteger; var AResult : TXRTLInteger);
5500:
           Procedure XRTLAssign1( const Value : Integer; var AResult : TXRTLInteger);
Procedure XRTLAssign2( const Value : Int64; var AResult : TXRTLInteger);
5501:
           Procedure XRTLAppend( const ALow, AHigh: TXRTLInteger; var AResult: TXRTLInteger)
5503:
           Procedure XRTLSplit(const AInteger: TXRTLInteger; var ALow, AHigh: TXRTLInteger; LowDigits: Integer)
           5504:
           Procedure XRTLMinMax(const AInteger1, AInteger2 : TXRTLInteger; var AMinResult, AMaxResult: TXRTLInteger)
5505:
           Procedure XRTLMini (const Ainteger), Ainteger: TXRTLInteger; var AResult: TXRTLInteger);

Procedure XRTLMin( const Ainteger): TXRTLInteger; const Ainteger: var AResult: TXRTLInteger);
5506:
5507:
           Procedure XRTLMax( const AInteger1, AInteger2 : TXRTLInteger; var AResult : TXRTLInteger);
Procedure XRTLMax1(const AInteger1:TXRTLInteger; const AInteger2:Integer; var AResult:TXRTLInteger);
5508:
5509:
           Procedure XRTLGCD( const AInteger1, AInteger2 : TXRTLInteger; var AResult : TXRTLInteger)

Procedure XRTLSwap( var AInteger1, AInteger2 : TXRTLInteger)
5510:
          Procedure XRTLFactorial( const AInteger: TXRTLInteger; var AResult: TXRTLInteger)
Procedure XRTLFactorialMod( const AInteger1, AInteger2: TXRTLInteger; var AResult: TXRTLInteger)
5512:
5513:
5514:
         end;
5515:
5516:
         procedure SIRegister_JvXPCoreUtils(CL: TPSPascalCompiler);
5517:
          Function JvXPMethodsEqual( const Method1, Method2: TMethod): Boolean
Procedure JvXPDrawLine( const ACanvas: TCanvas; const X1, Y1, X2, Y2: Integer)
Procedure JvXPCreateGradientRect( const AWidth, AHeight: Integer; const StartColor, EndColor: TColor;
5518:
5519:
          \textbf{const} \ \texttt{Colors:TJvXPGradientColors:} \\ \textbf{const} \ \texttt{Style:TJvXPGradientStyle:} \\ \textbf{const} \ \texttt{Dithered:Boolean:} \\ \textbf{var} \ \texttt{Bitmap:TBitmap:TBitmap:TBitmap:TBitmap:TBitmap:TBitmap:TBitmap:TBitmap:TBitmap:TBitmap:TBitmap:TBitmap:TBitmap:TBitmap:TBitmap:TBitmap:TBitmap:TBitmap:TBitmap:TBitmap:TBitmap:TBitmap:TBitmap:TBitmap:TBitmap:TBitmap:TBitmap:TBitmap:TBitmap:TBitmap:TBitmap:TBitmap:TBitmap:TBitmap:TBitmap:TBitmap:TBitmap:TBitmap:TBitmap:TBitmap:TBitmap:TBitmap:TBitmap:TBitmap:TBitmap:TBitmap:TBitmap:TBitmap:TBitmap:TBitmap:TBitmap:TBitmap:TBitmap:TBitmap:TBitmap:TBitmap:TBitmap:TBitmap:TBitmap:TBitmap:TBitmap:TBitmap:TBitmap:TBitmap:TBitmap:TBitmap:TBitmap:TBitmap:TBitmap:TBitmap:TBitmap:TBitmap:TBitmap:TBitmap:TBitmap:TBitmap:TBitmap:TBitmap:TBitmap:TBitmap:TBitmap:TBitmap:TBitmap:TBitmap:TBitmap:TBitmap:TBitmap:TBitmap:TBitmap:TBitmap:TBitmap:TBitmap:TBitmap:TBitmap:TBitmap:TBitmap:TBitmap:TBitmap:TBitmap:TBitmap:TBitmap:TBitmap:TBitmap:TBitmap:TBitmap:TBitmap:TBitmap:TBitmap:TBitmap:TBitmap:TBitmap:TBitmap:TBitmap:TBitmap:TBitmap:TBitmap:TBitmap:TBitmap:TBitmap:TBitmap:TBitmap:TBitmap:TBitmap:TBitmap:TBitmap:TBitmap:TBitmap:TBitmap:TBitmap:TBitmap:TBitmap:TBitmap:TBitmap:TBitmap:TBitmap:TBitmap:TBitmap:TBitmap:TBitmap:TBitmap:TBitmap:TBitmap:TBitmap:TBitmap:TBitmap:TBitmap:TBitmap:TBitmap:TBitmap:TBitmap:TBitmap:TBitmap:TBitmap:TBitmap:TBitmap:TBitmap:TBitmap:TBitmap:TBitmap:TBitmap:TBitmap:TBitmap:TBitmap:TBitmap:TBitmap:TBitmap:TBitmap:TBitmap:TBitmap:TBitmap:TBitmap:TBitmap:TBitmap:TBitmap:TBitmap:TBitmap:TBitmap:TBitmap:TBitmap:TBitmap:TBitmap:TBitmap:TBitmap:TBitmap:TBitmap:TBitmap:TBitmap:TBitmap:TBitmap:TBitmap:TBitmap:TBitmap:TBitmap:TBitmap:TBitmap:TBitmap:TBitmap:TBitmap:TBitmap:TBitmap:TBitmap:TBitmap:TBitmap:TBitmap:TBitmap:TBitmap:TBitmap:TBitmap:TBitmap:TBitmap:TBitmap:TBitmap:TBitmap:TBitmap:TBitmap:TBitmap:TBitmap:TBitmap:TBitmap:TBitmap:TBitmap:TBitmap:TBitmap:TBitmap:TBitmap:TBitmap:TBitmap:TBitmap:TBitmap:TBitmap:TBitmap:TBitmap:TBitmap:TBitmap:TBitmap:TBitmap:TBitmap:TBitmap:TB
5521:
           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);
5523: Procedure JvXPConvertToGray2(Bitmap: TBitmap)
5524: 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
          Swapped:Boolean);
5526: 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: end:
5530:
5531:
5532:
         procedure SIRegister uwinstr(CL: TPSPascalCompiler);
5533: begin
          Function StrDec( S : string) : string
Function uIsNumeric( var S : String; var X : Float) : Boolean
5534:
5535:
           Function ReadNumFromEdit( Edit : TEdit) : Float
5536:
           Procedure WriteNumToFile( var F : Text; X : Float)
5537:
5538: end;
5539:
5540:
         procedure SIRegister_utexplot(CL: TPSPascalCompiler);
5541:
          Function TeX_InitGraphics( FileName : String: PgWidth, PgHeight : Integer; Header : Boolean) : Boolean
Procedure TeX_SetWindow( X1, X2, Y1, Y2 : Integer; GraphBorder : Boolean)
Procedure TeX_LeaveGraphics( Footer : Boolean)
5542:
5543:
5544:
5545:
           Procedure TeX_SetOxScale( Scale : TScale; OxMin, OxMax, OxStep : Float)
5546:
           Procedure TeX_SetOyScale( Scale : TScale; OyMin, OyMax, OyStep : Float)
5547:
           Procedure TeX SetGraphTitle( Title : String)
           Procedure TeX_SetOxTitle( Title : String)
Procedure TeX_SetOyTitle( Title : String)
5548:
5549:
5550:
           Procedure TeX_PlotOxAxis
5551:
           Procedure TeX_PlotOyAxis
           Procedure TeX PlotGrid( Grid : TGrid)
5552:
           Procedure TeX WriteGraphTitle
5553:
           Function TeX_SetMaxCurv( NCurv : Byte) : Boolean
5554:
5555:
           Procedure TeX_SetPointParam( CurvIndex, Symbol, Size : Integer)
           Procedure TeX_SetLineParam( CurvIndex, Style : Integer; Width : Float; Smooth : Boolean)
5556:
           Procedure TeX SetCurvLegend( CurvIndex : Integer; Legend : String)
5557:
5558:
           Procedure TeX_SetCurvStep( CurvIndex, Step : Integer)
           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)
5560:
5561:
           Procedure TeX_WriteLegend( NCurv : Integer; ShowPoints, ShowLines : Boolean)
5562:
           Procedure TeX_ConRec( Nx, Ny, Nc : Integer; X, Y, Z : TVector; F : TMatrix)
5564:
           Function Xcm( X : Float) : Float
           Function Ycm( Y : Float) : Float
5565:
5566: end;
5567:
5568:
5569: procedure SIRegister_VarRecUtils(CL: TPSPascalCompiler);
5570: begin
             TConstArray', 'array of TVarRec
           Function CopyVarRec( const Item : TVarRec) : TVarRec
```

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5573:
        Function CreateConstArray( const Elements : array of const) : TConstArray
        Procedure FinalizeVarRec( var Item : TVarRec)
5574:
        Procedure FinalizeConstArray( var Arr : TConstArray)
5576:
5577:
       procedure SIRegister StStrS(CL: TPSPascalCompiler);
5578:
5579:
       begin
        Function HexBS( B : Byte) : ShortString
5580:
5581:
        Function HexWS( W : Word) : ShortString
        Function HexLS( L : LongInt) : ShortString
Function HexPtrS( P : Pointer) : ShortStrix
5582:
5583:
                                               : ShortString
        Function BinaryBS( B : Byte) :
                                               ShortString
5585:
        Function BinaryWS( W : Word) : ShortString
5586:
        Function BinaryLS( L : LongInt) : ShortString
        Function OctalBS( B : Byte) : ShortString
Function OctalWS( W : Word) : ShortString
5587:
5588:
        Function OctalLS( L : LongInt) : ShortString
5589:
        Function Str2Int16S( const S : ShortString; var I : SmallInt) : Boolean Function Str2WordS( const S : ShortString; var I : Word) : Boolean
5590.
5591:
        Function Str2LongS( const S : ShortString; var I : LongInt) : Boolean
5592:
        Function Str2RealS( const S : ShortString; var R : Double) : Boolean
5593:
5594:
        Function Str2RealS( const S : ShortString; var R : Real) : Boolean
5595:
        \textbf{Function} \  \, \texttt{Str2ExtS( const S : ShortString; var R : Extended) : Boolean}
        Function Long2StrS( L : LongInt) : ShortString
Function Real2StrS( R : Double; Width : Byte; Places : ShortInt) : ShortString
5596:
5597:
5598:
        Function Ext2StrS( R : Extended; Width : Byte; Places : ShortInt) : ShortString
5599:
        Function ValPrepS( const S : ShortString) : ShortString
5600:
        Function CharStrS( C : AnsiChar; Len : Cardinal) : ShortString
        Function PadChS( const S : ShortString; C : AnsiChar; Len : Cardinal) : ShortString
5601:
        Function PadS( const S : ShortString; Len : Cardinal) : ShortString
5603:
        Function LeftPadChS( const S : ShortString; C : AnsiChar; Len : Cardinal) : ShortString
Function LeftPadS( const S : ShortString; Len : Cardinal) : ShortString
Function TrimLeadS( const S : ShortString) : ShortString
5604:
5605:
        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
Function CenterS( const S : ShortString; Len : Cardinal) : ShortString
5609:
5610:
        Function EntabS( const S : ShortString; TabSize : Byte) : ShortString
5611:
        Function DetabS( const S : ShortString; TabSize : Byte) : ShortString
5612:
5613:
        Function ScrambleS( const S, Key : ShortString) : ShortString
        Function SubstituteS( const S, FromStr, ToStr: ShortString): ShortString Function FilterS( const S, Filters: ShortString): ShortString
5614:
5615:
        Function CharExistsS( const S: ShortString; C: AnsiChar): Boolean Function CharCountS( const S: ShortString; C: AnsiChar): Byte
5617:
        Function WordCountS( const S, WordDelims : ShortString) : Cardinal
5618:
        Function WordPositionS( N : Cardinal; const S, WordDelims : ShortString; var Pos : Cardinal) : Boolean
5619:
        5621:
        Function AsciiCountS( const S, WordDelims : ShortString; Quote : AnsiChar) : Cardinal
5622:
        \textbf{Function} \  \, \texttt{AsciiPositionS} (\texttt{N}: \texttt{Cardinal}; \textbf{const} \  \, \texttt{S}, \texttt{WordDelims}: \textbf{ShortString}; \texttt{Quote}: \texttt{AnsiChar}; \textbf{var} \  \, \texttt{Pos}: \texttt{Cardinal}): \texttt{Boolean} \\
        Function ExtractAsciis(N:Cardinal;const S,WordDelims:ShortString;Quote:AnsiChar): ShortString
Procedure WordWrapS(const InSt: ShortString; var OutSt,Overlap: ShortString;
5623:
5624:
       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
        Function MakeLetterSetS( const S : ShortString) : Longint
        Procedure BMMakeTableS( const MatchString : ShortString; var BT : BTable)
5629:
5630:
        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;
5632:
        Function DefaultExtensionS( const Name, Ext : ShortString) : ShortString
5633:
        Function ForceExtensionS( const Name, Ext : ShortString) : ShortString
        Function JustFilenameS( const PathName : ShortString) : ShortString
5634:
        Function JustNameS( const PathName : ShortString) : ShortString
        Function JustExtensionS( const Name : ShortString) : ShortString
5636:
5637:
        \textbf{Function} \  \, \texttt{JustPathnameS(} \  \, \textbf{const} \  \, \texttt{PathName} \  \, : \  \, \textbf{ShortString)} \  \, : \  \, \textbf{ShortString})
5638:
        Function AddBackSlashS( const DirName : ShortString) : ShortString
        Function CleanPathNameS( const PathName : ShortString) : ShortString
5639:
        Function HasExtensionS( const Name : ShortString; var DotPos : Cardinal) : Boolean
        Function CommaizeS( L : LongInt) : ShortString
5641:
        Function CommaizeChS( L : Longint; Ch : AnsiChar) : ShortString
5642:
        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;
Function StrChPosS( const P : ShortString; C : AnsiChar; var Pos : Cardinal) : Boolean
5645:
        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:
5648:
5649:
        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
        Function ContainsOtherThanS( const S, Chars: ShortString; var BadPos: Cardinal): Boolean Function CopyLeftS( const S: ShortString; Len: Cardinal): ShortString Function CopyMidS( const S: ShortString; First, Len: Cardinal): ShortString
5653:
5654:
5655:
        Function CopyRightS( const S : ShortString; First : Cardinal) : ShortString
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Function CopyRightAbsS( const S : ShortString; NumChars : Cardinal) : ShortString
5657:
       Function CopyFromNthWordS(const S, WordDelims:string;const AWord:String;N:Cardinal;var
5658:
      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;
5662: 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
5665:
       Function IsChAlphaS( C : Char) : Boolean
Function IsChNumericS( C : Char; const Numbers : ShortString) : Boolean
5666:
5667:
       Function IsChAlphaNumericS( C : Char; const Numbers : ShortString) : Boolean
       Function IsStrAlphaS( const S : Shortstring) : Boolean
       Function IsStrNumericS( const S, Numbers : ShortString) : Boolean
5669:
       Function IsStrAlphaNumericS( const S, Numbers : ShortString) : Boolean
Function LastWordS( const S, WordDelims, AWord : ShortString; var Position : Cardinal) : Boolean
5670:
5671:
       Function LastWordAbsS( const S, WordDelims : ShortString; var Position : Cardinal) : Boolean
       Function LastStringS( const S, AString : ShortString; var Position : Cardinal) : Boolean
5673:
5674:
       \textbf{Function} \  \, \texttt{LeftTrimCharsS( const S, Chars : ShortString) : ShortString}
       Function KeepCharsS( const S, Chars : ShortString) : ShortString
5675:
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: Function ReplaceStringAllS(const S,OldString,NewString:ShortString;var Replacements:Cardinal):ShortString;
       Function ReplaceWordS(const S, WordDelims, OldWord, NewW:SString; N:Cardinal; var
      Replacements:Cardinal):ShortString
5680:
       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
5681:
5683:
       Function TrimCharsS( const S, Chars : ShortString) : ShortString
5684: Function WordPosS(const S,WordDelims,AWord:ShortString;N:Cardinal; var Position: Cardinal):Boolean
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) : 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) : 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
5700: 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
      Function AccruedInterestPeriodic(Issue,Settlement,Maturity:TStDate;Rate,
      Par:Extended;Frequency:TStFrequency; Basis : TStBasis) : Extended
5723: Function BondDuration( Settlement, Maturity: TStDate; Rate,
      Yield:Ext; Frequency: TStFrequency; Basis: TStBasis): Extended;
5724: Function BondPrice(Settlement, Maturity: TStDate; Rate, Yield,
      Redemption:Ext;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 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
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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: \texttt{Extended}; \texttt{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,
      {\tt 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: Function Periods(Rate:Extended; Pmt, PV, FV:Extended; Frequency:TStFrequency; Timing:TStPaymentTime):Integer;
5752: Function PresentValueS( Rate: Extended; NPeriods: Integer; Pmt, FV: Extended; Frequency: TStFrequency;
      Timing: TStPaymentTime): Extended
5753: Function ReceivedAtMaturity(Settlement,Maturity:TStDate;Invest,Discount:Extended;Basis:TStBasis):Extended;
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
Financian 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:
        /*********** uPSI_StAstroP;
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 Model( 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'
5800:
              : Double; R2 : Double; sigma :Double; SSr: double; SSe: Double; F0 : Double; df : Integer; end
5801:
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)
5808: Function Slope( const KnownY : array of Double; const KnownX : array of Double) : Double
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 BetaInv( Probability, Alpha, Beta, A, B: Single): Single
```

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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: DegreesFreedoml, 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) : 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): Single
5827: Function Tinv( Probability : Single; DegreesFreedom : Integer) : Single 5828: Function Erfc( X : 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
5833: procedure SIRegister_TStSorter(CL: TPSPascalCompiler);
5834: Function OptimumHeapToUse(RecLen: Cardinal; NumRecs: LongInt): LongInt 5835: Function MinimumHeapToUse(RecLen: Cardinal): LongInt
         Function MergeInfo( MaxHeap : LongInt; RecLen : Cardinal; NumRecs : LongInt) : TMergeInfo
5836:
5837:
          Function DefaultMergeName( MergeNum : Integer) : string
5838:
         Procedure ArraySort( var A, RecLen, NumRecs : Cardinal; Compare : TUntypedCompareFunc)
5839:
5840: procedure SIRegister_StAstro(CL: TPSPascalCompiler);
        Function AmountOfSunlight( LD : TStDate; Longitude, Latitude : Double) : TStTime
         Function FixedRiseSet( LD : TStDate; RA, DC, Longitude, Latitude : Double) : TStRiseSetRec
5842:
5843:
         Function SunPos( UT : TStDateTimeRec) : TStPosRec
         Function SunPosPrim( UT : TStDateTimeRec) : TStSunXYZRec
5844:
          Function SunRiseSet( LD : TStDate; Longitude, Latitude : Double) : TStRiseSetRec
5845:
         Function Twilight( LD: TStDate; Longitude, Latitude: Double; TwiType:TStTwilight):TStRiseSetRec
Function LunarPhase( UT: TStDateTimeRec): Double
5846:
5847:
5848:
         Function MoonPos( UT : TStDateTimeRec) : TStMoonPosRec
         Function MoonRiseSet(LD: TStDate; Longitude, Latitude: Double): TStRiseSetRec
Function FirstQuarter(D: TStDate): TStLunarRecord
Function FullMoon(D: TStDate): TStLunarRecord
5849:
5850:
5851:
5852:
         Function LastQuarter( D : TStDate) : TStLunarRecord
         Function NewMoon( D : TStDate) : TStLunarRecord
Function NextFirstQuarter( D : TStDate) : TStDateTimeRec
5853:
5854:
          Function NextFullMoon( D : TStDate) : TStDateTimeRec
5855:
5856:
          \textbf{Function} \ \ \texttt{NextLastQuarter(D:TStDate):} \ \ \texttt{TStDateTimeRec}
         Function NextNewMoon( D : TStDate) : TStDateTimeRec
5857:
         Function PrevFirstQuarter( D : TStDate) : TStDateTimeRec
5858:
          Function PrevFullMoon( D : TStDate) : TStDateTimeRec
5860:
          Function PrevLastQuarter( D : TStDate) : TStDateTimeRec
         Function PrevNewMoon(D: TStDate): TStDateTimeRec
Function SiderealTime(UT: TStDateTimeRec): Double
5861:
5862:
          Function Solstice( Y, Epoch : Integer; Summer : Boolean) : TStDateTimeRec
5863:
          Function Equinox( Y, Epoch : Integer; Vernal : Boolean) : TStDateTimeRec
5864:
         Function SEaster( Y, Epoch: Integer, Verhal: Function SEaster( Y, Epoch: Integer): TStDate Function DateTimeToAJD( D: TDateTime): Double Function HoursMin( RA: Double): ShortString Function DegsMin( DC: Double): ShortString
5865:
5866:
5867:
5868:
         Function AJDToDateTime( D : Double) : TDateTime
5869:
5870:
5871: Procedure SIRegister StDate(CL: TPSPascalCompiler);
5872:
        Function CurrentDate : TStDate
5873:
          Function StValidDate( Day, Month, Year, Epoch : Integer) : Boolean
5874:
         Function DMYtoStDate( Day, Month, Year, Epoch : Integer) : TStDate
         Procedure StDateToDMY( Julian : TStDate; var Day, Month, Year : Integer)
Function StIncDate( Julian : TStDate; Days, Months, Years : Integer) : TStDate
5875:
5876:
          Function IncDateTrunc( Julian : TStDate; Months, Years : Integer) : TStDate
5877:
         Procedure StDateDiff( Date1, Date2 : TStDate; var Days, Months, Years : Integer)
Function BondDateDiff( Date1, Date2 : TStDate; DayBasis : TStBondDateType) : TStDate
Function WeekOfYear( Julian : TStDate) : Byte
5878:
5879:
5880:
         Function AstJulianDate( Julian : TStDate) : Double
Function AstJulianDate( Julian : TStDate) : Double
Function AstJulianDatetoStDate( AstJulian : Double; Truncate : Boolean) : TStDate
5881:
5882:
5883:
          \textbf{Function} \  \, \texttt{AstJulianDatePrim}(\  \, \texttt{Year}, \  \, \texttt{Month}, \  \, \texttt{Date} \ : \  \, \texttt{Integer}; \  \, \texttt{UT} \ : \  \, \texttt{TStTime}) \ : \  \, \texttt{Double}
         Function StDayOfWeek( Julian : TStDate) : TStDayType
Function DayOfWeekDMY( Day, Month, Year, Epoch : Integer) : TStDayType
5884:
5885:
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
Procedure StTimeToHMS( T: TStTime; var Hours, Minutes, Seconds: Byte)
5888:
5889:
5890:
          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
5894:
5895:
          Function RoundToNearestHour( T : TStTime; Truncate : Boolean) : TStTime
5896:
         Function RoundToNearestMinute( const T : TStTime; Truncate : Boolean) : TStTime
5897:
         Procedure DateTimeDiff(const DT1:TStDateTimeRec;var DT2:TStDateTimeRec;var Days:LongInt;var Secs:LongInt
5898:
         Procedure IncDateTime(const DT1:TStDateTimeRec;var DT2:TStDateTimeRec;Days:Integer;Secs:LongInt)
5899:
         Function DateTimeToStDate( DT : TDateTime) : TStDate
```

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5901:
        Function DateTimeToStTime( DT : TDateTime) : TStTime
5902:
        Function StDateToDateTime( D : TStDate) : TDateTime
        Function StTimeToDateTime( T : TStTime) : TDateTime
5904:
        Function Convert2ByteDate( TwoByteDate : Word) : TStDate
5905:
        Function Convert4ByteDate( FourByteDate : TStDate) : Word
5906:
5907: Procedure SIRegister_StDateSt(CL: TPSPascalCompiler);
       Function DateStringHMStoAstJD( const Picture, DS : string; H, M, S, Epoch : integer) : Double
5908:
        Function MonthToString( const Month : Integer) : string
Function DateStringToStDate( const Picture, S : string; Epoch : Integer) : TStDate
Function DateStringToDMY(const Picture, S:string; Epoch:Integer; var D, M, Y : Integer):Boolean
5909:
5910:
5911:
        Function StDateToDateString( const Picture : string; const Julian : TStDate; Pack : Boolean):string
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
5917:
5918 .
        \textbf{Function} \  \, \texttt{TimeStringToStTime}( \  \, \textbf{const} \  \, \texttt{Picture}, \  \, \texttt{S} \  \, \textbf{:} \  \, \textbf{string}) \  \, \textbf{:} \  \, \textbf{TStTime}
        Function StTimeToAmpEnString( 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 Picture, S : string) : Boolean
5921:
5922:
        Function InternationalDate( ForceCentury : Boolean) : string
5923:
        Function InternationalLongDate( ShortNames : Boolean; ExcludeDOW : Boolean) : string
5924:
        Function InternationalTime( ShowSeconds : Boolean) : string
5925:
        Procedure ResetInternationalInfo
5926:
5927:
       procedure SIRegister_StBase(CL: TPSPascalCompiler);
        Function DestroyNode( Container : TStContainer; Node : TStNode; OtherData : Pointer) : Boolean
5928:
        Function AnsiUpperCaseShort32( const S : string) : string
5929:
        Function AnsiCompareTextShort32( const S1, S2 : string) : Integer Function AnsiCompareStrShort32( const S1, S2 : string) : Integer
5930:
5931:
5932:
        Function HugeCompressRLE( const InBuffer, InLen : Longint; var OutBuffer) : Longint
        Function HugeDecompressRLE( const InBuffer, InLen : Longint; var OutBuffer,OutLen:LongInt): Longint
5933:
        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
5938:
5939:
5940:
        Function Search(const Buffer,BufLength:Cardinal;const Match,MatLength:Cardinal;var Pos:Cardinal):Bool;
5941:
        \textbf{Function} \ \ \texttt{StSearch}(\textbf{const} \ \ \texttt{Buffer}, \texttt{BufLength}: \texttt{Cardinal}; \textbf{const} \ \ \texttt{Match}, \texttt{MatLength}: \texttt{Cardinal}; \textbf{var} \ \ \texttt{Pos:Cardi}): \texttt{Boolean}
        Function SearchUC(const Buffer, BufLength: Cardinal; const Match, MatLength: Cardinal; var Pos: Cardi): Boolean
5942:
5943:
        Function IsOrInheritsFrom( Root, Candidate : TClass) : boolean
        Procedure RaiseContainerError( Code : longint)
5944:
5945:
        \textbf{Procedure} \ \texttt{RaiseContainerErrorFmt} ( \ \texttt{Code} \ : \ \texttt{Longint}; \ \texttt{Data} \ : \ \textbf{array of const})
        Function ProductOverflow( A, B : LongInt) : Boolean
Function StNewStr( S : string) : PShortString
Procedure StDisposeStr( PS : PShortString)
5946:
5947:
5949:
        Procedure ValLongInt( S : ShortString; var LI : Longint; var ErrorCode : integer)
        Procedure ValSmallint( const S : ShortString; var SI : smallint; var ErrorCode : integer)
Procedure ValWord( const S : ShortString; var Wd : word; var ErrorCode : integer)
5950:
5951:
        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);
       begin
        Procedure SV_Decomp( A : TMatrix; Lb, Ub1, Ub2 : Integer; S : TVector; V : TMatrix)
5958:
        Procedure SV_SetZero( S : TVector; Lb, Ub : Integer; Tol : Float)
Procedure SV_Solve(U:TMatrix; S:TVector;V:TMatrix;B:TVector;Lb,Ub1,Ub2:Integer;X:TVector);
5959:
5960:
        Procedure SV_Approx( U : TMatrix; S : TVector; V : TMatrix; Lb, Ub1, Ub2 : Integer; A : TMatrix)
5961:
        Procedure RKF45(F:TDiffEqs;Neqn:Int;Y,Yp:TVector;var T:Float;Tout,RelErr,AbsErr:Float;var Flag:Int;
5962:
5963: end:
5964:
       5965:
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:
5976: Function Adler32Prim( var Data, DataSize : Cardinal; CurCrc : LongInt) : LongInt
5977: Function Adler320fStream( Stream: TStream; CurCrc: LongInt): LongInt 5978: Function Adler320fFile( 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 5987: Function InternetSumOfFile( FileName: AnsiString): Cardinal 5988: Function Kermit16Prim( var Data, DataSize, CurCrc: Cardinal): Cardinal
5989: Function Kermit16OfStream( Stream: TStream; CurCrc : Cardinal) : Cardinal
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5990: Function Kermit160fFile(FileName: AnsiString): Cardinal
5991:
       5993: Function AddBcd( const B1, B2 : TbcdS) : TbcdS
5994: Function SubBcd( const B1, B2 : TbcdS) : TbcdS
5995: Function MulBcd( const B1, B2 : TbcdS) : TbcdS
5996: Function DivBcd( const B1, B2 :
                                             TbcdS) : TbcdS
5997: Function ModBcd( const B1, B2 : TbcdS) : 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)
6025:
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
with AddClassN(FindClass('TStComponent'), 'TStNetConnection') do begin
Constructor Create( AOwner : TComponent)
6039:
6040:
           Function Connect : DWord
6041:
           Function Disconnect : DWord
6042:
           Property('Password', 'String', iptrw);
Property('UserName', 'String', iptrw);
Property('ConnectOptions', 'TStNetConnectOptionsSet', iptrw);
6043:
6044:
6045:
           Property('DisconnectOptions', 'TStNetDisconnectOptionsSet', iptrw);
6046:
           Property( 'LocalDevice', 'String', iptrw);
Property('ServerName', 'String', iptrw);
Property('ShareName', 'String', iptrw);
Property('OnConnect', 'TNotifyEvent', iptrw);
6047:
6048:
6049:
6050:
           Property('OnConnectFail', 'TOnConnectFailEvent', iptrw);
Property('OnConnectCancel', 'TOnConnectCancelEvent', iptrw);
6051:
6052:
           Property('OnDisconnect', 'TNotifyEvent', iptrw);
Property('OnDisconnectFail', 'TOnDisconnectFailEvent', iptrw);
Property('OnDisconnectCancel', 'TOnDisconnectCancelEvent', iptrw);
6053:
6054:
6056:
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)
\texttt{6062: } \textbf{Function} \hspace{0.1cm} \texttt{InitializeCriticalSectionAndSpinCount} (\textbf{\textit{var}} \\
       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
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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:Ptr;AParam:Pointer;ASafeSection:bool;
6084: Procedure ParallelJob3( AJobGroup:TJobsGroup;ATarget:Pointer;AParam:Pointer;ASafeSection: boolean);
6085: Function CreateParallelJob(ASelf:TObject;ATarget:Pointer;AParam:Ptr;ASafeSection:bool:TParallelJob;
6086: Function CreateParallelJob1(ATarget:Pointer; AParam:Pointer; ASafeSection : boolean) : TParallelJob7
6087: Function CurrentParallelJobInfo : TParallelJobInfo 6088: Function ObtainParallelJobInfo : TParallelJobInfo
6091: Function MimeEncodeString( const S : AnsiString) : AnsiString
6092: Function MimeDecodeString( const S : AnsiString) : AnsiString
6093:
        Procedure MimeEncodeStream( const InputStream : TStream; const OutputStream : TStream)
        Procedure MimeDecodeStream( const InputStream : TStream; const OutputStream : TStream)
6094:
        Function MimeEncodedSize( const I : Cardinal) : Cardinal Function MimeDecodedSize( const I : Cardinal) : Cardinal
6095:
6096:
        Procedure MimeEncode( var InputBuffer : string; const InputByteCount : Cardinal; var OutputBuffer)
6097:
        Function MimeDecode(var InputBuffer:string;const InputBytesCount:Cardinal;var OutputBuffer):Cardinal;
        Function MimeDecodePartial(var InputBuffer:string;const InputBytesCount:Cardinal;var
6099:
       OutputBuffer:string;var ByteBuffer: Cardinal; var ByteBufferSpace: Cardinal): Cardinal Function MimeDecodePartialEnd(var OutputBuf:string;const ByteBuf:Card;const ByteBufferSpace:Card):
6100:
6101:
6103: Procedure DirectPrint( const Printer, Data : string)
6104:
        Procedure SetPrinterPixelsPerInch
        Function GetPrinterResolution : TPoint
        Function CharFitsWithinDots( const Text : string; const Dots : Integer) : Integer
6106:
6107:
        Procedure PrintMemo( const Memo: TMemo; const Rect: TRect)
6108:
6109:
6111: Function StrChr( lpStart : PChar; wMatch : WORD) : PChar
        Function StrChrI( lpStart : PChar; wMatch : WORD) : PChar
Function StrCmpN( lpStr1, lpStr2 : PChar; nChar : Integer) : Integer
6112:
6113:
        Function StrCmpNI( lpStr1, lpStr2 : PChar; nChar : Integer) : Integer Function StrCSpn( lpStr_, lpSet : PChar) : Integer
6114:
6115:
        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
        Function StrRChr( lpStart, lpEnd : PChar; wMatch : WORD) : PChar
Function StrRChrI( lpStart, lpEnd : PChar; wMatch : WORD) : PChar
Function StrRChrI( lpStart, lpEnd : PChar; wMatch : WORD) : PChar
Function StrRStrI( lpSource, lpLast, lpSrch : PChar) : PChar
6125:
6126:
        Function StrSpn( psz, pszSet : PChar) : Integer
6127:
        Function StrStr( lpFirst, lpSrch : PChar) : PChar
6128:
        Function StrStrI( lpFirst, lpSrch : PChar) : PChar
6129:
        Function StrToInt( lpSrch : PChar) : Integer
6130:
        Function StrToIntEx( pszString : PChar; dwFlags : DWORD; var piRet : Integer) : BOOL Function StrTrim( psz : PChar; pszTrimChars : PChar) : BOOL
6131:
6132:
        Function ChrCmpI( w1, w2 : WORD) : BOOL
6133:
        Function ChrCmpIA( w1, w2 : WORD) : BOOL
Function ChrCmpIW( w1, w2 : WORD) : BOOL
6134:
6135:
6136:
        Function StrIntlEqN( s1, s2 : PChar; nChar : Integer) : BOOL
        Function StrIntlEqNI( s1, s2 : PChar; nChar : Integer) : BOOL
        Function StrCatBuff( pszDest, pszSrc : PChar; cchDestBuffSize : Integer) : PChar
Function StrCayNX( psz1 : PChar; psz2rc : PChar; cchDestBuffSize : Integer) : PChar
Function IntlStrEqWorker( fCaseSens : BOOL; lpString1, lpString2 : PChar; nChar : Integer) : BOOL
Function IntlStrEqN( s1, s2 : PChar; nChar : Integer) : BOOL
6138:
6139:
6140:
        SZ_CONTENTTYPE_HTMLA','String').SetString( 'text/html
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
SZ_CONTENTTYPE_CDFW','String').SetString('application/x-cdf
6144:
6145:
6146:
        SZ_CONTENTTYPE_CDF', 'string').SetString( SZ_CONTENTTYPE_CDFA);
6147:
        Function PathIsHTMLFile( pszPath : PChar) : BOOL STIF_DEFAULT', 'LongWord').SetUInt( $00000000);
6148:
6149:
        Function StrNCmpI( lpStr1, lpStr2 : PChar; nChar : Integer) : Integer
6150:
6151:
6152:
        \textbf{Function} \  \, \texttt{StrNCpy( psz1, psz2 : PChar; cchMax : Integer) : PChar}
        Function StrCatN( psz1 : PChar; psz2 : PChar; cchMax : Integer) : PChar
6153:
        Function PathAddBackslash( pszPath : PChar) : PChar
6154:
        Function PathAddExtension( pszPath : PChar; pszExt : PChar) : BOOL
6156:
        Function PathAppend( pszPath : PChar; pMore : PChar) : BOOL
6157:
        Function PathBuildRoot( szRoot : PChar; iDrive : Integer) : PChar
        Function PathCanonicalize( pszBuf : PChar; pszPath : PChar) : BOOL
6158:
        Function PathCombine( szDest : PChar; lpszPath : PChar) : PChar

Function PathCompactPath( hDC : HDC; pszPath : PChar; dx : UINT) : BOOL
6159:
        Function PathCompactPathEx( pszOut : PChar; pszSrc : PChar; cchMax : UINT; dwFlags:DWORD) : BOOL
6161:
        Function PathCommonPrefix( pszFile1, pszFile2 : PChar; achPath : PChar) : Integer
6162:
6163:
        Function PathFileExists( pszPath : PChar) : BOOL
        Function PathFindExtension( pszPath : PChar) : PChar
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6165:
              Function PathFindFileName( pszPath : PChar) : PChar
              Function PathFindNextComponent( pszPath : PChar) : PChar
6166:
6167:
              Function PathFindOnPath( pszPath : PChar; var ppszOtherDirs : PChar) : BOOL
6168:
              Function PathGetArgs( pszPath : PChar) : PChar
6169:
              Function PathFindSuffixArray(pszPath: PChar; const apszSuffix: PChar; iArraySize: Integer): PChar
              Function PathIsLFNFileSpec( lpName : PChar) : BOOL
Function PathGetCharType( ch : Char) : UINT
6170:
6171:
              GCT_INVALID', 'LongWord').SetUInt( $0000);
GCT_LFNCHAR', 'LongWord').SetUInt( $0001);
6172:
6173:
6174:
              GCT SHORTCHAR', 'LongWord').SetUInt( $0002);
              GCT_WILD','LongWord').SetUInt( $0004);
6175:
              GCT_SEPARATOR','LongWord').SetUInt( $0008);
6176:
6177:
              Function PathGetDriveNumber( pszPath : PChar) : Integer
              Function PathIsDirectory( pszPath : PChar) : BOOL
6178:
              Function PathIsDirectoryEmpty( pszPath : PChar) : BOOL
6179:
6180:
              Function PathIsFileSpec( pszPath : PChar) : BOOL
              Function PathIsPrefix( pszPrefix, pszPath : PChar) : BOOL
6182:
              Function PathIsRelative( pszPath : PChar) : BOOL
              Function PathIsRoot( pszPath : PChar) : BOOL
6183:
              Function PathIsSameRoot( pszPath1, pszPath2 : PChar) : BOOL
6184:
              Function PathIsUNC(pszPath: PChar): BOOL

Function PathIsUNC(pszPath: PChar): BOOL

Function PathIsNetworkPath(pszPath: PChar): BOOL
6186:
              Function PathIsUNCServer( pszPath: PChar): BOOL
Function PathIsUNCServerShare( pszPath: PChar): BOOL
Function PathIsContentType( pszPath, pszContentType: PChar): BOOL
6187:
6188:
6189:
6190:
              Function PathIsURL( pszPath : PChar)
                                                                                              : BOOL
6191:
              Function PathMakePretty( pszPath : PChar) : BOOL Function PathMatchSpec( pszFile, pszSpec : PChar) : BOOL
6192:
              Function PathParseIconLocation( pszIconFile : PChar) : Integer Procedure PathQuoteSpaces( lpsz : PChar)
6193:
6195:
              \textbf{Function} \hspace{0.2cm} \texttt{PathRelativePathTo} (\texttt{pszPath}: \texttt{PChar/pszFrom}: \texttt{PChar/dwAttrFrom}: \texttt{DWORD/pszTo}: \texttt{PChar/dwAttrTo}: \texttt{DWORD}) : \texttt{BOOL/pszTo}: \texttt{PChar/dwAttrTo}: \texttt{PChar/dwAttrTo
6196:
              Procedure PathRemoveArgs( pszPath : PChar)
              Function PathRemoveBackslash( pszPath : PChar) : PChar
6197:
6198:
              Procedure PathRemoveBlanks( pszPath : PChar)
              Procedure PathRemoveExtension( pszPath : PChar)
6199:
6200:
              Function PathRemoveFileSpec( pszPath : PChar) : BOOL
              Function PathRenameExtension( pszPath : PChar; pszExt : PChar) : BOOL
Function PathSearchAndQualify( pszPath : PChar; pszBuf : PChar; cchBuf : UINT) : BOOL
Procedure PathSetDlgItemPath( hDlg : HWND; id : Integer; pszPath : PChar)
6201:
6202:
6203:
6204:
              Function PathSkipRoot( pszPath : PChar) : PChar
6205:
              Procedure PathStripPath( pszPath : PChar)
              Function PathStripToRoot( pszPath : PChar) : BOOL Procedure PathUnquoteSpaces( lpsz : PChar)
6206:
6207:
              Function PathMakeSystemFolder( pszPath : PChar) : BOOL
6208:
6209:
              \textbf{Function} \  \, \texttt{PathUnmakeSystemFolder}( \  \, \texttt{pszPath} \  \, : \  \, \texttt{PChar}) \  \, : \  \, \texttt{BOOL}
              \textbf{Function} \ \ \texttt{PathIsSystemFolder} ( \ \ \texttt{pszPath} \ : \ \ \texttt{PChar}; \ \ \texttt{dwAttrb} \ : \ \ \texttt{DWORD}) \ : \ \ \texttt{BOOL}
6210:
              Procedure PathUndecorate( pszPath : PChar)
6211:
              Function PathUnExpandEnvStrings( pszPath : PChar; pszBuf : PChar; cchBuf : UINT) : BOOL
              URL_SCHEME_INVALID ', 'LongInt').SetInt( - 1
URL_SCHEME_UNKNOWN', 'LongInt').SetInt( 0);
6213:
                                                                                                      1);
6214:
              URL_SCHEME_FTP','LongInt').SetInt( 1);
URL_SCHEME_HTTP','LongInt').SetInt( 2);
6215:
6216:
              URL_SCHEME_GOPHER','LongInt').SetInt( 3);
URL_SCHEME_MAILTO','LongInt').SetInt( 4);
6217:
6218:
              URL_SCHEME_NEWS','LongInt').SetInt( 5);
URL_SCHEME_NNTP','LongInt').SetInt( 6);
6219:
6220:
              URL_SCHEME_TELNET','LongInt').SetInt(
6221:
             URL_SCHEME_MAIS', 'LongInt').SetInt( 8);
URL_SCHEME_FILE', 'LongInt').SetInt( 9);
URL_SCHEME_MK', 'LongInt').SetInt( 10);
URL_SCHEME_HTTPS', 'LongInt').SetInt( 11);
URL_SCHEME_SHELL', 'LongInt').SetInt( 12);
6222:
6223:
6224:
6225:
6226:
              URL_SCHEME_SNEWS','LongInt').SetInt( 13);
URL_SCHEME_LOCAL','LongInt').SetInt( 14);
6227:
6228:
              URL_SCHEME_JAVASCRIPT','LongInt').SetInt( 15);
URL_SCHEME_VBSCRIPT','LongInt').SetInt( 16);
6229:
              URL_SCHEME_ABOUT', 'LongInt').SetInt( 17);
6231:
              URL_SCHEME_RES', 'LongInt').SetInt( 18);
6232:
              URL_SCHEME_MAXVALUE','LongInt').SetInt( 19);
6233:
              URL_SCHEME', 'Integer
URL_PART_NONE', 'LongInt').SetInt( 0);
6234:
6235:
              URL PART_SCHEME', 'LongInt').SetInt( 1);
URL_PART_HOSTNAME', 'LongInt').SetInt( 2);
URL_PART_USERNAME', 'LongInt').SetInt( 3);
6236:
6237:
6238:
              URL_PART_PASSWORD', 'LongInt').SetInt( 4);
6239:
              URL_PART_PORT', 'LongInt').SetInt( 5);
URL_PART_QUERY', 'LongInt').SetInt( 6);
6240:
6241:
              URL_PART', 'DWORD
URLIS_URL', 'LongInt').SetInt( 0);
6242:
6243:
              URLIS_OPAQUE', 'LongInt').SetInt( 1);
6245:
              URLIS_NOHISTORY','LongInt').SetInt( 2);
             URLIS_FILEURL', 'LongInt').SetInt( 3);
URLIS_APPLIABLE', 'LongInt').SetInt( 4);
URLIS_DIRECTORY', 'LongInt').SetInt( 5);
6246:
6247:
6248:
              URLIS_HASQUERY','LongInt').SetInt( 6);
6249:
6250:
              TUrlIs', 'DWORD
              URL_UNESCAPE','LongWord').SetUInt( $10000000);
6251:
              URL_ESCAPE_UNSAFE','LongWord').SetUInt( $2000000);
6252:
              URL_PLUGGABLE_PROTOCOL','LongWord').SetUInt( $40000000);
```

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URL_WININET_COMPATIBILITY','LongWord').SetUInt( DWORD ( $80000000 ));
URL_DONT_ESCAPE_EXTRA_INFO','LongWord').SetUInt( $02000000);
6254:
6255:
           URL_ESCAPE_SPACES_ONLY', 'LongWord').SetUInt( $04000000);
6257:
           URL_DONT_SIMPLIFY', 'LongWord').SetUInt( $08000000);
          URL_NO_META','longword').SetUInt( URL_DONT_SIMPLIFY);
URL_UNESCAPE_INPLACE','LongWord').SetUInt( $00100000);
URL_CONVERT_IF_DOSPATH','LongWord').SetUInt( $00200000)
6258:
6259:
6260:
          URL_UNESCAPE_HIGH_ANSI_ONLY', 'LongWord').SetUInt( $00400000);
URL_INTERNAL_PATH', 'LongWord').SetUInt( $00800000);
6261:
6262:
          URL_FILE_USE_PATHURL','LongWord').SetUInt( $00010000);
URL_ESCAPE_PERCENT','LongWord').SetUInt( $00001000);
6263:
6264:
          URL_ESCAPE_SEGMENT_ONLY', 'LongWord').SetUInt( $00002000);
URL_PARTFLAG_KEEPSCHEME', 'LongWord').SetUInt( $00000001);
6266:
          URL_APPLY_DEFAULT','LongWord').SetUInt( $00000001);
URL APPLY GUESSSCHEME','LongWord').SetUInt( $00000002);
6267:
6268:
          URL_APPLY_GUESSFILE', 'LongWord').SetUInt( $0000004);
URL_APPLY_FORCEAPPLY', 'LongWord').SetUInt( $00000008);
6269:
6270:
6271:
           Function UrlCompare( psz1, psz2 : PChar; fIgnoreSlash : BOOL) : Integer
          Function UrlCombine(pszlase,pszRelative:PChar;pszCombin:PChar;out pcchCombin:DWORD;dwFlags:DWORD):HRESULT;
Function UrlCanonicalize(pszUrl:PChar;pszCanonicalized:PChar;pcchCanonic:DWORD;dwFlags:DWORD):HRESULT;
6272:
6273:
           Function UrlIsOpaque( pszURL : PChar) : BOOL
6274:
6275:
           Function UrlIsNoHistory( pszURL : PChar) : BOOL
          Function UrlIsFileUrl( pszURL : PChar) : BOOL
Function UrlIs( pszUrl : PChar; UrlIs : TUrlIs) : BOOL
6276:
6277:
           Function UrlGetLocation( pszl : PChar) : PChar
6279:
           Function UrlUnescape( pszUrl, pszUnescaped: PChar; pcchUnescaped: DWORD; dwFlags: DWORD): HRESULT
6280:
          Function UrlEscape(pszUrl: PChar; pszEscaped: PChar; pcchEscaped:DWORD; dwFlags: DWORD) : HRESULT Function UrlCreateFromPath(pszPath:PChar; pszUrl: PChar;pcchUrl: DWORD; dwFlags: DWORD) : HRESULT
6281:
          Function PathCreateFromUrl(pszUrl:PChar; pszPath:PChar; pcchPath:DWORD; dwFlags : DWORD) : HRESULT
Function UrlHash( pszUrl : PChar; pbHash : BYTE; cbHash : DWORD) : HRESULT
6282:
6284:
           Function UrlGetPart(pszIn: PChar; pszOut: PChar; pschOut: DWORD; dwPart,dwFlags: DWORD) : HRESULT
          Function UrlApplyScheme(pszIn: PChar; pszOut: PChar; pcchOut: DWORD; dwFlags: DWORD): HRESULT Function HashData(pbData: BYTE; cbData: DWORD; pbHash: BYTE; cbHash: DWORD): HRESULT
6285:
6286:
           Function UrlEscapeSpaces(pszUrl: PChar; pszEscaped: PChar; pcchEscaped: DWORD): HRESULT
Function UrlUnescapeInPlace(pszUrl: PChar; dwFlags: DWORD): HRESULT
6287:
6288:
          Function SHDeleteEmptyKey( hKey: HKEY; pszSubKey: PChar): DWORD
Function SHDeleteKey( hKey: HKEY; pszSubKey: PChar): DWORD
Function SHDeleteValue( hKey: HKEY; pszSubKey, pszValue: PChar): DWORD
6289:
6290:
6291:
         Function SHEPLETEVALUE( nkey: 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
pcchValueName: DWORD; pdwType: DWORD; pvData: ____Pointer; pcbData: DWORD): Longint
Function SHQueryInfoKey(hKey: HKEY; pcSubKeys, pcchMaxSubKeyLen, pcVal, pcchMaxValueNameLen: DWORD): Longint;
Function SHCopyKey( hkeySrc: HKEY; szSrcSubKey: PChar; hkeyDest: HKEY; fReserved: DWORD): DWORD
6292:
6293:
6294:
6295:
           Function SHRegGetPath(hKey:HKEY; pcszSubKey,pcszValue: PChar; pszPath: PChar; dwFlags: DWORD): DWORD
6297:
          Function SHRegSetPath( hKey:HKEY; pcszSubKey, pcszValue, pcszPath : PChar; dwFlags : DWORD): DWORD
SHREGDEL_DEFAULT', 'LongWord').SetUInt( $00000000);
6298:
           SHREGDEL_HKCU', 'LongWord').SetUInt( $0000001);
SHREGDEL_HKLM', 'LongWord').SetUInt( $00000010);
6299:
6301:
           SHREGDEL_BOTH'
                                    'LongWord').SetUInt( $00000011);
          SHREGENUM_DEFAULT', 'LongWord').SetUInt( $0000000);
SHREGENUM_HKCU', 'LongWord').SetUInt( $00000001);
SHREGENUM_HKLM', 'LongWord').SetUInt( $0000001);
6302:
6303:
6304:
           SHREGENUM_BOTH','LongWord').SetUInt( $00000011);
6305:
6306:
           SHREGSET_HKCU', 'LongWord').SetUInt( $00000001);
           SHREGSET_FORCE_HKCU','LongWord').SetUInt( $00000002);
SHREGSET_HKLM','LongWord').SetUInt( $00000004);
6307:
6308:
           SHREGSET_FORCE_HKLM', 'LongWord').SetUInt( $00000008);
6309:
          TSHRegEnt_FORCE_INLIM', IDWORD
TSHRegEnumFlags', 'DWORD
HUSKEY', 'THandle
ASSOCF_INIT_NOREMAPCLSID', 'LongWord').SetUInt( $0000001);
6310:
6311:
6312:
6313:
6314:
           ASSOCF_INIT_BYEXENAME', 'LongWord').SetUInt( $00000002);
6315:
           ASSOCF_OPEN_BYEXENAME','LongWord').SetUInt( $00000002);
          ASSOCF_INIT_DEFAULTTOSTAR','LongWord').SetUInt( $00000004);
ASSOCF_INIT_DEFAULTTOFOLDER','LongWord').SetUInt( $00000008);
ASSOCF_NOUSERSETTINGS','LongWord').SetUInt( $00000010);
6316:
6317:
           ASSOCF_NOTRUNCATE','LongWord').SetUInt( $00000020);
6319:
6320:
           ASSOCF_VERIFY','LongWord').SetUInt( $00000040);
          ASSOCF_REMAPRUNDLL','LongWord').SetUInt( $00000080);
ASSOCF_NOFIXUPS','LongWord').SetUInt( $00000100);
6321:
6322:
6323:
           ASSOCF_IGNOREBASECLASS', 'LongWord').SetUInt( $00000200);
6324:
           ASSOCF', 'DWORD
           ASSOCSTR COMMAND', 'LongInt').SetInt( 1);
6325:
           ASSOCSTR_EXECUTABLE', 'LongInt').SetInt( 2);
6326:
          ASSOCSTR_FRIENDLYDOCNAME', 'LongInt').SetInt( 3);
ASSOCSTR_FRIENDLYAPPNAME', 'LongInt').SetInt( 4);
6327:
6328:
6329:
           ASSOCSTR_NOOPEN','LongInt').SetInt( 5);
          ASSOCSTR_NOOPEN, LONGING /.SetInt( 5);
ASSOCSTR_SHELLNEWVALUE', 'LongInt').SetInt( 6);
ASSOCSTR_DDECOMMAND', 'LongInt').SetInt( 7);
ASSOCSTR_DDEIFEXEC', 'LongInt').SetInt( 8);
6330:
6331:
           ASSOCSTR_DDEAPPLICATION','LongInt').SetInt( 9);
6333:
          ASSOCSTR_DDETOPIC','LongInt').SetInt(10);
ASSOCSTR_INFOTIP','LongInt').SetInt(11);
6334:
6335:
6336:
           ASSOCSTR_MAX', 'LongInt').SetInt( 12);
                            'DWORD
6337:
           ASSOCSTR',
          ASSOCKEY_SHELLEXECCLASS', 'LongInt').SetInt( 1);
6338:
          ASSOCKEY_APP','LongInt').SetInt( 2);
ASSOCKEY_CLASS','LongInt').SetInt( 3);
6339:
          ASSOCKEY_BASECLASS','LongInt').SetInt( 4);
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6342:
        ASSOCKEY MAX', 'LongInt').SetInt(5);
         ASSOCKEY', 'DWORD
6343:
         ASSOCDATA_MSIDESCRIPTOR','LongInt').SetInt( 1);
         ASSOCDATA_NOACTIVATEHANDLER','LongInt').SetInt(2);
ASSOCDATA_QUERYCLASSSTORE','LongInt').SetInt(3);
ASSOCDATA_HASPERUSERASSOC','LongInt').SetInt(4);
6345:
6346:
6347:
6348:
         ASSOCDATA_MAX', 'LongInt').SetInt(5);
         ASSOCENUM_NONE', 'LongInt').SetInt(0);
6349:
6350:
6351:
         ASSOCENUM', 'DWORD
6352:
         SID_IQueryAssociations','String').SetString('\{c46ca590-3c3f-11d2-bee6-0000f805ca57\}
         SHACF_DEFAULT', 'LongWord').SetUInt( $00000000)
6354:
         SHACF_FILESYSTEM','LongWord').SetUInt( $00000001);
         SHACF_URLHISTORY','LongWord').SetUInt( $00000002);
6355:
         SHACF_URLMRU', LongWord').SetUInt($0000004);
SHACF_USETAB', LongWord').SetUInt($00000008);
6356:
6357:
         SHACF_FILESYS_ONLY', 'LongWord').SetUInt( $00000010);
6358:
         SHACF_AUTOSUGGEST_FORCE_ON','LongWord').SetUInt( $10000000);
SHACF_AUTOSUGGEST_FORCE_OFF','LongWord').SetUInt( $20000000);
SHACF_AUTOSUGGEST_FORCE_ON','LongWord').SetUInt( $40000000);
SHACF_AUTOAPPEND_FORCE_OFF','LongWord').SetUInt( DWORD ( $80000000 ));
6359:
6360:
6361:
         Function SHAutoComplete( hwndEdit : HWND; dwFlags : DWORD) : HRESULT
6363:
         Procedure SHSetThreadRef( punk : IUnknown)
Procedure SHGetThreadRef( out ppunk : IUnknown)
6364:
6365:
         CTF_INSIST','LongWord').SetUInt( $00000001);
6366:
         CTF_TRREAD_REF','LongWord').SetUInt( $00000002);
CTF_PROCESS_REF','LongWord').SetUInt( $00000004);
6367:
6368:
         CTF_COINIT','LongWord').SetUInt( $00000008);
6369:
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:
6374:
        Function DrawFocusRect( hDC : HDC; const lprc : TRect) : BOOL
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; hbr : HBRUSH) : Integer
6375:
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)
6387:
         Function FlatSB_GetScrollProp( p1 : HWND; propIndex : Integer; p3 : PInteger) : Bool
6388:
         Function FlatSB_SetScrollProp( p1 : HWND; index : Integer; newValue : Integer; p4 : Bool) : Bool Function GET_APPCOMMAND_LPARAM( lParam : Integer) : Word //of JvWin32
6389:
6390:
         Function GET_DEVICE_LPARAM( lParam : Integer) : Word
Function GET_MOUSEORKEY_LPARAM( lParam : Integer) : Integer
6391:
6392:
         Function GET_FLAGS_LPARAM( lParam : Integer) : Word
6393:
         Function GET_KEYSTATE_LPARAM( lParam : Integer) : Word
6394:
6395:
6396:
            ******* 204 unit uPSI_ShellAPI;
6397: //
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 ShellAbout( 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
       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: Function ExtractIconEx(lpszFile:PChar;nIconIndex:Int;var 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:
6417:
         DLLVER_BUILD_MASK', 'LongWord').SetUInt( Int64 (
                                                                           $0000000FFFF0000 ));
6418:
         DLLVER_QFE_MASK','LongWord').SetUInt( Int64 ( $00000000000FFFF ));
         Function MAKEDLLVERULL( Major, Minor, Build, Qfe: Word): Int64
Function SimpleXMLEncode( const S: string): string
6419:
6420:
         Procedure SimpleXMLDecode( var S : string; TrimBlanks : Boolean)
        Function XMLEncode( const S : string) : string
Function XMLDecode( const S : string) : string
Function EntityEncode( const S : string) : string
Function EntityDecode( const S : string) : string
6422:
6423:
6424:
6425:
6426:
6427: procedure RIRegister_CPort_Routines(S: TPSExec);
       Procedure EnumComPorts( Ports : TStrings)
Procedure ListComPorts( Ports : TStrings)
6428:
6429:
         Procedure ComPorts ( Ports : TStrings) //Alias to Arduino
```

```
6431:
       Function GetComPorts: TStringlist;
       Function StrToBaudRate( Str : string) : TBaudRate
6432:
       Function StrToStopBits( Str : string) : TStopBits
6433:
6434:
       Function StrToDataBits( Str : string) : TDataBits
6435:
       Function StrToParity(Str:string):TParityBits
       Function StrToFlowControl( Str : string) : TFlowControl
6436:
6437:
       Function BaudRateToStr( BaudRate : TBaudRate) : string
       Function StopBitsToStr( StopBits : TStopBits) :
6438:
       Function DataBitsToStr( DataBits : TDataBits) : string
6439:
6440:
       Function ParityToStr( Parity : TParityBits) : string
Function FlowControlToStr( FlowControl : TFlowControl) : string
6441:
       Function ComErrorsToStr( Errors : TComErrors) : String
6442:
6443:
6444:
       Function GetMessage( var lpMsg : TMsg; hWnd : HWND; wMsgFilterMin, wMsgFilterMax : UINT) : BOOL
       Function DispatchMessage( const lpMsg : TMsg) : Longint
6445:
6446:
       Function TranslateMessage( const lpMsg : TMsg) : BOOL
       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
       Function GetSpecialFolderPath( const FolderName : string; CanCreate : Boolean) : string
6452:
6453:
       Procedure JAddToRecentDocs( const Filename : string)
       Procedure ClearRecentDocs
6454:
       Function ExtractIconFromFile(FileName: string; Index: Integer): HICON Function CreateShellLink(const AppName, Desc: string; Dest: string):
6455:
6456:
6457:
       Procedure GetShellLinkInfo( const LinkFile : WideString; var SLI : TShellLinkInfo)
Procedure SetShellLinkInfo( const LinkFile : WideString; const SLI : TShellLinkInfo)
6458:
       Function RecycleFile(FileToRecycle: string): Boolean
Function JCopyFile(FromFile, ToDir: string): Boolean
6459:
       Function ShellObjectTypeEnumToConst( ShellObjectType : TShellObjectType) : UINT Function ShellObjectTypeConstToEnum( ShellObjectType : UINT) : TShellObjectType
6461:
6462:
       Function QueryServiceConfig2A( hService : SC_HANDLE; dwInfoLevel : DWORD; lpBuffer : LPBYTE; cbBufSize :
6463:
      DWORD; var pcbBytesNeeded : DWORD) : BOOL
       Function QueryServiceConfig2W( hService : SC_HANDLE; dwInfoLevel : DWORD; lpBuffer : LPBYTE; cbBufSize :
      DWORD; var pcbBytesNeeded : DWORD) : BOOL
      Function QueryServiceConfig2( hService : SC_HANDLE; dwInfoLevel : DWORD; lpBuffer : LpBYTE; cbBufSize : DWORD; var pcbBytesNeeded : DWORD) : BOOL
6465:
6466:
       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
6468:
       Function EnumServicesStatusEx( hSCManager : SC_HANDLE; InfoLevel : SC_ENUM_TYPE; dwServiceType : DWORD;
      dwServiceState : DWORD; lpServices : LPBYTE; cbBufSize: DWORD; var pcbBytesNeeded, lpServicesReturned,
      lpResumeHandle:DWORD; pszGroupName
6469: Function ConvertSidToStringSid( sid : PSID; var stringSid : LPWSTR) : BOOL
      ******* unit uPSI JclPeImage;
6471:
6472:
6473:
       Function IsValidPeFile( const FileName : TFileName) : Boolean
       // Function PeGetNtHeaders( const FileName : TFileName; var NtHeaders : TImageNtHeaders) : Boolean
6474:
6475:
       Function PeCreateNameHintTable( const FileName : TFileName) : Boolean
6476:
       Function PeRebaseImage(const ImageName: TFileName; NewBase : DWORD; TimeStamp : DWORD; MaxNewSize :
      DWORD) : TJclRebaseImageInfo
       Function PeVerifyCheckSum( const FileName : TFileName) : Boolean
       Function PeClearCheckSum( const FileName : TFileName) : Boolean
6478:
6479:
       Function PeUpdateCheckSum( const FileName : TFileName) : Boolean
       Function PeDoesExportFunction(const FileName:TFileName;const
6480:
      FuncName: string; Options: TJclSmartCompOptions): Bool;
       Function PelsExportFunctionForwardedEx( const FileName : TFileName; const FunctionName : string; var
      {\tt ForwardedName} \; : \; {\tt string}; \; {\tt Options} \; : \; {\tt TJclSmartCompOptions}) \; : \; {\tt Boolean}
6482:
      Function PelsExportFunctionForwarded(const FileName:TFileName;const
      {\tt FunctionName:string:Options:TJclSmartCompOptions):Bool}
6483: Function PeDoesImportFunction( const FileName: TFileName; const FunctionName: string; const LibraryName
        string; Options : TJclSmartCompOptions) : Boolean
6484: Function PeDoesImportLibrary(const FileName:TFileName;const
      LibraryName: string; Recursive: Boolean): Boolean);
6485:
       Function PeImportedLibraries ( 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:
6488:
       Function PeExportedNames( const FileName : TFileName; const FunctionsList : TStrings) : Boolean
       Function PeExportedVariables( const FileName: TFileName; const FunctionsList: TStrings): Boolean
6489:
       Function PeResourceKindNames(const FileN:TFileName;ResourceType:TJclPeResourceKind;const
6490:
      NamesList:TStrings):Bool
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
6496:
       //Function PeMapImgLibraryName( const BaseAddress : Pointer) : string
6497:
6498:
       //Function PeMapImgSections( const NtHeaders : PImageNtHeaders) : PImageSectionHeader
6499:
       //Function PeMapImgFindSection( const NtHeaders: PImageNtHeaders; const SectionName: string):
      PImageSectionHeader
```

```
6500:
          // Function \ PeMapImgExported Variables (const \ Module: \ HMODULE; \ const \ Variables List: TStrings): Boolean // Function \ PeMapImgResolve Package Thunk ( \ Address: Pointer) : Pointer
6501:
          Function PeMapFindResource(const Module:HMODULE;const ResourceType:PChar;const ResourceName:string):
6502:
             Pointer;
6503:
            SIRegister_TJclPeSectionStream(CL);
            SIRegister_TJclPeMapImgHookItem(CL);
6504:
           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 \ Address: Pointer; \ var \ Name: string): Boolean \ Address: Pointer; \ var \ Name: string): Boolean \ Address: Pointer; \ var \ Name: string): Boolean \ Address: Pointer; \ var \ Name: string): Boolean \ Address: Pointer; \ var \ Name: string): Boolean \ Address: Pointer; \ var \ Name: string): Boolean \ Address: Pointer; \ var \ Name: string): Boolean \ Address: Pointer; \ var \ Name: string): Boolean \ Address: Pointer; \ var \ Name: string): Boolean \ Address: Pointer; \ var \ Name: string): Boolean \ Address: Pointer; \ var \ Name: string): Boolean \ Address: Pointer; \ var \ Name: string): Boolean \ Address: Pointer; \ var \ Name: string): Boolean \ Address: Pointer; \ var \ Name: string): Boolean \ Address: Pointer; \ var \ Name: string): Boolean \ Address: Pointer; \ var \ Name: string): Boolean \ Address: Pointer; \ var \ Name: string): Boolean \ Address: Pointer; \ var \ Name: string): Boolean \ Address: Pointer; \ var \ Name: string): Boolean \ Address: Pointer; \ var \ Name: string): Boolean \ Address: Pointer; \ var \ Name: string): Boolean \ Address: Pointer; \ var \ Name: string): Boolean \ Address: Pointer; \ var \ Name: string): Boolean \ Address: Pointer; \ var \ Name: string): Boolean \ Address: Pointer; \ var \ Name: string): Boolean \ Address: Pointer; \ var \ Name: string): Boolean \ Address: Pointer; \ var \ Name: string): Boolean \ Address: Pointer; \ var \ Name: string): Boolean \ Address: Pointer; \ var \ Name: string): Boolean \ Address: Pointer; \ var \ Name: string): Boolean \ Address: Pointer; \ var \ Name: string): Boolean \ Address: Pointer; \ var \ Name: string): Boolean \ Address: Pointer; \ var \ Name: string): Boolean \ Address: Pointer; \ var \ Name: string): Boolean \ Address: Pointer; \ var \ Name: string): Boolean \ Address: Pointer; \ var \ Name: string): Boolean \ Address: Pointer; \ Name: string): Boolean \ Address: Pointer; \ Name: string): \ Name: strin
6508:
            Type TJclBorUmSymbolKind','(skData,skFunction,skConstructor,skDestructor,skRTTI,skVTable)
TJclBorUmSymbolModifier', '( smQualified, smLinkProc )
6510:
            TJclBorUmSymbolModifiers', 'set of TJclBorUmSymbolModifier
6511:
            TJclBorUmDescription', 'record Kind : TJclBorUmSymbolKind; Modifiers : TJclBorUmSymbolModifiers; end
            TJclBorUmResult', '( urOk, urNotMangled, urMicrosoft, urError )
TJclPeUmResult', '( umNotMangled, umBorland, umMicrosoft )
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;
6516:
          Function PeBorUnmangleName2( const Name : string; var Unmangled : string) : TJclBorUmResult;
          Function PeBorUnmangleName3( const Name : string) : string;
6517:
          Function PeIsNameMangled( const Name : string) : TJclPeUmResult
Function PeUnmangleName( const Name : string; var Unmangled : string) : TJclPeUmResult
6518:
6519:
6520:
6521:
Function StCopyFile( const SrcPath, DestPath: AnsiString): Cardinal
Function CreateTempFile( const aFolder: AnsiString; const aPrefix: AnsiString): AnsiString
6523:
6524:
          Function DeleteVolumeLabel( Drive : Char) : Cardinal
6526:
           //Procedure EnumerateDirectories(const
        StartDir: AnsiString; FL: TStrings; SubDirs: Bool; IncludeItem: TIncludeItemFunc);
6527:
         //Procedure EnumerateFiles(const StartDir:AnsiString;FL:TStrings;SubDirs:Bool
         IncludeItem:TIncludeItemFunc);
         Function FileHandlesLeft( MaxHandles : Cardinal) : Cardinal
6529:
          \textbf{Function} \ \ \texttt{FileMask} \ ( \ \textbf{const} \ \ \texttt{FileMask} \ : \ \texttt{AnsiString}) \ : \ \texttt{Boolean}
          Function FileTimeToStDateTime( FileTime : LongInt) : TStDateTimeRec
Function FindNthSlash( const Path : AnsiString; n : Integer) : Integer
6530:
6531:
6532:
          Function FlushOsBuffers( Handle : Integer) : Boolean
          Function GetCurrentUser : AnsiString
6533:
          Function GetDiskClass( Drive : Char) : DiskClass
6534:
          Function GetDiskInfo(Drive:Char; var ClustersAvail, TotalClusters, BytesPerSector,
6535:
        SectorsPerCluster:Cardinal):Bool;
          Function GetDiskSpace(Drive:Char; var UserSpaceAvail:Double; var TotalSpaceAvail:Double; var
        DiskSize:Double):Bool;
6537:
        Function GetDiskSpace(Drive:Char; var UserSpaceAvail:Comp; var TotalSpaceAvail:Comp; var
        DiskSize:Comp):Boolean;
           { index 0 - FreeBytesAvailable, 1 - TotalNumberOfBytes, 2 - TotalNumberOfFreeBytes }
6539:
          Function getDiskSpace2(const path: String; index: integer): int64;
6540:
          Function GetFileCreateDate( const FileName : AnsiString) : TDateTime
          Function StGetFileLastAccess( const FileName : AnsiString) : TDateTime
6541:
          Function GetFileLastModify( const FileName : AnsiString) : TDateTime
6542:
          Function GetHomeFolder( aForceSlash : Boolean) : AnsiString
6543:
          Function GetLongPath( const APath : AnsiString) : AnsiString
6544:
6545:
          Function GetMachineName : AnsiString
          Function GetMediaID( Drive : Char; var MediaIDRec : MediaIDType) : Cardinal
6546:
6547:
          Function GetParentFolder( const APath : AnsiString; aForceSlash : Boolean) : AnsiString
          Function GetShortPath( const APath : AnsiString) : AnsiString
6548:
          Function GetSystemFolder( aForceSlash : Boolean) : AnsiString
Function GetTempFolder( aForceSlash : boolean) : AnsiString
6549:
6550:
          Function StGetWindowsFolder( aForceSlash : boolean) : AnsiString
6551:
          Function GetWorkingFolder( aForceSlash : boolean) : AnsiString
6553:
          Function GlobalDateTimeToLocal( const UTC : TStDateTimeRec; MinOffset : Integer) : TStDateTimeRec
6554:
          \textbf{Function} \  \, \texttt{StIsDirectory}( \  \, \textbf{const} \  \, \texttt{DirName} \  \, : \  \, \texttt{AnsiString}) \  \, : \  \, \texttt{Boolean}
          Function IsDirectoryEmpty( const S : AnsiString) : Integer Function IsDriveReady( Drive : Char) : Boolean
6555:
6556:
          Function IsFile( const FileName : AnsiString) : Boolean
6557:
6558:
          Function IsFileArchive( const S : AnsiString) : Integer
          \textbf{Function} \  \, \texttt{IsFileHidden}( \  \, \textbf{const} \  \, \texttt{S} \  \, \texttt{:} \  \, \texttt{AnsiString}) \  \, \texttt{:} \  \, \texttt{Integer}
6559:
          Function IsFileReadOnly( const S : AnsiString) : Integer
6560:
          Function IsFileSystem( const S : AnsiString) : Integer
6561:
6562:
          Function LocalDateTimeToGlobal( const DT1 : TStDateTimeRec; MinOffset : Integer) : TStDateTimeRec
          Function ReadVolumeLabel( var VolName : AnsiString; Drive : Char) : Cardinal
Function SameFile( const FilePath1, FilePath2 : AnsiString; var ErrorCode : Integer) : Boolean
6563:
6564:
6565:
          Function SetMediaID( Drive : Char; var MediaIDRec : MediaIDType) : Cardinal
          Procedure SplitPath( const APath : AnsiString; Parts : TStrings)
6566:
6567:
          Function StDateTimeToFileTime( const FileTime : TStDateTimeRec) : LongInt
          Function StDateTimeToUnixTime( const DT1: TStDateTimeRec): Longint Function UnixTimeToStDateTime( UnixTime: Longint): TStDateTimeRec
6568:
6569:
          Function ValidDrive( Drive : Char) : Boolean
6571:
          Function WriteVolumeLabel( const VolName : AnsiString; Drive : Char) : Cardinal
6572:
6574: Function CreateAccount( const Server, Username, Fullname, Password, Description, Homedir, Script: string; const PasswordNeverExpires: Boolean): Boolean
6575: Function CreateLocalAccount( const Username, Fullname, Password, Description, Homedir, Script : string;
        const PasswordNeverExpires : Boolean) : Boolean
          Function DeleteAccount( const Servername, Username : string) : Boolean
6577: Function DeleteLocalAccount( Username : string) : Boolean
```

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 \begin{tabular}{ll} \textbf{Function} & CreateLocalGroup( \begin{tabular}{ll} \textbf{const} & Server, & Groupname, & Description: \textbf{string}): Boolean \\ \textbf{Function} & CreateGlobalGroup( \begin{tabular}{ll} \textbf{const} & Server, & Groupname, & Description: \textbf{string}): Boolean \\ \textbf{const} & Server, & Groupname, & Description: \textbf{string}): Boolean \\ \textbf{const} & Server, & Groupname, & Description: \textbf{string}): Boolean \\ \textbf{const} & Server, & Groupname, & Description: \textbf{string}): \\ \textbf{const} & Server, & Groupname, & Description: \textbf{string}): \\ \textbf{const} & Server, & Groupname, & Description: \textbf{string}): \\ \textbf{const} & Server, & Groupname, & Description: \textbf{string}): \\ \textbf{const} & Server, & Groupname, & Description: \textbf{string}): \\ \textbf{const} & Server, & Groupname, & Description: \textbf{string}): \\ \textbf{const} & Server, & Groupname, & Description: \textbf{string}): \\ \textbf{const} & Server, & Groupname, & Description: \textbf{string}): \\ \textbf{const} & Server, & Groupname, & Description: \textbf{string}): \\ \textbf{const} & Server, & Groupname, & Description: \textbf{string}): \\ \textbf{const} & Server, & Groupname, & Description: \textbf{string}): \\ \textbf{const} & Server, & Groupname, & Groupname, & Groupname, & Groupname, & Groupname, \\ \textbf{const} & Server, & Groupname, & Groupname, & Groupname, & Groupname, \\ \textbf{const} & Server, & Groupname, & Groupname, & Groupname, & Groupname, \\ \textbf{const} & Server, & Groupname, & Groupname, & Groupname, & Groupname, \\ \textbf{const} & Server, & Groupname, & Groupname, & Groupname, & Groupname, \\ \textbf{const} & Server, & Groupname, & Groupname, & Groupname, \\ \textbf{const} & Server, & Groupname, & Groupname, & Groupname, \\ \textbf{const} & Server, & Groupname, & Groupname, & Groupname, \\ \textbf{const} & Server, & Groupname, & Groupname, & Groupname, \\ \textbf{const} & Server, & Groupname, & Groupname, & Groupname, \\ \textbf{const} & Server, & Groupname, & Groupname, & Groupname, \\ \textbf{const} & Server, & Groupname, & Groupname, & Groupname, \\ \textbf{const} & Groupname, &
6578:
6579:
           Function DeleteLocalGroup( const Server, Groupname : string) : Boolean
Function GetLocalGroups( const Server : string; const Groups : TStrings) : Boolean
6581:
           Function GetGlobalGroups( const Server : string; const Groups : TStrings) : Boolean
6582:
           Function LocalGroupExists( const Group : string) : Boolean
6583:
           Function GlobalGroupExists( const Server, Group : string) : Boolean
6584:
            Function AddAccountToLocalGroup( const Accountname, Groupname : string) : Boolean
6585:
6586:
           \textbf{Function} \  \, \texttt{LookupGroupName}( \  \, \textbf{const} \  \, \texttt{Server} \  \, : \  \, \textbf{string}; \  \, \textbf{const} \  \, \texttt{RID} \  \, : \  \, \texttt{TNetWellKnownRID}) \  \, : \  \, \textbf{string} 
6587:
           Procedure ParseAccountName( const QualifiedName : string; var Domain, UserName : string)
           Function IsLocalAccount( const AccountName : string) : Boolean
6588:
           Function TimeStampInterval( StartStamp, EndStamp : TDateTime) : integer
6590:
           Function GetRandomString( NumChar : cardinal) : string
6591:
               6592:
6593: TypeS('TUnitType', '( utSrc, utHead, utRes, utPrj, utOther )
6594: Function cIsWinNT: boolean
          Procedure cFilesFromWildcard(Directory, Mask: string; var Files:TStringList; Subdirs, ShowDirs,
6595:
         Multitasking:Boolean;
6596: Function cExecuteFile( const FileName, Params, DefaultDir: string; ShowCmd: Integer): THandle 6597: Function cRunAndGetOutput(Cmd,WorkDir:string; ErrFunc:TErrFunc; LineOutputFunc:TLineOutputFunc;
          CheckAbortFunc: TCheckAbortFunc; ShowReturnValue: Boolean): string
6598:
         Function cGetShortName( FileName : string) : string
           Procedure cShowError( Msg : String)
Function cCommaStrToStr( s : string; formatstr : string) : string
6599:
6601:
            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;
6606:
           Function cBuildFilter1( var value : string; const _filters : array of string) : boolean;
           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:
6611:
           Procedure cStrtoPoint( var pt : TPoint; value : string)
           Function cPointtoStr( const pt : TPoint) : string
Function cListtoStr( const List : TStrings) : string
6612:
6613:
6614:
           Function ListtoStr( const List : TStrings) : string
6615:
           Procedure StrtoList( s : string; const List : TStrings; const delimiter : char)
           Procedure cStrtoList( s : string; const List : TStrings; const delimiter : char)
6616:
           Function cGetFileTyp( const FileName : string) : TUnitType
6617:
           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
6620:
6621:
           Procedure cCloneMenu( const FromMenu : TMenuItem; ToMenu : TMenuItem)
6622:
           Function cGetLastPos( const SubStr : string; const S : string) : integer
6624:
           Function cGenMakePath( FileName : String) : String;
           Function cGenMakePath1(FileName: String): String
Function cGenMakePath1(FileName: String): String
Function cGenMakePath1(FileName: String; EscapeSpaces, EncloseInQuotes: Boolean): String;
6625:
6626:
           Function cGetRealPath( BrokenFileName : String; Directory : String) : String
6627:
           Function cCalcMod( Count : Integer) : Integer
6628:
           Function cGetVersionString( FileName : string) : string
6629:
6630:
           \textbf{Function} \ \texttt{cCheckChangeDir}(\ \textbf{var} \ \texttt{Dir} \ : \ \textbf{string}) \ : \ \texttt{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)
6633:
6634:
           \textbf{Function} \  \, \texttt{AttrtoStr(} \  \, \textbf{const} \  \, \texttt{Attr} \  \, : \  \, \texttt{TSynHighlighterAttributes)} \  \, : \  \, \textbf{string}
           Function GetFileTyp( const FileName : string) : TUnitType
6635:
6636:
           Function Atoi(const aStr: string): integer
6637:
            Function Itoa(const aint: integer): string
6638:
6639:
         procedure SIRegister_cHTTPUtils(CL: TPSPascalCompiler);
6640:
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:
6648:
             THTTPVersion', 'record Version : THTTPVersionEnum; Protocol : TH'
+'TTPProtocolEnum; CustomProtocol : AnsiString; CustomMajVersion : Integer; '
6649:
6650:
                +'CustomMinVersion : Integer; end
             THTTPHeaderNameEnum', '( hntCustom, hntHost, hntContentType, hnt'
6651:
6652:
               +'ContentLength, hntContentTransferEncoding, hntContentLocation, hntContentL'
               +'anguage, hntContentEncoding, hntTransferEncoding, hntDate, hntServer, hntU'
+'serAgent, hntLocation, hntConnection, hntExpires, hntCacheControl, hntSetC'
6653:
6654:
               +'ookie, hntCookie, hntAuthorization, hntVia, hntWarning, hntContentRange,
6656:
               +'ntXForwardedFor, hntPragma, hntXPoweredBy, hntWWWAuthenticate, hntLastModi'
6657:
               +'fied, hntETag, hntProxyAuthorization, hntReferer, hntAge, hntAcceptRanges,'
               +'hntAcceptEncoding, hntAcceptLanguage, hntAcceptCharset, hntIfModifiedSince
+'e, hntIfUnmodifiedSince, hntRetryAfter, hntUpgrade, hntStatus, hntProxyCon'
6658:
6659:
6660:
                +'nection, hntOrigin, hntKeepAlive
             THTTPHeaderName', 'record Value : THTTPHeaderNameEnum; Custom: AnsiString; end THTTPCustomHeader', 'record FieldName : AnsiString; FieldValue :' +' AnsiString; end
6661:
6662:
6663:
             //PHTTPCustomHeader', '^THTTPCustomHeader // will not work
```

```
THTTPContentLengthEnum', '( hcltNone, hcltByteCount )
THTTPContentLength', 'record Value : THTTPContentLengthEnum; ByteCount:Int64; end
//PHTTPContentLength', '^THTTPContentLength // will not work
THTTPContentTypeMajor', '( hctmCustom, hctmText, hctmImage )
6665:
6666:
6667:
6668:
                                                         '( hctNone, hctCustomParts, hctCustomStri'
6669:
              THTTPContentTypeEnum',
                +'ng, hctTextHtml, hctTextAscii, hctTextCss, hctTextPlain, hctTextXml, hctTe'
+'xtCustom, hctImageJpeg, hctImagePng, hctImageGif, hctImageCustom, hctAppli'
6670:
6671:
6672:
                +'cationJSON, hctApplicationOctetStream, hctApplicationJavaScript, hctApplic'
6673:
                +'ationCustom, hctAudioCustom, hctVideoCustom)
              THTTPContentType', 'record Value : THTTPContentTypeEnum; CustomM'
    +'ajor : AnsiString; CustomMinor : AnsiString; Parameters : AnsiStringArray;'
6674:
6675:
                +' CustomStr : AnsiString; end
6676:
6677:
              THTTPDateFieldEnum', '( hdNone, hdCustom, hdParts, hdDateTime )
              THTTPDateField', 'record Value : THTTPDateFieldEnum; DayOfWeek :'
+' Integer; Day : integer; Month : integer; Year : Integer; Hour : integer;
6678:
6679:
6680:
                +'Min : integer; Sec : Integer; TimeZoneGMT : Boolean; CustomTimeZone : Ansi'
                +'String; DateTime : TDateTime; Custom : AnsiString; end
6681:
6682:
              THTTPTransferEncodingEnum', '( hteNone, hteCustom, hteChunked )
              THTTPTransferEncoding', 'record Value : THTTPTransferEncodingEnu' +'m; Custom : AnsiString; end THTTPConnectionFieldEnum', '( hcfNone, hcfCustom, hcfClose, hcfKeepAlive )
6683:
6684:
6685:
              THTTPConnectionField', 'record Value : THTTPConnectionFieldEnum;
6686:
6687:
                +' Custom : AnsiString; end
6688:
              THTTPAgeFieldEnum', '( hafNone, hafCustom, hafAge )
              THTTPAgeField', 'record Value: THTTPAgeFieldEnum; Age : Int64; Custom: AnsiString; end
6689:
6690:
              THTTPCacheControlFieldEnum', '( hccfNone, hccfDecoded, hccfCustom )
6691:
              THTTPCacheControlRequestSubField', '( hccsfNoCache, hccsfNoStore'
6692:
                +', hccsfMaxAge, hccsfMaxStale, hccsfMinFresh, hccsfNoTransform, hccsfOnlyIfCached )
6693:
              THTTPCacheControlResponseSubField', '(hccrfPublic, hccrfPrivate
                +', hccrfNoCache, hccrfNoStore, hccrfNoTransform, hccrfMustRevalidate, hccrf'
6694:
6695:
                +'ProxyRevalidate, hccrfMaxAge, hccrfSMaxAge)
              THTTPCacheControlField', 'record Value : THTTPCacheControlFieldEnum; end THTTPContentEncodingEnum', '( hceNone, hceCustom, hceIdentity, h' +'ceCompress, hceDeflate, hceExi, hceGzip, hcePack200Gzip )
6696:
6697:
6698:
              THTTPContentEncoding', 'record Value: THTTPContentEncodingEnum; Custom: AnsiString; end;
6699:
              THTTPContentEncodingFieldEnum', '( hcefNone, hcefList )
THTTPContentEncodingField', 'record Value : THTTPContentEncoding'
6700:
6701:
              +'FieldEnum; List: array of THTTPContentEncoding; end
THTTPRetryAfterFieldEnum', '( hrafNone, hrafCustom, harfDate, harfSeconds )
THTTPRetryAfterField', 'record Value: THTTPRetryAfterFieldEnum;'
6702:
6703:
6704:
              +' Custom : AnsiString; Date : TDateTime; Seconds : Int64; end
THTTPContentRangeFieldEnum', '( hcrfNone, hcrfCustom, hcrfByteRange )
THTTPContentRangeField', 'record Value : THTTPContentRangeFieldE'
6705:
6706:
6707:
                 +'num; ByteFirst : Int64; ByteLast : Int64; ByteSize : Int64; Custom : AnsiString; end
6708:
              THTTPSetCookieFieldEnum', '( hscoNone, hscoDecoded, hscoCustom )
THTTPSetCookieCustomField', 'record Name : AnsiString; Value : AnsiString; end
6709:
6710:
              THTTPSetCookieCustomFieldArray', 'array of THTTPSetCookieCustomField
6711:
              THTTPSetCookieField', 'record Value : THTTPSetCookieFieldEnum; D
6712:
6713:
                +'omain : AnsiString; Path : AnsiString; Expires : THTTPDateField; MaxAge : '
                +'Int64; HttpOnly : Boolean; Secure : Boolean; CustomFields : THTTPSetCookie' +'CustomFieldArray; Custom : AnsiString; end
6714:
6715:
               //PHTTPSetCookieField', '^THTTPSetCookieField // will not work
6716:
6717:
              THTTPSetCookieFieldArray', 'array of THTTPSetCookieField
              THTTPCookieFieldEnum', '( hcoNone, hcoDecoded, hcoCustom )
THTTPCookieFieldEntry', 'record Name : AnsiString; Value : AnsiString; end
6718:
6719:
              THITPCookieFieldEntry', 'ATHTTPCookieFieldEntry', value - Amsisting, v
6720:
6721:
6722:
              THTTPCookieField', 'record Value : THTTPCookieFieldEnum; Entries'
6723:
                +' : THTTPCookieFieldEntryArray; Custom : AnsiString; end
              THTTPCommonHeaders', 'record TransferEncoding: THTTPTransferEnc'
+'oding; ContentType: THTTPContentType; ContentLength: THTTPContentLength;'
6724:
6725:
6726:
                +' Connection : THTTPConnectionField; ProxyConnection : THTTPConnectionField'
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)
6732:
              THTTPMethod', 'record Value : THTTPMethodEnum; Custom : AnsiString; end
6733:
              THTTPRequestStartLine', 'record Method: THTTPMethod;URI: AnsiString;Version:THTTPVersion; end THTTPRequestHeader', 'record CommonHeaders: THTTPCommonHeaders;'
6734:
6735:
6736:
                +' FixedHeaders : THTTPFixedHeaders; CustomHeaders : THTTPCustomHeaders; Coo'
              +'kie : THTTPCookieField; IfModifiedSince:THTTPDateField;IfUnmodifiedSince:THTTPDateField;end //PHTTPRequestHeader', '^THTTPRequestHeader'/ will not work
6737:
6738:
6739:
              THTTPRequest', 'record StartLine: THTTPRequestStartLine; Header'
6740:
                +' : THTTPRequestHeader; HeaderComplete : Boolean; HasContent : Boolean; end
              THTTPResponseStartLineMessage', '( hslmNone, hslmCustom, hslmOK)
THTTPResponseStartLine', 'record Version: THTTPVersion; Code: '
+'Integer; Msg: THTTPResponseStartLineMessage; CustomMsg: AnsiString; end
6741:
6742:
6743:
              THTTPResponseHeader', 'record CommonHeaders: THTTPCommonHeaders' +'; FixedHeaders: THTTPFixedHeaders; CustomHeaders: THTTPCustomHeaders; Co'
6744:
6745:
6746:
                +'okies : THTTPSetCookieFieldArray; Expires : THTTPDateField; LastModified :'
              +' THTTPDateField; Age : THTTPAgeField; end //PHTTPResponseHeader', '^THTTPResponseHeader // will not work
6747:
6748:
6749:
              THTTPResponse', 'record StartLine: THTTPResponseStartLine; Head'
            +'er: THTTPResponseHeader; HeaderComplete: Boolean; HasContent: Boolean; end
Function HTTPMessageHasContent( const H: THTTPCommonHeaders): Boolean
Procedure InitHTTPRequest( var A: THTTPRequest)
Procedure InitHTTPResponse( var A: THTTPResponse)
6750:
6751:
6752:
```

```
6754:
       Procedure ClearHTTPVersion( var A : THTTPVersion)
       Procedure ClearHTTPContentLength( var A : THTTPContentLength)
6755:
6756:
       Procedure ClearHTTPContentType( var A : THTTPContentType)
6757:
       Procedure ClearHTTPDateField( var A : THTTPDateField)
6758:
       Procedure ClearHTTPTransferEncoding( var A : THTTPTransferEncoding)
       Procedure ClearHTTPConnectionField( var A : THTTPConnectionField)
Procedure ClearHTTPAgeField( var A : THTTPAgeField)
6759:
6760:
       Procedure ClearHTTPContentEncoding( var A : THTTPContentEncoding)
6761:
6762:
       Procedure ClearHTTPContentEncodingField( var A : THTTPContentEncodingField)
       Procedure ClearHTTPContentRangeField( var A : THTTPContentRangeField)
Procedure ClearHTTPSetCookieField( var A : THTTPSetCookieField)
6763:
6764:
       Procedure ClearHTTPCommonHeaders( var A : THTTPCommonHeaders)
6766:
       //Procedure ClearHTTPFixedHeaders( var A : THTTPFixedHeaders,
       Procedure ClearHTTPCustomHeaders( var A : THTTPCustomHeaders)
Procedure ClearHTTPCookieField( var A : THTTPCookieField)
6767:
6768:
6769:
       Procedure ClearHTTPMethod( var A : THTTPMethod)
       Procedure ClearHTTPRequestStartLine( var A : THTTPRequestStartLine)
6770:
       Procedure ClearHTTPRequestHeader( var A : THTTPRequestHeader)

Procedure ClearHTTPRequest( var A : THTTPRequestHeader)

Procedure ClearHTTPResponseStartLine( var A : THTTPResponseStartLine)

Procedure ClearHTTPResponseHeader( var A : THTTPResponseHeader)
6771:
6772:
6773:
6774:
6775:
       Procedure ClearHTTPResponse( var A : THTTPResponse)
        THTTPStringOption',
THTTPStringOptions',
                              '( hsoNone )
6776:
                                set of THTTPStringOption
6777:
        FindClass('TOBJECT'), 'TAnsiStringBuilder
6778:
6779:
6780:
       Procedure BuildStrHTTPVersion(const A:THTTPVersion; const B:TAnsiStringBuilder;const
      P:THTTPStringOptions)
6781:
       Procedure BuildStrHTTPContentLengthValue( const A : THTTPContentLength; const B : TAnsiStringBuilder;
      const P : THTTPStringOptions)
       Procedure BuildStrHTTPContentLength( const A : THTTPContentLength; const B : TAnsiStringBuilder; const P
6782:
        THTTPStringOptions)
6783: Procedure BuildStrHTTPContentTypeValue( const A : THTTPContentType; const B : TAnsiStringBuilder; const P
        THTTPStringOptions)
       Procedure BuildStrHTTPContentType(const A:THTTPContentType;const B:TAnsiStringBuilder; const
6784:
      P:THTTPStringOptions)
      Procedure BuildStrRFCDateTime( const DOW, Da, Mo, Ye, Ho, Mi, Se : Integer; const TZ : AnsiString; const
B : TAnsiStringBuilder; const P : THTTPStringOptions)
6785:
6786:
       Procedure BuildStrHTTPDateFieldValue( const A : THTTPDateField; const B : TAnsiStringBuilder; const P :
      THTTPStringOptions)
6787:
      Procedure BuildStrHTTPDateField(const A:THTTPDateField;const B:TAnsiStringBuilder;const
      P:THTTPStringOptions)
      Procedure BuildStrHTTPTransferEncodingValue( const A : THTTPTransferEncoding; const B :
      TAnsiStringBuilder; const P: THTTPStringOptions)

Procedure BuildStrHTTPTransferEncoding( const A: THTTPTransferEncoding; const B: TAnsiStringBuilder;
6789:
      const P : THTTPStringOptions)
6790:
      Procedure BuildStrHTTPContentRangeField( const A : THTTPContentRangeField; const B : TAnsiStringBuilder;
      const P : THTTPStringOptions)
6791: Procedure BuildStrHTTPConnectionFieldValue( const A : THTTPConnectionField; const B : TAnsiStringBuilder;
      const P : THTTPStringOptions)
6792: Procedure BuildStrHTTPConnectionField( const A : THTTPConnectionField; const B : TAnsiStringBuilder;
      const P : THTTPStringOptions)
      Procedure BuildStrHTTPAgeField(const A:THTTPAgeField;const B:TAnsiStringBuilder;const
      P:THTTPStringOptions);
      Procedure BuildStrHTTPContentEncoding( const A : THTTPContentEncoding; const B : TAnsiStringBuilder; const P : THTTPStringOptions)
6794:
       Procedure BuildStrHTTPContentEncodingField(const A:THTTPContentEncodingField;const
      B:TAnsiStringBuilder;const P:THTTPStringOptions)
6796: Procedure BuildStrHTTPProxyConnectionField(const A : THTTPConnectionField; const B : TAnsiStringBuilder;
      const P : THTTPStringOptions
6797: Procedure BuildStrHTTPCommonHeaders( const A : THTTPCommonHeaders; const B : TAnsiStringBuilder; const P
        THTTPStringOptions)
6798: Procedure BuildStrHTTPFixedHeaders(const A:THTTPFixedHeaders;const B:TAnsiStrBuilder;const
      P:THTTPStringOptions)
       Procedure BuildStrHTTPCustomHeaders( const A : THTTPCustomHeaders; const B : TAnsiStringBuilder; const P
        THTTPStringOptions)
6800: Procedure BuildStrHTTPSetCookieFieldValue( const A : THTTPSetCookieField; const B : TAnsiStringBuilder;
      const P : THTTPStringOptions)
6801: Procedure BuildStrHTTPCookieFieldValue( const A : THTTPCookieField; const B : TAnsiStringBuilder; const P
        THTTPStringOptions
      Procedure BuildStrHTTPCookieField(const A:THTTPCookieField;const B:TAnsiStringBuilder;const
      P:THTTPStringOptions);
6803:
       Procedure BuildStrHTTPMethod( const A : THTTPMethod; const B : TAnsiStringBuilder; const P :
      THTTPStringOptions)
      Procedure BuildStrHTTPRequestStartLine( const A : THTTPRequestStartLine; const B : TAnsiStringBuilder;
      const P : THTTPStringOptions)
6805:
      Procedure BuildStrHTTPRequestHeader(const A:THTTPRequestHeader;const B:TAnsiStringBuilder;const
      P:THTTPStringOptions);
      Procedure BuildStrHTTPRequest( const A : THTTPRequest; const B : TAnsiStringBuilder; const P :
6806:
      THTTPStringOptions)
6807:
       Procedure BuildStrHTTPResponseCookieFieldArray( const A : THTTPSetCookieFieldArray; const B :
      TAnsiStringBuilder; const P : THTTPStringOptions)
       Procedure BuildStrHTTPResponseStartLine(const A:THTTPResponseStartLine;const B:TAnsiStrBldr;const P
6808:
      THTTPStrOptions);
      Procedure BuildStrHTTPResponseHeader(const A:THTTPRespHeader;const B:TAnsiStrBuilder;const
      P:THTTPStringOptions);
6810: Procedure BuildStrHTTPResponse(const A:THTTPResponse; const B:TAnsiStringBuilder; const
      P:THTTPStringOptions)
6811: Function HTTPContentTypeValueToStr( const A : THTTPContentType) : AnsiString
```

```
6812:
             Function HTTPSetCookieFieldValueToStr( const A : THTTPSetCookieField) : AnsiString
              Function HTTPCookieFieldValueToStr( const A : THTTPCookieField) : AnsiString
6813:
             Function HTTPMethodToStr( const A: THTTPMethod): AnsiString
Function HTTPRequestToStr( const A: THTTPRequest): AnsiString
6815:
             Function HTTPResponseToStr( const A : THTTPResponse) : AnsiString
6816:
             Procedure PrepareCookie(var A:THTTPCookieField;const B:THTTPSetCookieFieldArray;const
6817:
           Domain:AnsiString;const Secure:Bool;
6818:
               THTTPParserHeaderParseFunc', 'Function ( const HeaderName : THTT'
                  +'PHeaderNameEnum; const HeaderPtr : ___Pointer) : Boolean
6819:
6820:
                SIRegister_THTTPParser(CL);
                FindClass('TOBJECT'), 'THTTPContentDecoder
6821:
                THTTPContentDecoderProc', 'Procedure ( const Sender : THTTPContentDecoder)
6823:
               THTTPContentDecoderContentType', '( crctFixedSize, crctChunked, crctUnsized )
THTTPContentDecoderChunkState', '( crcsChunkHeader, crcsContent,'
6824:
                  +' crcsContentCRLF, crcsTrailer, crcsFinished )
6825:
6826:
                THTTPContentDecoderLogEvent', 'Procedure ( const Sender : THTTPContentDecoder; const LogMsg : String)
                SIRegister_THTTPContentDecoder(CL);
6827:
               THTTPContentReaderMechanism', '( hcrmEvent, hcrmString, hcrmStream, hcrmFile )
FindClass('TOBJECT'),'THTTPContentReader
THTTPContentReaderProc', 'Procedure ( const Sender : THTTPContentReader)
6828:
6829:
6830:
                THTTPContentReaderLogEvent', 'Procedure (const Sender: THTTPContentReader; const LogMsg: String; const
6831:
           LogLevel: Int;
6832:
               SIRegister THTTPContentReader(CL);
               THTTPContentWriterMechanism','(hotmEvent, hotmString, hotmStream, hotmFile) FindClass('TOBJECT'),'THTTPContentWriter
6833:
6834:
6835:
               THTTPContentWriterLogEvent', 'Procedure (const Sender : THTTPContentWriter;const LogMsg:AnsiString);
6836:
               SIRegister_THTTPContentWriter(CL);
6837:
             Procedure SelfTestcHTTPUtils
6838:
           end;
6839:
6840:
6841:
           procedure SIRegister_cTLSUtils(CL: TPSPascalCompiler);
6842: begin
               TLSLibraryVersion', 'String').SetString( '1.00
6843:
              'TLSError_None','LongInt').SetInt( 0);
6844:
6845:
              'TLSError_InvalidBuffer', 'LongInt').SetInt( 1);
6846:
              'TLSError_InvalidParameter','LongInt').SetInt( 2);
'TLSError_InvalidCertificate','LongInt').SetInt( 3);
6847:
              'TLSError_InvalidState','LongInt').SetInt( 4);
'TLSError_DecodeError','LongInt').SetInt( 5);
'TLSError_BadProtocol','LongInt').SetInt( 6);
6848:
6849:
6850:
             Function TLSErrorMessage( const TLSError : Integer) : String
6851:
6852:
               SIRegister_ETLSError(CL);
             TTLSProtocolVersion', 'record major : Byte; minor : Byte; end
PTLSProtocolVersion', '^TTLSProtocolVersion // will not work
Procedure InitSSLProtocolVersion30( var A : TTLSProtocolVersion)
6853:
6854:
6855:
             Procedure InitTLSProtocolVersion10( var A : TTLSProtocolVersion)
6856:
              Procedure InitTLSProtocolVersion11( var A : TTLSProtocolVersion)
             Procedure InitTLSProtocolVersion12 (var A: TTLSProtocolVersion)

Function IsTLSProtocolVersion( const A, B: TTLSProtocolVersion): Boolean

Function IsSSL2( const A: TTLSProtocolVersion): Boolean
6858:
6859:
6860:
              Function IsSSL3( const A : TTLSProtocolVersion) : Boolean
6861:
              Function IsTLS10( const A : TTLSProtocolVersion) : Boolean
6862:
             Function IsTLS11( const A : TTLSProtocolVersion) : Boolean Function IsTLS12( const A : TTLSProtocolVersion) : Boolean
6863:
6864:
             Function IsTLS100rLater( const A : TTLSProtocolVersion) : Boolean
6865:
              Function IsTLS110rLater( const A : TTLSProtocolVersion) : Boolean
6866:
             Function IsTLS12OrLater( const A : TTLSProtocolVersion) : Boolean
6867:
             Function IsFutureTLSVersion( const A : TTLSProtocolVersion) : Boolean
Function IsKnownTLSVersion( const A : TTLSProtocolVersion) : Boolean
6868:
6869:
             Function TLSProtocolVersionToStr( const A : TTLSProtocolVersion) : String
6870:
6871:
              Function TLSProtocolVersionName( const A : TTLSProtocolVersion) : String
6872:
               PTLSRandom', '^TTLSRandom // will not work
             Procedure InitTLSRandom( var Random : TTLSRandom)
Function TLSRandomToStr( const Random : TTLSRandom) : AnsiString
6873:
6874:
                TLSSessionIDMaxLen','LongInt').SetInt( 32);
6875:
6876:
             Procedure InitTLSSessionID( var SessionID: TTLSSessionID; const A: AnsiString)
6877:
             \textbf{Function} \ \ \texttt{DecodeTLSSessionID}(\textbf{const} \ \ \texttt{Buffer:string}; \textbf{const} \ \ \texttt{Size:Int}; \textbf{var} \ \ \texttt{SessionID:TTLSSessionID}): \texttt{Int}; \textbf{total} \ \ \texttt{Size:Int}; \textbf{var} \ \ \texttt{Size:Int}; \textbf{v
6878:
               TTLSSignatureAndHashAlgorithm', 'record Hash : TTLSHashAlgorithm +'; Signature : TTLSSignatureAlgorithm; end
6879:
6880:
              // PTLSSignatureAndHashAlgorithm', ''TTLSSignatureAndHashAlgorithm +'// will not work
TTLSSignatureAndHashAlgorithmArray', 'array of TTLSSignatureAndHashAlgorithm
6881:
6882:
               TTLSKeyExchangeAlgorithm', '( tlskeaNone, tlskeaNULL, tlskeaDHE '
6883:
                  +'DSS, tlskeaDHE_RSA, tlskeaDH_Anon, tlskeaRSA, tlskeaDH_DSS, tlskeaDH_RSA)
6884:
               TTLSMACAlgorithm', '( tlsmaNone, tlsmaNULL, tlsmaHMAC_MD5, tlsma'
6885:
6886:
               +'HMAC_SHA1, tlsmaHMAC_SHA256, tlsmaHMAC_SHA384, tlsmaHMAC_SHA512 )
TTLSMacAlgorithmInfo', 'record Name : AnsiString; DigestSize : I'
+'nteger; Supported : Boolean; end
6887:
6888:
              PTLSMacAlgorithmInfo', '^TTLSMacAlgorithmInfo // will not work
'TLS_MAC_MAXDIGESTSIZE', 'LongInt').SetInt( 64);
6889:
689n:
               TTLSPRFAlgorithm', '( tlspaSHA256 )
6891:
             Function tlsP_MD5( const Secret, Seed : AnsiString; const Size : Integer) : AnsiString
Function tlsP_SHA1( const Secret, Seed : AnsiString; const Size : Integer) : AnsiString
6892:
6893:
             Function tlsP_SHA256( const Secret, Seed : AnsiString; const Size : Integer) : AnsiString Function tlsP_SHA512( const Secret, Seed : AnsiString; const Size : Integer) : AnsiString
6894:
6895:
             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
6896:
6897:
```

```
6899: Function TLSPRF(const ProtoVersion:TTLSProtocolVersion;const Secret.ALabel.Seed:AString;const
             Size:Int):AString;
               Function tls10KeyBlock(const MasterSecret, ServerRandom, ClientRandom: AnsiString; const
             Size:Integer):AnsiString
6901: Function tls12SHA256KeyBlock(const MasterSecret, ServerRandom, ClientRandom: AnsiString; const
             Size:Int):AnsiString;
6902: Function tls12SHA512KeyBlock(const MasterSecret,ServerRandom,ClientRandom: AnsiString;const
             Size:Int):AnsiString;
6903: 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;
6906:
               \textbf{Function} \ \ \texttt{tls12SHA512MasterSecret} \\ (\textbf{const} \ \ \texttt{PreMasterSecret}, \texttt{ClientRandom}, \texttt{ServerRandom} \\ : \texttt{AnsiString}) \\ : \ \ \texttt{AnsiString}) \\ : \ \ \texttt{AnsiString} \\ : \ \ \texttt{AnsiString
6907:
               \textbf{Function} \ \ \texttt{TLSMasterSecret}( \ \ \textbf{const} \ \ \texttt{ProtocolVersion}; \ \ \textbf{TTLSProtocolVersion}; \ \ \textbf{const} \ \ \texttt{PreMasterSecret}, \ \ \texttt{ClientRandom}, \ \ \ \texttt{ClientRandom}, \ \ \texttt{ClientRa
             ServerRandom: AnsiString) : AnsiString
6908:
                  TTLSKeys', 'record KeyBlock : AnsiString; ClientMACKey : AnsiStr
                    +'ing; ServerMACKey : AnsiString; ClientEncKey : AnsiString; ServerEncKey : '+'AnsiString; ClientIV : AnsiString; ServerIV : AnsiString; end
6909:
6910:
               Procedure GenerateTLSKeys( const ProtocolVersion: TTLSProtocolVersion; const MACKeyBits, CipherKeyBits,
6911:
             IVBits : Integer; const MasterSecret, ServerRandom, ClientRandom : AnsiString; var TLSKeys : TTLSKeys)
               Procedure GenerateFinalTLSKeys(const ProtocolVersion:TTLSProtocolVersion;const IsExportable:Boolean;const
6912:
              ExpandedKeyBits:Integer;const ServerRandom,ClientRandom:AnsiString;var TLSKeys:TTLSKeys)
                'TLS_PLAINTEXT_FRAGMENT_MAXSIZE','LongInt').SetInt( 16384 - 1);
'TLS_COMPRESSED_FRAGMENT_MAXSIZE','LongInt').SetInt( 16384 + 1024);
6913:
6914:
6915:
               Procedure SelfTestcTLSUtils
6916: end;
6917:
6918:
6919: procedure SIRegister_Reversi(CL: TPSPascalCompiler);
6920: begin
                   sPosData','record corner : boolean; square2x2 : boolean; edge:boolean; stable : integer; internal :
6921:
             integer; disks : integer; mx : integer; my : integer; end
// pBoard', '^tBoard // will not work
6922:
               Function rCalculateData( cc : byte; cx, cy : integer) : sPosData
Function rCheckMove( color : byte; cx, cy : integer) : integer
6923:
6924:
               //Function rDoStep( data : pBoard) : word
Function winExecAndWait( const sAppPath : string; wVisible : word) : boolean
6925:
6926:
6927:
             end;
6928:
6929:
             procedure SIRegister_IWDBCommon(CL: TPSPascalCompiler);
6930: begin
6931: Function InEditMode( ADataset : TDataset) : Boolean
6932: Function CheckDataSource( ADataSource : TDataSource) : Boolean;
             Function CheckDataSource1(ADataSource:TDataSource;const AFieldName:string;var VField:TField):boolean;
6934: Function GetFieldText( AField : TField) : String
6935: end:
6936:
6937:
             procedure SIRegister_SortGrid(CL: TPSPascalCompiler);
6938:
             begin
                  TPrintMode', '( pmPrint, pmPreview, pmPageCount )
6939:
                  TMyPrintRange', '( prAll, prSelected )
TSortStyle', '( ssAutomatic, ssNormal, ssNumeric, ssNumericExten'
6940:
6941:
                     +'ded, ssDateTime, ssTime, ssCustom )
6942:
6943:
                   TSortDirection', '( sdAscending, sdDescending )
                  TSetChecked', 'Procedure ( Sender : TObject; ACol, ARow : integer; State : Boolean)
TGetCombobox', 'Procedure ( Sender : TObject; ACol, ARow : integ'
6944:
6945:
                     +'er; var Strs : TStringList; var Width, Height : integer; var Sorted : Boolean)
6946:
6947:
                   TSetCombobox', 'Procedure ( Sender : TObject; ACol, ARow : integer; Str : String)
6948:
                   TSetEllipsis', 'Procedure ( Sender : TObject; ACol, ARow : integer)
                  SIRegister_TSortOptions(CL);
SIRegister_TPrintOptions(CL);
6949:
6950:
6951:
                   TSortedListEntry',
                                                               'record Str : String; RowNum : integer; SortOption : TSortOptions; end
6952:
                   SIRegister_TSortedList(CL);
                  TCellBevelStyle', '(cbNone, cbRaised, cbLowered)
TCellBevelStyle', '(cbNone, cbRaised, cbLowered)
TCellBevel', 'record Style: TCellBevelStyle; UpperLeftColor: TColor; LowerRightColor: TColor; end
TVertAlignment', '(taTopJustify, taBottomJustify, taMiddle)
TFormatOptions', 'record Brush: TBrush; Font: TFont; Alignment'
6953:
6954:
6955:
6956:
6957:
                     +'Horz : TAlignment; AlignmentVert : TVertAlignment; Bevel : TCellBevel; HideText : Boolean; end
6958:
                   SIRegister_TFontSetting(CL);
                   SIRegister_TFontList(CL);
6959:
                   AddTypeS(TFormatDrawCellEvent', 'Procedure ( Sender : TObject; Col, Row :'
6960:
6961:
                     + integer;State:TGridDrawState;var FormatOptions:TFormatOptions;var CheckBox,Combobox,Ellipsis:Bool);
6962:
                  TSetFilterEvent', 'Procedure ( ARows : TStrings; var Accept : Boolean)
TSearchEvent', 'Procedure ( ARows : TStrings; var Accept : Boolean)
6963:
                   TUpdateGridEvent', 'Procedure ( Sender : Tobject; Arow : integer)
TSizeChangedEvent', 'Procedure ( Sender : TObject; OldColCount, OldRowCount : integer)
6964:
6965:
                  TBeginSortEvent', 'Procedure ( Sender : TObject; var Col : integer)
TEndSortEvent', 'Procedure ( Sender : TObject; Col : integer)
6966:
6967:
                  TGetSortStyleEvent', 'Procedure ( Sender : TObject; Col : intege
6968:
                                var SortStyle : TSortStyle)
6969:
                  TCellValidateEvent', 'Procedure ( Sender : TObject; ACol, ARow :'
+' integer; const OldValue : string; var NewValue : String; var Valid : Boolean)
6970:
6971:
6972:
                  SIRegister TSortGrid(CL);
6973:
                Function ExtendedCompare( const Str1, Str2 : String) : Integer
               Function NormalCompare( const Str1, Str2: String): Integer Function DateTimeCompare( const Str1, Str2: String): Integer
6974:
6975:
              Function NumericCompare( const Str1, Str2: String): Integer Function TimeCompare( const Str1, Str2: String): Integer //Function Compare( Item1, Item2: Pointer): Integer
6976:
6977:
```

```
6979: end;
6980:
         Procedure IBAlloc( var P, OldSize, NewSize : Integer)

Procedure IBError( ErrMess : TIBClientError; const Args : array of const)
6982:
6983:
        Procedure IBDataBaseError
6984:
        Function StatusVector : PISC_STATUS
6985:
        Function StatusVector : FIDC_SIMOS

Function StatusVectorArray : PStatusVector

Function CheckStatusVector( ErrorCodes : array of ISC_STATUS) : Boolean
6986:
6987:
        Function StatusVectorAsText : string
6988:
        Procedure SetIBDataBaseErrorMessages( Value : TIBDataBaseErrorMessages)
6989:
        Function GetIBDataBaseErrorMessages : TIBDataBaseErrorMessages
6991:
6992:
Function BoldNamesEqual( const name1, name2 : string) : Boolean
6995:
6996:
        Procedure BoldAppendToStrings(strings: TStrings; const aString: string; const ForceNewLine:Boolean)
        Function BoldSeparateStringList(strings:TStringList;const Separator, PreString, PostString:String):String
6997:
6998:
        Function BoldSeparatedAppend( const S1, S2 : string; const Separator : string) : string
6999:
         Function BoldTrim( const S : string)
                                                       : string
        Function BoldTrIm( const S. String): String): Boolean
Function BoldStrEqual( P1, P2: PChar; Len: integer): Boolean
Function BoldStrAnsiEqual( P1, P2: PChar; Len: integer): Boolean
Function BoldAnsiEqual( const S1, S2: string): Boolean
Function BoldStrStringEqual( const S1: string; P2: PChar; Len: integer): Boolean
Function BoldStrStringEqual( const S1: string; P2: PChar; Len: integer): Boolean
7000:
7001:
7002:
7003:
7004:
7005:
        \textbf{Function} \  \, \texttt{BoldCaseIndependentPos}(\  \, \textbf{const} \  \, \texttt{Substr}, \  \, \texttt{S} \  \, \vdots \  \, \textbf{string}) \  \, \vdots \  \, \textbf{Integer}
        //Procedure EnumToStrings( aTypeInfo : pTypeInfo; Strings : TStrings)
Function CapitalisedToSpaced( Capitalised : String) : String
7006:
7007:
        Function SpacedToCapitalised( Spaced : String) : String
7008:
        Function BooleanToString( BoolValue : Boolean) : String
7009:
7010:
        Function StringToBoolean(StrValue: String): Boolean
        Function GetUpperLimitForMultiplicity( const Multiplicity: String): Integer
7011:
        Function GetLowerLimitForMultiplicity( const Multiplicity: String): Integer Function StringListToVarArray( List: TStringList): variant
7012:
7013:
7014:
        Function IsLocalMachine( const Machinename : WideString) : Boolean
7015:
        Function GetComputerNameStr : string
Function TimeStampComp( const Time1, Time2 : TTimeStamp) : Integer
7016:
7017:
        Function BoldStrToDateFmt(const S:string;const DateFormat:string;const DateSeparatorChar:char):TDateTime
        Function BoldDateToStrFmt(const aDate:TDateTime;DateFormat:string;const DateSeparatorChar:char):String;
7018:
7019:
        Function BoldParseFormattedDateList(const value:String;const formats:TStrings;var Date:TDateTime):Boolean;
7020:
        Function BoldParseFormattedDate(const value:String;const formats:array of string; var
       Date:TDateTime):Boolean;
        Procedure EnsureTrailing( var Str : String; ch : char)
7021:
7022:
        \textbf{Function} \  \, \texttt{BoldDirectoryExists}(\  \, \textbf{const} \  \, \texttt{Name} \  \, \textbf{:} \  \, \textbf{string}) \  \, \textbf{:} \  \, \texttt{Boolean}
7023:
        Function BoldForceDirectories( Dir : string) : Boolean
        Function BoldRootRegistryKey : string
7024:
        Function GetModuleFileNameAsString( IncludePath : Boolean) : string
7026:
        Function BoldVariantToStrings( V : OleVariant; Strings : TStrings) : Integer
7027:
        Function LogicalAnd( A, B : Integer) : Boolean
7028:
        record TByHandleFileInformation dwFileAttributes : DWORD; '
           +'ftCreationTime : TFileTime; ftLastAccessTime : TFileTime; ftLastWriteTime
7029:
           +': TFileTime; dwVolumeSerialNumber : DWORD; nFileSizeHigh : DWORD; nFileSiz'
7030:
        +'eLow: DWORD; nNumberOfLinks: DWORD; nFileIndexHigh: DWORD; nFileIndexLow: DWORD; end
Function GetFileInformationByHandle(hFile:THandle; var lpFileInformation:TByHandleFileInformation):BOOL;
7031:
7032:
7033:
        Function IsFirstInstance : Boolean
         Procedure ActivateFirst( AString : PChar)
7034:
        Procedure ActivateFirstCommandLine
7035:
        function MakeAckPkt(const BlockNumber: Word): string;
procedure SendError(UDPBase:TIdUDPBase;APeerIP:string;const APort:Int;const ErrNumber:Word;ErrStr:string;
7036:
7037:
        procedure SendError(UDPClient: TIdUDPClient; const ErrNumber: Word; ErrorString: string); overload;
7038:
        procedure SendError(UDPBase: TIdUDPBase; APeerIP: string; const APort: Integer; E: Exception); overload;
7039:
7040:
        procedure SendError(UDPClient: TIdUDPClient; E: Exception); overload;
7041:
         function IdStrToWord(const Value: String): Word;
        function IdWordToStr(const Value: Word): WordStr;
7042:
        Function HasInstructionSet( const InstructionSet : TCPUInstructionSet) : Boolean
7043:
7044:
        Function CPUFeatures : TCPUFeatures
7045:
7046:
       procedure SIRegister_xrtl_util_CPUUtils(CL: TPSPascalCompiler);
7047:
7048:
       begin
          AddTypeS('TXRTLBitIndex', 'Integer
7049:
        Function XRTLSwapBits( Data : Cardinal; BitlIndex, Bit2Index : TXRTLBitIndex) : Cardinal Function XRTLBitTest( Data : Cardinal; BitIndex : TXRTLBitIndex) : Boolean
7050:
7051:
        Function XRTLBitSet( Data : Cardinal; BitIndex : TXRTLBitIndex) : Cardinal
7052:
7053:
        Function XRTLBitReset( Data : Cardinal; BitIndex : TXRTLBitIndex) : Cardinal
        Function XRTLBitComplement( Data : Cardinal; BitIndex : TXRTLBitIndex) : Cardinal
Function XRTLSwapHiLo16( X : Word) : Word
Function XRTLSwapHiLo32( X : Cardinal) : Cardinal
7054:
7055:
7056:
        Function XRTLSwapHilo64( X : Int64) : Int64
Function XRTLROL32( A, S : Cardinal) : Cardinal
7058:
        Function XRTLROR32( A, S : Cardinal) : Cardinal
7059:
        Function XRTLROL16( A : Word; S : Cardinal) : Word Function XRTLROR16( A : Word; S : Cardinal) : Word
7060:
7061:
        Function XRTLROL8( A : Byte; S : Cardinal) : Byte Function XRTLROR8( A : Byte; S : Cardinal) : Byte
7062:
7063:
        //Procedure XRTLXorBlock( I1, I2, O1 : PByteArray; Len : integer)
//Procedure XRTLIncBlock( P : PByteArray; Len : integer)
Procedure XRTLUMul64( const A, B : Integer; var MulL, MulH : Integer)
7064:
7065:
```

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

Function ReverseCompareResult( const C : TCompareResult) : TCompareResult
7113:
7114:
        Const('MinSingle','Single').setExtended( 1.5E-45);
Const('MaxSingle','Single').setExtended( 3.4E+38);
7115:
7116:
        Const('MinDouble', 'Double').setExtended( 5.0E-324);
7117:
         Const('MaxDouble','Double').setExtended( 1.7E+308);
7118:
        Const('MaxDouble', Double').setExtended(1.7E+300)/
Const('MinExtended','Extended').setExtended(3.4E-4932);
Const('MaxExtended','Extended').setExtended(1.1E+4932);
Const('MinCurrency','Currency').SetExtended(-922337203685477.5807);
Const('MaxCurrency','Currency').SetExtended(922337203685477.5807);
7119:
7120:
7121:
7122:
        Function MinF( const A, B : Float) : Float
7123:
        Function MaxF( const A, B : Float) : Float
Function ClipF( const Value : Float; const Low, High : Float) : Float
7124:
7125:
7126:
        Function InSingleRange( const A : Float) : Boolean
         Function InDoubleRange( const A : Float) : Boolean
7127:
7128:
        \textbf{Function} \  \, \texttt{InCurrencyRange}( \  \, \textbf{const} \  \, \texttt{A} \  \, \texttt{:} \  \, \texttt{Float}) \  \, \texttt{:} \  \, \texttt{Boolean};
7129:
        Function InCurrencyRangel( const A : Int64) : Boolean;
        Function FloatExponentBase2( const A : Extended; var Exponent : Integer) : Boolean Function FloatExponentBase10( const A : Extended; var Exponent : Integer) : Boolean
7130:
         Function FloatIsInfinity( const A : Extended) : Boolean
7132:
7133:
        Function FloatIsNaN( const A : Extended) : Boolean
7134:
        Const('SingleCompareDelta','Extended').setExtended( 1.0E-34);
Const('DoubleCompareDelta','Extended').setExtended( 1.0E-280);
7135:
7136:
         Const('ExtendedCompareDelta','Extended').setExtended( 1.0E-4400);
7137:
         Const('DefaultCompareDelta','Extended').SetExtended( 1.0E-34);
        \textbf{Function} \  \, \texttt{FloatZero}( \  \, \textbf{const} \  \, \texttt{A} \  \, \texttt{Float}; \  \, \textbf{const} \  \, \texttt{CompareDelta} \  \, \texttt{:} \  \, \texttt{Float}) \  \, \texttt{:} \  \, \texttt{Boolean}
7138:
        Function FloatOne( const A : Float; const CompareDelta : Float) : Boolean
7139:
7140:
        Function FloatsEqual( const A, B : Float; const CompareDelta : Float) : Boolean
         Function FloatsCompare( const A, B : Float; const CompareDelta : Float) : TCompareResult
7141:
        Const('SingleCompareEpsilon','Extended').setExtended( 1.0E-5);
Const('DoubleCompareEpsilon','Extended').setExtended( 1.0E-13);
7142:
7143:
        Const('ExtendedCompareEpsilon','Extended').setExtended( 1.0E-17);
Const('DefaultCompareEpsilon','Extended').setExtended( 1.0E-10);
7144:
7146:
        Function ApproxEqual( const A, B : Extended; const CompareEpsilon : Double) : Boolean
        Function ApproxCompare( const A, B : Extended; const CompareEpsilon : Double): TCompareResult
7147:
7148:
        Function cClearBit( const Value, BitIndex : LongWord) : LongWord
        Function cSetBit( const Value, BitIndex : LongWord) : LongWord
7149:
        Function cIsBitSet( const Value, BitIndex : LongWord) : Boolean
7150:
7151:
        Function cToggleBit( const Value, BitIndex : LongWord) : LongWord
7152:
        Function cIsHighBitSet( const Value : LongWord) : Boolean
7153:
        Function SetBitScanForward( const Value : LongWord) : Integer;
        Function SetBitScanForward1( const Value, BitIndex : LongWord) : Integer;
```

```
Function SetBitScanReverse( const Value : LongWord) : Integer;
7155:
        Function SetBitScanReversel( const Value, BitIndex : LongWord) : Integer;
7156:
        Function ClearBitScanForward( const Value : LongWord) : Integer;
7158:
        Function ClearBitScanForward1( const Value, BitIndex : LongWord) : Integer;
7159:
        Function ClearBitScanReverse( const Value : LongWord) : Integer;
        Function ClearBitScanReversel( const Value, BitIndex : LongWord) : Integer;
7160:
        Function cReverseBits( const Value : LongWord) : LongWord;
7161:
        Function cReverseBits1( const Value : LongWord; const BitCount : Integer) : LongWord;
7163:
        Function cSwapEndian( const Value : LongWord) : LongWord
       Function cTwosComplement( const Value : LongWord) : LongWord
Function RotateLeftBits16( const Value : Word; const Bits : Byte) : Word
7164:
7165:
        Function RotateLeftBits32( const Value : LongWord; const Bits : Byte) : LongWord
7166:
7167:
        Function RotateRightBits16( const Value : Word; const Bits : Byte) : Word
        Function RotateRightBits32( const Value : LongWord; const Bits : Byte) : LongWord
7168:
        Function cBitCount( const Value : LongWord) : LongWord
7169:
7170:
        Function cIsPowerOfTwo( const Value : LongWord) : Boolean
       Function LowBitMask( const HighBitIndex : LongWord) : LongWord Function HighBitMask( const LowBitIndex : LongWord) : LongWord
7171:
7172:
        Function RangeBitMask( const LowBitIndex, HighBitIndex : LongWord) : LongWord
7173:
7174:
       Function SetBitRange( const Value: LongWord; const LowBitIndex, HighBitIndex: LongWord) : LongWord
        Function ClearBitRange(const Value: LongWord) const LowBitIndex, HighBitIndex: LongWord) :
7175:
7176:
        Function ToggleBitRange(const Value:LongWord; const LowBitIndex,HighBitIndex: LongWord) : LongWord
7177:
       Function IsBitRangeSet(const Value: LongWord; const LowBitIndex, HighBitIndex : LongWord) : Boolean
       Function IsBitRangeClear(const Value: LongWord; const LowBitIndex, HighBitIndex: LongWord): Boolean
7178:
          AddTypeS('CharSet', 'set of AnsiChar
AddTypeS('CharSet', 'set of Char
7179:
7180:
         AddTypeS('CharSet',
7181:
         AddTypeS('AnsiCharSet', 'TCharSet
         AddTypeS('ByteSet', 'set of Byte AddTypeS('AnsiChar', 'Char
7182:
7183:
7184:
          // Function AsCharSet( const C : array of AnsiChar) : CharSet
7185:
       Function AsByteSet( const C : array of Byte) : ByteSet
7186:
         \textbf{Procedure} \ \texttt{ComplementChar}( \ \textbf{var} \ \texttt{C} \ : \ \texttt{CharSet}; \ \textbf{const} \ \texttt{Ch} \ : \ \texttt{Char}) 
       Procedure ClearCharSet( var C : CharSet)
7187:
7188:
        Procedure FillCharSet( var C : CharSet)
        Procedure ComplementCharSet( var C : CharSet)
7190:
       Procedure AssignCharSet( var DestSet : CharSet; const SourceSet : CharSet)
7191:
        Procedure Union( var DestSet : CharSet; const SourceSet : CharSet)
       Procedure Difference ( var DestSet : CharSet; const SourceSet : CharSet)
7192:
7193:
        Procedure Intersection( var DestSet : CharSet; const SourceSet : CharSet)
7194:
        Procedure XORCharSet( var DestSet : CharSet; const SourceSet : CharSet)
7195:
        \textbf{Function} \  \, \texttt{IsSubSet(} \  \, \textbf{const} \  \, \texttt{A, B} \  \, \texttt{EharSet)} \  \, \texttt{:} \  \, \texttt{Boolean}
       Function IsEqual( const A, B : CharSet) : Boolean Function IsEmpty( const C : CharSet) : Boolean
7196:
7197:
       Function IsComplete(const C: CharSet): Boolean
Function cCharCount(const C: CharSet): Integer
7198:
7199:
7200:
        Procedure ConvertCaseInsensitive( var C : CharSet)
        Function CaseInsensitiveCharSet( const C : CharSet) : CharSet
7201:
        Function IntRangeLength( const Low, High: Integer): Int64
7203:
        Function IntRangeAdjacent( const Low1, High1, Low2, High2 : Integer) : Boolean
7204:
       Function IntRangeOverlap( const Low1, High1, Low2, High2 : Integer) : Boolean
        Function IntRangeHasElement( const Low, High, Element : Integer) : Boolean
7205:
        Function IntRangeIncludeElement( var Low, High: Integer; const Element: Integer): Boolean
7206:
        Function IntRangeIncludeElementRange(var Low, High:Integer; const LowElement, HighElement:Integer):Boolean
7207:
7208:
        Function CardRangeLength( const Low, High : Cardinal) : Int64
       Function CardRangeAdjacent(const Lowl, Highl, Low2, High2: Cardinal): Boolean Function CardRangeOverlap(const Lowl, Highl, Low2, High2: Cardinal): Boolean
7209:
7210:
        Function CardRangeHasElement (const Low, High, Element : Cardinal) : Boolean
7211:
        Function CardRangeIncludeElement( var Low, High : Cardinal; const Element : Cardinal) : Boolean
7212:
7213:
        Function CardRangeIncludeElementRange(var Low, High: Card; const LowElement, HighElement: Card): Boolean;
7214:
       AddTypeS('UnicodeChar', 'WideChar Function Compare( const I1, I2 : Boolean) : TCompareResult;
7215:
7216:
        Function Compare1( const I1, I2 : Integer) : TCompareResult;
       Function Compare2( const I1, I2 : Int64) : TCompareResult;
7217:
7218:
        Function Compare3( const I1, I2 : Extended) : TCompareResult;
        Function CompareA( const I1, I2 : AnsiString) : TCompareResult
7219:
        Function CompareW( const I1, I2 : WideString) : TCompareResult
        Function cSgn( const A : LongInt) : Integer;
7221:
7222:
       Function cSgn1( const A : Int64) : Integer;
7223:
       Function cSqn2( const A : Extended) : Integer;
       AddTypeS('TConvertResult', '( convertOK, convertFormatError, convertOverflow )
Function AnsiCharToInt( const A : AnsiChar) : Integer
7224:
7225:
7226:
        Function WideCharToInt( const A : WideChar) : Integer
7227:
        Function CharToInt( const A : Char) : Integer
       Function IntToAnsiChar( const A : Integer) : AnsiChar
Function IntToWideChar( const A : Integer) : WideChar
7228:
7229:
        Function IntToChar( const A : Integer)
                                                     : Char
7230:
       Function IsHexAnsiChar( const Ch : AnsiChar) : Boolean Function IsHexWideChar( const Ch : WideChar) : Boolean
7231:
7232:
       Function IsHexChar( const Ch : Char) : Boolean
7233:
       Function HexAnsiCharToInt( const A : AnsiChar) : Integer Function HexWideCharToInt( const A : WideChar) : Integer
7235:
       Function HexCharToInt( const A : Char) : Integer
Function IntToUpperHexAnsiChar( const A : Integer) : AnsiChar
7236:
7237:
        Function IntToUpperHexWideChar( const A : Integer) : WideChar
7238:
        Function IntToUpperHexChar( const A : Integer) : Char
7239:
       Function IntToLowerHexAnsiChar( const A : Integer) : AnsiChar Function IntToLowerHexWideChar( const A : Integer) : WideChar
7240:
7241:
7242:
       Function IntToLowerHexChar( const A : Integer) : Char
       Function IntToStringA( const A : Int64) : AnsiString
```

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7244:
         Function IntToStringW( const A : Int64) : WideString
7245:
         Function IntToString( const A : Int64) : String
         Function UIntToStringA( const A : NativeUInt) : AnsiString
Function UIntToStringW( const A : NativeUInt) : WideString
7247 .
7248:
         Function UIntToString( const A : NativeUInt) : String
         Function LongWordToStrA( const A : LongWord; const Digits : Integer) : AnsiString
Function LongWordToStrW( const A : LongWord; const Digits : Integer) : WideString
7249:
7250:
          Function LongWordToStrU( const A : LongWord; const Digits : Integer) : UnicodeString
7251:
7252:
         Function LongWordToStr( const A : LongWord; const Digits : Integer) : String
         Function LongWordToHexA(const A:LongWord;const Digits:Integer;const UpperCase:Boolean):AnsiString;
7253:
         Function LongWordToHexW(const A:LongWord;const Digits:Integer;const UpperCase:Boolean):WideString;
7254:
          Function LongWordToHex( const A : LongWord; const Digits : Integer; const UpperCase: Boolean): String
         Function LongWordToOctA( const A : LongWord; const Digits : Integer) : AnsiString Function LongWordToOctW( const A : LongWord; const Digits : Integer) : WideString
7256:
7257:
         Function LongWordToOct( const A : LongWord; const Digits : Integer) : String
7258:
7259:
         Function LongWordToBinA( const A : LongWord; const Digits : Integer) : AnsiString
         Function LongWordToBinW( const A : LongWord; const Digits : Integer) : WideString
7260:
         Function LongWordToBin( const A : LongWord; const Digits : Integer) : String
Function TryStringToInt64A( const S : AnsiString; out A : Int64) : Boolean
Function TryStringToInt64W( const S : WideString; out A : Int64) : Boolean
7261 .
7262:
7263:
          Function TryStringToInt64( const S : String; out A : Int64) : Boolean
7264:
         Function StringToInt64DefM( const S : AnsiString; const Default : Int64) : Int64
Function StringToInt64DefW( const S : WideString; const Default : Int64) : Int64
7265:
7266:
         Function StringToInt64Def( const S : String; const Default : Int64) : Int64
7267:
         Function StringToInt64A( const S : AnsiString) : Int64
Function StringToInt64W( const S : WideString) : Int64
7268:
7269:
7270:
         Function StringToInt64( const S : String) : Int64
         Function TryStringToIntA( const S : AnsiString; out A : Integer) : Boolean
Function TryStringToIntW( const S : WideString; out A : Integer) : Boolean
7271:
7272:
         Function TryStringToInt( const S : String; out A : Integer) : Boolean
7273:
7274:
         \textbf{Function} \ \texttt{StringToIntDefA}( \ \textbf{const} \ \texttt{S} \ : \ \texttt{AnsiString}; \ \textbf{const} \ \textbf{Default} \ : \ \texttt{Integer}) \ : \ \texttt{Integer}
         Function StringToIntDefW( const S: WideString; const Default : Integer) : Integer Function StringToIntDef( const S : String; const Default : Integer) : Integer
7275:
7276:
         Function StringToIntA( const S: AnsiString): Integer Function StringToIntW( const S: WideString): Integer
7277:
7278:
         Function StringToInt( const S : String) : Integer
Function TryStringToLongWordA( const S : AnsiString; out A : LongWord) : Boolean
Function TryStringToLongWordW( const S : WideString; out A : LongWord) : Boolean
7279:
7280:
7281:
7282:
          Function TryStringToLongWord( const S : String; out A : LongWord) : Boolean
         Function StringToLongWordA( const S : AnsiString) : LongWord
7283:
7284:
         Function StringToLongWordW( const S : WideString) : LongWord
         Function StringToLongWord( const S : String) : LongWord
7285:
         Function HexToUIntA( const S : AnsiString) : NativeUInt
Function HexToUIntW( const S : WideString) : NativeUInt
7286:
         Function HexToUInt( const S : String) : NativeUInt
7288:
         \textbf{Function} \  \, \texttt{TryHexToLongWordA( const S} : \  \, \texttt{AnsiString; out A} : \  \, \texttt{LongWord)} : \  \, \texttt{Boolean}
7289:
         Function TryHexToLongWordW( const S : WideString; out A : LongWord) : Boolean
7290:
         Function TryHexToLongWord( const S : String; out A : LongWord) : Boolean
         Function HexToLongWordA( const S : AnsiString) : LongWord
Function HexToLongWordW( const S : WideString) : LongWord
7292:
7293:
         Function HexToLongWord( const S : String) : LongWord
7294:
         Function TryOctToLongWordA( const S : AnsiString; out A : LongWord) : Boolean Function TryOctToLongWordW( const S : WideString; out A : LongWord) : Boolean
7295:
7296:
7297:
         Function TryOctToLongWord( const S : String; out A : LongWord) : Boolean
7298:
         Function OctToLongWordA( const S : AnsiString) : LongWord
Function OctToLongWordW( const S : WideString) : LongWord
7299:
          Function OctToLongWord( const S : String) : LongWord
7300:
         Function TryBinToLongWordA( const S : AnsiString; out A : LongWord) : Boolean
7301:
         Function TryBinToLongWordW( const S : WideString; out A : LongWord) : Boolean
7302:
         Function TryBinToLongWord( const S : String; out A : LongWord) : Boolean
7303:
         Function BinToLongWordA( const S : AnsiString) : LongWord
7304:
7305:
          Function BinToLongWordW( const S : WideString) : LongWord
7306:
         Function BinToLongWord( const S : String) : LongWord
         Function FloatToStringA( const A : Extended) : AnsiString
Function FloatToStringW( const A : Extended) : WideString
7307:
7308:
         Function FloatToString( const A : Extended) : String
         Function TryStringToFloatA( const A : AnsiString; out B : Extended) : Boolean Function TryStringToFloatW( const A : WideString; out B : Extended) : Boolean
7310:
7311:
         \textbf{Function} \  \, \texttt{TryStringToFloat(} \  \, \textbf{const} \  \, \texttt{A} \  \, : \  \, \textbf{String;} \  \, \textbf{out} \  \, \texttt{B} \  \, : \  \, \texttt{Extended)} \  \, : \  \, \texttt{Boolean}
7312:
         Function StringToFloatA( const A : AnsiString) : Extended
Function StringToFloatW( const A : WideString) : Extended
7313:
7314:
7315:
         Function StringToFloat( const A : String) : Extended
         Function StringToFloatDefA( const A : AnsiString; const Default : Extended) : Extended
Function StringToFloatDefW( const A : WideString; const Default : Extended) : Extended
7316:
7317:
         Function StringToFloatDef( const A : String; const Default : Extended) : Extended
7318:
         Function EncodeBase64(const S,Alphabet:AnsiString; const Pad:Boolean; const PadMultiple:Integer; const
7319:
        PadChar: AnsiChar) : AnsiString
7320:
         Function DecodeBase64( const S. Alphabet : AnsiString; const PadSet : CharSet) : AnsiString
         unit uPSI_cFundamentUtils;
7321:
         Const('b64_MIMEBase64','Str').String('ABCDEFGHIJKLMNOPQRSTUVWXYZabcdefghijklmnopqrstuvwxyz0123456789+/
Const('b64_UUEncode','String').String('!"#$%&''()*+,-./0123456789:;<=>?@ABCDEFGHIJKLMNOPQRSTUVWXYZ[\]^';
Const('b64_XXEncode','String').String('+-0123456789ABCDEFGHIJKLMNOPQRSTUVWXYZabcdefghijklmnopqrstuvwxyz';
7323:
7324:
         Const('CCHARSET', 'String').SetString(b64_XXEncode);
Const('CHEXSET', 'String').SetString('0123456789ABCDEF
7325:
7326:
          Const('HEXDIGITS','String').SetString('0123456789ABCDEF
7327:
         Const('DIGISET','String').SetString('0123456789ABCDEF';
Const('DIGISET','String').SetString('0123456789
Const('LETTERSET','String').SetString('ABCDEFGHIJKLMNOPQRSTUVWXYZ'
Const('DIGISET2','TCharset').SetSet('0123456789'
7328:
7329:
7330:
```

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7332:
         Const('LETTERSET2','TCharset').SetSet('ABCDEFGHIJKLMNOPORSTUVWXYZ'
         Const('HEXSET2','TCharset').SetSET('0123456789ABCDEF');
7333:
          Const('NUMBERSET','TCharset').SetSet('0123456789');
         Const('NUMBERS','String').SetString('0123456789');
Const('LETTERS','String').SetString('ABCDEFGHIJKLMNOPQRSTUVWXYZ');
7335:
7336:
         Function CharSetToStr( const C : CharSet) : AnsiString
Function StrToCharSet( const S : AnsiString) : CharSet
7337:
7338:
         Function MIMEBase64Decode( const S: AnsiString): AnsiString
Function MIMEBase64Encode( const S: AnsiString): AnsiString
7339:
7340:
7341:
         Function UUDecode( const S : AnsiString) : AnsiString
Function XXDecode( const S : AnsiString) : AnsiString
7342:
         Function BytesToHex( const P : array of Byte; const UpperCase : Boolean) : AnsiString
         Function InterfaceToStrA( const I : IInterface) : AnsiString Function InterfaceToStrW( const I : IInterface) : WideString
7344:
7345:
         Function InterfaceToStr( const I : IInterface) : String
7346:
7347:
         Function ObjectClassName( const 0 : TObject) : String
         Function ClassClassName( const C : TClass) : String
7348:
7340 .
         Function ObjectToStr( const 0 : TObject) : String
         Function ObjectToString const 0 : Tobject) : String
Function CharSetToStr( const C : CharSet) : AnsiString
7350:
7351:
          Function StrToCharSet( const S : AnsiString) : CharSet
7353: Function HashStrA( const S : AnsiString; const Index : Integer; const Count : Integer; const
        {\tt AsciiCaseSensitive} \; : \; {\tt Boolean}; \; {\tt const} \; {\tt Slots} \; : \; {\tt LongWord}) \; : \; {\tt LongWord}
7354: Function HashStrW(const S:WideString;const Index:Integer;const Count:Integer;const
        AsciiCaseSensitive:Boolean; const Slots:LongWord) : LongWord
7355: Function HashStr( const S : String; const Index : Integer; const Count : Integer; const
AsciiCaseSensitive: Boolean; const Slots: LongWord): LongWord
7356: Function HashInteger( const I: Integer; const Slots: LongWord): LongWord
7357: Function HashLongWord( const I: LongWord; const Slots: LongWord): LongWord
         Const('Bytes1KB','LongInt').SetInt( 1024);
7359:
           SIRegister_IInterface(CL);
7360: Procedure SelfTestCFundamentUtils
7361:
7362: Function CreateSchedule : IJclSchedule
7363: Function NullStamp : TTimeStamp
7364: Function CompareTimeStamps( const Stamp1, Stamp2 : TTimeStamp) : Int64 7365: Function EqualTimeStamps( const Stamp1, Stamp2 : TTimeStamp) : Boolean 7366: Function IsNullTimeStamp( const Stamp : TTimeStamp) : Boolean
7367:
7368: procedure SIRegister_uwinplot(CL: TPSPascalCompiler);
7369: begin
7370: AddTypeS('TFunc', 'function(X : Float) : Float;
7371: Function InitGraphics (Width, Height: Integer): Boolean
7372: Procedure SetWindow( Canvas : TCanvas; X1, X2, Y1, Y2 : Integer; GraphBorder : Boolean)
7373: Procedure SetOxScale( Scale : TScale; OxMin, OxMax, OxStep : Float)
7374: Procedure SetOyScale( Scale : TScale; OyMin, OyMax, OyStep : Float)
7375: Procedure GetoxScale( var Scale : TScale; var OxMin, OxMax, OxStep : Float)
7376: Procedure GetoxScale( var Scale : TScale; var OxMin, OxMax, OxStep : Float)
7377: Procedure SetGraphTitle( Title : String)
7378: Procedure SetOxTitle( Title: String)
7379: Procedure SetOyTitle( Title: String)
7380: Function GetGraphTitle : String
7381: Function GetOxTitle : String
7382: Function GetOyTitle : String
7383: Procedure PlotOxAxis( Canvas : TCanvas)
7384: Procedure PlotOyAxis( Canvas : TCanvas)
7385: Procedure PlotGrid( Canvas : TCanvas; Grid : TGrid)
7386: Procedure WriteGraphTitle( Canvas : TCanvas)
7387: Function SetMaxCurv( NCurv : Byte) : Boolean
7388: Procedure SetDointParam( CurvIndex, Symbol, Size : Integer; Color : TColor)
7389: Procedure SetLineParam( CurvIndex : Integer; Style : TPenStyle; Width : Integer; Color : TColor)
7390: Procedure SetCurvLegend( CurvIndex : Integer; Legend : String)
7391: Procedure SetCurvStep( CurvIndex, Step : Integer)
7392: Function GetMaxCurv : Byte
7393: Procedure GetPointParam( CurvIndex : Integer; var Symbol, Size : Integer; var Color : TColor)
7394: Procedure GetLineParam(CurvIndex:Integer; var Style:TPenStyle; var Width:Integer; var Color:TColor);
7395: Function GetCurvLegend( CurvIndex : Integer) : String
7396: Function GetCurvStep( CurvIndex : Integer) : String
7397: Procedure PlotPoint( Canvas : TCanvas; X, Y : Float; CurvIndex : Integer)
7398: Procedure PlotCurve( Canvas : TCanvas; X, Y : TVector; Lb, Ub, CurvIndex : Integer)
7399: Procedure PlotCurveWithErrorBars(Canvas : TCanvas; X,Y,S: TVector; Ns,Lb,Ub,CurvIndex:Integer)
7400: Procedure PlotFunc(Canvas: TCanvas; Func: TFunc; Xmin,Xmax: Float; Npt,CurvIndex: Integer)
7401: Procedure WriteLegend( Canvas: TCanvas; NCurv: Integer; ShowPoints, ShowLines: Boolean) 7402: Procedure ConRec( Canvas: TCanvas; Nx, Ny, Nc: Integer; X, Y, Z: TVector; F: TMatrix)
7403: Function Xpixel( X: Float): Integer
7404: Function Ypixel( Y: Float): Integer
7405: Function Xuser( X : Integer) : Float 7406: Function Yuser( Y : Integer) : Float
7407: end;
7409: Procedure FFT( NumSamples : Integer; InArray, OutArray : TCompVector)
7410: Procedure IFFT( NumSamples : Integer; InArray, OutArray : TCompVector)
7411: Procedure FFT_Integer( NumSamples : Integer; RealIn, ImagIn : TIntVector; OutArray : TCompVector)
7412: Procedure FFT_Integer_Cleanup
7413: Procedure CalcFrequency(NumSamples,FrequencyIndex: Integer;InArray: TCompVector;var FT : Complex)
7414: //unit uPSI_JclStreams;
7415: Function StreamSeek( Stream: TStream; const Offset: Int64; const Origin: TSeekOrigin): Int64
7416: Function StreamCopy( Source: TStream; Dest: TStream; BufferSize: Integer): Int64
7417: Function CompareStreams( A, B: TStream; BufferSize: Integer): Boolean
```

```
7418: Function JCompareFiles (const FileA, FileB: TFileName; BufferSize: Integer): Boolean
7419:
7420: procedure SIRegister_FmxUtils(CL: TPSPascalCompiler);
7421: begin
      FindClass('TOBJECT'),'EInvalidDest
7422:
       FindClass('TOBJECT'), 'EFCantMove
7423:
       Procedure fmxCopyFile( const FileName, DestName : string)
7424:
       Procedure fmxMoveFile( const FileName, DestName : string
7425:
7426:
       Function fmxGetFileSize( const FileName : string) : LongInt
7427:
       Function fmxFileDateTime( const FileName : string) : TDateTime
       Function fmxHasAttr( const FileName : string; Attr : Word) : Boolean
7428:
       Function fmxExecuteFile( const FileName, Params, DefaultDir: string; ShowCmd: Integer):THandle;
7430: end;
7431:
7432: procedure SIRegister FindFileIter(CL: TPSPascalCompiler);
7433: begin
      SIRegister_IFindFileIterator(CL);
7434:
7435:
       Function CreateFindFile(const Path:string; IncludeAttr:Integer;out iffi:IFindFileIterator):Bool;
7436: end;
7437:
7438: procedure SIRegister PCharUtils(CL: TPSPascalCompiler);
7439: begin
7440: Function SkipWhite(cp: PChar): PChar
7441: Function ReadStringDoubleQuotedMaybe(cp: PChar; var AStr: string): PChar
7442: Function ReadStringSingleQuotedMaybe(cp: PChar; var AStr: string): PChar
7443:
       Function ReadIdent( cp : PChar; var ident : string) : PChar
7444: end;
7445:
7446: procedure SIRegister_JclStrHashMap(CL: TPSPascalCompiler);
7447: begin
7448:
         SIRegister_TStringHashMapTraits(CL);
       Function CaseSensitiveTraits : TStringHashMapTraits
Function CaseInsensitiveTraits : TStringHashMapTraits
7449:
7450:
        THashNode', 'record Str : string; Ptr : Pointer; Left : PHashNod' +'e; Right : PHashNode; end
7451:
7452:
7453:
         //PHashArray', '^THashArray // will not work
        SIRegister_TStringHashMap(CL);
7454:
7455:
       THashValue', 'Cardinal
7456:
       Function StrHash( const s : string) : THashValue
       Function TextHash( const s : string) : THashValue
7457:
       Function DataHash( var AValue, ASize : Cardinal) : THashValue
7458:
       Function Iterate_FreeObjects( AUserData : Pointer; const AStr : string; var AData : Pointer) : Boolean Function Iterate_Dispose( AUserData : Pointer; const AStr : string; var AData : Pointer) : Boolean
7459:
7460:
       Function Iterate_FreeMem( AUserData : Pointer; const AStr : string; var AData : Pointer) : Boolean
7461:
7462:
        SIRegister_TCaseSensitiveTraits(CL);
7463:
        SIRegister TCaseInsensitiveTraits(CL);
7464:
7465:
7467: Function uExpo( X : Float) : Float
7468: Function uExp2( X : Float) : Float
       Function uExp10( X : Float) : Float
7469:
       Function uLog( X : Float) : Float
7470:
7471:
       Function uLog2( X : Float) : Float
7472:
       Function uLog10( X : Float) : Float
       Function uLogA( X, A : Float) : Float
7473:
7474:
       Function uIntPower( X : Float; N : Integer): Float
7475:
       Function uPower( X, Y : Float) : Float
       Function SgnGamma( X : Float) : Integer
Function Stirling( X : Float) : Float
7476:
7477:
7478:
       Function StirLog( X : Float) :
                                           Float
       Function Gamma( X : Float) : Float
7479:
7480:
       Function LnGamma( X : Float) : Float
7481: Function DiGamma( X : Float) : Float
7482: Function TriGamma( X : Float) : Float
       Function IGamma( X : Float) : Float
       Function JGamma( X : Float) : Float
7484:
7485: Function InvGamma( X : Float) : Float
7486: Function Erf( X : Float) : Float
7487: Function Erfc( X : Float) : Float
7488: Function Correl(X, Y : TVector; Lb, Ub : Integer) : Float;
7489: { Correlation coefficient between samples X and Y }
7490: function DBeta(A, B, X : Float) : Float;
7491: { Density of Beta distribution with parameters A and B }
7492: Function LambertW( X : Float; UBranch, Offset : Boolean) : Float 7493: Function Beta(X, Y : Float) : Float 7494: Function Binomial( N, K : Integer) : Float
7495: Function PBinom( N : Integer; \overline{P} : Float; K : Integer) : Float
7496: Procedure Cholesky( A, L : TMatrix; Lb, Ub : Integer)
7497: Procedure LU_Decomp( A : TMatrix; Lb, Ub : Integer)
7498: Procedure LU_Solve( A : TMatrix; B : TVector; Lb, Ub : Integer; X : TVector)
7499: Function DNorm( X : Float) : Float
7500:
7501: function DGamma(A, B, X : Float) : Float;
7502: { Density of Gamma distribution with parameters A and B }
7503: function DKhi2(Nu : Integer; X : Float) : Float;
7504: { Density of Khi-2 distribution with Nu d.o.f. } 7505: function DStudent(Nu : Integer; X : Float) : Float;
7506: { Density of Student distribution with Nu d.o.f. }
```

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7507: function DSnedecor(Nul, Nu2: Integer; X: Float): Float;
7508: { Density of Fisher-Snedecor distribution with Nu1 and Nu2 d.o.f. }
      function IBeta(A, B, X : Float) : Float;
7510 .
      { Incomplete Beta function}
7511:
      function Correl(X, Y : TVector; Lb, Ub : Integer) : Float;
7512:
7513: procedure SIRegister_unlfit(CL: TPSPascalCompiler);
7514: begin
7515: Procedure SetOptAlgo( Algo : TOptAlgo)
7516: procedure SetOptAlgo(Algo: TOptAlgo);
7517: {
7518:
        Sets the optimization algorithm according to Algo, which must be
7519:
        NL_MARQ, NL_SIMP, NL_BFGS, NL_SA, NL_GA. Default is NL_MARQ
7520:
       Function GetOptAlgo : TOptAlgo
7521:
7522:
       Procedure SetMaxParam( N : Byte)
7523:
       Function GetMaxParam : Byte
       Procedure SetParamBounds( I : Byte; ParamMin, ParamMax : Float)
Procedure GetParamBounds( I : Byte; var ParamMin, ParamMax : Float)
Function NullParam( B : TVector; Lb, Ub : Integer) : Boolean
7524 .
7525:
7526:
       Procedure NLFit( RegFunc : TRegFunc; DerivProc : TDerivProc; X, Y : TVector; Lb, Ub : Integer; MaxIter :
      Integer; Tol : Float; B : TVector; FirstPar, LastPar : Integer; V : TMatrix)
7528: Procedure WNLFit( RegFunc: TRegFunc; DerivProc: TDerivProc: X, Y, S: TVector; Lb, Ub:Integer; MaxIter:Integer; Tol: Float; B: TVector; FirstPar, LastPar: Integer; V: TMatrix)
7529: Procedure SetMCFile( FileName: String)
       Procedure SimFit(RegFunc:TRegFunc;X,Y:TVector;Lb,Ub:Integer;B:TVector;FirstPar,LastPar:Integer;V:TMatrix;
7531: Procedure WSimFit(RegFunc:TRegFunc; X,Y,S:TVector;Lb,Ub:Integer;B:TVector;FirstPar,
      LastPar: Integer; V: TMatrix);
7532: end;
7533:
7534: /*---
7535: procedure SIRegister_usimplex(CL: TPSPascalCompiler);
7536: begin
7537: Procedure SaveSimplex(FileName: string)
       Procedure Simplex(Func:TFuncNVar; X:TVector;Lb,Ub:Integer; MaxIter:Integer;Tol:Float; var F_min:Float);
7539: end;
7540: (*---
               ._____*)
7541: procedure SIRegister_uregtest(CL: TPSPascalCompiler);
7542: begin
7543:
      Procedure RegTest(Y,Ycalc: TVector;LbY,UbY:Integer;V:TMatrix;LbV,UbV:Integer;var Test:TRegTest)
7544: Procedure WRegTest(Y, Ycalc, S:TVector; LbY, UbY:Integer; V:TMatrix; LbV, UbV:Integer; var Test:TRegTest);
7545: end;
7546:
7547: procedure SIRegister_ustrings(CL: TPSPascalCompiler);
7548: begin
7549: Function LTrim( S : String) : String
       Function RTrim( S : String) : String
7550:
       Function uTrim( S : String) : String
7551:
       Function StrChar( N : Byte; C : Char) : String
Function RFill( S : String; L : Byte) : String
7552:
7553:
7554:
       Function LFill( S : String; L : Byte) : String
       Function CFill( S : String; L : Byte) : String
7555:
       Function Replace(S: String; C1, C2: Char): String
7556:
7557:
       Function Extract( S : String; var Index : Byte; Delim : Char) : String
       Procedure Parse( S : String; Delim : Char; Field : TStrVector; var N : Byte)
Procedure SetFormat( NumLength, MaxDec : Integer; FloatPoint, NSZero : Boolean)
7558:
7559:
7560:
       Function FloatStr( X : Float) : String
       Function IntStr( N : LongInt) : String
7561:
7562:
       Function uCompStr( Z : Complex) : String
7563: end;
7564:
7565: procedure SIRegister_uhyper(CL: TPSPascalCompiler);
7566: begin
7567: Function uSinh( X : Float) : Float
       Function uCosh( X : Float) : Float
7568:
       Function uTanh( X : Float) : Float
7570:
       Function uArcSinh( X : Float) : Float
       Function uArcCosh( X : Float) : Float
7571:
7572: Function ArcTanh( X : Float) : Float
7573: Procedure SinhCosh( X : Float; var SinhX, CoshX : Float)
7574: end;
7575:
7576: procedure SIRegister_urandom(CL: TPSPascalCompiler);
7577: begin
7578: type RNG_Type =
7579: (RNG_MVC, { Multiply-With-Carry }
7580: RNG_MT, { Mersenne Twister }
7581: RNG_UVAG); { Universal Virtual Array Generator }
7582: Procedure SetRNG( RNG: RNG_Type)
7583:
       Procedure InitGen( Seed : RNG_IntType)
7584:
       Procedure SRand( Seed : RNG_IntType)
7585: Function IRanGen : RNG_IntType
7586: Function IRanGen31: RNG_IntType
7587:
       Function RanGen1 : Float
       Function RanGen2 : Float
7588:
7589: Function RanGen3 : Float
7590: Function RanGen53 : Float
7591: end;
7592:
```

```
7593: // Optimization by Simulated Annealing
7594: procedure SIRegister_usimann(CL: TPSPascalCompiler);
7595: begin
7596
        Procedure InitSAParams( NT, NS, NCycles : Integer; RT : Float)
        Procedure SA_CreateLogFile( FileName : String)
7597:
7598: Procedure SimAnn(Func: TFuncNVar; X, Xmin, Xmax : TVector; Lb, Ub : Integer; var F_min : Float);
7599: end;
7600:
7601: procedure SIRegister_uranuvag(CL: TPSPascalCompiler);
7602: begin
7603: Procedure InitUVAGbyString( KeyPhrase : string)
        Procedure InitUVAG( Seed : RNG_IntType)
7605:
        Function IRanUVAG : RNG_IntType
7606: end;
7607:
7608: procedure SIRegister_ugenalg(CL: TPSPascalCompiler);
7610: Procedure InitGAParams( NP, NG : Integer; SR, MR, HR : Float) 7611: Procedure GA_CreateLogFile( LogFileName : String)
7612:
       Procedure GenAlg(Func: TFuncNVar; X, Xmin, Xmax: TVector; Lb, Ub: Integer; var F_min: Float);
7614:
7615: TVector'
                    'array of Float
7616: procedure SIRegister_uqsort(CL: TPSPascalCompiler);
7617: begin
7618: Procedure QSort( X : TVector; Lb, Ub : Integer)
7619: Procedure DQSort( X : TVector; Lb, Ub : Integer)
7620: end:
7621:
7622: procedure SIRegister uinterv(CL: TPSPascalCompiler);
7623: begin
7624: Procedure Interval( X1, X2 : Float; MinDiv, MaxDiv : Integer; var Min, Max, Step : Float)
7625: Procedure AutoScale(X: TVector; Lb, Ub : Integer; Scale : TScale; var XMin, XMax, XStep:Float)
7626: end;
7628: procedure SIRegister_D2XXUnit(CL: TPSPascalCompiler);
7629: begin
         FT_Result', 'Integer
//TDWordptr', '^DWor
7630:
                          '^DWord // will not work
7631:
         TFT_Program_Data', 'record Signature1 : DWord; Signature2 : DWor'
7632:
7633:
          d; Version : DWord; VendorID : Word; ProductID : Word; Manufacturer : PCha
          r; ManufacturerID : PChar; Description : PChar; SerialNumber : PChar; MaxPower : Word; PnP : Word; SelfPowered : Word; RemoteWakeup : Word; Rev4 : B
7634:
7635:
7636:
          yte; IsoIn : Byte; IsoOut : Byte; PullDownEnable : Byte;
                                                                                SerNumEnable : By'
          te; USBVersionEnable : Byte; USBVersion : Word; Rev5 : Byte; IsoInA : Byte; IsoInB : Byte; IsoOutA : Byte; IsoOutB : Byte; PullDownEnable5 : Byte; S'
7637:
7638:
          erNumEnable5 : Byte; USBVersionEnable5 : Byte; USBVersion5 : Word; AIsHigh
7639:
          Current : Byte; BIsHighCurrent : Byte; IFAIsFifo : Byte; IFAIsFifoTar : By
          te; IFAIsFastSer : Byte; AIsVCP : Byte; IFBIsFifo : Byte; IFBIsFifoTar : Byte; IFBIsFastSer : Byte; BIsVCP : Byte; UseExtOsc : Byte; HighDriveIOs : 'Byte; EndpointSize : Byte; PullDownEnableR : Byte; SerNumEnableR : Byte; I'
7641:
7642:
7643:
          nvertTXD : Byte; InvertRXD : Byte; InvertRTS : Byte; InvertCTS : Byte; Inv
7644:
          ertDTR : Byte; InvertDSR : Byte; InvertDCD : Byte; InvertRI : Byte; Cbus0
7645:
7646:
          : Byte; Cbus1 : Byte; Cbus2 : Byte; Cbus3 : Byte; Cbus4 : Byte; RIsVCP : B'
7647:
          yte; end
7648: end;
7649:
7650:
7652: procedure SIRegister_TJvPaintFX(CL: TPSPascalCompiler);
7653: begin
         //with RegClassS(CL, 'TComponent', 'TJvPaintFX') do
7655:
         with AddClassN(FindClass('TComponent'), 'TJvPaintFX') do begin
           Procedure Solarize( const Src : TBitmap; var Dst : TBitmap; Amount : Integer)
Procedure Posterize( const Src : TBitmap; var Dst : TBitmap; Amount : Integer)
7656:
7657:
            Procedure Blend( const Src1, Src2 : TBitmap; var Dst : TBitmap; Amount : Single)
7659:
            Procedure Blend2( const Src1, Src2 : TBitmap; var Dst : TBitmap; Amount : Single)
           Procedure ExtractColor( const Dst : TBitmap; AColor : TColor)
Procedure ExcludeColor( const Dst : TBitmap; AColor : TColor)
7660:
7661:
           Procedure Turn( Src, Dst : TBitmap)
Procedure TurnRight( Src, Dst : TBitmap)
7662:
7663:
7664:
            Procedure HeightMap( const Dst : TBitmap; Amount : Integer)
7665:
           Procedure TexturizeTile( const Dst : TBitmap; Amount : Integer)
Procedure TexturizeOverlap( const Dst : TBitmap; Amount : Integer)
7666:
7667:
            Procedure RippleRandom( const Dst : TBitmap; Amount : Integer)
            Procedure RippleTooth( const Dst : TBitmap; Amount : Integer)
7668:
7669:
            Procedure RippleTriangle( const Dst : TBitmap; Amount : Integer)
            Procedure Triangles( const Dst : TBitmap; Amount : Integer)
7670:
            Procedure DrawMandelJulia(const Dst: TBitmap; x0,y0,x1,y1:Single; Niter:Integer; Mandel:Boolean)
7671:
            Procedure FilterXBlue( const Dst : TBitmap; Min, Max : Integer)
Procedure FilterXGreen( const Dst : TBitmap; Min, Max : Integer)
7673:
7674:
            Procedure FilterXRed( const Dst : TBitmap; Min, Max : Integer)
            Procedure FilterBlue ( const Dst : TBitmap; Min, Max : Integer)
7675:
            Procedure FilterGreen( const Dst : TBitmap; Min, Max : Integer)
7676:
7677:
            Procedure FilterRed( const Dst : TBitmap; Min, Max : Integer)
           Procedure Emboss( var Bmp: TBitmap)

Procedure Plasma( Src1, Src2, Dst: TBitmap; Scale, Turbulence: Single)

Procedure Shake( Src, Dst: TBitmap; Factor: Single)

Procedure ShakeDown( Src, Dst: TBitmap; Factor: Single)
7678:
7679:
7680:
```

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7682:
            Procedure KeepBlue( const Dst : TBitmap; Factor : Single)
7683:
            Procedure KeepGreen( const Dst : TBitmap; Factor : Single)
            Procedure KeepRed( const Dst : TBitmap; Factor : Single)
7685
            Procedure Mandelbrot( const Dst : TBitmap; Factor : Integer)
            Procedure MaskMandelbrot( const Dst : TBitmap; Factor : Integer)
Procedure FoldRight( Src1, Src2, Dst : TBitmap; Amount : Single)
Procedure QuartoOpaque( Src, Dst : TBitmap)
7686:
7687:
7688:
            Procedure SemiOpaque( Src, Dst : TBitmap)
7689:
7690:
            Procedure ShadowDownLeft( const Dst : TBitmap)
            Procedure ShadowDownRight( const Dst : TBitmap)
7691:
            Procedure ShadowUpLeft( const Dst : TBitmap)
Procedure ShadowUpRight( const Dst : TBitmap)
7692:
            Procedure Darkness( const Dst : TBitmap; Amount : Integer)
Procedure Trace( const Dst : TBitmap; Intensity : Integer)
7694:
7695:
            Procedure FlipRight( const Dst : TBitmap)
7696:
7697:
            Procedure FlipDown( const Dst : TBitmap)
            Procedure SpotLight( const Dst : TBitmap; Amount : Integer; Spot : TRect)
7698:
7699:
            Procedure SplitLight( const Dst : TBitmap; Amount : Integer)
           Procedure MakeSeamlessClip( var Dst : TBitmap; Seam : Integer)
Procedure Wave( const Dst : TBitmap; Amount, Inference, Style : Integer)
Procedure Mosaic( const Bm : TBitmap; Size : Integer)
7700:
7701:
7702:
            Procedure SmoothRotate( var Src, Dst : TBitmap; CX, CY : Integer; Angle : Single)
7703:
7704:
            Procedure SmoothResize( var Src, Dst : TBitmap)
           Procedure Twist( var Bmp, Dst : TBitmap; Amount : Integer)
Procedure SplitBlur( const Dst : TBitmap; Amount : Integer)
7705:
7707:
            Procedure GaussianBlur( const Dst : TBitmap; Amount : Integer)
7708:
            Procedure Smooth( const Dst : TBitmap; Weight : Integer)
7709:
            Procedure GravScale( const Dst : TBitmap)
            Procedure AddColorNoise( const Dst : TBitmap; Amount : Integer)

Procedure AddMonoNoise( const Dst : TBitmap; Amount : Integer)
7710:
7711:
7712:
            Procedure Contrast( const Dst : TBitmap; Amount : Integer)
           Procedure Lightness( const Dst : TBitmap; Amount : Integer)
Procedure Saturation( const Dst : TBitmap; Amount : Integer)
7713:
7714:
7715:
            Procedure Spray( const Dst : TBitmap; Amount : Integer)
            Procedure AntiAlias( const Dst : TBitmap)
7716:
7717:
            Procedure AntiAliasRect( const Dst : TBitmap; XOrigin, YOrigin, XFinal, YFinal : Integer)
           Procedure SmoothPoint( const Dst : TBitmap; XK, YK : Integer)

Procedure FishEye( var Bmp, Dst : TBitmap; Amount : Single)

Procedure Marble( const Src : TBitmap; var Dst : TBitmap; Scale : Single; Turbulence : Integer)
7718:
7719:
7720:
7721:
            Procedure Marble2( const Src : TBitmap; var Dst : TBitmap; Scale : Single; Turbulence: Integer)
            Procedure Marble3( const Src : TBitmap; var Dst : TBitmap; Scale : Single; Turbulence: Integer)
7722:
7723:
            Procedure Marble4( const Src : TBitmap; var Dst : TBitmap; Scale : Single; Turbulence: Integer)
7724:
            Procedure Marble5( const Src : TBitmap; var Dst : TBitmap; Scale : Single; Turbulence: Integer)
            Procedure Marble6( const Src : TBitmap; var Dst : TBitmap; Scale : Single; Turbulence: Integer)
7725:
7726:
            Procedure Marble7( const Src : TBitmap; var Dst : TBitmap; Scale : Single; Turbulence: Integer)
7727:
            Procedure Marble8( const Src : TBitmap; var Dst : TBitmap; Scale : Single; Turbulence: Integer)
            Procedure SqueezeHor( Src, Dst : TBitmap; Amount : Integer; Style : TLightBrush)
7728:
            Procedure SplitRound( Src, Dst : TBitmap; Amount : Integer; Style : TLightBrush)
7730:
            Procedure Tile( Src, Dst : TBitmap; Amount : Integer)
7731:
            Procedure Stretch( Src, Dst : TBitmap; Filter : TFilterProc; AWidth : Single)
           Procedure Grow( Src1, Src2, Dst : TBitmap; Amount : Single; X, Y : Integer)
Procedure Invert( Src : TBitmap)
7732:
7733:
7734:
            Procedure MirrorRight( Src : TBitmap)
7735:
            Procedure MirrorDown( Src : TBitmap)
7736:
         end;
7737:
       end;
7738:
7739:
7740: procedure SIRegister_JvPaintFX(CL: TPSPascalCompiler);
7741: begin
         AddTypeS('TLightBrush', '( lbBrightness, lbContrast, lbSaturation, lbFishe'
7743:
          +'ye, lbrotate, lbtwist, lbrimple, mbHor, mbTop, mbBottom, mbDiamond, mbWast'
7744:
           +'e, mbRound, mbRound2, mbSplitRound, mbSplitWaste)
7745:
         SIRegister TJvPaintFX(CL);
7746:
        Function SplineFilter( Value : Single) : Single
        Function BellFilter( Value : Single) : Single
7748:
        Function TriangleFilter( Value : Single) : Single
7749:
        Function BoxFilter( Value : Single) : Single
        Function HermiteFilter( Value : Single) : Single
Function Lanczos3Filter( Value : Single) : Single
Function MitchellFilter( Value : Single) : Single
7750:
7751:
7752:
7753:
7754:
7755:
7756: (
       procedure SIRegister_Chart(CL: TPSPascalCompiler);
7757:
7758:
         'TeeMsg_DefaultFunctionName','String').SetString( 'TeeFunction
7759:
        TeeMsg_DefaultSeriesName','String').SetString( 'Series
7760:
        TeeMsg_DefaultToolName', 'String').SetString( 'ChartToolChartComponentPalette', 'String').SetString( 'TeeChart
                                                                ChartTool
7762:
        TeeMaxLegendColumns',LongInt').SetInt( 2);
TeeDefaultLegendSymbolWidth','LongInt').SetInt( 20);
7763:
7764:
        TeeTitleFootDistance,LongInt).SetInt(5);
7765:
         SIRegister_TCustomChartWall(CL);
7766:
7767:
         SIRegister_TChartWall(CL);
7768:
         SIRegister_TChartLegendGradient(CL);
         TLegendStyle', '( lsAuto, lsSeries, lsValues, lsLastValues, lsSeriesGroups )
TLegendAlignment', '( laLeft, laRight, laTop, laBottom )
7769:
```

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7771:
             FindClass('TOBJECT'), 'LegendException
             TOnGetLegendText', 'Procedure ( Sender : TCustomAxisPanel; Legen'
7772:
             +'dStyle : TLegendStyle; Index : Integer; var LegendText : String)
FindClass('TOBJECT'),'TCustomChartLegend
7773:
7774 .
             TLegendSymbolSize', '( lcsPercent, lcsPixels )
TLegendSymbolPosition', '( spLeft, spRight )
7775:
7776:
             TSymbolCalcHeight', 'Function : Integer : TchartSeries: TChartSeries: TchartSeries: Tobject; TsymbolCalcHeight', 'Function : Integer : TsymbolCalcHeight', 'Function : Integer : TsymbolCalcHeight', 'Function : TsymbolCalcHe
7777:
7778:
7779:
              SIRegister_TLegendSymbol(CL);
7780:
              SIRegister_TTeeCustomShapePosition(CL);
7781:
              TCheckBoxesStyle', '( cbsCheck, cbsRadio )
              SIRegister_TLegendTitle(CL);
7782:
7783:
              SIRegister_TLegendItem(CL);
7784:
              SIRegister_TLegendItems(CL);
7785:
              TLegendCalcSize', 'Procedure ( Sender : TCustomChartLegend; var ASize : Integer)
7786:
              FindClass('TOBJECT'), 'TCustomChart
              SIRegister_TCustomChartLegend(CL);
7787:
7788:
              SIRegister_TChartLegend(CL);
7789:
              SIRegister_TChartTitle(CL);
7790:
              SIRegister TChartFootTitle(CL);
7791:
              TChartClick',
                                      'Procedure ( Sender : TCustomChart; Button : TMous'
             +'eButton; Shift: TShiftState; X, Y: Integer)
TChartClickAxis', 'Procedure ( Sender: TCustomChart; Axis: TCh'
7792:
7793:
               +'artAxis; Button : TMouseButton; Shift : TShiftState; X, Y : Integer)
ChartClickSeries', 'Procedure ( Sender : TCustomChart; Series :'
7794:
7795:
              TChartClickSeries',
7796:
                +TChartSeries; ValueIndex : Integer; Button: TMouseButton; Shift:TShiftState;X,Y:Integer)
             TChartClickTitle', 'Procedure (Sender: TCustomChart; ATitle: '
+'TChartTitle; Button: TMouseButton; Shift: TShiftState; X, Y: Integer)
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'
7797:
7798:
7799:
7800:
7801:
             +'toMax : Boolean; Min : Double; Max : Double; end
TAllAxisSavedScales', 'array of TAxisSavedScales
7802:
7803:
              SIRegister_TChartBackWall(CL);
7804:
              SIRegister_TChartRightWall(CL);
7805:
7806:
              SIRegister_TChartBottomWall(CL);
7807:
              SIRegister_TChartLeftWall(CL);
7808:
              SIRegister_TChartWalls(CL);
7809:
              TChartAllowScrollEvent', 'Procedure(Sender:TChartAxis; var AMin, AMax:Double; var AllowScroll:Boolean);
7810:
              SIRegister_TCustomChart(CL)
7811:
              SIRegister_TChart(CL);
             SIRegister_TTeeSeriesTypes(CL);
SIRegister_TTeeToolTypes(CL);
7812:
7813:
7814:
              SIRegister_TTeeDragObject(CL);
7815:
             SIRegister_TColorPalettes(CL);
7816:
           Procedure RegisterTeeSeries(ASeriesClass:TChartSeriesClass;ADescription.
          AGalleryPage:PString;ANumGallerySeries:Integer;
7817: Procedure RegisterTeeSeries1( ASeriesClass: TChartSeriesClass; ADescription: PString);
7818:
            Procedure RegisterTeeFunction(AFunctClass:TTeeFunctionClass;ADescription,
          AGalleryPage:PString;ANumGallerySeries: Int;
7819: Procedure RegisterTeeBasicFunction( AFunctionClass: TTeeFunctionClass; ADescription: PString)
           Procedure RegisterTeeSeriesFunction(ASeriesClass: TChartSeriesClass; AFunctionClass: TTeeFunctionClass;
7820:
          ADescription, AGalleryPage : PString; ANumGallerySeries : Integer; ASubIndex : Integer)
7821:
           Procedure UnRegisterTeeSeries( const ASeriesList : array of TChartSeriesClass)
           Procedure UnRegisterTeeFunctions( const AFunctionList : array of TTeeFunctionClass)
Procedure AssignSeries( var OldSeries, NewSeries : TChartSeries)
Function CreateNewTeeFunction( ASeries : TChartSeries; AClass : TTeeFunctionClass) : TTeeFunction
7822:
7823:
7824:
           Function CreateNewSeries( AOwner : TComponent; AChart : TCustomAxisPanel; AClass : TChartSeriesClass;
7825:
          AFunctionClass : TTeeFunctionClass) : TChartSeries
Function CloneChartSeries( ASeries : TChartSeries) : TChartSeries;
Function CloneChartSeries1( ASeries : TChartSeries; AChart : TCustomAxisPanel) : TChartSeries;
7826:
7827:
7828:
            Function CloneChartSeries2(ASeries:TChartSeries;AOwner:TComponent;AChart:TCustomAxisPanel):TChartSeries;
7829:
            \textbf{Function} \ \texttt{CloneChartTool} ( \ \texttt{ATool} : \ \texttt{TTeeCustomTool}; \ \texttt{AOwner} : \ \texttt{TComponent}) : \ \texttt{TTeeCustomTool} \\
           Function ChangeSeriesType( var ASeries : TChartSeries; NewType : TChartSeriesClass) : TChartSeriesProcedure ChangeAllSeriesType( AChart : TCustomChart; AClass : TChartSeriesClass)
7830:
7831:
            Function GetNewSeriesName( AOwner : TComponent) : TComponentName
            Procedure RegisterTeeTools( const ATools : array of TTeeCustomToolClass)
7833:
7834:
           Procedure UnRegisterTeeTools( const ATools : array of TTeeCustomToolClass)
           Function GetGallerySeriesName( ASeries : TChartSeries) : String
7835:
           Procedure PaintSeriesLegend(ASeries:TChartSeries; ACanvas:TCanvas; const R:TRect; ReferenceChart:
7836:
          TCustomChart);
7837:
             SIRegister_TChartTheme(CL);
7838:
             //TChartThemeClass', 'class of TChartTheme \\//TCanvasClass', 'class of TCanvas3D
7839:
           Function SeriesNameOrIndex ( ASeries : TCustomChartSeries) : String
Function SeriesTitleOrName( ASeries : TCustomChartSeries) : String
7840:
7841:
           Procedure FillSeriesItems ( Altems : TStrings; AList : TCustomSeriesList; UseTitles : Boolean)

Procedure ShowMessageUser( const S : String)
7842:
7843:
           Function HasNoMandatoryValues( ASeries : TChartSeries) : Boolean
7844:
           Function HasLabels( ASeries : TChartSeries) : Boolean
Function HasColors( ASeries : TChartSeries) : Boolean
7846:
           Function SeriesGuessContents( ASeries : TChartSeries) : TeeFormatFlag

Procedure TeeDrawBitmapEditor( Canvas : TCanvas; Element : TCustomChartElement; Left, Top : Integer)
7847:
7848:
7849: end;
7850:
7851:
7852: procedure SIRegister TeeProcs(CL: TPSPascalCompiler);
7853: begin
7854: //'TeeFormBorderStyle','').SetString( bsNone);
```

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7855:
              SIRegister TMetafile(CL);
7856:
               TeeDefVerticalMargin','LongInt').SetInt( 4);
             'TeeDefHorizMargin','LongInt').SetInt( 3);
'crTeeHand','LongInt').SetInt( TCursor ( 2020 ));
7858 .
7859:
              'TeeMsg_TeeHand','String').SetString( 'crTeeHand
              'TeeNormalPrintDetail', 'LongInt').SetInt( 0);
'TeeHighPrintDetail', 'LongInt').SetInt( - 100);
7860:
7861:
              'TeeDefault_PrintMargin', 'LongInt').SetInt( 15);
7862:
              'MaxDefaultColors', 'LongInt').SetInt( 19);
7863:
              TeeTabDelimiter','Char').SetString( #9);
TDateTimeStep','( dtOneMicroSecond, dtOneMillisecond, dtOneSeco'
7864:
7865:
                +'nd, dtFiveSeconds, dtTenSeconds, dtFifteenSeconds, dtThirtySeconds, dtOneM'
7867:
                 +'inute, dtFiveMinutes, dtTenMinutes, dtFifteenMinutes, dtThirtyMinutes, dtO'
                +'neHour, dtTwoHours, dtSixHours, dtTwelveHours, dtOneDay, dtTwoDays, dtThre' +'eDays, dtOneWeek, dtHalfMonth, dtOneMonth, dtTwoMonths, dtTreeMonths, dtF'
7868:
7869:
                 +'ourMonths, dtSixMonths, dtOneYear, dtNone )
               SIRegister_TCustomPanelNoCaption(CL);
7871:
               FindClass('TOBJECT'),'TCustomTeePanel
SIRegister_TZoomPanning(CL);
7872:
7873:
7874:
               SIRegister_TTeeEvent(CL);
7875:
               //SIRegister_TTeeEventListeners(CL);
7876:
               TTeeMouseEventKind', '( meDown, meUp, meMove )
7877:
               SIRegister_TTeeMouseEvent(CL);
7878:
               SIRegister TCustomTeePanel(CL);
               //TChartGradient', 'TTeeGradient
7880:
                //TChartGradientClass', 'class of TChartGradient
7881:
               TPanningMode', '( pmNone, pmHorizontal, pmVertical, pmBoth )
               SIRegister_TTeeZoomPen(CL);
SIRegister_TTeeZoomBrush(CL);
7882:
7883:
7884:
               TTeeZoomDirection', '( tzdHorizontal, tzdVertical, tzdBoth )
7885:
               SIRegister_TTeeZoom(CL);
               FindClass('TOBJECT'),'TCustomTeePanelExtended
TTeeBackImageMode', '( pbmStretch, pbmTile, pbmCenter, pbmCustom )
7886:
7887:
7888:
               SIRegister_TBackImage(CL);
               SIRegister_TCustomTeePanelExtended(CL);
7889:
7890:
               //TChartBrushClass', 'class of TChartBrush
               SIRegister_TTeeCustomShapeBrushPen(CL);
7891:
               TChartObjectShapeStyle', '( fosRectangle, fosRoundRectangle, fosEllipse )
TTextFormat', '( ttfNormal, ttfHtml )
7892:
7893:
7894:
               SIRegister_TTeeCustomShape(CL);
7895:
               SIRegister_TTeeShape(CL);
7896:
              SIRegister TTeeExportData(CL);
7897:
             Function TeeStr( const Num : Integer) : String
7898:
             Function DateTimeDefaultFormat( const AStep : Double) : String
            Function TEEDaysInMonth( Year, Month: Word): Word
Function FindDateTimeStep( const StepValue: Double): TDateTimeStep
Function NextDateTimeStep( const AStep: Double): Double
Function PointInLine( const P: TPoint; const px, py, qx, qy: Integer): Boolean;
Function PointInLine( const P, FromPoint, ToPoint: TPoint): Boolean;
Function PointInLine( const P, FromPoint, ToPoint: TPoint): Boolean;
7899:
7900:
7901:
            Function PointInLine1( const P. FromPoint, ToPoint: TPoint): Boolean;
Function PointInLine2(const P. FromPoint, ToPoint: TPoint): Boolean;
Function PointInLine2(const P. FromPoint, ToPoint: TPoint; const TolerancePixels:Integer):Boolean;
Function PointInLine3( const P: TPoint; const px, py, qx, qy, TolerancePixels:Integer):Boolean;
Function PointInLineTolerance(const P:TPoint; const px, py, qx, qy, TolerancePixels:Integer):Boolean;
7903:
7904:
7905:
7906:
            Function PointInLineTolerance(const P:TPoint;const px,py,qx,qy,TolerancePixels:Integer
Function PointInPolygon( const P : TPoint; const Poly : array of TPoint) : Boolean
Function PointInTriangle( const P, P0, P1, P2 : TPoint) : Boolean;
Function PointInTriangle( const P : TPoint; X0, X1, Y0, Y1 : Integer) : Boolean;
Function PointInHorizTriangle( const P : TPoint; Y0, Y1, X0, X1 : Integer) : Boolean
Function PointInEllipse( const P : TPoint; const Rect : TRect) : Boolean;
Function PointInEllipse( const P : TPoint; Left, Top, Right, Bottom : Integer) : Boolean;
Function PointInEllipse( const P : TPoint; Const Rect : TRect) : Grant Polymetric Polymetric Polymetric Const Promoter : Const Prom
7907:
7908:
7909:
7910:
7911:
7912:
            Function DelphiToLocalFormat( const Format : String) : String
Function LocalToDelphiFormat( const Format : String) : String
Procedure TEEEnableControls(Enable: Boolean; const ControlArray : array of TControl)
7913:
7914:
7915:
7916:
             Function TeeRoundDate(const ADate : TDateTime; AStep : TDateTimeStep) : TDateTime
7917:
            Procedure TeeDateTimeIncrement(IsDateTime:Boolean/Increment:Boolean/var Value:Double/const
           AnIncrement:Double; tmpWhichDateTime:TDateTimeStep)
7918:
              TTeeSortCompare', 'Function ( a, b : Integer) : Integer TTeeSortSwap', 'Procedure ( a, b : Integer)
7919:
7920:
             Procedure TeeSort(StartIndex,EndIndex:Integer;CompareFunc:TTeeSortCompare;SwapFunc:TTeeSortSwap);
7921:
             Function TeeGetUniqueName( AOwner : TComponent; const AStartName : String) : string
            Function TeeExtractField( St : String; Index : Integer) : String;
Function TeeExtractField1( St : String; Index : Integer; const Separator : String) : String;
Function TeeNumFields( St : String) : Integer;
7922:
7923:
7924:
7925:
             Function TeeNumFields1( const St, Separator : String) : Integer;
            Procedure TeeGetBitmapEditor( AObject: TObject; var Bitmap: TBitmap)
Procedure TeeLoadBitmap( Bitmap: TBitmap; const Name1, Name2: String)
7926:
7927:
             // TColorArray', 'array of TColor
7928:
7929:
             Function GetDefaultColor( const Index : Integer) : TColor
7930:
             Procedure SetDefaultColorPalette;
             Procedure SetDefaultColorPalette1( const Palette : array of TColor);
7931:
7932:
              'TeeCheckBoxSize', 'LongInt').SetInt( 11);
             Procedure TeeDrawCheckBox(x,y:Integer;Canvas:TCanvas;Checked:Boolean;ABackColor:TColor;CheckBox:Boolean);
7934:
             \textbf{Function} \ \ \texttt{TEEStrToFloatDef(} \ \ \textbf{const} \ \ \texttt{S} \ \ : \ \textbf{string}; \ \ \textbf{const} \ \ \textbf{Default} \ : \ \ \texttt{Extended)} \ : \ \ \texttt{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);
7935:
7936:
7937:
             Procedure TeeTranslateControl( AControl: TControl; const ExcludeChilds: array of TControl);
7938:
7939:
            Function ReplaceChar( const AString : String; const Search : Char; const Replace : Char) : String
7940:
            //Procedure RectToFourPoints( const ARect : TRect; const Angle : Double; var P : TFourPoints)
Function TeeAntiAlias( Panel : TCustomTeePanel; ChartRect : Boolean) : TBitmap
7941:
            //Procedure DrawBevel(Canvas:TTeeCanvas;Bevel:TPanelBevel;var R:TRect;Width:Integer;Round:Integer);
```

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7943:
       //Function ScreenRatio( ACanvas : TCanvas3D) : Double
Function TeeReadBoolOption( const AKey : String; DefaultValue : Boolean) : Boolean
7944:
        Procedure TeeSaveBoolOption( const AKey : String; Value : Boolean)
        Function TeeReadIntegerOption( const AKey : String; DefaultValue : Integer) : Integer
7946 .
        Procedure TeeSaveIntegerOption( const AKey : String; Value : Integer)
7947:
       Function TeeReadStringOption( const AKey, DefaultValue : String) : String
Procedure TeeSaveStringOption( const AKey, Value : String)
7948:
7949:
        Function TeeDefaultXMLEncoding : String
7950:
7951:
       Procedure ConvertTextToXML( Stream : TStream; XMLHeader : Boolean)
7952:
        TeeWindowHandle', 'Integer
       Procedure TeeGotoURL( Handle : TeeWindowHandle; const URL : String)
7953:
        Procedure HtmlTextOut( ACanvas : TCanvas; x, y : Integer; Text : String)
7955:
       Function HtmlTextExtent( ACanvas : TCanvas; const Text : String) : TSize
7956: end;
7957:
7958:
      7959:
7960:
       Procedure SetAlias( aAlias, aDirectory : String)
7961:
       Procedure CheckRegistryEntry(Reg:TRegistry;const Path, Value:String;const Default,
7962:
       Desired: Variant; Size: Byte);
7963:
       Function GetFileVersionNumber( const FileName : String) : TVersionNo
       Procedure SetBDE( aPath, aNode, aValue : String)
function RestartDialog(Wnd: HWnd; Reason: PChar; Flags: Integer): Integer; stdcall;
7964:
7965:
       Function GetSystemDirectory( lpBuffer : string; uSize : UINT) : UINT
7967:
        Function GetSystemDirectoryW( lpBuffer : pchar; uSize : UINT) : UINT
7968:
       Function GetTempPath( nBufferLength : DWORD; lpBuffer : string) : DWORD
       Function GetWindowsDirectoryW( nBufferLength : DWORD; lpBuffer : string) : DWORD
7969:
7970:
       Function GetTempFileName(lpPathName,lpPrefixString:string;uUnique:UINT;lpTempFileName:string):UINT;
7971:
7972:
7973: procedure SIRegister_cDateTime(CL: TPSPascalCompiler);
7974: begin
7975: AddClassN(FindClass('TOBJECT'), 'EDateTime
7976: Function DatePart( const D : TDateTime) : Integer 7977: Function TimePart( const D : TDateTime) : Double
7978: Function Century( const D : TDateTime) : Word
7979: Function Year( const D : TDateTime) : Word
7980: Function Month( const D : TDateTime) : Word
7981: Function Day( const D : TDateTime) : Word
7982: Function Hour ( const D : TDateTime) : Word
7983: Function Minute( const D : TDateTime) : Word 7984: Function Second( const D : TDateTime) : Word
7985: Function Millisecond( const D : TDateTime) : Word
7986: ('OneDay', 'Extended').setExtended( 1.0);
7987: ('OneHour', 'Extended').SetExtended( OneDay / 24);
7988: ('OneMinute', 'Extended').SetExtended( OneHour / 60);
        'OneSecond', 'Extended').SetExtended( OneMinute / 60);
7990: ('OneMillisecond', 'Extended').SetExtended( OneSecond / 1000);
7991: ('OneWeek', 'Extended').SetExtended( OneDay * 7);
7992: ('HoursPerDay', 'Extended').SetExtended( 24);
7993: ('MinutesPerHour','Extended').SetExtended( 60);
7994: ('SecondsPerMinute','Extended').SetExtended( 60);
7995: Procedure SetYear( var D : TDateTime; const Year : Word)
7996: Procedure SetMonth( var D : TDateTime; const Month : Word)
7997: Procedure SetDay( var D : TDateTime; const Day : Word)
7998: Procedure SetHour( var D : TDateTime; const Hour : Word)
7999: Procedure SetMinute( var D : TDateTime; const Minute : Word)
8000: Procedure SetSecond( var D : TDateTime; const Second : Word)
8001: Procedure SetMillisecond( var D : TDateTime; const Milliseconds : Word) 8002: Function IsEqual( const D1, D2 : TDateTime) : Boolean;
8003: Function IsEqual1( const D1 : TDateTime; const Ye, Mo, Da : Word):Boolean;
8004: Function IsEqual2( const D1 : TDateTime; const Ho, Mi, Se, ms : Word):Boolean;
8005: Function IsAM( const D : TDateTime) : Boolean 8006: Function IsPM( const D : TDateTime) : Boolean
8007: Function IsMidnight( const D : TDateTime) : Boolean
8008: Function IsNoon( const D : TDateTime) : Boolean
8009: Function IsSunday( const D : TDateTime) : Boolean
8010: Function IsMonday( const D : TDateTime) : Boolean
8011: Function IsTuesday( const D : TDateTime) : Boolean
8012: Function IsWedneday( const D : TDateTime) : Boolean
8013: Function IsThursday( const D : TDateTime) : Boolean
8014: Function IsFriday( const D : TDateTime) : Boolean
8015: Function IsSaturday( const D : TDateTime) : Boolean 8016: Function IsWeekend( const D : TDateTime) : Boolean
8017: Function Noon( const D : TDateTime) : TDateTime
8018: Function Midnight( const D : TDateTime) : TDateTime
8019: Function FirstDayOfMonth( const D : TDateTime) : TDateTime 8020: Function LastDayOfMonth( const D : TDateTime) : TDateTime
8021: Function NextWorkday( const D : TDateTime) : TDateTime
8022: Function PreviousWorkday( const D : TDateTime) : TDateTime 8023: Function FirstDayOfYear( const D : TDateTime) : TDateTime
8024: Function LastDayOfYear( const D : TDateTime) : TDateTime
8025: Function EasterSunday( const Year : Word) : TDateTime
8026: Function GoodFriday( const Year : Word) : TDateTime
8027: Function AddMilliseconds( const D : TDateTime; const N : Int64) : TDateTime
8028: Function AddSeconds( const D : TDateTime; const N : Int64) : TDateTime 8029: Function AddMinutes( const D : TDateTime; const N : Integer) : TDateTime
8030: Function AddHours( const D : TDateTime; const N : Integer) : TDateTime
```

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8031: Function AddDays( const D : TDateTime; const N : Integer) : TDateTime
8032: Function AddWeeks( const D : TDateTime; const N : Integer) : TDateTime
8033: Function AddMonths( const D : TDateTime; const N : Integer) :
8034: Function AddYears( const D : TDateTime; const N : Integer) : TDateTime
8035: Function DayOfYear( const Ye, Mo, Da : Word) : Integer 8036: Function DayOfYear( const D : TDateTime) : Integer
8037: Function DaysInMonth( const Ye, Mo: Word): Integer
8038: Function DaysInMonth( const D: TDateTime): Integer
8039: Function DaysInYear( const Ye: Word): Integer
8040: Function DaysInYearDate( const D : TDateTime) : Integer
8041: Function WeekNumber( const D : TDateTime) : Integer
8042: Function ISOFirstWeekOfYear( const Ye : Word) : TDateTime
8043: Procedure ISOWeekNumber( const D : TDateTime; var WeekNumber, WeekYear : Word)
8044: Function DiffMilliseconds( const D1, D2 : TDateTime) : Int64
8045: Function DiffSeconds( const D1, D2 : TDateTime) : Integer
8046: Function DiffMinutes( const D1, D2 : TDateTime) : Integer
8047: Function DiffHours( const D1, D2 : TDateTime) : Integer
8048: Function DiffDays(const D1, D2: TDateTime): Integer 8049: Function DiffWeeks(const D1, D2: TDateTime): Integer 8050: Function DiffMonths(const D1, D2: TDateTime): Integer
8051: Function DiffYears( const D1, D2 : TDateTime) : Integer
8052: Function GMTBias : Integer
8053: Function GMTTimeToLocalTime( const D : TDateTime) : TDateTime 8054: Function LocalTimeToGMTTime( const D : TDateTime) : TDateTime
8055: Function NowAsGMTTime : TDateTime
8056: Function DateTimeToISO8601String( const D : TDateTime) : AnsiString
8057: Function ISO8601StringToTime( const D : AnsiString) : TDateTime
8058: Function ISO8601StringAsDateTime( const D : AnsiString) : TDateTime 8059: Function DateTimeToANSI( const D : TDateTime) : Integer
8060: Function ANSIToDateTime( const Julian : Integer) : TDateTime
8061: Function DateTimeToISOInteger( const D : TDateTime) : Integer
8062: Function DateTimeToISOString( const D : TDateTime) : AnsiString 8063: Function ISOIntegerToDateTime( const ISOInteger : Integer) : TDateTime
8064: Function TwoDigitRadix2000YearToYear( const Y : Integer) : Integer
8065: Function DateTimeAsElapsedTime(const D:TDateTime; const IncludeMilliseconds:Boolean):AnsiString
8066: Function UnixTimeToDateTime( const UnixTime : LongWord) : TDateTime
8067: Function DateTimeToUnixTime( const D : TDateTime) : LongWord
8068: Function EnglishShortDayOfWeekStrA( const DayOfWeek : Integer) : AnsiString
8069: Function EnglishShortDayOfWeekStrU( const DayOfWeek : Integer) : UnicodeString
8070: Function EnglishLongDayOfWeekStrA( const DayOfWeek : Integer) : AnsiString
8071: Function EnglishLongDayOfWeekStrU( const DayOfWeek: Integer) : UnicodeString
8072: Function EnglishShortMonthStrA( const Month : Integer) : AnsiString 8073: Function EnglishShortMonthStrU( const Month : Integer) : UnicodeString
8074: Function EnglishLongMonthStrA( const Month: Integer): AnsiString 8075: Function EnglishLongMonthStrU( const Month: Integer): UnicodeString
8076: Function EnglishShortDayOfWeekA( const S : AnsiString) : Integer 8077: Function EnglishShortDayOfWeekU( const S : UnicodeString) : Integer
8078: Function EnglishLongDayOfWeekA( const S : AnsiString) : Integer
8079: Function EnglishLongDayOfWeekU( const S : UnicodeString) : Integer
8080: Function EnglishShortMonthA( const S : AnsiString) : Integer 8081: Function EnglishShortMonthU( const S : UnicodeString) : Integer
8082: Function EnglishLongMonthA( const S : AnsiString) : Integer
8083: Function EnglishLongMonthU( const S : UnicodeString) : Integer
8084: Function RFC850DayOfWeekA( const S : AnsiString) : Integer 8085: Function RFC850DayOfWeekU( const S : UnicodeString) : Integer 8086: Function RFC1123DayOfWeekA( const S : AnsiString) : Integer
8087: Function RFC1123DayOfWeekU( const S : UnicodeString) : Integer
8088: Function RFCMonthA( const S : AnsiString) : Word 8089: Function RFCMonthU( const S : UnicodeString) : Word
8090: Function GMTTimeToRFC1123TimeA( const D: TDateTime; const IncludeSeconds:Boolean): AnsiString 8091: Function GMTTimeToRFC1123TimeU( const D: TDateTime; const IncludeSeconds:Boolean): UnicodeString
8092: Function GMTDateTimeToRFC1123DateTimeA(const D: TDateTime; const IncludeDayOfWeek:Bool):AnsiString;
8093: Function GMTDateTimeToRFC1123DateTimeU(const D:TDateTime;const IncludeDayOfWeek:Bool):UnicodeString;
8094: Function DateTimeToRFCDateTimeA( const D : TDateTime) : AnsiString 8095: Function DateTimeToRFCDateTimeU( const D : TDateTime) : UnicodeString
8096: Function NowAsRFCDateTimeA : AnsiString
8097: Function NowAsRFCDateTimeU : UnicodeString
8098: Function RFCDateTimeToGMTDateTime( const s : AnsiString) : TDateTime
8099: Function RFCDateTimeToDateTime( const S : AnsiString) : TDateTime
8100: Function RFCTimeZoneToGMTBias( const Zone : AnsiString) : Integer
8101: Function TimePeriodStr( const D : TDateTime) : AnsiString
8102: Procedure SelfTest
8103: end;
8105: Function PathHasDriveLetterA( const Path : AnsiString) : Boolean
8106: Function PathHasDriveLetter( const Path : String) : Boolean
8107: Function PathIsDriveLetterA( const Path : AnsiString) : Boolean
8108: Function PathIsDriveLetter( const Path : String) : Boolean
8109: Function PathIsDriveRootA( const Path : AnsiString) : Boolean
8110: Function PathIsPriveRoot( const Path: String): Boolean 8111: Function PathIsRootA( const Path: AnsiString): Boolean
8112: Function PathIsRoot( const Path : String) : Boolean
8113: Function PathIsUNCPathA( const Path: AnsiString) : Boolean 8114: Function PathIsUNCPath( const Path: String) : Boolean
8115: Function PathIsAbsoluteA( const Path : AnsiString) : Boolean
8116: Function PathIsAbsolute( const Path : String) : Boolean
8117: Function PathIsDirectoryA( const Path : AnsiString) : Boolean 8118: Function PathIsDirectory( const Path : String) : Boolean
8119: Function PathInclSuffixA( const Path : AnsiString; const PathSep : Char) : AnsiString
```

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8120: Function PathInclSuffix( const Path : String; const PathSep : Char) : String
8121: Function PathExclSuffixA( const Path : AnsiString; const PathSep : Char) : AnsiString
8122: Function PathExclSuffix( const Path: String; const PathSep: Char): String
8123: Procedure PathEnsureSuffixA( var Path : AnsiString; const PathSep : Char)
8124: Procedure PathEnsureSuffix( var Path : String; const PathSep : Char)
8125: Procedure PathEnsureNoSuffixA( var Path : AnsiString; const PathSep : Char)
8126: Procedure PathEnsureNoSuffix( var Path : String; const PathSep : Char)
8127: //Function PathCanonicalA( const Path : AnsiString; const PathSep : Char) : AnsiString
8128: Function PathCanonical( const Path : String; const PathSep : Char) : String
8129: Function PathExpandA(const Path:AnsiString;const BasePath:AnsiString;const PathSep:Char):AnsiString
8130: Function PathExpand( const Path : String; const BasePath : String; const PathSep : Char) : String
8131: Function PathLeftElementA( const Path : AnsiString; const PathSep : Char) : AnsiString
8132: Function PathLeftElement( const Path : String; const PathSep : Char) : String
8133: Procedure PathSplitLeftElementA(const Path:Astring; var LeftElement, RightPath: Astring; const PathSep:Char);
8134: Procedure PathSplitLeftElement(const Path: String; var LeftElement, RightPath: String; const PathSep:Char);
8135: Procedure DecodeFilePathA(const FilePath:AnsiString; var Path,FileName:AnsiString; const PathSep:Char;
8136: Procedure DecodeFilePath( const FilePath: String; var Path, FileName: String; const PathSep: Char)
8137: Function FileNameValidA( const FileName : AnsiString) : AnsiString 8138: Function FileNameValid( const FileName : String) : String
8139: Function FilePathA(const FileName, Path:AnsiString;const BasePath:AnsiStr;const PathSep:Char):AnsiString;
8140: Function FilePath(const FileName, Path: String;const BasePath: String;const PathSep : Char) : String
8141: Function DirectoryExpandA(const Path:AnsiString;const BasePath:AnsiString;const PathSep:Char):AnsiString
8142: Function DirectoryExpand(const Path: String; const BasePath: String; const PathSep : Char) : String
8143: Function UnixPathToWinPath( const Path : AnsiString) : AnsiString 8144: Function WinPathToUnixPath( const Path : AnsiString) : AnsiString
8145: Procedure CCopyFile( const FileName, DestName : String)
8146: Procedure CMoveFile( const FileName, DestName : String)
8147: Function CDeleteFiles( const FileMask : String) : Boolean
8148: Function FileSeekEx(const FHandle:TrileHandle;const FileOffset:Int64; const FilePos:TFileSeekPos):Int64;
8149: Procedure FileCloseEx( const FileHandle : TFileHandle)
8150: Function FileExistsA( const FileName : AnsiString) : Boolean
8151: Function CFileExists(const FileName: String): Boolean 8152: Function CFileGetSize(const FileName: String): Int64
8153: Function FileGetDateTime( const FileName : String) : TDateTime
8154: Function FileGetDateTime2( const FileName : String) : TDateTime
8155: Function FileIsReadOnly( const FileName : String) : Boolean
8156: Procedure FileDeleteEx( const FileName : String)
8157: Procedure FileRenameEx( const OldFileName, NewFileName : String)
8158: Function ReadFileStrA( const FileName:AnsiString; const FileSharing : TFileSharing; const FileCreationMode
       : TFileCreationMode; const FileOpenWait : PFileOpenWait)
                                                                        : AnsiString
8159: Function DirectoryEntryExists( const Name : String) : Boolean
8160: Function DirectoryEntrySize( const Name : String) : Int64
8161: Function CDirectoryExists( const DirectoryName : String) : Boolean
8162: Function DirectoryGetDateTime( const DirectoryName : String) : TDateTime
8163: Procedure CDirectoryCreate( const DirectoryName : String)
8164: Function GetFirstFileNameMatching( const FileMask : String) : String
8165: Function DirEntryGetAttr( const FileName : AnsiString) : Integer
8166: Function DirEntryIsDirectory( const FileName : AnsiString) : Boolean
8167: Function FileHasAttr( const FileName : String; const Attr : Word) : Boolean
      AddTypeS('TLogicalDriveType', '( DriveRemovable, DriveFixed, DriveRemote, +'DriveCDRom, DriveRamDisk, DriveTypeUnknown)
8168:
8169:
8170: Function DriveIsValid( const Drive : Char) : Boolean
8171: Function DriveGetType( const Path : AnsiString) : TLogicalDriveType
8172: Function DriveFreeSpace( const Path : AnsiString) : Int64
8173:
8174: procedure SIRegister_cTimers(CL: TPSPascalCompiler);
8175: begin
8176: AddClassN(FindClass('TOBJECT'), 'ETimers
8177: Const(TickFrequency', LongInt').SetInt( 1000);Function GetTick: LongWord 8178: Function TickDelta( const D1, D2: LongWord): Integer 8179: Function TickDeltaW( const D1, D2: LongWord): LongWord
        AddTypeS('THPTimer',
                                  'Int64
8181: Procedure StartTimer( var Timer: THPTimer)
8182: Procedure StopTimer( var Timer: THPTimer)
8183: Procedure ResumeTimer( var StoppedTimer: THPTimer)
8184: Procedure InitStoppedTimer( var Timer: THPTimer)
8185: Procedure InitElapsedTimer( var Timer: THPTimer; const Milliseconds: Integer)
8186: Function MillisecondsElapsed( const Timer: THPTimer; const TimerRunning : Boolean) : Integer 8187: Function MicrosecondsElapsed( const Timer: THPTimer; const TimerRunning : Boolean) : Int64
8188: Procedure WaitMicroseconds ( const MicroSeconds : Integer)
8189: Function GetHighPrecisionFrequency : Int64
8190: Function GetHighPrecisionTimerOverhead : Int64
8191: Procedure AdjustTimerForOverhead( var StoppedTimer: THPTimer; const Overhead: Int64)
8192: Procedure SelfTestCTimer
8193: end
8194:
8195:
      procedure SIRegister_cRandom(CL: TPSPascalCompiler);
8196: begin
      Function RandomSeed : LongWord
8197:
        Procedure AddEntropy( const Value : LongWord)
8199:
        Function RandomUniform : LongWord;
8200:
       Function RandomUniform1 ( const N : Integer) : Integer;
8201:
       Function RandomBoolean : Boolean
8202:
       Function RandomByte : Byte
       Function RandomByteNonZero : Byte
8203:
8204:
       Function RandomWord : Word
       Function RandomInt64: Int64;
8205:
8206:
       Function RandomInt641( const N : Int64) : Int64;
8207: Function RandomHex( const Digits : Integer) : String
```

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8208:
           Function RandomFloat : Extended
            Function RandomAlphaStr( const Length : Integer) : AnsiString
8209:
            Function RandomPseudoWord( const Length : Integer) : AnsiString
8211:
            Function RandomPassword(const MinL, MaxLength:Int:const CaseSens, UseSymbols, UseNumbers:Bool):AnsiString;
           Function mwcRandomLongWord : LongWord Function urnRandomLongWord : LongWord
8212:
8213:
           Function moaRandomFloat : Extended
8214:
            Function mwcRandomFloat : Extended
8215:
8216:
           Function RandomNormalF : Extended
8217:
           Procedure SelfTestCRandom
8218:
          end;
8219:
8220:
          procedure SIRegister_SynEditMiscProcs(CL: TPSPascalCompiler);
8221: begin
           // PIntArray', '^TIntArray // will not work
Addtypes('TConvertTabsProc','function(const Line:AnsiString; TabWidth: integer):AnsiString
8222:
            Addtypes('TConvertTabsProcEx','function(const Line:AnsiString; TabWidth: integer;var HasTabs: boolean):
          AnsiString
8225:
           Function synMax(x, y : integer) : integer
           Function synMin(x, y : integer) : integer
8226:
            Function synMinMax( x, mi, ma : integer)
            Procedure synSwapInt( var 1, r : integer)
8228:
           Function synMaxPoint( const P1, P2 : TPoint) : TPoint Function synMinPoint( const P1, P2 : TPoint) : TPoint
8229:
8230:
            //Function synGetIntArray( Count : Cardinal; InitialValue : integer) : PIntArray
8231:
8232:
            Procedure synInternalFillRect( dc : HDC; const rcPaint : TRect)
8233:
            \textbf{Function} \  \, \texttt{synGetBestConvertTabsProc} ( \  \, \texttt{TabWidth} \  \, : \  \, \texttt{integer}) \  \, : \  \, \texttt{TConvertTabsProc} \\
           Function synConvertTabs( const Line : AnsiString; TabWidth : integer) : AnsiString Function synGetBestConvertTabsProcEx( TabWidth : integer) : TConvertTabsProcEx
8234:
8235:
            Function synConvertTabsEx(const Line:AnsiString;TabWidth:integer; var HasTabs:boolean):AnsiString;
8236:
            Function synGetExpandedLength( const aStr : string; aTabWidth : integer) : integer
8237:
           Function synCharIndex2CaretPos( Index, TabWidth: integer; const Line: string): integer
Function synCaretPos2CharIndex(Position, TabWidth: int; const Line: string; var InsideTabChar: boolean):int;
8238:
8239:
8240:
            Function synStrScanForCharInSet(const Line:string;Start:integer;AChars:TSynIdentChars):integer;
            Function synStrRScanForCharInSet(const Line:string;Start:integer;AChars:TSynIdentChars):integer;
8241:
8242:
             TStringType', '( stNone, stHalfNumAlpha, stHalfSymbol, stHalfKat'
               +'akana,stWideNumAlpha,stWideSymbol,stWideKatakana,stHiragana,stIdeograph,stControl,stKashida )
8243:
            ('C3 NONSPACING', 'LongInt').SetInt(1);
8244:
8245:
             'C3_DIACRITIC', 'LongInt').SetInt( 2);
8246:
            'C3_VOWELMARK', 'LongInt').SetInt( 4);
            ('C3_SYMBOL','LongInt').SetInt( 8);
('C3_KATAKANA','LongWord').SetUInt( $0010);
('C3_HIRAGANA','LongWord').SetUInt( $0020);
8247:
8248:
8249:
              'C3_HALFWIDTH','LongWord').SetUInt( $0040);
'C3_FULLWIDTH','LongWord').SetUInt( $0080);
8250:
8251:
              'C3_IDEOGRAPH', 'LongWord').SetUInt( $0100);
8252:
            ('C3_KASHIDA','LongWord').SetUInt( $0200);
('C3_LEXICAL','LongWord').SetUInt( $0400);
8253:
8254:
8255:
              'C3_ALPHA','LongWord').SetUInt( $8000);
8256:
            ('C3_NOTAPPLICABLE', 'LongInt').SetInt( 0);
           Function synStrScanForMultiByteChar( const Line : string; Start : Integer) : Integer Function synStrRScanForMultiByteChar( const Line : string; Start : Integer) : Integer
8257:
8258:
            Function synIsStringType( Value : Word) : TStringType
8259:
8260:
            Function synGetEOL( Line : PChar) : PChar
8261:
           Function synEncodeString( s : string) : string
Function synDecodeString( s : string) : string
8262:
8263:
            Procedure synFreeAndNil( var Obj: TObject)
            Procedure synAssert( Expr : Boolean)
8264:
8265:
            \textbf{Function} \  \, \textbf{synLastDelimiter}(\  \, \textbf{const} \  \, \textbf{Delimiters}, \  \, \textbf{S} \  \, \textbf{:} \  \, \textbf{string}) \  \, \textbf{:} \  \, \textbf{Integer}
8266:
             TReplaceFlag', '( rfReplaceAll, rfIgnoreCase )
TReplaceFlags', 'set of TReplaceFlag )
8267:
            \textbf{Function} \  \, \text{synStringReplace}(\textbf{const} \  \, \text{S, OldPattern, NewPattern} \  \, : \  \, \textbf{string}; \  \, \text{Flags: TReplaceFlags)} \  \, : \  \, \textbf{string} \  \, \text{string} \  \, : \  \, \text{Transition} \  \, : \  \, \text{Transition} \  \, : \  \, \text{String} \  \, : \  \, \text{Transition} \  \, : \  \, \text{String} \  \, : \  \, \text{String} \  \, : \  \, \text{Transition} \  \, : \  \, \text{String} \  \, : \  \, : \  \, \text{String} \  \, : \  \, \text{String} \  \, : \  \, : \  \, \text{String} \  \, : \  \, : \  \, : \  \, : \  \, : \  \, : \  \, : \  \, : \  \, : \  \, : \  \, : \  \, : \  \, : \  \, : \  \, : \  \, : \  \, : \  \, : \  \, : \  \, : \  \, : \  \, : \  \, : \  \, : \  \, : \  \, : \  \, : \  \, : \  \, : \  \, : \  \, : \  \, : \  \, : \  \, : \  \, : \  \, : \  \, : \  \, : \  \, : \  \, : \  \, : \  \, : \  \, : \  \, : \  \, : \  \, : \  \, : \  \, : \  \, : \  \, : \  \, : \  \, : \  \, : \  \, : \  \, : \  \, : \  \, : \  \, : \  \, : \  \, : \  \, : \  \, : \  \, : \  \, : \  \, : \  \, : \  \, : \  \, : \  \, : \  \, : \  \, : \  \, : \  \, : \  \, : \  \, : \  \, : \  \, : \  \, : \  \, : \  \, : \  \, : \  \, : \  \, : \  \, : \  \, : \  \, : \  \, : \  \, : \  \, : \  \, : \  \, : \  \, : \  \, : \  \, : \  \, : \  \, : \  \, : \  \, : \  \, : \  \, : \  \, : \  \, : \  \, : \  \, : \  \, : \  \, : \  \, : \  \, : \  \, : \  \, : \  \, : \  \, : \  \, : \  \, : \  \, : \  \, : \  \, : \  \, : \  \, : \  \, : \  \, : \  \, : \  \, : \  \, : \  \, : \  \, : \  \, : \  \, : \  \, : \  \, : \  \, : \  \, : \  \, : \  \, : \  \, : \  \, : \  \, : \  \, : \  \, : \  \, : \  \, : \  \, : \  \, : \  \, : \  \, : \  \, : \  \, : \  \, : \  \, : \  \, : \  \, : \  \, : \  \, : \  \, : \  \, : \  \, : \  \, : \  \, : \  \, : \  \, : \  \, : \  \, : \  \, : \  \, : \  \, : \  \, : \  \, : \  \, : \  \, : \  \, : \  \, : \  \, : \  \, : \  \, : \  \, : \  \, : \  \, : \  \, : \  \, : \  \, : \  \, : \  \, : \  \, : \  \, : \  \, : \  \, : \  \, : \  \, : \  \, : \  \, : \  \, : \
8269:
           Function synGetRValue( RGBValue : TColor) : byte
8270:
           Function synGetGValue( RGBValue : TColor) : byte
            Function synGetBValue( RGBValue : TColor) : byte
8271:
           Function synRGB( r, g, b : Byte) : Cardinal
                 THighlighterAttriProc', 'Function ( Highlighter : TSynCustomHigh'
8273:
8274:
              // +'lighter; Attri:TSynHighlighterAttributes;UniqueAttriName:string;Params array of Pointer):Boolean;
8275:
            //Function synEnumHighlighterAttris( Highlighter : TSynCustomHighlighter; SkipDuplicates : Boolean;
         HighlighterAttriProc: THighlighterAttriProc; Params: array of Pointer): Boolean Function synCalcFCS( const ABuf, ABufSize: Cardinal): Word
8276:
           Procedure synSynDrawGradient(const ACanvas:TCanvas;const AStartColor,
8277:
          AEndColor:TColor;ASteps:integer;const ARect : TRect; const AHorizontal : boolean)
8278: end;
8280:
            Function GET_APPCOMMAND_LPARAM( lParam : LPARAM) : WORD
8281:
            Function GET_DEVICE_LPARAM( lParam : LPARAM) : WORD
           Function GET KEYSTATE LPARAM( lParam : LPARAM) : WORD
8282:
8283:
8284:
          procedure SIRegister_synautil(CL: TPSPascalCompiler);
8285:
          Function STimeZoneBias : integer
8286:
8287:
           Function TimeZone : string
Function Rfc822DateTime( t : TDateTime) : string
8288:
            Function CDateTime( t : TDateTime) : string
8289:
           Function SimpleDateTime(t:TDateTime): string
Function AnsiCDateTime(t:TDateTime): string
8290:
8291:
           Function GetMonthNumber( Value : String) : integer
8292:
8293: Function GetTimeFromStr( Value : string) : TDateTime
```

```
8294:
        Function GetDateMDYFromStr( Value : string) : TDateTime
        Function DecodeRfcDateTime( Value : string) : TDateTime
8295:
        Function GetUTTime : TDateTime
8297:
        Function SetUTTime( Newdt : TDateTime) : Boolean
8298:
        Function SGetTick : LongWord
        Function STickDelta( TickOld, TickNew : LongWord) : LongWord
8299:
8300:
        Function CodeInt( Value : Word) : Ansistring
        Function DecodeInt( const Value : Ansistring; Index : Integer) : Word
8301:
8302:
        Function CodeLongInt( Value : LongInt) : Ansistring
8303:
        Function DecodeLongInt( const Value : Ansistring; Index : Integer) : LongInt
        Function DumpStr( const Buffer : Ansistring) : string
Function DumpExStr( const Buffer : Ansistring) : string
8304:
8306:
        Procedure Dump( const Buffer : AnsiString; DumpFile : string)
8307:
        Procedure DumpEx( const Buffer : AnsiString; DumpFile : string)
8308:
        Function TrimSPLeft( const S : string) : string
8309:
        Function TrimSPRight( const S : string) : string
        Function TrimSP( const S : string) : string
8310:
8311:
        Function SeparateLeft( const Value, Delimiter : string) : string
        Function SeparateRight( const Value, Delimiter : string) : string
Function SGetParameter( const Value, Parameter : string) : string
8312:
8313:
        Procedure ParseParametersEx( Value, Delimiter : string; const Parameters : TStrings)
        Procedure ParseParameters ( Value : string; const Parameters : TStrings)
8315:
8316:
        Function IndexByBegin( Value : string; const List : TStrings) : integer
        Function GetEmailAddr( const Value : string) : string
8317:
        Function GetEmailDesc( Value : string) : string
8318:
8319:
        Function CStrToHex( const Value : Ansistring)
        Function CIntToBin( Value : Integer; Digits : Byte) : string
Function CBinToInt( const Value : string) : Integer
Function ParseURL( URL : string; var Prot, User, Pass, Host, Port, Path, Para:string):string
Function CReplaceString( Value, Search, Replace : AnsiString) : AnsiString
8320:
8321:
8322:
8323:
8324:
        Function CRPosEx( const Sub, Value : string; From : integer) : Integer
        Function CRPos( const Sub, Value : String) : Integer
8325:
        Function FetchBin( var Value : string; const Delimiter : string) : string
8326:
        Function CFetch( var Value : string; const Delimiter : string) : string
8327:
        Function FetchEx( var Value : string; const Delimiter, Quotation : string) : string
Function IsBinaryString( const Value : AnsiString) : Boolean
8329:
        Function PosCRLF( const Value : AnsiString; var Terminator : AnsiString) : integer
8330:
8331:
        Procedure StringsTrim( const value : TStrings)
8332:
        Function PosFrom( const SubStr, Value : String; From : integer) : integer
        Function IncPoint( const p : ___pointer; Value : integer) : ___pointer
8333:
8334:
        Function GetBetween( const PairBegin, PairEnd, Value : string) : string
        Function CCountOfChar( const Value : string; aChr : char) : integer
Function UnquoteStr( const Value : string; Quote : Char) : string
8335:
8336:
        Function QuoteStr( const Value : string; Quote : Char) : string
8337:
        Procedure HeadersToList( const Value : TStrings)
Procedure ListToHeaders( const Value : TStrings)
8338:
8339:
        Function SwapBytes( Value : integer) : integer
8340:
        Function ReadStrFromStream( const Stream: TStream; len: integer): AnsiString
        Procedure WriteStrToStream( const Stream : TStream; Value : AnsiString)
8342:
8343:
        \textbf{Function} \ \ \texttt{GetTempFile}( \ \ \textbf{const} \ \ \texttt{Dir}, \ \ \texttt{prefix} \ : \ \ \texttt{AnsiString}) \ : \ \ \texttt{AnsiString})
8344:
        Function CPadString( const Value : AnsiString; len : integer; Pad : AnsiChar): AnsiString
        Function CXorString( Indata1, Indata2 : AnsiString) : AnsiString
8345:
        Function NormalizeHeader( Value : TStrings; var Index : Integer) : string
8346:
8347:
       end;
8348:
       procedure SIRegister_StCRC(CL: TPSPascalCompiler);
8349:
8350:
       begin
        ('CrcBufSize','LongInt').SetInt( 2048);
8351:
8352:
        Function Adler32Prim( var Data, DataSize : Cardinal; CurCrc : LongInt) : LongInt
        Function Adler320fStream( Stream : TStream; CurCrc : LongInt) : LongInt
Function Adler320fFile( FileName : AnsiString) : LongInt
8353:
8354:
8355:
        Function Crc16Prim( var Data, DataSize, CurCrc : Cardinal)
        Function Crc16OfStream( Stream: TStream; CurCrc: Cardinal): Cardinal Function Crc16OfFile( FileName: AnsiString): Cardinal
8356:
8357:
        Function Crc32Prim( var Data, DataSize : Cardinal; CurCrc : LongInt) : LongInt
Function Crc32OfStream( Stream : TStream; CurCrc : LongInt) : LongInt
8358:
        Function Crc32OfFile( FileName : AnsiString) : LongInt
8360:
8361:
        \textbf{Function} \  \, \texttt{InternetSumPrim}( \  \, \textbf{var} \  \, \texttt{Data}, \  \, \texttt{DataSize}, \  \, \texttt{CurCrc} \  \, \texttt{:} \  \, \texttt{Cardinal}) \  \, \texttt{:} \  \, \texttt{Cardinal}
        Function InternetSumOfStream( Stream: TStream; CurCrc : Cardinal) : Cardinal
Function InternetSumOfFile( FileName : AnsiString) : Cardinal
Function Kermit16Prim( var Data, DataSize, CurCrc : Cardinal) : Cardinal
8362:
8363:
       Function Kermit160fStream( Stream: TStream; CurCrc: Cardinal): Cardinal Function Kermit160fFile(FileName: AnsiString): Cardinal
8365:
8366:
8367:
       end;
8368:
       procedure SIRegister_ComObj(cl: TPSPascalCompiler);
8369:
8370: begin
        function CreateOleObject(const ClassName: String): IDispatch;
8371:
        function GetActiveOleObject(const ClassName: String): IDispatch;
8372:
        function ProgIDToClassID(const ProgID: string): TGUID;
8374:
        function ClassIDToProgID(const ClassID: TGUID): string;
        function CreateClassID: string;
8375:
8376:
        function CreateGUIDString: string
        function CreateGUIDID: string;
        procedure OleError(ErrorCode: longint)
8378:
        procedure OleCheck(Result: HResult);
8379:
8380: end;
8381:
8382: Function xCreateOleObject( const ClassName : string) : Variant //or IDispatch
```

```
Function xGetActiveOleObject( const ClassName : string) : Variant
//Function DllGetClassObject( const CLSID : TCLSID; const IID : TIID; var Obj) : HResult
8383:
8384:
8385:
           Function DllCanUnloadNow : HResult
           Function DllRegisterServer : HResult
8386:
8387:
           Function DllUnregisterServer : HResult
           Function VarFromInterface( Unknown : IUnknown) : Variant
8388:
           Function VarToInterface( const V : Variant) : IDispatch
8389:
           Function VarToAutoObject( const V : Variant) : TAutoObject
8390:
8391:
           //Procedure
         DispInvoke(Dispatch:IDispatch;CallDesc:PCallDesc:DispIDs:PDispIDList;Params:Pointer;Res:PVariant);\\
8392:
           //Procedure DispInvokeError( Status : HResult; const ExcepInfo : TExcepInfo)
           Procedure OleError( ErrorCode : HResult)
8393:
8394:
           Procedure OleCheck( Result : HResult)
           Function StringToClassID( const S : string) : TCLSID
Function ClassIDToString( const ClassID : TCLSID) : string
Function xProgIDToClassID( const ProgID : string) : TCLSID
8395:
8396:
8397:
           Function xClassIDToProgID( const ClassID : TCLSID) : string
8398:
          Function xWideCompareStr( const S1, S2 : WideString) : Integer Function xWideSameStr( const S1, S2 : WideString) : Boolean Function xGUIDToString( const ClassID : TGUID) : string Function xStringToGUID( const S : string) : TGUID
8399:
8400:
8401:
8402:
8403:
           Function xGetModuleName( Module : HMODULE) : string
           Function xAcquireExceptionObject : TObject
Function xIfThen( AValue : Boolean; const ATrue : Integer; const AFalse : Integer) : Integer
8404:
8405:
           Function xUtf8Encode( const WS : WideString) : UTF8String
8406:
8407:
           Function xUtf8Decode( const S : UTF8String) : WideString
8408:
           Function xExcludeTrailingPathDelimiter( const S : string) : string
8409:
           Function xIncludeTrailingPathDelimiter( const S : string) : string
           Function XRTLHandleCOMException : HResult
8410:
8411:
           Procedure XRTLCheckArgument( Flag : Boolean)
           //Procedure XRTLCheckOutArgument( out Arg)
8412:
8413:
           Procedure XRTLInterfaceConnect(const Source:IUnknown;const IID:TIID;const Sink:IUnknown;var
         Connection:Longint);
8414:
           Procedure XRTLInterfaceDisconnect(const Source: IUnknown; const IID:TIID; var Connection: Longint)
           Function XRTLRegisterActiveObject(const Unk:IUnknown;ClassID:TCLSID;Flags:DWORD;var
8415:
         RegisterCookie:Int):HResult
8416:
         Function XRTLUnRegisterActiveObject( var RegisterCookie : Integer) : HResult
           //Function XRTLGetActiveObject( ClassID : TCLSID; RIID : TIID; out Obj) : HResult Procedure XRTLEnumActiveObjects( Strings : TStrings)
8417:
8418:
           Procedure XRTLEnumActiveObjects( Strings
8419: function XRTLDefaultCategoryManager: IUnknown;
8420: function
                           {\tt XRTLIsCategoryEmpty(CatID: TGUID: const CategoryManager: IUnknown = nil): Boolean;}\\
8421:
          // ICatRegister helper functions
8422: function XRTLCreateComponentCategory(CatID: TGUID; CatDescription: WideString;
                                                                         LocaleID: TLCID = LOCALE_USER_DEFAULT;
8423:
8424:
                                                                         const CategoryManager: IUnknown = nil): HResult;
{\tt 8425:} \ \ \textbf{function} \qquad {\tt XRTLRemoveComponentCategory(CatID: TGUID: CatDescription: WideString; CatID: CatDescription: WideString; CatID: CatDescription: WideString; CatID: CatI
                                                                         LocaleID: TLCID = LOCALE_USER_DEFAULT;
8426:
8427:
                                                                         const CategoryManager: IUnknown = nil): HResult;
                         XRTLRegisterCLSIDInCategory(ClassID: TGUID; CatID: TGUID;
8428: function
8429:
                                                                         const CategoryManager: IUnknown = nil): HResult;
8430: function XRTLUnRegisterCLSIDInCategory(ClassID: TGUID; CatID: TGUID;
                                                                            const CategoryManager: IUnknown = nil): HResult;
8431:
8432: // ICatInformation helper functions
8433: function XRTLGetCategoryDescription(CatID: TGUID; var CatDescription: WideString;
8434:
                                                                       LocaleID: TLCID = LOCALE_USER_DEFAULT;
                                                                       const CategoryManager: IUnknown = nil): HResult;
8435:
                         XRTLGetCategoryList(Strings: TStrings: LocaleID: TLCID = LOCALE_USER_DEFAULT;
8436: function
                                                            const CategoryManager: IUnknown = nil): HResult;
8437:
8438: function XRTLGetCategoryCLSIDList(CatID: TGUID; Strings: TStrings; 8439: const CategoryManager: IUnknown = nil): HResult;
8440: function XRTLGetCategoryProgIDList(CatID: TGUID; Strings: TStrings;
                                                                     const CategoryManager: IUnknown = nil): HResult;
8442: function XRTLFetch(var AInput: WideString; const ADelim: WideString = '
8443: const ADelete: Boolean = True): WideString;
8444: function XRTLRPos(const ASub, AIn: WideString; AStart: Integer = -1): Integer;
8445: Function XRTLGetVariantAsString( const Value : Variant) : string
8446: Function XRTLDateTimeToTimeZoneTime( DT : TDateTime; TimeZone : TXRTLTimeZone) : TDateTime
8447: Function XRTLGetTimeZones : TXRTLTimeZones
8448: Function XFileTimeToDateTime( FileTime : TFileTime) : TDateTime 8449: Function DateTimeToFileTime( DateTime : TDateTime) : TFileTime
8450: Function GMTNow : TDateTime
8451: Function {\tt GMTToLocalTime}({\tt GMT}: {\tt TDateTime}): {\tt TDateTime}
8452: Function LocalTimeToGMT( LocalTime : TDateTime) : TDateTime
8453: Procedure XRTLNotImplemented
8454: Procedure XRTLRaiseError( E : Exception)
8455: Procedure XRTLInvalidOperation( ClassName:string; OperationName:string; Description: string)
8456:
8457:
8458: procedure SIRegister xrtl util Value(CL: TPSPascalCompiler);
8459: begin
8460:
            SIRegister_IXRTLValue(CL);
8461:
            SIRegister TXRTLValue(CL);
            //AddTypeS('PXRTLValueArray', '^TXRTLValueArray // will not work AddTypeS('TXRTLValueArray', 'array of IXRTLValue
8462:
8463:
8464: Function XRTLValue( const AValue : Cardinal) : IXRTLValue;
8465: Function XRTLSetValue( const IValue : IXRTLValue; const AValue : Cardinal) : Cardinal;
8466: Function XRTLGetAsCardinal( const IValue : IXRTLValue) : Cardinal
8467: Function XRTLGetAsCardinalDef( const IValue : IXRTLValue; const DefValue : Cardinal) : Cardinal 8468: Function XRTLValue( const AValue : Integer) : IXRTLValue;
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8469: Function XRTLSetValue1( const IValue : IXRTLValue; const AValue : Integer;
8470: Function XRTLGetAsInteger( const IValue : IXRTLValue) : Integer
8471: Function XRTLGetAsIntegerDef( const IValue : IXRTLValue; const DefValue : Integer) : Integer 8472: Function XRTLValue2( const AValue : Int64) : IXRTLValue;
8473: Function XRTLSetValue2( const IValue : IXRTLValue; const AValue : Int64) : Int64; 8474: Function XRTLGetAsInt64( const IValue : IXRTLValue) : Int64
8475: Function XRTLGetAsInt64Def( const IValue: IXRTLValue; const DefValue: Int64): Int64
8476: Function XRTLValue3( const AValue : Single) : IXRTLValue;
8477: Function XRTLSetValue3( const IValue : ĪXRTLValue; const AValue : Single) : Single;
8478: Function XRTLGetAsSingle( const IValue : IXRTLValue) : Single
8479: Function XRTLGetAsSingleDef( const IValue : IXRTLValue; const DefValue : Single) : Single
8480: Function XRTLValue4( const AValue : Double) : IXRTLValue;
8481: Function XRTLSetValue4( const IValue : IXRTLValue; const AValue : Double) : Double;
{\tt 8482:} \  \  \textbf{Function} \  \  \, \texttt{XRTLGetAsDouble(const} \  \  \, \texttt{IValue:IXRTLValue):Double}
8483: Function XRTLGetAsDoubleDef( const IValue : IXRTLValue; const DefValue : Double) : Double
8484: Function XRTLValue5( const AValue : Extended) : IXRTLValue;
8485: Function XRTLSetValue5 ( const IValue : IXRTLValue; const AValue : Extended) : Extended;
8486: Function XRTLGetAsExtended( const IValue : IXRTLValue) : Extended 8487: Function XRTLGetAsExtendedDef( const IValue : IXRTLValue; const DefValue : Extended) : Extended
8488: Function XRTLValue6( const AValue : IInterface) : IXRTLValue;
8489: Function XRTLSetValue6( const IValue : IXRTLValue; const AValue : IInterface;
8490: Function XRTLGetAsInterface( const IValue : IXRTLValue) : IInterface;
8491: //Function XRTLGetAsInterface1( const IValue : IXRTLValue; out Obj) : IInterface;
8492: Function XRTLGetAsInterfaceDef( const IValue : IXRTLValue; const DefValue : IInterface;
8493: Function XRTLValue7( const AValue : WideString) : IXRTLValue;
8494: Function XRTLSetValue7( const IValue : IXRTLValue; const AValue : WideString) : WideString;
8495: Function XRTLGetAsWideString( const IValue : IXRTLValue) : WideString
8496: Function XRTLGetAsWideStringDef( const IValue : IXRTLValue; const DefValue : WideString) : WideString
8497: Function XRTLValue8 (const AValue : TObject; const AOwnValue : Boolean) : IXRTLValue;
8498: Function XRTLSetValue8( const IValue : IXRTLValue; const AValue : TObject) : TObject;
8499: Function XRTLGetAsObject( const IValue : IXRTLValue; const ADetachOwnership : Boolean) : TObject;
8500: Function XRTLGetAsObjectDef(const IValue:IXRTLValue:const DefValue:TObject;const
       ADetachOwnership:Boolean):TObject;
8501: //Function XRTLValue9( const AValue : __Pointer) : IXRTLValue;
8502: //Function XRTLSetValue9( const IValue : IXRTLValue; const AValue : __Pointer) : __Pointer;
8503: //Function XRTLGetAsPointer( const IValue : IXRTLValue) : __Pointer
8504: //Function XRTLGetAsPointerDef( const IValue : IXRTLValue; const DefValue : __Pointer) : __Pointer 8505: Function XRTLValueV( const AValue : Variant) : IXRTLValue;
8506: Function XRTLSetValueV( const IValue : IXRTLValue; const AValue : Variant) : Variant;
8507: Function XRTLGetAsVariant( const IValue : IXRTLValue) : Variant 8508: Function XRTLGetAsVariantDef( const IValue : IXRTLValue; const DefValue : Variant) : Variant
8509: Function XRTLValue10( const AValue : Currency) : IXRTLValue;
8510: Function XRTLSetValue10( const IValue : IXRTLValue; const AValue : Currency) : Currency;
8511: Function XRTLGetAsCurrency( const IValue : IXRTLValue) : Currency
8512: Function XRTLGetAsCurrencyDef( const IValue : IXRTLValue; const DefValue : Currency) : Currency 8513: Function XRTLValue11( const AValue : Comp) : IXRTLValue; 8514: Function XRTLSetValue11( const IValue : IXRTLValue; const AValue : Comp) : Comp;
8515: Function XRTLGetAsComp( const IValue : IXRTLValue) : Comp
8516: Function XRTLGetAsCompDef( const IValue : IXRTLValue; const DefValue : Comp) : Comp
8517: Function XRTLValue12( const AValue : TClass) : IXRTLValue;
8518: Function XRTLSetValue12( const IValue : IXRTLValue; const AValue : TClass) : TClass;
8519: Function XRTLGetAsClass( const IValue : IXRTLValue) : TClass
8520: Function XRTLGetAsClassDef( const IValue : IXRTLValue; const DefValue : TClass) : TClass
8521: Function XRTLValue13( const AValue : TGUID) : IXRTLValue;
8522: Function XRTLSetValue13( const IValue : IXRTLValue; const AValue : TGUID) : TGUID; 8523: Function XRTLGetAsGUID( const IValue : IXRTLValue) : TGUID
8524: Function XRTLGetAsGUIDDef( const IValue : IXRTLValue; const DefValue : TGUID) : TGUID
8525: Function XRTLValue14( const AValue : Boolean) : IXRTLValue;
8526: Function XRTLSetValue14( const IValue : IXRTLValue; const AValue : Boolean) : Boolean; 8527: Function XRTLGetAsBoolean( const IValue : IXRTLValue) : Boolean
8528: Function XRTLGetAsBooleanDef( const IValue : IXRTLValue; const DefValue : Boolean) : Boolean
8530:
8532:
        Function Color32( WinColor : TColor) : TColor32;
        Function Color321( R, G, B : Byte; A : Byte) : TColor32;
Function Color322( Index : Byte; var Palette : TPalette32) : TColor32;
8534:
8535:
8536:
        Function Gray32( Intensity : Byte; Alpha : Byte) : TColor32
Function WinColor( Color32 : TColor32) : TColor
8537:
        Function ArrayOfColor32( Colors : array of TColor32) : TArrayOfColor32
8538:
8539:
        Procedure Color32ToRGB( Color32 : TColor32; var R, G, B : Byte)
        Procedure Color32ToRGBA( Color32 : TColor32; var R, G, B, A : Byte)
Function Color32Components( R, G, B, A : Boolean) : TColor32Components
Function RedComponent( Color32 : TColor32) : Integer
8540:
8541:
8542:
        Function GreenComponent( Color32 : TColor32) : Integer
8543:
8544:
        Function BlueComponent( Color32 : TColor32) : Integer
        Function AlphaComponent(Color32: TColor32): Integer
8545:
        Function Intensity( Color32 : TColor32) : Integer
8546:
        Function SetAlpha( Color32 : TColor32; NewAlpha : Integer) : TColor32
        Function HSLtoRGB( H, S, L : Single) : TColor32;
8548:
        Procedure RGBtoHSL( RGB : TColor32; out H, S, L : Single);
Function HSLtoRGB1( H, S, L : Integer) : TColor32;
8549:
8550:
        Function HSLtoRGB1( H, S, L : Integer, . Icologs:
Procedure RGBtoHSL1( RGB : TColor32; out H, S, L : Byte);
Function WinPalette( const P : TPalette32) : HPALETTE
8551:
        Function FloatPoint( X, Y : Single) : TFloatPoint;
8553:
        Function FloatPoint1( const P : TPoint) : TFloatPoint;
Function FloatPoint2( const FXP : TFixedPoint) : TFloatPoint;
8554:
8555:
        Function FixedPoint( X, Y : Integer) : TFixedPoint;
```

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8557:
              Function FixedPoint1( X, Y : Single) : TFixedPoint;
              Function FixedPoint2( const P : TPoint) : TFixedPoint;
8558:
              Function FixedPoint3( const FP : TFloatPoint) : TFixedPoint;
              AddTypeS('TRectRounding', '( rrclosest, rroutside, rrInside )
Function MakeRect( const L, T, R, B : Integer) : TRect;
Function MakeRectl( const FR : TFloatRect; Rounding : TRectRounding) : TRect;
8560:
8561:
8562:
              Function MakeRect2( const FXR : TRect; Rounding : TRectRounding) : TRect;
8563:
              Function GFixedRect( const L, T, R, B : TFixed)
                                                                                                                      : TRect;
8564:
8565:
              \textbf{Function} \  \, \texttt{FixedRect1}( \  \, \textbf{const} \  \, \texttt{ARect} \, : \, \, \texttt{TRect}) \, : \, \, \texttt{TRect};
              Function FixedRect2( const FR : TFloatRect) : TRect;
Function GFloatRect( const L, T, R, B : TFloat) : TFloatRect;
8566:
8567:
              Function FloatRect1( const ARect : TRect) : TFloatRect;
8569:
              Function FloatRect2( const FXR : TRect) : TFloatRect;
              Function GIntersectRect( out Dst : TRect; const R1, R2 : TRect) : Boolean;
Function IntersectRect1( out Dst : TFloatRect; const FR1, FR2 : TFloatRect) : Boolean;
8570:
8571:
              Function GUnionRect( out Rect : TRect; const R1, R2 : TRect) : Boolean;
              Function UnionRect1( out Rect : TFloatRect; const R1, R2 : TFloatRect) : Boolean;
8573:
             Function GEqualRect( const R1, R2 : TFloatRect) : Boolean;
Function EqualRect( const R1, R2 : TFloatRect) : Boolean;
Procedure GInflateRect( var R : TRect; Dx, Dy : Integer);
Procedure InflateRect1( var FR : TFloatRect; Dx, Dy : TFloat);
8574 .
8575:
8576:
8577:
8578:
              Procedure GOffsetRect( var R : TRect; Dx, Dy : Integer);
8579:
              Procedure OffsetRect1( var FR : TFloatRect; Dx, Dy : TFloat);
              Function IsRectEmpty( const R : TReat Problem:

Function IsRectEmpty1( const FR : TFloatRect) : Boolean;
8580:
8581:
8582:
              Function GPtInRect( const R : TRect; const P : TPoint) : Boolean;
              Function PtInRect1( const R : TFloatRect; const P : TPoint) : Boolean;
Function PtInRect2( const R : TRect; const P : TFloatPoint) : Boolean;
Function PtInRect3( const R : TFloatRect; const P : TFloatPoint) : Boolean;
8583:
8584:
8585:
              Function EqualRectSize( const R1, R2 : TRect) : Boolean;
              Function EqualRectSize1( const R1, R2 : TFloatRect) : Boolean;
8587:
              Function MessageBeep( uType : UINT) : BOOL
Function ShowCursor( bShow : BOOL) : Integer
8588:
8589:
              Function SetCursorPos( X, Y : Integer) : BOOL
Function SetCursor( hCursor : HICON) : HCURSOR
8590:
8591:
8592:
              Function GetCursorPos( var lpPoint : TPoint) : BOOL
              //Function ClipCursor( lpRect : PRect) : BOOL
Function GetClipCursor( var lpRect : TRect) : BOOL
8593:
8594:
8595:
              Function GetCursor : HCURSOR
8596:
              Function CreateCaret( hWnd : HWND; hBitmap : HBITMAP; nWidth, nHeight : Integer) : BOOL
8597:
              Function GetCaretBlinkTime : UINT
              Function SetCaretBlinkTime( uMSeconds : UINT) : BOOL
8598:
8599:
              Function DestroyCaret : BOOL
              Function HideCaret( hWnd : HWND) : BOOL
Function ShowCaret( hWnd : HWND) : BOOL
8600:
8601:
              \textbf{Function} \  \, \texttt{SetCaretPos} \, (\  \, \texttt{X} \, , \  \, \texttt{Y} \, : \, \, \texttt{Integer} \, ) \, \, : \, \, \texttt{BOOL} \, \,
8602:
              Function GetCaretPos( var lpPoint : TPoint) : BOOL
8603:
              Function ClientToScreen( hWnd : HWND; var lpPoint : TPoint) : BOOL
8605:
              Function ScreenToClient( hWnd : HWND; var lpPoint : TPoint) : BOOL
8606:
              \textbf{Function} \hspace{0.2cm} \texttt{MapWindowPoints}(\texttt{hWndFrom}, \texttt{hWndTo:HWND}; \hspace{0.2cm} \textbf{var} \hspace{0.2cm} \texttt{lpPoints}, \hspace{0.2cm} \texttt{cPoints} \hspace{0.2cm} : \hspace{0.2cm} \texttt{UINT}) \hspace{0.2cm} : \hspace{0.2cm} \texttt{Integer} \hspace{0.2cm} \texttt{Integer} \hspace{0.2cm} \texttt{MapWindowPoints}(\texttt{hWndFrom}, \texttt{hWndTo:HWND}; \hspace{0.2cm} \textbf{var} \hspace{0.2cm} \texttt{lpPoints}, \hspace{0.2cm} \texttt{cPoints} \hspace{0.2cm} : \hspace{0.2cm} \texttt{UINT}) \hspace{0.2cm} : \hspace{0.2cm} \texttt{Integer} \hspace{0.2cm} \texttt{Integer} \hspace{0.2cm} \texttt{MapWindowPoints}(\texttt{hWndFrom}, \texttt{hWndTo:HWND}; \hspace{0.2cm} \textbf{var} \hspace{0.2cm} \texttt{lpPoints}, \hspace{0.2cm} \texttt{cPoints} \hspace{0.2cm} : \hspace{0.2cm} \texttt{UINT}) \hspace{0.2cm} : \hspace{0.2cm} \texttt{Integer} \hspace{0.2cm} \texttt{Integer} \hspace{0.2cm} \texttt{MapWindowPoints}(\texttt{hWndFrom}, \texttt{hWndTo:HWND}; \hspace{0.2cm} \textbf{var} \hspace{0.2cm} \texttt{lpPoints}, \hspace{0.2cm} \texttt{cPoints} \hspace{0.2cm} : \hspace{0.2cm} \texttt{UINT}) \hspace{0.2cm} : \hspace{0.2cm} \texttt{Integer} \hspace{0.2cm} \texttt{lpPoints}, \hspace{0.2cm} \texttt{lpPoint
              Function WindowFromPoint( Point : TPoint) : HWND
8607:
8608:
              Function ChildWindowFromPoint( hWndParent : HWND; Point : TPoint) : HWND
8609:
8610:
8611:
            procedure SIRegister GR32 Math(CL: TPSPascalCompiler);
8612: begin
8613:
              Function FixedFloor( A : TFixed) : Integer
              Function FixedCeil( A : TFixed) : Integer
8614:
              Function FixedMul( A, B : TFixed) : TFixed
Function FixedDiv( A, B : TFixed) : TFixed
8615:
8616:
              Function OneOver( Value : TFixed) : TFixed
8617:
              Function FixedRound( A : TFixed) : Integer
8619:
              Function FixedSqr( Value : TFixed) : TFixed
              Function FixedSqrtLP( Value : TFixed) : TFixed
Function FixedSqrtHP( Value : TFixed) : TFixed
8620:
8621:
              Function FixedCombine( W, X, Y : TFixed) : TFixed
              Procedure GRSinCos( const Theta : TFloat; out Sin, Cos : TFloat);
8623:
8624:
              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
8625:
8626:
8627:
              Function FastSqrtBabl( const Value : TFloat) : TFloat
Function FastSqrtBab2( const Value : TFloat) : TFloat
Function FastInvSqrt( const Value : Single) : Single;
8628:
8629:
8630:
              Function MulDiv( Multiplicand, Multiplier, Divisor : Integer) : Integer Function GRIsPowerOf2( Value : Integer) : Boolean
8631:
8632:
8633:
              Function PrevPowerOf2( Value : Integer) : Integer
              Function NextPowerOf2( Value : Integer) : Integer
8634:
              Function Average( A, B : Integer) : Integer
8635:
              Function GRSign( Value : Integer) : Integer
8637:
              Function FloatMod(x, y : Double) : Double
8638: end;
8639:
8640: procedure SIRegister_GR32_LowLevel(CL: TPSPascalCompiler);
8641: begin
8642: Function Clamp( const Value : Integer) : Integer;
             Procedure GRFillWord( var X, Count : Cardinal; Value : Longword)
Function StackAlloc( Size : Integer) : Pointer
8643:
8645: Procedure StackFree( P : Pointer)
```

```
8646:
           Procedure Swap( var A, B : Pointer);
8647:
           Procedure Swap1( var A, B : Integer);
            Procedure Swap2( var A, B : TFixed)
8649:
            Procedure Swap3( var A, B : TColor32);
8650:
           Procedure TestSwap( var A, B : Integer);
           Procedure TestSwap1( var A, B : TFixed);
8651:
           Function TestClip( var A, B : Integer; const Size : Integer) : Boolean;
8652:
           Function TestClip1( var A, B : Integer; const Start, Stop : Integer) : Boolean;
Function GRConstrain( const Value, Lo, Hi : Integer) : Integer;
8653:
8654:
           Function Constrain1( const Value, Lo, Hi : Single) : Single;
8655:
           Function SwapConstrain( const Value:Integer; Constrain1,Constrain2:Integer) : Integer
8656:
            Function GRMin( const A, B, C : Integer) : Integer;
8658:
           Function GRMax( const A, B, C : Integer) : Integer;
           Function Clamp( Value, Max : Integer) : Integer;
8659:
           Function Clamp1( Value, Min, Max : Integer) : Integer;
8660:
8661:
            Function Wrap( Value, Max : Integer) : Integer;
           Function Wrap1( Value, Min, Max : Integer) : Integer;
           Function Wrap3( Value, Max : Single) : Single;;
Function WrapPow2( Value, Max : Integer) : Integer;
Function WrapPow21( Value, Min, Max : Integer) : Integer;
8663:
8664:
8665:
            Function Mirror( Value, Max : Integer) : Integer;
           Function Mirror1( Value, Min, Max : Integer) : Integer;
8667:
           Function MirrorPow2( Value, Max : Integer) : Integer;
Function MirrorPow21( Value, Min, Max : Integer) : Integer;
Function GetOptimalWrap( Max : Integer) : TWrapProc;
8668:
8669:
8671:
           Function GetOptimalWrap1( Min, Max : Integer) : TWrapProcEx;
8672:
           Function GetOptimalMirror( Max : Integer) : TWrapProc;
           Function GetOptimalMirror1( Min, Max : Integer) : TWrapProcEx;
Function GetWrapProc( WrapMode : TWrapMode) : TWrapProc;
Function GetWrapProc1( WrapMode : TWrapMode; Max : Integer) : TWrapProc;
8673:
8674:
8675:
8676:
           Function GetWrapProcEx( WrapMode : TWrapMode) : TWrapProcEx;
           Function GetWrapProcEx1( WrapMode : TWrapMode; Min, Max : Integer):TWrapProcEx;
Function Div255( Value : Cardinal) : Cardinal
8677:
8678:
           Function SAR_4( Value : Integer) : Integer
Function SAR_8( Value : Integer) : Integer
8679:
8680:
8681:
           Function SAR_9( Value : Integer) : Integer
8682:
           Function SAR_11( Value : Integer) : Integer
           Function SAR 12( Value : Integer)
8683:
                                                                        : Integer
8684:
           Function SAR_13( Value : Integer)
                                                                          Integer
           Function SAR_14( Value : Integer) : Integer
8685:
8686:
           Function SAR_15( Value : Integer) : Integer
           Function SAR_16( Value : Integer) : Integer
8687:
8688:
           Function ColorSwap (WinColor : TColor) : TColor32
8690:
8691: procedure SIRegister_GR32_Filters(CL: TPSPascalCompiler);
8692:
         begin
         AddTypeS('TLogicalOperator', '( loXOR, loAND, loOR
           Procedure CopyComponents( Dst, Src : TCustomBitmap32; Components : TColor32Components);
Procedure CopyComponents( Dst:TCustomBmap32; DstX,
8695:
          DstY:Int;Src:TCustomBmap32;SrcRect:TRect;Components:TColor32Comp;
           Procedure AlphaToGrayscale( Dst, Src : TCustomBitmap32)
Procedure ColorToGrayscale( Dst, Src : TCustomBitmap32; PreserveAlpha : Boolean)
8697:
8698:
           Procedure IntensityToAlpha( Dst, Src : TCustomBitmap32)
           Procedure Invert( Dst, Src : TCustomBitmap32; Components : TColor32Components)

Procedure InvertRGB( Dst, Src : TCustomBitmap32)

Procedure ApplyLUT( Dst, Src : TCustomBitmap32; const LUT : TLUT8; PreserveAlpha : Boolean)
8699:
8700:
           Procedure ChromaKey( ABitmap : TCustomBitmap32; TrColor : TColor32)
8702:
8703:
           Function CreateBitmask( Components : TColor32Components) : TColor32
Procedure ApplyBitmask(Dst: TCustomBitmap32; DstX,DstY:Integer; Src:TCustomBitmap32; SrcRect : TRect;
8704:
          Bitmask : TColor32; LogicalOperator : TLogicalOperator);
8705:
          ApplyBitmask! (ABitmap: TCustomBitmap32; ARect: TRect; Bitmask: TColor32; LogicalOperator: TLogicalOperator); ARect: TRect; ABitmask: TColor32; LogicalOperator: TLogicalOperator; ARect: TRect; ABitmask: TColor32; LogicalOperator; ARect: ARect: TRect; ABitmask: TColor32; ARect: TRect; ABitmask: TColor32; ARect: TRect; ABitmask: TColor32; ABitmask: TColor32;
8706: Procedure CheckParams( Dst, Src : TCustomBitmap32; ResizeDst : Boolean)
8707:
8708:
8709:
8710: procedure SIRegister_JclNTFS(CL: TPSPascalCompiler);
8711:
         begin
             AddClassN(FindClass('TOBJECT'),'EJclNtfsError
8712:
             AddTypeS('TFileCompressionState', '( fcNoCompression, fcDefaultCompression, fcLZNT1Compression)
8713:
8714:
           Function NtfsGetCompression( const FileName : string; var State : Short) : Boolean;
8715:
           \textbf{Function} \ \ \texttt{NtfsGetCompression1} \ ( \ \ \textbf{const} \ \ \texttt{FileName} \ : \ \textbf{string}) \ : \ \ \texttt{TFileCompressionState};
           Function NtfsSetCompression(const FileName: string; const State: Short): Boolean
8716:
           Procedure NtfsSetFileCompression( const FileName : string; const State : TFileCompressionState)
8718:
            Procedure NtfsSetDirectoryTreeCompression(const Directory: string; const State: TFileCompressionState)
           Procedure NtfsSetDefaultFileCompression(const Directory: string; const State:TFileCompressionState)
Procedure NtfsSetPathCompression(const Path:string; const State:TFileCompressionState; Recursive:Boolean;
8719:
8720:
            //AddTypeS('TNtfsAllocRanges', 'record Entries : Integer; Data : PFileAlloca'
//+'tedRangeBuffer; MoreData : Boolean; end
8721:
8723:
           Function NtfsSetSparse( const FileName : string) : Boolean
           Function NtfsZeroDataByHandle( const Handle: THandle; const First, Last: Int64): Boolean Function NtfsZeroDataByName( const FileName: string; const First, Last: Int64): Boolean //Function NtfsQueryAllocRanges(const FileName:string;Offset,Count:Int64;var
8724:
8725:
8726:
          Ranges:TNtfsAllocRanges):Boolean;
           //Function NtfsGetAllocRangeEntry( const Ranges : TNtfsAllocRanges;
          Index:Integer):TFileAllocatedRangeBuffer
           Function NtfsSparseStreamsSupported( const Volume : string) : Boolean
8729: Function NtfsGetSparse( const FileName : string) : Boolean
```

```
8730:
         Function NtfsDeleteReparsePoint( const FileName : string; ReparseTag : DWORD) : Boolean
         Function NtfsSetReparsePoint( const FileName : string; var ReparseData, Size : Longword) : Boolean
8731:
         //Function NtfsGetReparsePoint(const FileName:string; var ReparseData:TReparseGuidDataBuffer):Boolean
8733:
         \textbf{Function} \  \, \texttt{NtfsGetReparseTag}( \  \, \textbf{const} \  \, \texttt{Path} \  \, : \  \, \textbf{string}; \  \, \textbf{var} \  \, \texttt{Tag} \  \, : \  \, \texttt{DWORD}) \  \, : \  \, \texttt{Boolean}
8734:
         \textbf{Function} \  \, \texttt{NtfsReparsePointsSupported}( \  \, \textbf{const} \  \, \texttt{Volume} \  \, : \  \, \textbf{string}) \  \, : \  \, \texttt{Boolean}
         Function NtfsFileHasReparsePoint( const Path : string) : Boolean Function NtfsIsFolderMountPoint( const Path : string) : Boolean
8735:
8736:
         Function NtfsMountDeviceAsDrive( const Device : string; Drive : Char) : Boolean
8737:
8738:
         Function NtfsMountVolume( const Volume : Char; const MountPoint : string) : Boolean
8739:
         AddTypeS('TOpLock', '( olExclusive, olReadOnly, olBatch, olFilter )

Function NtfsOpLockAckClosePending( Handle : THandle; Overlapped : TOverlapped) : Boolean
8740:
         Function NtfsOpLockBreakAckNo2( Handle : THandle; Overlapped : TOverlapped) : Boolean
8741:
8742:
         Function NtfsOpLockBreakAcknowledge( Handle : THandle; Overlapped : TOverlapped) : Boolean
         Function NtfsOpLockBreakNotify( Handle: THandle; Overlapped: TOverlapped): Boolean
Function NtfsRequestOpLock( Handle: THandle; Kind: TOpLock; Overlapped: TOverlapped): Boolean
8743:
8744:
8745:
         Function NtfsCreateJunctionPoint( const Source, Destination: string): Boolean
         Function NtfsDeleteJunctionPoint( const Source : string) : Boolean
8746:
         Function NtfsGetJunctionPointDestination( const Source : string; var Destination : string) : Boolean AddTypeS('TStreamId', '( siInvalid, siStandard, siExtendedAttribute, siSec' +'urity, siAlternate, siHardLink, siProperty, siObjectIdentifier, siReparsePoints, siSparseFile )
8747:
8748:
8749:
8750:
          AddTypeS('TStreamIds',
                                          'set of TStreamId
          AddTypeS('TInternalFindStreamData', 'record FileHandle: THandle; Context'
8751:
          +': ___Pointer; StreamIds: TStreamIds; end AddTypeS('TFindStreamData', 'record internal: TInternalFindStreamData; At'
8752:
8753:
           +'tributes : DWORD; StreamID : TStreamId; Name : WideString; Size : Int64; end
8754:
8755:
         Function NtfsFindFirstStream(const FileName:string;StreamIds;TStreamIds;var Data:TFindStreamData):Boolean;
8756:
         Function NtfsFindNextStream( var Data : TFindStreamData) : Boolean
Function NtfsFindStreamClose( var Data : TFindStreamData) : Boolean
8757:
         Function NtfsCreateHardLink( const LinkFileName, ExistingFileName: string): Boolean AddTypeS('TNtfsHardLinkInfo', 'record LinkCount: Cardinal; FileIndex: Int64; end
8758:
8759:
8760:
         Function NtfsGetHardLinkInfo( const FileName : string; var Info : TNtfsHardLinkInfo) : Boolean
8761:
         Function NtfsFindHardLinks(const Path:string;const FileIndexHigh,FileIndexLow:Cardinal;const
       List:TStrings):Bool;
8762:
         Function NtfsDeleteHardLinks( const FileName : string) : Boolean
         Function JclAppInstances : TJclAppInstances;
8763:
8764:
         Function JclAppInstances1( const UniqueAppIdGuidStr : string) : TJclAppInstances;
        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)
8765:
8766:
8767:
8768:
8769:
8770:
8771:
8772:
       procedure SIRegister_JclGraphics(CL: TPSPascalCompiler);
8773: begin
          FindClass('TOBJECT'),'EJclGraphicsError
8774:
          TDynDynIntegerArrayArray', 'array of TDynIntegerArray TDynPointArray', 'array of TPoint
8775:
8776:
          TDynDynPointArrayArray', 'array of TDynPointArray TPointF', 'record X : Single; Y : Single; end
8777:
8778:
          TDynPointArrayF', 'array of TPointF
TDrawMode2', '(dmOpaque, dmBlend)
8779:
8780:
          TStretchFilter2', '( sfNearest, sfLinear, sfSpline )
TConversionKind', '( ckRed, ckGreen, ckBlue, ckAlpha, ckUniformRGB, ckWeightedRGB )
TResamplingFilter', '( rfBox, rfTriangle, rfHermite, rfBell, rfSpline, rfLanczos3, rfMitchell )
TMatrix3d', 'record array[0...2,0...2] of extended end
TDynDynPointArrayArrayF', 'array of TDynPointArrayF
8781:
8782:
8783:
8784:
8785:
          TScanLine', 'array of Integer
TScanLines', 'array of TScanLine
TColorChannel', '(ccRed, ccGreen, ccBlue, ccAlpha)
TGradientDirection', '(gdVertical, gdHorizontal)
8786:
8787:
8788:
8789:
8790:
          TPolyFillMode', '( fmAlternate, fmWinding )
8791:
          TJclRegionCombineOperator', '( coAnd, coDiff, coOr, coXor )
8792:
          TJclRegionBitmapMode', '( rmInclude, rmExclude )
          TJclRegionKind', '( rkNull, rkSimple, rkComplex, rkError )
SIRegister_TJclDesktopCanvas(CL);
8793:
8794:
8795:
          FindClass('TOBJECT'), 'TJclRegion
          SIRegister_TJclRegionInfo(CL);
8796:
8797:
          SIRegister_TJclRegion(CL);
          SIRegister_TJclThreadPersistent(CL);
8798:
          SIRegister_TJclCustomMap(CL);
8799:
8800:
          SIRegister_TJclBitmap32(CL);
8801:
          SIRegister_TJclByteMap(CL);
8802:
          SIRegister TJclTransformation(CL);
8803:
          SIRegister_TJclLinearTransformation(CL);
         Procedure Stretch(NewWidth,
8804:
        NewHeight:Card;Filter:TResamplingFilter;Radius:Single;Source:TGraphic;Target:TBitmap);
8805:
         Procedure Stretch1(NewWidth,NewHeight:Cardinal;Filter:TResamplingFilter;Radius:Single;Bitmap:TBitmap);
         Procedure DrawBitmap( DC : HDC; Bitmap : HBitMap; X, Y, Width, Height : Integer)
8806:
         Function GetAntialiasedBitmap( const Bitmap : TBitmap) : TBitmap
8808:
         Procedure BitmapToJPeg( const FileName : string)
         Procedure JPegToBitmap( const FileName : string)
8809:
         Function ExtractIconCount( const FileName : string) : Integer
8810:
         Function BitmapToIconJ( Bitmap : HBITMAP; cx, cy : Integer) : HICON
8811:
         Function IconToBitmapJ( Icon : HICON) : HBITMAP
8812:
8813:
         Procedure
       \verb|BlockTransfer(Dst:TJclBitmap32;DstX:Int;DstY:Int;Src:TJclBitmap32;SrcRect:TRect;CombineOp:TDrawMode)| \\
        Procedure StretchTransfer(Dst:TJclBitmap32;
        DstRect:TRect;Src:TJclBitmap32;SrcRect:TRect;StretchFilter:TStretchFilter; CombineOp : TDrawMode)
```

```
8815:
        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:
8816:
       TGradientDirection) : Boolean;
       Function CreateRegionFromBitmap(Bitmap: TBitmap; RegionColor:TColor;
8818:
       RegionBitmapMode: TJclRegionBitmapMode): HRGN
       Procedure ScreenShot( bm : TBitmap; Left, Top, Width, Height : Integer; Window : HWND);
         Procedure ScreenShot1( bm : TBitmap);
8820:
         Procedure PolyLineTS( Bitmap : TJclBitmap32; const Points : TDynPointArray; Color : TColor32)
8821:
        Procedure PolyLineAs( Bitmap : TJclBitmap32; const Points : TDynPointArray; Color : TColor32)

Procedure PolyLineFs( Bitmap : TJclBitmap32; const Points : TDynPointArrayF; Color : TColor32)
8822:
8823:
         Procedure PolygonTS( Bitmap : TJclBitmap32; const Points : TDynPointArray; Color : TColor32)
        Procedure PolygonAS( Bitmap : TJclBitmap32; const Points : TDynPointArray; Color : TColor32)
Procedure PolygonFS( Bitmap : TJclBitmap32; const Points : TDynPointArrayF; Color : TColor32)
8825:
8826:
         Procedure PolyPolygonTS(Bitmap:TJclBitmap32;const Points:TDynDynPointArrayArray;Color:TColor32);
8827:
8828:
         Procedure PolyPolygonAS(Bitmap:TJclBitmap32;const Points:TDynDynPointArrayArray;Color:TColor32);
         Procedure PolyPolygonFS(Bitmap:TJclBitmap32;const Points:TDynDynPointArrayArrayF;Color:TColor32);
8829:
        Procedure AlphaToGrayscale( Dst, Src : TJclBitmap32)
Procedure IntensityToAlpha( Dst, Src : TJclBitmap32)
Procedure Invert( Dst, Src : TJclBitmap32)
8830:
8831:
8832:
         Procedure InvertRGB( Dst, Src : TJclBitmap32)
         Procedure ColorToGrayscale( Dst, Src : TJclBitmap32)
8834:
        Procedure ApplyLUT( Dst, Src : TJclBitmap32; const LUT : TLUT8)
Procedure SetGamma( Gamma : Single)
8835:
8836:
8837:
       end;
8838:
8839:
       procedure SIRegister_JclSynch(CL: TPSPascalCompiler);
8840:
8841:
       begin
        Function LockedAdd( var Target : Integer; Value : Integer) : Integer
         \textbf{Function} \ \texttt{LockedCompareExchange}( \ \textbf{var} \ \texttt{Target} \ : \ \texttt{Integer}; \ \texttt{Exch}, \ \texttt{Comp} \ : \ \texttt{Integer}; \ \texttt{Integer}; \\
8843:
        Function LockedCompareExchangel( var Target : __Pointer; Exch, Comp : __Pointer) : Pointer;
Function LockedDec( var Target : Integer) : Integer
8844:
8845:
8846:
         Function LockedExchange( var Target : Integer; Value : Integer) : Integer
         Function LockedExchangeAdd( var Target : Integer; Value : Integer) : Integer
8847:
        Function LockedExchangeDec( var Target : Integer) : Integer
Function LockedExchangeInc( var Target : Integer) : Integer
8848:
8849:
        Function LockedExchangeSub( var Target : Integer; Value : Integer) : Integer
8850:
        Function LockedInc( var Target : Integer) : Integer
Function LockedSub( var Target : Integer; Value : Integer) : Integer
8851:
8852:
8853:
          TJclWaitResult', '( wrAbandoned, wrError, wrIoCompletion, wrSignaled, wrTimeout )
          SIRegister TJclDispatcherObject(CL);
8854:
         Function WaitForMultipleObjects(const Objects:array of
8855:
       TJclDispatcherObject; WaitAll: Bool; TimeOut: Cardinal): Cardinal;
8856:
        Function WaitAlertableForMultipleObjects(const Objects: array of TJclDispatcherObject; WaitAll:Bool;
       TimeOut : Cardinal):Cardinal
8857:
          SIRegister_TJclCriticalSection(CL);
          SIRegister_TJclCriticalSectionEx(CL);
          SIRegister_TJclEvent(CL);
8859:
8860:
          SIRegister TJclWaitableTimer(CL);
8861:
          SIRegister_TJclSemaphore(CL);
          SIRegister_TJclMutex(CL);
8862:
          POptexSharedInfo', ''TOptexSharedInfo // will not work
TOptexSharedInfo', 'record SpinCount:Int; LockCount: Int; ThreadId:Longword; RecursionCount:Int; end
8863:
8864:
8865:
          SIRegister_TJclOptex(CL);
          TMrewPreferred', '( mpReaders, mpWriters, mpEqual )
TMrewThreadInfo', 'record ThreadId : Longword; Recu
8866:
                                  'record ThreadId : Longword; RecursionCount: Integer; Reader : Boolean; end
8867:
          TMrewThreadInfoArray', 'array of TMrewThreadInfo
8868:
          SIRegister_TJclMultiReadExclusiveWrite(CL);
PMetSectSharedInfo', '^TMetSectSharedInfo // will not work
TMetSectSharedInfo', 'record Initialized : LongBool; SpinLock : '
8869:
8870:
8871:
8872:
            +'Longint; ThreadsWaiting : Longint; AvailableCount : Longint; MaximumCount : Longint; end
          PMeteredSection', '^TMeteredSection // will not work
TMeteredSection', 'record Event : THandle; FileMap : THandle; SharedInfo : PMetSectSharedInfo; end
8873:
8874:
8875:
          SIRegister_TJclMeteredSection(CL);
          TEventInfo', 'record EventType : Longint; Signaled : LongBool; end
TMutexInfo', 'record SignalState : Longint; Owned : Boolean; Abandoned : Boolean; end
8876:
8877:
8878:
          {\tt TSemaphoreCounts', 'record CurrentCount: Longint: MaximumCount: Longint: end}\\
        TTimerInfo', 'record Remaining: TLargeInteger; Signaled: LongBool; end

Function QueryCriticalSection( CS: TJclCriticalSection; var Info: TRTLCriticalSection): Boolean

Function QueryEvent( Handle: THandle; var Info: TEventInfo): Boolean

Function QueryMutex( Handle: THandle; var Info: TMutexInfo): Boolean
8879:
8880:
8881:
8882:
        Function QuerySemaphore( Handle : THandle; var Info : TSemaphoreCounts) : Boolean Function QueryTimer( Handle : THandle; var Info : TTimerInfo) : Boolean
8883:
8884:
          FindClass('TOBJECT'), 'EJclWin32HandleObjectError
FindClass('TOBJECT'), 'EJclDispatcherObjectError
8885:
8886:
          FindClass('TOBJECT'),'EJclCriticalSectionError
8887:
          FindClass('TOBJECT'), 'EJclEventError
8888:
          FindClass('TOBJECT'), 'EJclWaitableTimerError
8889:
         FindClass('TOBJECT'), 'EJclSemaphoreError
FindClass('TOBJECT'), 'EJclMutexError
FindClass('TOBJECT'), 'EJclMeteredSectionError
8891:
8892:
8893: end;
8894:
8895:
8897: Procedure SetCurrentPrinterAsDefault
8898: Function CurrentPrinterName : string
8899: Function mCurrentPrinterPaperSize : string
```

```
8900: Procedure UseDefaultPrinter
8901:
      procedure SIRegisterTSTREAM(Cl: TPSPascalCompiler);
8903:
      begin
         with FindClass('TOBJECT'), 'TStream') do begin
8904:
8905:
           IsAbstract := True;
8906:
          //RegisterMethod('Function Read( var Buffer, Count : Longint) : Longint
          /// RegisterMethod('Function Write( const Buffer, Count : Longint) : Longint
function Read(Buffer:String;Count:LongInt):LongInt
8907:
8908:
8909:
           function Write(Buffer:String;Count:LongInt):LongInt
           function ReadString(Buffer:String;Count:LongInt):LongInt
8910:
                                                                                 //FileStream
           function WriteString(Buffer:String;Count:LongInt):LongInt
8911:
8912:
           function ReadInt(Buffer:integer;Count:LongInt):LongInt
           function WriteInt(Buffer:integer;Count:LongInt):LongInt
procedure ReadAB(Buffer: TByteArray;Count:LongInt)
8913:
8914:
8915:
           procedure WriteAB(Buffer: TByteArray;Count:LongInt)
           procedure ReadABD(Buffer: TByteDynArray;Count:LongInt)
8916:
8917:
           procedure WriteABD(Buffer: TByteDynArray;Count:LongInt)
           procedure WriteABJ(Buffer: TSharArray;Count:LongInt)
procedure WriteAC(Buffer: TCharArray;Count:LongInt)
8918:
8919:
           procedure ReadACD(Buffer: TCharDynArray;Count:LongInt)
8920:
8921:
           procedure WriteACD(Buffer: TCharDynArray;Count:LongInt)
8922:
8923:
           function Seek(Offset:LongInt;Origin:Word):LongInt
8924:
           procedure ReadBuffer(Buffer:String;Count:LongInt)
8925:
           procedure WriteBuffer(Buffer:String;Count:LongInt)
8926:
           procedure ReadBufferInt(Buffer:Integer;Count:LongInt)');
           procedure WriteBufferInt(Buffer:Integer;Count:LongInt)');
8927:
8928:
           procedure ReadBufferFloat(Buffer:Double;Count:LongInt)');
8929:
           Procedure WriteBufferFloat(Buffer:Double;Count:LongInt)');
8930:
           procedure ReadBufferAB(Buffer: TByteArray;Count:LongInt)
procedure WriteBufferAB(Buffer: TByteArray;Count:LongInt)
8931:
8932:
           procedure ReadBufferABD(Buffer: TByteDynArray;Count:LongInt)
8933:
           procedure WriteBufferABD(Buffer: TByteDynArray;Count:LongInt)
8934:
8935:
           procedure ReadBufferAW(Buffer: TWordArray;Count:LongInt)
           procedure WriteBufferAW(Buffer: TWordArray;Count:LongInt)
procedure ReadBufferAWD(Buffer: TWordDynArray;Count:LongInt)
8936:
8937:
8938:
           procedure WriteBufferAWD(Buffer: TWordDynArray;Count:LongInt)
           procedure ReadBufferAW(Buffer: TWordArray;Count:LongInt)
procedure WriteBufferAW(Buffer: TWordArray;Count:LongInt)
8939:
8940:
           procedure ReadBufferAC(Buffer: TCharArray;Count:LongInt)
procedure WriteBufferAC(Buffer: TCharArray;Count:LongInt)
8941:
8942:
           procedure ReadBufferACD(Buffer: TCharDynArray;Count:LongInt)
8943:
8944:
           procedure WriteBufferACD(Buffer: TCharDynArray;Count:LongInt)
8945:
           procedure ReadBufferP(Buffer: PChar;Count:LongInt)
8946:
           procedure WriteBufferP(Buffer: PChar;Count:LongInt)
8947:
           procedure ReadBufferO(Buffer: TObject;Count:LongInt)');
procedure WriteBufferO(Buffer: TObject;Count:LongInt)');
8948:
8949:
8950:
            //READBUFFERAC
           function InstanceSize: Longint
8951:
           Procedure FixupResourceHeader( FixupInfo : Integer)
8952:
8953:
           Procedure ReadResHeader
8954:
            { $IFDEF DELPHI4UP }
8955:
8956:
           function CopyFrom(Source:TStream;Count:Int64):LongInt
8957:
            function CopyFrom(Source:TStream;Count:Integer):LongInt
8958:
8959:
            RegisterProperty('Position', 'LongInt', iptrw);
8960:
8961:
           RegisterProperty('Size', 'LongInt', iptrw);
8962:
         end;
8963: end;
8964:
8965:
8966: {
        8967:
8968:
8969: // see more docs/dmath manual.pdf
8970:
8971: Function InitEval : Integer
8972: Procedure SetVariable( VarName : Char; Value : Float)
8973: Procedure SetFunction( FuncName : String; Wrapper : TWrapper)
8974: Function Eval( ExpressionString : String) : Float
8975:
8976: unit dmath; //types are in built, others are external in DLL
8977: interface
8978:
      { $IFDEF DELPHI }
8979:
      uses
8980:
         StdCtrls, Graphics;
8981:
        $ENDIF}
8982: {
8983:
         Types and constants
8984:
8985:
        $i types.inc}
8986: {
8987:
         Error handling
8988:
```

```
8989: procedure SetErrCode(ErrCode: Integer); external 'dmath';
8990: { Sets the error code }
8991: function DefaultVal(ErrCode : Integer; DefVal : Float) : Float; external 'dmath';
8992: { Sets error code and default function value } 8993: function MathErr : Integer; external 'dmath';
8994:
       { Returns the error code }
8995: {
8996:
8997:
8998: procedure SetAutoInit(AutoInit : Boolean); external 'dmath';
8999: { Sets the auto-initialization of arrays }
9000: procedure DimVector(var V : TVector; Ub : Integer); external 'dmath';
9001: { Creates floating point vector V[0..Ub] }
9002: procedure DimIntVector(var V : TIntVector; Ub : Integer); external 'dmath';
9003: { Creates integer vector V[0..Ub] }
9004: procedure DimCompVector(var V : TCompVector; Ub : Integer); external 'dmath';
9005: { Creates complex vector V[0..Ub] }
9006: procedure DimBoolVector(var V : TBoolVector; Ub : Integer); external 'dmath';
9007: { Creates boolean vector V[0..Ub] }
9008: procedure DimStrVector(var V : TStrVector; Ub : Integer); external 'dmath';
9009: { Creates string vector V[0..Ub] }
9010: procedure DimMatrix(var A : TMatrix; Ub1, Ub2 : Integer); external 'dmath';
9011: { Creates floating point matrix A[0..Ub1, 0..Ub2] }
9012: procedure DimIntMatrix(var A : TIntMatrix; Ub1, Ub2 : Integer); external 'dmath';
9013: { Creates integer matrix A[0..Ub1, 0..Ub2] }
9014: procedure DimCompMatrix(var A : TCompMatrix; Ub1, Ub2 : Integer); external 'dmath';
9015: { Creates complex matrix A[0..Ub1, 0..Ub2] }
9016: procedure DimBoolMatrix(var A : TBoolMatrix; Ubl, Ub2 : Integer); external 'dmath';
9017: { Creates boolean matrix (var A : 15001matrix (bl., 052 : Integer); external dmatri
9018: procedure DimStrMatrix(var A : TStrMatrix; Ub1, Ub2 : Integer); external 'dmath';
9021:
        Minimum, maximum, sign and exchange
9022:
9023: function FMin(X, Y : Float) : Float; external 'dmath';
9024: { Minimum of 2 reals }
9025: function FMax(X, Y : Float) : Float; external 'dmath';
9026: { Maximum of 2 reals }
9027: function IMin(X, Y : Integer) : Integer; external 'dmath';
9028: { Minimum of 2 integers }
9029: function IMax(X, Y : Integer) : Integer; external 'dmath';
9030: { Maximum of 2 integers }
9031: function Sgn(X : Float) : Integer; external 'dmath';
9032: { Sign (returns 1 if X = 0) }
9033: function Sgn0(X : Float) : Integer; external 'dmath';
9034: { Sign (returns 0 if X = 0) }
9035: function DSgn(A, B : Float) : Float; external 'dmath';
9036: { Sgn(B) * |A| }
9037: procedure FSwap(var X, Y : Float); external 'dmath';
9038: { Exchange 2 reals }
9039: procedure ISwap(var X, Y : Integer); external 'dmath';
       { Exchange 2 integers }
9040:
9041: {
9042:
        Rounding functions
9043:
9044: function RoundN(X : Float; N : Integer) : Float; external 'dmath';
       { Rounds X to N decimal places }
9045:
9046: function Ceil(X : Float) : Integer; external 'dmath';
9047: { Ceiling function }
9048: function Floor(X: Float): Integer; external 'dmath'; 9049: { Floor function }
9050: {
9051:
       Logarithms, exponentials and power
9052:
9053: function Expo(X : Float) : Float; external 'dmath';
9054: { Exponential
9055: function Exp2(X : Float) : Float; external 'dmath';
9056: { 2^X }
9057: function Expl0(X : Float) : Float; external 'dmath';
9058: { 10^x }
9059: function Log(X : Float) : Float; external 'dmath';
9060: { Natural log }
9061: \hat{\textbf{function}} \text{ Log} \hat{\textbf{2}} (\hat{\textbf{X}} : \texttt{Float}) : \texttt{Float}; \ \textbf{external} \ 'dmath';
9062: { Log. base 2
9063: function Log10(X : Float) : Float; external 'dmath';
9064: { Decimal log }
9065: function LogA(X, A : Float) : Float; external 'dmath';
9066: { Log, base A }
9067: function IntPower(X : Float; N : Integer) : Float; external 'dmath';
9069: function Power(X, Y : Float) : Float; external 'dmath';
9070: \{ X^Y, X >= 0 \}
9071: { -----
9072:
        Trigonometric functions
9073:
9074: function Pythag(X, Y : Float) : Float; external 'dmath';
9075: { Sqrt(X^2 + Y^2) }
9076: function FixAngle(Theta : Float) : Float; external 'dmath';
9077: { Set Theta in -Pi..Pi }
```

```
9078: function Tan(X : Float) : Float; external 'dmath';
9079: { Tangent }
9080: function ArcSin(X : Float) : Float; external 'dmath';
9081: { Arc sinus }
9082: function ArcCos(X : Float) : Float; external 'dmath';
9083: { Arc cosinus }
9084: function ArcTan2(Y, X : Float) : Float; external 'dmath';
9085: { Angle (Ox, OM) with M(X,Y) } 9086: { -----
9087:
        Hyperbolic functions
9088:
9089: function Sinh(X : Float) : Float; external 'dmath';
9090: { Hyperbolic sine }
9091: function Cosh(X : Float) : Float; external 'dmath';
9092: { Hyperbolic cosine }
9093: function Tanh(X : Float) : Float; external 'dmath';
9094: { Hyperbolic tangent }
9095: function ArcSinh(X : Float) : Float; external 'dmath';
9096: { Inverse hyperbolic sine }
9097: function ArcCosh(X : Float) : Float; external 'dmath';
9098: { Inverse hyperbolic cosine }
9099: function ArcTanh(X: Float): Float; external 'dmath';
9100: { Inverse hyperbolic tangent }
9101: procedure SinhCosh(X : Float; var SinhX, CoshX : Float); external 'dmath';
9102: { Sinh & Cosh }
9103: { -----
9104:
        Gamma function and related functions
9105:
9106: function Fact(N : Integer) : Float; external 'dmath';
9107: { Factorial }
9108: function SgnGamma(X : Float) : Integer; external 'dmath';
9109: { Sign of Gamma function }
9110: function Gamma(X : Float) : Float; external 'dmath';
9111: { Gamma function }
9112: function LnGamma(X : Float) : Float; external 'dmath';
9113: { Logarithm of Gamma function }
9114: function Stirling(X : Float) : Float; external 'dmath';
9115: { Stirling's formula for the Gamma function }
9116: function StirLog(X : Float) : Float; external 'dmath';
9117: { Approximate Ln(Gamma) by Stirling's formula, for X >= 13 }
9118: function DiGamma(X : Float ) : Float; external 'dmath';
9119: { Digamma function }
9120: function TriGamma(X : Float ) : Float; external 'dmath';
9121: { Trigamma function }
9122: function IGamma(A, X : Float) : Float; external 'dmath';
9123: { Incomplete Gamma function}
9124: function JGamma(A, X : Float) : Float; external 'dmath';
9125: { Complement of incomplete Gamma function }
9126: function InvGamma(A, P : Float) : Float; external 'dmath';
9127: { Inverse of incomplete Gamma function }
9128: function Erf(X : Float) : Float; external 'dmath';
9129: { Error function }
9130: function Erfc(X : Float) : Float; external 'dmath';
9131: { Complement of error function }
9132: {
9133:
        Beta function and related functions
9134:
9135: function Beta(X, Y : Float) : Float; external 'dmath';
9136: { Beta function }
9137: function IBeta(A, B, X : Float) : Float; external 'dmath';
9138: { Incomplete Beta function }
9139: function InvBeta(A, B, Y : Float) : Float; external 'dmath';
9140: { Inverse of incomplete Beta function }
9141: {
9142:
        Lambert's function
9144: function LambertW(X : Float; UBranch, Offset : Boolean) : Float; external 'dmath';
9145:
9146:
        Binomial distribution
9147:
9148: function Binomial(N, K : Integer) : Float; external 'dmath';
9149: { Binomial coefficient C(N,K) } 9150: function PBinom(N : Integer; P : Float; K : Integer) : Float; external 'dmath';
      { Probability of binomial distribution }
9151:
9152: function FBinom(N : Integer; P : Float; K : Integer) : Float; external 'dmath';
      { Cumulative probability for binomial distrib. }
9153:
9154: {
9155:
        Poisson distribution
9156:
9157: function PPoisson(Mu : Float; K : Integer) : Float; external 'dmath';
9158: { Probability of Poisson distribution }
9159: function FPoisson(Mu : Float; K : Integer) : Float; external 'dmath';
9160: { Cumulative probability for Poisson distrib. }
9161: {
        Exponential distribution
9162:
9163:
9164: function DExpo(A, X : Float) : Float; external 'dmath';
       { Density of exponential distribution with parameter A }
9165:
9166: function FExpo(A, X : Float) : Float; external 'dmath'
```

```
9167: { Cumulative probability function for exponential dist. with parameter A }
9168: {
9169:
        Standard normal distribution
9170:
9171: function DNorm(X : Float) : Float; external 'dmath';
9172:
      { Density of standard normal distribution }
9173: function FNorm(X : Float) : Float; external 'dmath';
9174: { Cumulative probability for standard normal distrib. }
9175: function PNorm(X : Float) : Float; external 'dmath';
9176: { Prob(|U| > X) for standard normal distrib. } 9177: function InvNorm(P : Float) : Float; external 'dmath';
9178: { Inverse of standard normal distribution }
9179: {
9180:
        Student's distribution
9181:
9182: function DStudent(Nu : Integer; X : Float) : Float; external 'dmath';
9183: { Density of Student distribution with Nu d.o.f. }
9184: function FStudent(Nu : Integer; X : Float) : Float; external 'dmath';
9185: { Cumulative probability for Student distrib. with Nu d.o.f. } 9186: function PStudent(Nu : Integer; X : Float) : Float; external 'dmath';
9187: { Prob(|t| > X) for Student distrib. with Nu d.o.f. } 9188: function InvStudent(Nu : Integer; P : Float) : Float; external 'dmath';
9189: { Inverse of Student's t-distribution function }
9190:
9191:
        Khi-2 distribution
9192:
9193: function DKhi2(Nu : Integer; X : Float) : Float; external 'dmath';
9194: { Density of Khi-2 distribution with Nu d.o.f. } 9195: function FKhi2(Nu : Integer; X : Float) : Float; external 'dmath';
      { Cumulative prob. for Khi-2 distrib. with Nu d.o.f. }
9197: function PKhi2(Nu : Integer; X : Float) : Float; external 'dmath';
9198: { Prob(Khi2 > X) for Khi-2 distrib. with Nu d.o.f. }
9199: function InvKhi2(Nu : Integer; P : Float) : Float; external 'dmath';
9200: { Inverse of Khi-2 distribution function }
9201: {
9202:
        Fisher-Snedecor distribution
9203:
                                                       _____
9204: function DSnedecor(Nu1, Nu2 : Integer; X : Float) : Float; external 'dmath';
9205: { Density of Fisher-Snedecor distribution with Nu1 and Nu2 d.o.f.
9206: function FSnedecor(Nul, Nu2 : Integer; X : Float) : Float; external 'dmath';
9207: { Cumulative prob. for Fisher-Snedecor distrib. with Nu1 and Nu2 d.o.f. }
9208: function PSnedecor(Nul, Nu2: Integer; X: Float): Float; external 'dmath'; 9209: { Prob(F > X) for Fisher-Snedecor distrib. with Nu1 and Nu2 d.o.f. }
      function InvSnedecor(Nu1, Nu2 : Integer; P : Float) : Float; external 'dmath';
      { Inverse of Snedecor's F-distribution function }
9211:
9212: {
9213:
        Beta distribution
9214:
9215: function DBeta(A, B, X : Float) : Float; external 'dmath';
9216: { Density of Beta distribution with parameters A and B } 9217: function FBeta(A, B, X : Float) : Float; external 'dmath';
      { Cumulative probability for Beta distrib. with param. A and B }
9218:
9219:
9220:
        Gamma distribution
9221:
9222: function DGamma(A, B, X : Float) : Float; external 'dmath';
9223:
      { Density of Gamma distribution with parameters A and B }
9224: function FGamma(A, B, X : Float) : Float; external 'dmath';
      \{ Cumulative probability for Gamma distrib. with param. A and B \}
9225:
9226:
9227:
        Expression evaluation
9228:
9229: function InitEval : Integer; external 'dmath';
9230: { Initializes built-in functions and returns their number }
9231: function Eval(ExpressionString : String) : Float; external 'dmath';
9232: { Evaluates an expression at run-time }
9233: procedure SetVariable(VarName : Char; Value : Float); external 'dmath';
9234: { Assigns a value to a variable }
9235: procedure SetFunction(FuncName : String; Wrapper : TWrapper); external 'dmath';
9236: { Adds a function to the parser } 9237: { ------
9238:
        Matrices and linear equations
9239:
9240: procedure GaussJordan(A
                                              : TMatrix;
                             Lb, Ub1, Ub2 : Integer;
9241:
                               var Det : Float); external 'dmath';
9242:
9243: { Transforms a matrix according to the Gauss-Jordan method }
9244: procedure LinEq(A : TMatrix;
                                 : TVector;
9245:
            B
- -
                        Lb, Ub : Integer;
                       var Det : Float); external 'dmath';
9247:
9248: { Solves a linear system according to the Gauss-Jordan method }
9249: procedure Cholesky(A, L : TMatrix; Lb, Ub : Integer); external 'dmath';
9250: { Cholesky factorization of a positive definite symmetric matrix }
9251: procedure LU_Decomp(A : TMatrix; Lb, Ub : Integer); external 'dmath';
9252: { LU decomposition }
                                  : TMatrix;
9253: procedure LU_Solve(A
                                   : TVector;
9254:
                            В
9255:
                            Lb, Ub : Integer;
```

```
9256:
                                  : TVector); external 'dmath';
                          X
9257: { Solution of linear system from LU decomposition }
                                          : TMatrix;
9258: procedure QR_Decomp(A
                            Lb, Ub1, Ub2 : Integer;
9259 .
                                  : TMatrix); external 'dmath';
9260:
                            R
9261: { OR decomposition }
                                       : TMatrix;
: TVector;
9262: procedure QR_Solve(Q, R
9263:
                           Lb, Ub1, Ub2 : Integer;
9264:
9265:
                           X
                                        : TVector); external 'dmath';
9266: { Solution of linear system from QR decomposition }
9267: procedure SV_Decomp(A
                                          : TMatrix;
9268:
                           Lb, Ub1, Ub2 : Integer;
                            S : TVector;
V : TMatrix); external 'dmath';
9269:
9270:
9271: { Singular value decomposition }
9272: procedure SV_SetZero(S : TVector;

9273: Lb, Ub : Integer;

9274: Tol : Float); external 'dmath';
9275: { Set lowest singular values to zero }
9276: procedure SV_Solve(U
                                           TMatrix;
9277:
                                         : TVector;
                           S
9278:
                           V
                                         : TMatrix;
9279:
                                         : TVector;
                           В
9280:
                           Lb, Ub1, Ub2 : Integer;
9281:
                           Х
                                         : TVector); external 'dmath';
9282: { Solution of linear system from SVD }
                               : TMatrix;
: TVector;
9283: procedure SV_Approx(U
9284:
                            S
                                          : TMatrix;
9286:
                            Lb, Ub1, Ub2 : Integer;
                           A
                                          : TMatrix); external 'dmath';
9287:
9288: { Matrix approximation from SVD }
9289: procedure EigenVals(A : TMatrix; 9290: Lb, Ub : Integer;
9291:
                            Lambda : TCompVector); external 'dmath';
9292: { Eigenvalues of a general square matrix }
9293: procedure EigenVect(A : TMatrix; 9294: Lb, Ub : Integer;
9295:
                            Lambda : TCompVector;
                            V : TMatrix); external 'dmath';
9296:
9297: { Eigenvalues and eigenvectors of a general square matrix }
9299: Marties and eigenvectors of a specific procedure EigenSym(A : TMatrix; 9299: Lb, Ub : Integer;
9300:
                           Lambda : TVector;
                           V : TMatrix); external 'dmath';
9301:
9302: { Eigenvalues and eigenvectors of a symmetric matrix (SVD method) }
                                         : TMatrix;
9303: procedure Jacobi(A
9304:
                         Lb, Ub, MaxIter : Integer;
9305:
                         Tol
                                 : Float;
: TVector;
9306:
                         Lambda
                                           : TMatrix); external 'dmath';
9307:
9308: { Eigenvalues and eigenvectors of a symmetric matrix (Jacobi method) } 9309: {
9310:
        Optimization
9311:
9312: procedure MinBrack(Func
                                                     : TFunc;
                          var A, B, C, Fa, Fb, Fc : Float); external 'dmath';
9313:
9314: { Brackets a minimum of a function }
9315: procedure GoldSearch(Func : TFunc;
MaxIter : Integer;
Tol : Float;
var Xmin, Ymin : Float); external 'dmath';
9317:
9318:
9319:
9320: { Minimization of a function of one variable (golden search) } 9321: procedure LinMin(Func : TFuncNVar;
9322:
                         X, DeltaX : TVector;
9323:
                         Lb, Ub : Integer;
9324:
                         var R
                                   : Float;
                                  : Integer;
                         MaxIter
9325:
9326:
                                    : Float;
                         Tol
9327:
                         var F_min : Float); external 'dmath';
9328: { Minimization of a function of several variables along a line }
9329: procedure Newton (Func
                         (Func : TFuncNVar;
HessGrad : THessGrad;
                                      TFuncNVar;
9330:
9331:
                                    : TVector;
9332:
                         Lb. Ub
                                    : Integer;
                         MaxIter
                                   : Integer;
9333:
9334:
                                    : Float;
                         Tol
9335:
                         var F_min : Float;
                         G : TVector;
H_inv : TMatrix;
var Det : --
9336:
9337:
                                    : Float); external 'dmath';
9338:
9339: { Minimization of a function of several variables (Newton's method) }
9340: procedure SaveNewton(FileName :
                                         string); external 'dmath';
9341: { Save Newton iterations in a file }
                            (Func : TFuncNVar;
HessGrad : THessGrad;
9342: procedure Marquardt(Func
9343:
9344:
                            Х
                                       : TVector;
```

```
9345:
                               Lb. Ub
                                           : Integer;
9346:
                               MaxIter
                                          : Integer;
                                           : Float;
9347:
                               Tol
                               var F_min : Float;
9348 .
                                       : TVector;
9349:
                               G
                              H_inv
                                          : TMatrix;
9350:
9351: var Det : Float); external 'dmath';
9352: { Minimization of a function of several variables (Marquardt's method) }
9353: procedure SaveMarquardt(FileName : string); external 'dmath';
9354: { Save Marquardt iterations in a file }
                        (Func : TFuncNVar;
Gradient : TGradient;
9355: procedure BFGS(Func
9357:
                         X
Lb, Ub
                                     : TVector
9358:
                                     : Integer;
                         MaxIter
                                   : Integer;
9359:
9360:
                         Tol
                                    : Float;
                         var F_min : Float;
9361:
                                : TVector;
: TMatrix); external 'dmath';
9362:
                         G
                         H_inv
9363:
9364: { Minimization of a function of several variables (BFGS method) }
9365: procedure SaveBFGS(FileName : string); external 'dmath';
9366: { Save BFGS iterations in a file }
                                     : TFuncNVar;
: TVector;
9367: procedure Simplex(Func
9368:
                            X
                            Lb, Ub
9369:
                                        : Integer;
9370:
                            MaxIter
                                        : Integer;
                            Tol : Float;
var F_min : Float); external 'dmath';
9371:
9372:
9373: { Minimization of a function of several variables (Simplex) } 9374: procedure SaveSimplex(FileName: string); external 'dmath';
       { Save Simplex iterations in a file }
9375:
9376: {
9377:
        Nonlinear equations
9378:
9379: procedure RootBrack(Func
                                                  : TFunc;
                              var X, Y, FX, FY : Float); external 'dmath';
9380:
9381: { Brackets a root of function Func between X and Y }
9382: procedure Bisect(Func
                                    : TFunc;
9383:
                           var X, Y : Float;
                           MaxIter : Integer;
Tol : Float;
var F : Float); external 'dmath';
9384:
9385:
9386:
9387: { Bisection method }
9388: procedure Secant(Func
                                     : TFunc;
                           var X, Y : Float;
MaxIter : Integer;
Tol : Float;
var F : Float); external 'dmath';
9389:
9390:
9391:
9392:
9393: { Secant method }
9394: procedure NewtEq(Func, Deriv : TFunc;
9395: var X : Float;
9396: MaxIter : Integer;
9397:
                           Tol
                                          : Float;
9398:
                           var F
                                         : Float); external 'dmath';
9399: { Newton-Raphson method for a single nonlinear equation } 9400: procedure NewtEqs(Equations: TEquations;
                            Jacobian : TJacobian;
9401:
9402:
                                        : TVector;
                            X, F
9403:
                            Lb. Ub
                                        : Integer;
9404:
                            MaxIter
                                        : Integer;
9405:
                            Tol
                                        : Float); external 'dmath';
9406: { Newton-Raphson method for a system of nonlinear equations }
9407: procedure Broyden(Equations: TEquations;
9408:
                            X, F
                                        : TVector;
                            Lb, Ub
                                        : Integer;
9409:
9410:
                            MaxIter
                                        : Integer;
9411:
                                        : Float); external 'dmath';
                            Tol
       { Broyden's method for a system of nonlinear equations }
9412:
9413: {
9414:
         Polynomials and rational fractions
9415:
9416: function Poly(X
                             : Float;
                       Coef : TVector;
9417:
                       Deg : Integer) : Float; external 'dmath';
9418:
9410: { Evaluates a polynomial }
9420: function RFrac(X : Float;
9421: Coef : TVector;
9422: Degl, Deg2 : Integer) : Float; external 'dmath';
9423: { Evaluates a rational fraction } 9424: function RootPol1(A, B : Float;
                           var X : Float) : Integer; external 'dmath';
9425:
9426: { Solves the linear equation A + B * X = 0 }
9427: function RootPol2(Coef: TVector;
9428: Z : TCompVector): Integer; external 'dmath';
9429: { Solves a quadratic equation }
9430: function RootPol3(Coef: TVector;
9431: Z : TCompVector) : Integer; external 'dmath';
9432: { Solves a cubic equation }
9433: function RootPol4(Coef : TVector;
```

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9434:
                               : TCompVector) : Integer; external 'dmath';
                          Z
9435: { Solves a quartic equation }
9436: function RootPol(Coef : TVector;
9437:
                         Deg : Integer;
9438:
                         7.
                               : TCompVector) : Integer; external 'dmath';
       { Solves a polynomial equation }
9439:
9440: function SetRealRoots(Deg : Integer; 9441: Z : TCompVector;
                            Z : TCompVector;
Tol : Float) : Integer; external 'dmath';
9442:
9443: { Set the imaginary part of a root to zero }
9444: procedure SortRoots(Deg : Integer;
9445: Z : TCompVector); external 'dmath';
9446:
        Sorts the roots of a polynomial }
9447: {
9448:
        Numerical integration and differential equations
9449:
9450: function TrapInt(X, Y : TVector; N : Integer) : Float; external 'dmath';
9451: { Integration by trapezoidal rule }
9452: function GausLeg(Func : TFunc; A, B : Float) : Float; external 'dmath';
9453: { Integral from A to B }
9454: function GausLeg0(Func : TFunc; B : Float) : Float; external 'dmath';
9455: { Integral from 0 to B }
9456: function Convol(Func1, Func2 : TFunc; T : Float) : Float; external 'dmath';
9457: { Convolution product at time T }
9458: procedure ConvTrap(Func1,Func2:TFunc; T,Y:TVector; N:Integer);external 'dmath';
9459: { Convolution by trapezoidal rule }
9460: procedure RKF45(F
                                                : TDiffEqs;
9461:
                        Neqn
                                                : Integer;
                        Y, Yp
                                                : TVector;
9462:
                        var T
9463:
9464:
                        Tout, RelErr, AbsErr : Float;
9465:
                       var Flag
                                               : Integer); external 'dmath';
9466: { Integration of a system of differential equations }
9467: { ------
9468:
        Fast Fourier Transform
9469:
9470: procedure FFT(NumSamples
                                      : Integer;
                     InArray, OutArray : TCompVector); external 'dmath';
9471:
9472: { Fast Fourier Transform }
                                       : Integer;
9473: procedure IFFT(NumSamples
InArray, OutArray : TCompVector); external 'dmath';
                              RealIn, ImagIn : TintVector;
OutArray : TCompVector); external 'dmath';
9477:
9478:
9479: { Fast Fourier Transform for integer data }
9480: procedure FFT_Integer_Cleanup; external 'dmath';
9481: { Clear memory after a call to FFT_Integer }
9482: procedure CalcFrequency(NumSamples,
                                 FrequencyIndex : Integer;
9483:
                                 InArray : TCompVector;
var FFT : Complex); external 'dmath';
9484:
9485:
9486: { Direct computation of Fourier transform } 9487: {
9488:
        Random numbers
9489:
9490: procedure SetRNG(RNG : RNG_Type); external 'dmath';
9491: { Select generator }
9492: procedure InitGen(Seed : RNG_IntType); external 'dmath';
9493: { Initialize generator } 9494: function IRanGen : RNG_IntType; external 'dmath';
9495: { 32-bit random integer in [-2^31 .. 2^31 - 1] }
9496: function IRanGen31: RNG_IntType; external 'dmath';
9497: { 31-bit random integer in [0 .. 2^31 - 1] }
9498: function RanGen1 : Float; external 'dmath';
9499: { 32-bit random real in [0,1] }
9500: function RanGen2 : Float; external 'dmath';
9501: { 32-bit random real in [0,1) }
9502: function RanGen3 : Float; external 'dmath';
9503: { 32-bit random real in (0,1) }
9504: function RanGen53: Float; external 'dmath';
9505: { 53-bit random real in [0,1) }
9506: procedure InitMWC(Seed : RNG_IntType); external 'dmath';
9507: { Initializes the 'Multiply with carry' random number generator }
9508: function IRanMWC: RNG_IntType; external 'dmath';
9509: { Returns a 32 bit random number in [-2^31 ; 2^31-1]
9510: procedure InitMT(Seed : RNG_IntType); external 'dmath'
9511: { Initializes Mersenne Twister generator with a seed }
9512: procedure InitMTbyArray(InitKey : array of RNG_LongType; 9513: KeyLength : Word); external 'dmath';
9514: { Initialize MT generator with an array InitKey[0..(KeyLength - 1)] } 9515: function IRanMT: RNG_IntType; external 'dmath';
9516: { Random integer from MT generator }
9517: procedure InitUVAGbyString(KeyPhrase: string); external 'dmath';
9518: { Initializes the UVAG generator with a string }
9519: procedure InitUVAG(Seed : RNG_IntType); external 'dmath';
9520: { Initializes the UVAG generator with an integer } 9521: function IRanUVAG : RNG_IntType; external 'dmath';
9522: { Random integer from UVAG generator }
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9523: function RanGaussStd : Float; external 'dmath';
9524: { Random number from standard normal distribution }
      function RanGauss(Mu, Sigma : Float) : Float; external 'dmath';
9526: { Random number from normal distrib. with mean Mu and S. D. Sigma }
9527: procedure RanMult(M
                                 : TVector; L
                                                      : TMatrix;
                         Lb, Ub : Integer;
9528:
                                  : TVector); external 'dmath';
9529:
                          X
9530: { Random vector from multinormal distribution (correlated) }
9531: procedure RanMultIndep(M, S : TVector;
                              Lb, Ub : Integer;
9532:
                                       : TVector); external 'dmath';
9533:
                                Х
9534: { Random vector from multinormal distribution (uncorrelated) }
9535: procedure InitMHParams(NCycles, MaxSim, SavedSim : Integer); external 'dmath';
9536: { Initializes Metropolis-Hastings parameters }
9537: procedure GetMHParams(var NCycles, MaxSim, SavedSim:Integer); external 'dmath';
9538: { Returns Metropolis-Hastings parameters }
9539: procedure Hastings(Func
                                     : TFunca
: Float;
                                        TFuncNVar
9540 .
                           Х
9541:
                                       : TVector;
9542:
                                      : TMatrix;
                           Lb, Ub
9543:
                                       : Integer;
9544:
                           Xmat
                                      : TMatrix;
9545:
                           X min
                                      : TVector;
                           var F_min : Float); external 'dmath';
9546:
9547: { Simulation of a probability density function by Metropolis-Hastings ,
9548: procedure InitSAParams(NT, NS, NCycles : Integer; RT : Float); external 'dmath';
9549: { Initializes Simulated Annealing parameters }
9550: procedure SA_CreateLogFile(FileName : String); external 'dmath';
9551: { Initializes log file }
9552: procedure SimAnn(Func
                                         : TFuncNVar
9553:
                         X, Xmin, Xmax : TVector;
                                    : Integer;
: Float); external 'dmath';
9554:
                         Lb, Ub
                         var F min
9555:
9556: { Minimization of a function of several var. by simulated annealing } 9557: procedure InitGAParams(NP, NG: Integer; SR, MR, HR: Float); external 'dmath';
9558: { Initializes Genetic Algorithm parameters }
9559: procedure GA_CreateLogFile(FileName : String); external 'dmath';
9560: { Initializes log file }
9561: procedure GenAlg(Func
                                         : TFuncNVar;
                         X, Xmin, Xmax : TVector;
9562:
9563:
                         Lb, Ub
                                    : Integer;
: Float); external 'dmath';
                         var F min
9564:
9565: { Minimization of a function of several var. by genetic algorithm }
9566: {
9567:
        Statistics
9568:
9569: function Mean(X: TVector; Lb, Ub: Integer): Float; external 'dmath';
9570: { Mean of sample X }
9571: function Min(X: TVector; Lb, Ub: Integer): Float; external 'dmath';
9572: { Minimum of sample X }
9573: function Max(X: TVector; Lb. Ub: Integer): Float; external 'dmath';
      { Maximum of sample X }
9575: function Median(X: TVector; Lb, Ub: Integer; Sorted: Boolean): Float; external 'dmath';
9576: { Median of sample X }
9577: function StDev(X : TVector; Lb, Ub : Integer; M : Float) : Float; external 'dmath';
9578: { Standard deviation estimated from sample X }
9579: function StDevP(X : TVector; Lb, Ub : Integer; M : Float) : Float; external 'dmath';
9580: { Standard deviation of population }
9581: function Correl(X, Y : TVector; Lb, Ub : Integer) : Float; external 'dmath'; 9582: { Correlation coefficient }
9583: function Skewness(X: TVector; Lb, Ub: Integer; M, Sigma: Float): Float; external 'dmath';
9584: { Skewness of sample X }
9585: function Kurtosis(X : TVector; Lb, Ub : Integer; M,Sigma: Float): Float; external 'dmath'; 9586: { Kurtosis of sample X } 9587: procedure QSort(X : TVector; Lb, Ub : Integer); external 'dmath';
9588: { Quick sort (ascending order) }
9589: procedure DQSort(X : TVector; Lb, Ub : Integer); external 'dmath';
9590: { Quick sort (descending order) }
9591: procedure Interval(X1, X2
9592: MinDiv, MaxDiv
                                                : Float;
                                                : Integer;
                           var Min, Max, Step : Float); external 'dmath';
9593:
9594: { Determines an interval for a set of values }
9595: procedure AutoScale(X : TVector; Lb, Ub : Integer; Scale : TScale; 9596: var XMin, XMax, XStep : Float); external 'dmath'; 9597: { Finds an appropriate scale for plotting the data in X[Lb..Ub] }
9598: procedure StudIndep(N1, N2
                                            : Integer;
9599:
                            M1, M2, S1, S2 : Float;
                                      : Float;
: Integer); external 'dmath';
9600:
                            var T
                            var DoF
9601:
9602: { Student t-test for independent samples }
                                   : TVector;
9603: procedure StudPaired(X, Y
                            Lb, Ub : Integer;
9604:
9605:
                             var T : Float;
                             var DoF : Integer); external 'dmath';
9606:
9607: { Student t-test for paired samples }
9608: procedure AnOVal(Ns : Integer;
9609:
                         N
                                            : TIntVector;
9610:
                         M. S
                                             : TVector;
9611:
                         var V_f, V_r, F : Float;
```

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9612:
                        var DoF f, DoF r : Integer); external 'dmath';
9613: { One-way analysis of variance }
9614: procedure AnOVa2(NA, NB, Nobs : Integer;
9615:
                        M, S
                                      : TMatrix;
                        V. F
9616:
                                      : TVector;
9617:
                        DoF
                                      : TIntVector); external 'dmath';
9618: { Two-way analysis of variance }
9619: procedure Snedecor(N1, N2
                                          : Integer;
9620:
                          S1, S2
                                          : Float;
9621:
                          var F
                                          : Float;
                          var DoF1, DoF2 : Integer); external 'dmath';
9622:
9623: { Snedecor's F-test (comparison of two variances) }
9624: procedure Bartlett(Ns
                                 : Integer;
: TIntVector;
9625:
                          N
9626:
                          S
                                    : TVector;
9627:
                          var Khi2 : Float;
                          var DoF : Integer); external 'dmath';
9629: { Bartlett's test (comparison of several variances) }
9630: procedure Mann_Whitney(N1, N2 : Integer; 9631: X1, X2 : TVector;
                              var U, Eps : Float); external 'dmath';
9633: { Mann-Whitney test}
9634: procedure Wilcoxon(X, Y
                                      : TVector;
                         Lb, Ub : Integer;

var Ndiff : Integer;
9635:
9636:
9637:
                          var T, Eps : Float); external 'dmath';
9638: { Wilcoxon test }
9639: procedure Kruskal_Wallis(Ns
                                         : Integer;
9640:
                                         : TIntVector;
                                 N
                                 Х
                                 X : TMatrix;
var H : Float;
9641:
9642:
9643:
                                 var DoF : Integer); external 'dmath';
9644: { Kruskal-Wallis test }
9645: procedure Khi2_Conform(N_cls
                                        : Integer;
                               N_estim : Integer;
9647:
                              Obs : TIntVector;
9648:
                              Calc
                                        : TVector;
                              var Khi2 : Float;
9649:
9650:
                              var DoF : Integer); external 'dmath';
9651: { Khi-2 test for conformity }
                                     : Integer;
9652: procedure Khi2_Indep(N_lin
                                     : Integer;
9653:
                            N col
                                      : TIntMatrix;
9654:
                             Obs
                             var Khi2 : Float;
9655:
9656:
                            var DoF : Integer); external 'dmath';
9657: { Khi-2 test for independence }
9658: procedure Woolf_Conform(N_cls
                                        : Integer;
                               N_estim : Integer;
9660:
                                Obs
9661:
                               Calc
                                        : TVector;
                                        : Float;
9662:
                               var G
                               var DoF : Integer); external 'dmath';
9663:
9664: { Woolf's test for conformity }
9665: procedure Woolf_Indep(N_lin
                                      : Integer;
                                     : Integer;
9666:
                             N col
                                      : TIntMatrix;
9667:
                             Obs
                             var G
9668:
                                      : Float;
                             var DoF : Integer); external 'dmath';
9669:
9670: { Woolf's test for independence }
9671: procedure DimStatClassVector(var C : TStatClassVector;
                          Ub : Integer); external 'dmath';
9672:
9673: { Allocates an array of statistical classes: C[0..Ub] }
                         (X : TVector;
Lb, Ub : Integer;
9674: procedure Distrib(X
9675:
                         A, B, H : Float;
9676:
                                  : TStatClassVector); external 'dmath';
9677:
                         C
9678: { Distributes an array X[Lb..Ub] into statistical classes }
9679: {
9680:
       Linear / polynomial regression
9681:
9682: procedure LinFit(X, Y : TVector;
9683:
                        Lb, Ub : Integer;
                             : TVector;
9684:
                        B
9685:
                        7.7
                               : TMatrix); external 'dmath';
9686: { Linear regression : Y = B(0) + B(1) * X }
9687: procedure WLinFit(X, Y, S : TVector;
                         Lb, Ub : Integer;
B : TVector;
9688:
9689:
                         V
                                  : TMatrix); external 'dmath';
9690:
9691: { Weighted linear regression : Y = B(0) + B(1) * X }
9692: procedure SVDLinFit(X, Y : TVector;
                          Lb. Ub : Integer;
9693:
9694:
                           SVDTol : Float;
                                : TVector;
: TMatrix); external 'dmath';
9695:
                           В
                           V
9696:
9697: { Unweighted linear regression by singular value decomposition }
9698: procedure WSVDLinFit(X, Y, S : TVector; 9699: Lb, Ub : Integer; 9700: SVDTol : Float;
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9701:
                                        : TVector;
                              В
9702:
                              V
                                       : TMatrix); external 'dmath';
9703: { Weighted linear regression by singular value decomposition }
9704: procedure MulFit(X
                                          : TMatrix;
9705:
                          Y
                                         : TVector;
9706:
                          Lb. Ub. Nvar : Integer;
                          ConsTerm : Boolean;
B : TVector;
9707:
9708:
9709:
                          V
                                        : TMatrix); external 'dmath';
9710: { Multiple linear regression by Gauss-Jordan method }
9710: { Multiple lineal logical | 9711: procedure WMulFit(X : TMatrix; 9712: Y, S : TVector;
                                            TMatrix;
9713:
                           Lb, Ub, Nvar : Integer
9714:
                           ConsTerm : Boolean;
9715:
                                          : TVector;
                           В
9716:
                                          : TMatrix); external 'dmath';
9717: { Weighted multiple linear regression by Gauss-Jordan method }
                             : TMatrix;
: TVector;
9718: procedure SVDFit(X
9719:
                          Y
9720:
                          Lb, Ub, Nvar : Integer;
9721:
                          ConsTerm
                                           Boolean;
9722:
                          SVDTol
                                        : Float;
9723:
                          В
                                        : TVector;
9724:
                                         : TMatrix); external 'dmath';
9725: { Multiple iiiear -- 9726: procedure WSVDFit(X Y, S
9725: { Multiple linear regression by singular value decomposition }
                                          : TMatrix;
                                           : TVector;
                           Lb, Ub, Nvar : Integer;
9728:
                                       : Boolean;
9729:
                           ConsTerm
9730:
                           SVDTol
                                          : Float;
9731:
                                          : TVector;
                           В
9732:
                           7.7
                                          : TMatrix); external 'dmath';
9733: { Weighted multiple linear regression by singular value decomposition }
                          (X, Y : TVector;
Lb, Ub, Deg : Integer;
9734: procedure PolFit(X, Y
9735:
                               : TVector;
9736:
                          В
9737:
                          V
                                        : TMatrix); external 'dmath';
9738: { Polynomial regression by Gauss-Jordan method }
9739: procedure WPolFit(X, Y, S : TVector; 9740: Lb, Ub, Deg : Integer;
                                       : TVector;
                               : TVector;
9741:
                           В
                                         : TMatrix); external 'dmath';
9742:
                           V
9743: { Weighted polynomial regression by Gauss-Jordan method }
9744: procedure SVDPolFit(X, Y : TVector;
Lb, Ub, Deg : Integer;
9746:
                              SVDTol : Float;
9747:
                                           : TVector;
                              В
                                           : TMatrix); external 'dmath';
       \{ Unweighted polynomial regression by singular value decomposition \}
9749:
9750: procedure WSVDPolFit(X, Y, S : TVector; 9751: Lb, Ub, Deg : Integer;
                                          : Float;
9752:
                               SVDTol
9753:
                                            : TVector;
9754:
                              V
                                            : TMatrix); external 'dmath';
9755: { Weighted polynomial regression by singular value decomposition }
9756: weighted polynomial regression by s
9756: procedure RegTest(Y, Ycalc : TVector;
9757: LbY, UbY : Integer;
9758:
                           V
                                     : TMatrix;
                           LbV, UbV : Integer;
var Test : TReqTest); external 'dmath';
9759:
9760: Val 1885

9761: { Test of unweighted regression }

9762: procedure WRegTest(Y, Ycalc, S: TVector;

9763: LbY, UbY : Integer;
9760:
9764:
                             V
                                          : TMatrix;
9765:
                            LbV, UbV
                                          : Integer;
9766:
                            var Test
                                          : TRegTest); external 'dmath';
9767: { Test of weighted regression }
9768: {
9769:
        Nonlinear regression
9770:
9771: procedure SetOptAlgo(Algo : TOptAlgo); external 'dmath';
9772:
       { Sets the optimization algorithm for nonlinear regression }
9773: function GetOptAlgo : TOptAlgo; external 'dmath';
9774: { Returns the optimization algorithm }
9775: procedure SetMaxParam(N : Byte); external 'dmath';
9776:
      { Sets the maximum number of regression parameters for nonlinear regression }
9777: function GetMaxParam : Byte; external 'dmath';
9778: { Returns the maximum number of regression parameters for nonlinear regression } 9779: procedure SetParamBounds(I : Byte; ParamMin, ParamMax : Float); external 'dmath';
9780: { Sets the bounds on the I-th regression parameter }
9781: procedure GetParamBounds(I : Byte; var ParamMin, ParamMax:Float); external 'dmath';
9782: { Returns the bounds on the I-th regression parameter }
9783: procedure NLFit(RegFunc : TRegFunc;
                         DerivProc : TDerivProc;
9784:
9785:
                                    : TVector;
                         X, Y
                         Lb, Ub
                                    : Integer;
9786:
9787:
                                    : Integer;
                         MaxIter
9788:
                                    : Float;
                         Tol
9789:
                         В
                                    : TVector;
```

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9790:
                        FirstPar,
                        LastPar : Integer;
V : TMatrix); external 'dmath';
9791:
9792:
9793.
       { Unweighted nonlinear regression }
9794: procedure WNLFit(RegFunc : TRegFunc;
9795: DerivProc : TDerivPro
                                      TDerivProc;
9796:
                         X, Y, S
                                      TVector;
9797:
                         Lb, Ub
                                    : Integer
9798:
                         MaxIter
                                    : Integer;
9799:
                         Tol
                                    : Float;
9800:
                         В
                                    : TVector;
                         FirstPar,
9801:
                         LastPar : Integer;
V : TMatrix); external 'dmath';
9802:
9803:
9804: { Weighted nonlinear regression }
9805: procedure SetMCFile(FileName : String); external 'dmath';
9806: { Set file for saving MCMC simulations }
                                    : TRegFunc; : TVector;
9807:
      procedure SimFit(RegFunc
9808:
                         X, Y
                         Lb, Ub
9809:
                                    : Integer;
                         B
FirstPar,
'aqtPar : Integer;
' TMatrix)
9810:
9811:
9812:
                                    : TMatrix); external 'dmath';
9813:
9814: { Simulation of unweighted nonlinear regression by MCMC }
9815: procedure WSimFit(RegFunc
                                     : TRegFunc;
9816:
                          X, Y, S
                                     : TVector;
9817:
                          Lb, Ub
                                     : Integer;
9818:
                                     : TVector;
                          В
                          FirstPar,
9819:
                          LastPar : Integer;
9820:
                                    : TMatrix); external 'dmath';
9821:
                          7.7
9822: { Simulation of weighted nonlinear regression by MCMC }
9823: {
9824:
        Nonlinear regression models
9825:
9826: procedure FracFit(X, Y
                                      : TVector;
                          Lb. Ub
9827:
                                      : Integer;
9828:
                          Deg1, Deg2 :
                                        Integer;
9829:
                          ConsTerm : Boolean;
9830:
                          MaxIter
                                      : Integer;
9831:
                          Tol
                                      : Float;
9832:
                          В
                                        TVector;
                                      : TMatrix); external 'dmath';
9833:
                          V
9834:
      { Unweighted fit of rational fraction }
                                     : TVector;
9835: procedure WFracFit(X, Y, S 9836: Lb, Ub
                                         Integer;
                           Deg1, Deg2 :
                                         Integer;
9838:
                           ConsTerm :
                                         Boolean
9839:
                           MaxIter
                                       : Integer;
9840:
                           Tol
                                       : Float;
                                       : TVector;
9841:
                           В
9842:
                                       : TMatrix); external 'dmath';
9843: { Weighted fit of rational fraction }
9844:
9845: function FracFit_Func(X : Float; B : TVector) : Float; external 'dmath';
      { Returns the value of the rational fraction at point X }
9847:
      procedure ExpFit(X, Y
                                     : TVector;
9848:
                         Lb, Ub, Nexp:
                                         Integer;
                         ConsTerm : Boolean;
MaxIter : Integer;
9849:
9850:
9851:
                         Tol
                                       : Float;
9852:
                         В
                                       : TVector;
                                       : TMatrix); external 'dmath';
9853:
                         V
9854: { Unweighted fit of sum of exponentials }
9855: procedure WExpFit(X, Y, S
                                       : TVector;
9856:
                          Lb, Ub, Nexp : Integer;
9857:
                          ConsTerm
                                        : Boolean;
9858:
                          MaxIter
                                        : Integer;
                                        : Float;
9859:
                          Tol
9860:
                          В
                                        : TVector;
9861:
                          V
                                        : TMatrix); external 'dmath';
9862: { Weighted fit of sum of exponentials }
9863: function ExpFit_Func(X : Float; B : TVector) : Float; external 'dmath';
9864: { Returns the value of the regression function at point X }
9865: procedure IncExpFit(X, Y
                            (X, Y : TVector;
Lb, Ub : Integer;
9866:
                            ConsTerm : Boolean;
9867:
                            MaxIter : Integer;
9868:
                                      : Float;
9869:
                            Tol
9870:
                            В
                                      : TVector;
                                      : TMatrix); external 'dmath';
9871:
                            V
9872: { Unweighted fit of model of increasing exponential }
9873: procedure WIncExpFit(X, Y, S : TVector; 9874: Lb, Ub : Integer;
9875:
                              ConsTerm : Boolean;
9876:
                             MaxIter : Integer;
                                       : Float;
9877:
                              Tol
9878:
                              В
                                        : TVector;
```

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9879:
                                         : TMatrix); external 'dmath';
9880: { Weighted fit of increasing exponential }
9881: function IncExpFit_Func(X: Float; B: TVector): Float; external 'dmath';
9882: { Returns the value of the regression function at point X }
                                      : TVector;
9883: procedure ExpLinFit(X, Y 9884: Lb, Ub
                                      : Integer;
9885:
                             MaxIter : Integer;
9886:
                             Tol
                                       : Float;
9887:
                             В
                                       : TVector;
                                      : TMatrix); external 'dmath';
9888:
                             V
      { Unweighted fit of the "exponential + linear" model }
9889:
9890: procedure WExpLinFit(X, Y, S : TVector;
9891:
                               Lb, Ub : Integer;
9892:
                               MaxIter : Integer;
9893:
                                        : Float;
                               Tol
9894:
                               В
                                        : TVector;
                                        : TMatrix); external 'dmath';
9895:
9896: { Weighted fit of the "exponential + linear" model }
9897:
9898: function ExpLinFit_Func(X : Float; B : TVector) : Float; external 'dmath';
9899: { Returns the value of the regression function at point X }
9900: procedure MichFit(X, Y : TVector;
                           (X, Y : TVector;
Lb, Ub : Integer;
9901:
9902:
                           MaxIter : Integer;
9903:
                           Tol
                                     : Float;
9904:
                           В
                                    : TVector;
9905:
                           7.7
                                    : TMatrix); external 'dmath';
9906: { Unweighted fit of Michaelis equation }
9907: procedure WMichFit(X, Y, S: TVector; 9908: Lb, Ub: Integer;
9909:
                            MaxIter : Integer;
9910:
                            To1
                                     : Float;
                                     : TVector;
9911:
                            В
9912:
                                      : TMatrix); external 'dmath';
9913: { Weighted fit of Michaelis equation }
9914: function MichFit_Func(X: Float; B: TVector): Float; external 'dmath';
9915: { Returns the value of the Michaelis equation at point X } 9916: procedure MintFit(X, Y : TVector; 9917: Lb, Ub : Integer;
9918:
                           MintVar : TMintVar;
9919:
                           Fit SO : Boolean;
                           MaxIter : Integer;
9920:
9921:
                           Tol
                                      Float;
9922:
                                      TVector;
9923:
                           ٦,7
                                    : TMatrix); external 'dmath';
9927:
                            MintVar :
                                       TMintVar
9928:
                            Fit S0
                                       Boolean;
9929:
                            MaxIter : Integer;
                                       Float;
9930:
                            Tol
9931:
                                       TVector
9932:
                            7.7
                                     : TMatrix); external 'dmath';
       { Weighted fit of the integrated Michaelis equation }
9933:
9934: function MintFit_Func(X : Float; B : TVector) : Float; external 'dmath';
      { Returns the value of the integrated Michaelis equation at point X }
9936: procedure HillFit(X, Y : TVector; 9937: Lb, Ub : Integer;
9938:
                           MaxIter : Integer;
9939:
                           Tol
                                     : Float;
9940:
                           В
                                    : TVector;
9941:
                           V
                                    : TMatrix); external 'dmath';
9942: { Unweighted fit of Hill equation }
9943: procedure WHillFit(X, Y, S : TVector; 9944:

Lb, Ub : Integer;
9945:
                            MaxIter : Integer;
9946:
                            Tol
                                     : Float;
9947:
                            В
                                     : TVector;
                                       TMatrix); external 'dmath';
9948:
9949: { Weighted fit of Hill equation }
9950: function HillFit_Func(X : Float; B : TVector) : Float; external 'dmath';
9951: { Returns the value of the Hill equation at point X } 9952: procedure LogiFit(X, Y): TVector;
                           Lb, Ub
9953:
                                        Integer;
9954:
                           ConsTerm :
                                       Boolean
9955:
                           General :
                                       Boolean;
9956:
                           MaxIter
                                       Integer;
9957:
                                       Float;
                           Tol
                           В
                                        TVector;
9959:
                           V
                                       TMatrix); external 'dmath';
9960: { Unweighted fit of logistic function }
9961: procedure WLogiFit(X, Y, S : TVector;
9962: Lb, Ub : Integer;
9962:
                                         Integer;
9963:
                            ConsTerm
                                         Boolean;
9964:
                            General : Boolean;
9965:
                            MaxIter
                                       : Integer;
                                       : Float;
9966:
                            Tol
9967:
                                       : TVector
```

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9968:
                          V
                                   : TMatrix); external 'dmath';
 9969: { Weighted fit of logistic function }
 9970: function LogiFit_Func(X : Float; B :
                                             TVector) : Float; external 'dmath';
 9971: { Returns the value of the logistic function at point X }
9972: procedure PKFit(X, Y : TVector;
9973: Lb, Ub : Integer;
 9974:
                       MaxIter : Integer;
                              : Float;
: TVector;
 9975:
                       Tol
                       В
 9976:
                               : TMatrix); external 'dmath';
 9977:
                       V
 9978: { Unweighted fit of the acid-base titration curve }
 9979: procedure WPKFit(X, Y, S : TVector;
 9980:
                        Lb, Ub : Integer;
 9981:
                        MaxIter : Integer;
 9982:
                        Tol
                                : Float;
 9983:
                        В
                                : TVector;
                                : TMatrix); external 'dmath';
 9984:
                        V
 9985: { Weighted fit of the acid-base titration curve }
 9986: function PKFit_Func(X : Float; B : TVector) : Float; external 'dmath';
 9987: { Returns the value of the acid-base titration function at point X }
 9988: procedure PowFit(X, Y
                                  TVector;
                        Lb, Ub : Integer;
 9989:
 9990:
                        MaxIter : Integer;
 9991:
                                : Float;
                        Tol
 9992:
                        В
                                 : TVector;
 9993:
                        V
                                : TMatrix); external 'dmath';
 9994: { Unweighted fit of power function }
9995: procedure WPowFit(X, Y, S : TVector;
9996: Lb, Ub : Integer;
                         MaxIter : Integer;
 9997:
                                 : Float;
 9998:
                         Tol
                         В
9999:
                                 : TVector;
                                 : TMatrix); external 'dmath';
10000:
                         V
10001: { Weighted fit of power function }
10003: function PowFit_Func(X : Float; B : TVector) : Float; external 'dmath';
10004: { Returns the value of the power function at point X }
10005: procedure GammaFit(X, Y
                                    TVector;
10006:
                          Lb, Ub
                                     Integer;
10007:
                          MaxIter : Integer;
10008:
                          Tol
                                  : Float;
10009:
                                  : TVector;
                          В
10010:
                          V
                                   : TMatrix); external 'dmath';
10011: { Unweighted fit of gamma distribution function }
10011: { Oliweighted lit of gamma Fit(X, Y, S : TVector; 10013: Lb, Ub : Integer;
                           MaxIter : Integer;
10014:
                           Tol
                                    : Float;
10016:
                           В
                                   : TVector;
10017:
                           V
                                   : TMatrix); external 'dmath';
10018: { Weighted fit of gamma distribution function }
10019: function GammaFit_Func(X : Float; B : TVector) : Float; external 'dmath';
10022:
        Principal component analysis
10023:
                        -----
10024: procedure VecMean(X
                                       : TMatrix;
                       Lb, Ub, Nvar : Integer;
10025:
10026:
                         M
                                      : TVector); external 'dmath';
10027: { Computes the mean vector M from matrix X }
10028: procedure VecSD(X
                                    : TMatrix;
10029:
                       Lb, Ub, Nvar : Integer;
10030:
                       M, S
                                  : TVector); external 'dmath';
10031: { Computes the vector of standard deviations S from matrix X }
                         ov(X : TMatrix;
Lb, Ub, Nvar : Integer;
10032: procedure MatVarCov(X
                                 : TVector;
: TMatrix); external 'dmath';
10034:
                           Μ
10035:
                           V
10036: { Computes the variance-covariance matrix V from matrix X }
10037: procedure MatCorrel(V : TMatrix;
                           Nvar : Integer;
10038:
10039:
                           R : TMatrix); external 'dmath';
10040: { Computes the correlation matrix R from the var-cov matrix V }
10041: procedure PCA(R : TMatrix; 10042: Nvar : Integer;
10043:
                     Lambda : TVector;
10044:
                     C, Rc : TMatrix); external 'dmath';
10045: { Performs a principal component analysis of the correlation matrix R }
10046: procedure ScaleVar(X
                                      : TMatrix;
                          Lb, Ub, Nvar : Integer;
10047:
                               : TVector;
10048:
                          M, S
                                       : TMatrix); external 'dmath';
10049:
                          7.
10050: { Scales a set of variables by subtracting means and dividing by SD's }
10051: procedure PrinFac(Z
                                      : TMatrix;
                         Lb, Ub, Nvar : Integer;
10052:
10053:
                         C, F
                                      : TMatrix); external 'dmath';
10054: { Computes principal factors }
10055: { -----
```

```
10057:
10058: function LTrim(S : String) : String; external 'dmath';
10059: { Removes leading blanks }
10060: function RTrim(S : String) : String; external 'dmath';
10061: { Removes trailing blanks }
10062: function Trim(S : String) : String; external 'dmath';
10063: { Removes leading and trailing blanks }
10064: function StrChar(N : Byte; C : Char) : String; external 'dmath';
10065: { Returns a string made of character C repeated N times } 10066: function RFill(S: String; L: Byte) : String; external 'dmath';
10067: { Completes string S with trailing blanks for a total length L }
10068: function LFill(S: String; L: Byte): String; external 'dmath'
10069: { Completes string S with leading blanks for a total length L }
10070: function CFill(S : String; L : Byte) : String; external 'dmath';
10071: { Centers string S on a total length L }
10072: function Replace(S : String; C1, C2 : Char) : String; external 'dmath';
10073: { Replaces in string S all the occurences of C1 by C2 }
10074: function Extract(S: String; var Index: Byte; Delim: Char): String; external 'dmath';
10075: { Extracts a field from a string }
10076: procedure Parse(S : String; Delim:Char; Field:TStrVector; var N:Byte); external 'dmath';
10077: { Parses a string into its constitutive fields
10078: procedure SetFormat(NumLength, MaxDec:Integer; FloatPoint, NSZero:Bool); external 'dmath';
10079: { Sets the numeric format }
10080: function FloatStr(X : Float) : String; external 'dmath';
10081: { Converts a real to a string according to the numeric format } 10082: function IntStr(N : LongInt) : String; external 'dmath';
10083: { Converts an integer to a string }
10084: function CompStr(Z : Complex) : String; external 'dmath';
10085: { Converts a complex number to a string } 10086: { SIFDEF DELPHI }
10087: function StrDec(S: String): String; external 'dmath';
10088: { Set decimal separator to the symbol defined in SysUtils } 10089: function IsNumeric(var S : String; var X : Float) : Boolean; external 'dmath';
10090: { Test if a string represents a number and returns it in X } 10091: function ReadNumFromEdit(Edit : TEdit) : Float; external 'dmath';
10092: { Reads a floating point number from an Edit control }
10093: procedure WriteNumToFile(var F : Text; X : Float); external 'dmath'; 10094: { Writes a floating point number in a text file }
10095: { $ENDIF }
10096: { ----
10097:
          BGI / Delphi graphics
10098:
10099: function InitGraphics
10100: [SIFDEF DELPHI]
10101: (Width, Height: Integer): Boolean;
10102: { $ELSE }
10103: (Pilot, Mode: Integer; BGIPath: String): Boolean; (SENDIF) external 'dmath';
10104: { Enters graphic mode }
10105: procedure SetWindow({$IFDEF DELPHI}Canvas: TCanvas;{$ENDIF}
10106:
                                 X1, X2, Y1, Y2 : Integer; GraphBorder: Boolean); external 'dmath';
10107: { Sets the graphic window }
10108: procedure SetOxScale(Scale
                                                              : TScale;
                                  OxMin, OxMax, OxStep : Float); external 'dmath';
10110: { Sets the scale on the Ox axis }
10111: procedure SetOyScale(Scale
                                                             : TScale;
                                  OyMin, OyMax, OyStep : Float); external 'dmath';
10112:
10113: { Sets the scale on the Oy axis }
10114: procedure GetOxScale(var Scale
                                                                  : TScale;
10115:
                                  var OxMin, OxMax, OxStep : Float); external 'dmath';
10116: { Returns the scale on the Ox axis }
10117: procedure GetOyScale(var Scale
                                                                  : TScale;
                                  var OyMin, OyMax, OyStep : Float); external 'dmath';
10119: { Returns the scale on the Oy axis }
10120: procedure SetGraphTitle(Title: String); external 'dmath'; { Sets the title for the graph }
10121: procedure SetOxTitle(Title: String); external 'dmath'; { Sets the title for the Ox axis } 10122: procedure SetOyTitle(Title: String); external 'dmath'; { Sets the title for the Ox axis }
10123: function GetGraphTitle : String; external 'dmath'; { Returns the title for the graph }
10124: function GetOxTitle: String; external 'dmath'; { Returns the title for the Ox axis } 10125: function GetOyTitle: String; external 'dmath'; { Returns the title for the Oy axis }
10126: {$IFNDEF DELPHI
10127: procedure SetTitleFont(FontIndex, Width, Height : Integer); external 'dmath';
10128: { Sets the font for the main graph title }
10129: procedure SetOxFont(FontIndex, Width, Height : Integer); external 'dmath';
10130: { Sets the font for the Ox axis (title and labels) }
10131: procedure SetOyFont(FontIndex, Width, Height : Integer); external 'dmath';
10132: { Sets the font for the Oy axis (title and labels) }
10133: procedure SetLgdFont(FontIndex, Width, Height : Integer); external 'dmath';
10134: { Sets the font for the legends }
10135: procedure SetClipping(Clip : Boolean); external 'dmath';
10136: { Determines whether drawings are clipped at the current viewport
10137:
          boundaries, according to the value of the Boolean parameter Clip }
10138: ⟨SENDIF)
10139: procedure PlotOxAxis(SIFDEF DELPHI)(Canvas: TCanvas)(SENDIF); external 'dmath';
10140: { Plots the horizontal axis }
10141: procedure PlotOyAxis{$IFDEF DELPHI}(Canvas : TCanvas){$ENDIF}; external 'dmath';
10142: { Plots the vertical axis }
10143: procedure PlotGrid([{SIFDEF DELPHI}]Canvas:TCanvas;[{SENDIF}] Grid:TGrid); external 'dmath';
10144: { Plots a grid on the graph }
10145: procedure WriteGraphTitle(SIFDEF DELPHI)(Canvas: TCanvas)(SENDIF); external 'dmath';
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10146: { Writes the title of the graph }
10147: procedure SetMaxCurv(NCurv: Byte); external 'dmath';
10148: { Sets the maximum number of curves and re-initializes their parameters }
10149: procedure SetPointParam
10150: {$IFDEF DELPHI}
10151: (CurvIndex, Symbol, Size : Integer; Color : TColor);
10152: { $ELSE }
10153: (CurvIndex, Symbol, Size, Color: Integer); { SENDIF } external 'dmath';
10154: { Sets the point parameters for curve # CurvIndex }
10155: procedure SetLineParam
10156: {SIFDEF DELPHI}
10157: (CurvIndex : Integer; Style : TPenStyle; Width : Integer; Color : TColor);
10158: {$ELSE}
10159: (CurvIndex, Style, Width, Color: Integer); {\$ENDIF} external 'dmath'; 10160: { Sets the line parameters for curve # CurvIndex }
10161: procedure SetCurvLegend(CurvIndex : Integer; Legend : String); external 'dmath';
10162: { Sets the legend for curve # CurvIndex }
10163: procedure SetCurvStep(CurvIndex, Step : Integer); external 'dmath';
10164: { Sets the step for curve # CurvIndex }
10165: function GetMaxCurv: Byte; external 'dmath'; { Returns the maximum number of curves }
10166: procedure GetPointParam
10167: {SIFDEF DELPHI}
10168: (CurvIndex : Integer; var Symbol, Size : Integer; var Color : TColor);
10169: { $ELSE }
10170: (CurvIndex: Integer; var Symbol, Size, Color: Integer); ($ENDIF) external 'dmath';
10171: { Returns the point parameters for curve # CurvIndex }
10172: procedure GetLineParam
10173: {$IFDEF DELPHI}
10174: (CurvIndex : Integer; var Style : TPenStyle; var Width : Integer; var Color : TColor);
10175: {$ELSE}
10176: (CurvIndex : Integer; var Style, Width, Color : Integer); ($ENDIF) external 'dmath';
10177: { Returns the line parameters for curve # CurvIndex }
10178: function GetCurvLegend(CurvIndex : Integer) : String; external 'dmath';
10179: { Returns the legend for curve # CurvIndex }
10180: function GetCurvStep(CurvIndex : Integer) : Integer; external 'dmath';
10181: { Returns the step for curve # CurvIndex } 10182: { SIFDEF DELPHI }
10186: procedure PlotPoint(Xp, Yp, CurvIndex : Integer); external 'dmath';
10187: { $\frac{\$\text{ENDIF}}{\}}
10188: { Plots a point on the screen }
10189: procedure PlotCurve({$IFDEF DELPHI}Canvas : TCanvas; {$ENDIF}
                                           X, Y
10190:
                                                                               : TVector;
                                         Lb, Ub, CurvIndex : Tvector;
Lb, CurvIndex : Integer); external 'dmath';
10191:
10192: { Plots a curve }
10193: procedure PlotCurveWithErrorBars({\$IFDEF DELPHI}\)Canvas: TCanvas;{\$ENDIF\}
10194: X, Y, S : TVector;
                                                               Ns, Lb, Ub, CurvIndex : Integer); external 'dmath';
10195:
10196: { Plots a curve with error bars }
10197: procedure PlotFunc({\$iFDEF DELPHI}\Canvas : TCanvas;\{\$ENDIF\}
                                                                            : TFunc;
: Float;
10199:
                                          Xmin, Xmax
                                          10200:
10201:
                                         CurvIndex
10202: { Plots a function }
10203: procedure WriteLegend({$IFDEF DELPHI}Canvas: TCanvas; {$ENDIF}
10204:
                                               NCurv : Integer;
ShowPoints, ShowLines : Boolean); external 'dmath';
                                             NCurv
10205:
10206: { Writes the legends for the plotted curves }
10207: procedure ConRec([SIPDEF DELPHI] Canvas: TCanvas;[SENDIF]
10208: Nx, Ny, Nc : Integer;
10209: X, Y, Z : TVector;
                                      F
                                                                          : TMatrix); external 'dmath';
10210:
10211: { Contour plot }
10211: { Contour Pict }
10212: function Xpixel(X : Float):Integer; external 'dmath'; {Converts user abscissa X to screen coordinate 10213: function Ypixel(Y : Float):Integer; external 'dmath'; {Converts user ordinate Y to screen coordinate 10214: function Xuser(X : Integer):Float; external 'dmath'; {Converts screen coordinate X to user abscissa 10215: function Yuser(Y : Integer):Float; external 'dmath'; {Converts screen coordinate Y to user ordinate Y to user ordin
10216: {$IFNDEF DELPHI}
10217: procedure LeaveGraphics; external 'dmath';
10220: {
10221:
           LaTeX graphics
10222:
10223: function TeX_InitGraphics(FileName : String; PgWidth, PgHeight : Integer; 10224: Header : Boolean; external 'dmath';
10225: { Initializes the LaTeX file }
10226: procedure TeX_SetWindow(X1, X2, Y1, Y2 : Integer; GraphBorder : Boolean); external 'dmath';
10227: { Sets the graphic window }
10228: procedure TeX_LeaveGraphics(Footer : Boolean); external 'dmath'; { Close the LaTeX file }
10229: procedure TeX_SetOxScale(Scale : TScale; OxMin, OxMax, OxStep : Float); external 'dmath';
10230: { Sets the scale on the Ox axis }
10231: procedure TeX_SetOyScale(Scale: TScale: OyMin, OyMax, OyStep: Float); external 'dmath';
10232: { Sets the scale on the Oy axis }
10233: procedure TeX_SetGraphTitle(Title: String); external 'dmath'; { Sets the title for the graph }
10234: procedure TeX_SetOxTitle(Title: String); external 'dmath'; { Sets the title for the Ox axis }
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10235: procedure TeX_SetOyTitle(Title : String); external 'dmath'; { Sets the title for the Oy axis }
10236: procedure TeX_PlotOxAxis; external 'dmath'; { Plots the horizontal axis } 10237: procedure TeX_PlotOyAxis; external 'dmath'; { Plots the vertical axis }
10238: procedure TeX_FlotGyAxis, external 'dmath'; { Plots the vertical axis }
10238: procedure TeX_PlotGrid(Grid: TGrid); external 'dmath'; { Plots a grid on the graph }
10239: procedure TeX_WriteGraphTitle; external 'dmath'; Writes the title of the graph }
10240: procedure TeX_SetMaxCurv(NCurv: Byte); external 'dmath';
10241: { Sets the maximum number of curves and re-initializes their parameters }
10242: procedure TeX_SetPointParam(CurvIndex, Symbol, Size : Integer); external 'dmath';
10243: { Sets the point parameters for curve # CurvIndex }
10244: procedure TeX_SetLineParam(CurvIndex, Style : Integer;
10245: Width: Float; Smooth: Boolean); external 'dmath'; 10246: { Sets the line parameters for curve # CurvIndex }
10247: procedure TeX_SetCurvLegend(CurvIndex : Integer; Legend : String); external 'dmath';
10248: { Sets the legend for curve # CurvIndex }
10249: procedure TeX_SetCurvStep(CurvIndex, Step : Integer); external 'dmath';
10250: { Sets the step for curve # CurvIndex }
10251: procedure TeX_PlotCurve(X, Y : TVector; Lb, Ub, CurvIndex : Integer); external 'dmath';
10252: { Plots a curve }
10253: procedure TeX_PlotCurveWithErrorBars(X, Y, S : TVector;
10254: Ns, Lb, Ub, CurvIndex : Integer); external 'dmath';
10255: { Plots a curve with error bars }
10256: procedure TeX_PlotFunc(Func : TFunc; X1, X2 : Float;
10257:
                                    Npt : Integer; CurvIndex : Integer); external 'dmath';
10258: { Plots a function }
10259: procedure TeX_WriteLegend(NCurv : Integer; ShowPoints, ShowLines : Boolean); external 'dmath'; 10260: { Writes the legends for the plotted curves }
10261: procedure TeX_ConRec(Nx, Ny, Nc : Integer; X, Y, Z : TVector; F : TMatrix); external 'dmath';
10262: { Contour plot }
10263: function Xcm(X : Float) : Float; external 'dmath'; { Converts user coordinate X to cm }
10264: function Ycm(Y : Float) : Float; external 'dmath'; { Converts user coordinate Y to cm }
10265:
10267: Function RawUTF8ToPDFString( const Value : RawUTF8) : PDFString
10268: Function _DateTimeToPdfDate( ADate : TDateTime) : TPdfDate
         Function _PdfDateToDateTime( const AText : TPdfDate) : TDateTime
10270:
         Function PdfRect( Left, Top, Right, Bottom : Single) : TPdfRect;
10271:
         Function PdfRect1( const Box : TPdfBox) : TPdfRect;
         Function PdfBox( Left, Top, Width, Height : Single) : TPdfBox
10272:
10273:
         //Function _GetCharCount( Text : PAnsiChar) : integer
         //Procedure L2R( W : PWideChar; L : integer)
Function PdfCoord( MM : single) : integer
10274:
10275:
10276:
         Function CurrentPrinterPaperSize : TPDFPaperSize
10277:
         Function CurrentPrinterRes : TPoint
         Procedure GDICommentBookmark( MetaHandle : HDC; const aBookmarkName : RawUTF8)
10278:
         Procedure GDICommentOutline( MetaHandle : HDC; const aTitle : RawUTF8; aLevel : Integer)
Procedure GDICommentLink( MetaHandle: HDC; const aBookmarkName: RawUTF8; const aRect : TRect)
10279:
10280:
         Const('Usp10','String').SetString('usp10.dll
10281:
          AddTypeS('TScriptState_enum', '( r0, r1, r2, r3, r4, fOverrideDirection, fInhibitSymSwap,
10282:
10283:
            'fCharShape, fDigitSubstitute,fInhibitLigate,fDisplayZWG, fArabicNumContext, fGcpClusters )
10286:
10287: procedure SIRegister PMrand(CL: TPSPascalCompiler); //ParkMiller
10288: begin
10289: Procedure PMrandomize( I : word)
10290:
         Function PMrandom : longint
10291:
         Function Rrand : extended
         \textbf{Function} \  \, \texttt{Irand( N : word) : word}
10292:
10293: Function Brand( P : extended) : boolean 10294: Function Nrand : extended
10295: end;
10296:
10297: procedure SIRegister_Spring_Cryptography_Utils(CL: TPSPascalCompiler);
10298: begin
10299:
          Function Endian(x: LongWord): LongWord
           Function Endian64( x : Int64) : Int64
10300:
          Function spRol(x: LongWord; y: Byte): LongWord
Function spRor(x: LongWord; y: Byte): LongWord
10301:
10302:
          Function Ror64( x : Int64; y : Byte) : Int64
10303:
10304: end;
10305:
10306: procedure SIRegister_MapReader(CL: TPSPascalCompiler);
10307: begin
10308: Procedure ClearModules
10309:
         Procedure ReadMapFile( Fname : string)
         Function AddressInfo( Address : dword) : string
10310:
10311:
        end;
10312:
10313: procedure SIRegister_LibTar(CL: TPSPascalCompiler);
10315:
           TTarPermission', '( tpReadByOwner, tpWriteByOwner, tpExecuteByOw'
10316:
            +'ner, tpReadByGroup, tpWriteByGroup, tpExecuteByGroup, tpReadByOther, tpWri'
10317:
            +'teBvOther, tpExecuteBvOther)
           TTarPermissions', 'set of TTarPermission
10318:
          Trainfermissions', 'set of Trainfermission

TrileType', '(ftNormal, ftLink, ftSymbolicLink, ftCharacter, ft'
+'Block, ftDirectory, ftFifo, ftContiguous, ftDumpDir, ftMultiVolume, ftVolumeHeader;

TTarMode', '(tmSetUid, tmSetGid, tmSaveText)

TTarModes', 'set of TTarMode
10319:
10320:
10321:
10322:
           TTarDirRec', 'record Name : STRING; Size : INT64; DateTime : TDa'
```

```
10324:
            +'teTime; Permissions : TTarPermissions; FileType : TFileType; LinkName : ST'
10325:
            +'RING; UID : INTEGER; GID : INTEGER; UserName : STRING; GroupName : STRING;
                ChecksumOK : BOOLEAN; Mode : TTarModes; Magic : STRING; MajorDevNo : INTE'
10327:
            +'GER; MinorDevNo : INTEGER; FilePos : INT64; end
10328:
           SIRegister TTarArchive(CL);
10329:
           SIRegister TTarWriter(CL);
10330:
         Function PermissionString( Permissions : TTarPermissions) : STRING
         Function ConvertFilename( Filename : STRING) : STRING
10331:
         Function FileTimeGMT( FileName : STRING) : TDateTime;
Function FileTimeGMT1( SearchRec : TSearchRec) : TDateTime;
Procedure ClearDirRec( var DirRec : TTarDirRec)
10332:
10333:
10334:
10335:
10336:
10337:
10339: procedure SIRegister_TlHelp32(CL: TPSPascalCompiler);
10340:
10341 •
         Const('MAX_MODULE_NAME32','LongInt').SetInt( 255);
         Const('TH32CS_SNAPPROCESS','LongWord').SetUInt($00000002);
Const('TH32CS_SNAPPROCESS','LongWord').SetUInt($00000002);
10342:
10343:
10344:
10345:
          Const('TH32CS_SNAPTHREAD','LongWord').SetUInt( $00000004);
         Const('TH32CS_SNAPMODULE','LongWord').SetUInt( $00000008);
Const('TH32CS_INHERIT','LongWord').SetUInt( $80000000);
10346:
10347:
           tagHEAPLIST32', 'record dwSize:DWORD;th32ProcessID:DWORD;th32HeapID:DWORD;dwFlags:DWORD;end';
10348:
          AddTypeS('HEAPLIST32', 'tagHEAPLIST32' AddTypeS('THeapList32', 'tagHEAPLIST32')
10349:
10350:
         Const('HF32_DEFAULT','LongInt').SetInt( 1);
Const('HF32_SHARED','LongInt').SetInt( 2);
Function Heap32ListFirst( hSnapshot : THandle; var lphl : THeapList32) : BOOL
10351:
10352:
10353:
10354:
          Function Heap32ListNext( hSnapshot : THandle; var lphl : THeapList32) : BOOL
         AddTypeS('tagHEAPENTRY32', 'record dwSize : DWORD; hHandle : THandle; dwAd' +'dress : DWORD; dwBlockSize : DWORD; dwFlags : DWORD; dwLockCount : DWORD;
10355:
10356:
10357:
             +'dwResvd : DWORD; th32ProcessID : DWORD; th32HeapID : DWORD; end
           AddTypeS('HEAPENTRY32', 'tagHEAPENTRY32' AddTypeS('THeapEntry32', 'tagHEAPENTRY32')
10358:
10359:
         Const('LF32_FIXED','LongWord').SetUInt( $00000001);
Const('LF32_FREE','LongWord').SetUInt( $00000002);
10360:
10361:
         Const ('LF32_MOVEABLE', 'LongWord').SetUInt( $00000004);

Function Heap32First( var lphe : THeapEntry32; th32ProcessID, th32HeapID : DWORD) : BOOL

Function Heap32Next( var lphe : THeapEntry32) : BOOL
10362:
10363:
10364:
          DWORD; var lpNumberOfBytesRead : DWORD) : BOOL
10365:
          AddTypeS('tagTHREADENTRY32', 'record dwSize : DWORD; cntUsage : DWORD; th3'
10366:
            +'2ThreadID : DWORD; th32OwnerProcessID : DWORD; tpBasePri : Longint; tpDelt'
10367:
          +'aPri : Longint; dwFlags : DWORD; end
AddTypeS('THREADENTRY32', 'tagTHREADENTRY32
AddTypeS('TThreadEntry32', 'tagTHREADENTRY32
10368:
10369:
10370:
10371:
          Function Thread32First( hSnapshot : THandle; var lpte : TThreadEntry32) : BOOL
10372:
         Function Thread32Next( hSnapshot : THandle; var lpte : TThreadENtry32) : BOOL
10373:
        end;
10374:
         Const('EW_RESTARTWINDOWS','LongWord').SetUInt( $0042);
         Const('EW_REBOOTSYSTEM','LongWord').SetUInt($0043);
Const('EW_EXITANDEXECAPP','LongWord').SetUInt($0044);
10375:
10376:
10377:
          Const('ENDSESSION_LOGOFF','LongWord').SetUInt( DWORD ( $80000000 ));
         Const('EWX_LOGOFF','LongInt').SetInt( 0);
Const('EWX_SHUTDOWN','LongInt').SetInt( 1);
10378:
10379:
         Const('EWX_REBOOT', 'LongInt').SetInt( 2);
Const('EWX_FORCE', 'LongInt').SetInt( 4);
10380:
10381:
         Const('EWX_POWEROFF','LongInt').SetInt( 8);
Const('EWX_FORCEIFHUNG','LongWord').SetUInt( $10);
10382:
10383:
         Function GET_APPCOMMAND_LPARAM( const lParam : LongInt) : Shortint
10384:
10385:
          Function GET_DEVICE_LPARAM( const lParam : LongInt) : Word
10386:
         Function GET_MOUSEORKEY_LPARAM( const lParam : LongInt) : Word
10387:
         Function GET FLAGS LPARAM( const lParam : LongInt) : Word
         Function GET_FLAGS_FARAM( CONSt IParam : LongInt) : Word
Function GET_KEYSTATE_LPARAM( const IParam : LongInt) : Word
Function GetWindowWord( hWnd : HWND; nIndex : Integer) : Word
10388:
10390:
          Function SetWindowWord( hWnd : HWND; nIndex : Integer; wNewWord : Word) : Word
10391:
         Function GetWindowLong( hWnd : HWND; nIndex : Integer) : Longint
10392:
         Function SetWindowLong( hWnd : HWND; nIndex : Integer; dwNewLong : Longint) : Longint
         Function GetClassWord( hWnd : HWND; nIndex : Integer) : Word
10393:
          Function SetClassWord( hWnd : HWND; nIndex : Integer; wNewWord : Word) : Word
10394:
10395:
         Function GetClassLong( hWnd : HWND; nIndex : Integer) : DWORD
         Function SetClassLong( hWnd : HWND; nIndex : Integer; dwNewLong : Longint) : DWORD
10396:
         Function GetDesktopWindow: HWND

Function GetParent(hWnd: HWND): HWND

Function SetParent(hWndChild,hWndNewParent: HWND): HWND
10397:
10398:
10399:
         Function GetTopWindow( hWnd : HWND) : HWND
Function GetNextWindow( hWnd : HWND; uCmd : UINT) : HWND
10400:
10401:
         Function GetWindow( hWnd : HWND; uCmd : UINT) : HWND
10402:
10404:
          Function LoadDFMFile2Strings(const AFile:string; AStrings:TStrings; var WasText:boolean):integer
10405:
         Function SaveStrings2DFMFile( AStrings : TStrings; const AFile : string) : integer
         procedure GetHighlighters(AOwner: TComponent; AHighlighters: TStringList; AppendToList: boolean);
function GetHighlightersFilter(AHighlighters: TStringList): string;
10406:
10407:
          function GetHighlighterFromFileExt(AHighlighters: TStringList;Extension: string):TSynCustomHighlighter;
10408:
         Function ShowOwnedPopups( hWnd : HWND; fShow : BOOL) : BOOL
Function OpenIcon( hWnd : HWND) : BOOL
10409:
10410:
10411:
         Function CloseWindow( hWnd : HWND) : BOOL
10412: Function MoveWindow( hWnd : HWND; X, Y, nWidth, nHeight : Integer; bRepaint : BOOL) : BOOL
```

```
10413:
         Function SetWindowPos(hWnd: HWND; hWndInsertAfter: HWND; X,Y,cx,cv: Integer; uFlags: UINT): BOOL
          Function IsWindowVisible( hWnd : HWND) : BOOL
10414:
          Function Islconic( hWnd : HWND) : BOOL
10416:
          Function AnyPopup : BOOL
10417:
          Function BringWindowToTop( hWnd : HWND) : BOOL
         Function IsZoomed( hWnd : HWND) : BOOL
Function IsWindow( hWnd : HWND) : BOOL
10418:
10419:
10420:
          Function IsMenu( hMenu : HMENU) : BOOL
         Function Ischild( hWndParent, hWnd : HWND) : BOOL
Function DestroyWindow( hWnd : HWND) : BOOL
10421:
10422:
         Function ShowWindow( hWnd : HWND; nCmdShow : Integer) : BOOL
10423:
          Function AnimateWindow( hWnd : HWND; dwTime : DWORD; dwFlags : DWORD) : BOOL
10425:
         Function ShowWindowAsync( hWnd : HWND; nCmdShow : Integer) : BOOL
         Function FlashWindow( hWnd : HWND; bInvert : BOOL) : BOOL
Function IsWindowUnicode( hWnd : HWND) : BOOL
10426:
10427:
10428:
         Function EnableWindow( hWnd : HWND; bEnable : BOOL) : BOOL
         Function IsWindowEnabled( hWnd : HWND) : BOOL
10429:
10430:
10431: procedure SIRegister IDECmdLine(CL: TPSPascalCompiler);
10432: begin
          const('ShowSetupDialogOptLong','String').SetString('--setup
         PrimaryConfPathOptLong','String').SetString( '-setup
PrimaryConfPathOptLong','String').SetString( '--primary-config-path=
PrimaryConfPathOptShort','String').SetString( '--pcp=
SecondaryConfPathOptLong','String').SetString( '--secondary-config-path=
SecondaryConfPathOptShort','String').SetString( '--scp=
10434:
10435:
10436:
10437:
         NoSplashScreenOptLong', 'String').SetString('--no-splash-screen
NoSplashScreenOptShort', 'String').SetString('--nsc
StartedByStartLazarusOpt', 'String').SetString('--started-by-startlazarus
10438:
10439:
10440:
         SkipLastProjectOpt', 'String').SetString( '--skip-last-project DebugLogOpt', 'String').SetString( '--debug-log=
10441:
10442:
10443:
          DebugLogOptEnable','String').SetString( '--debug-enable=
         LanguageOpt','String').SetString('--language=
LazarusDirOpt','String').SetString('--lazarusdir=
10444:
10445:
10446:
         Procedure ParseCommandLine(aCmdLineParams:TStrings;out IDEPid:Int;out ShowSplashScreen:boolean);
         Function GetCommandLineParameters( aCmdLineParams: TStrings; isStartLazarus:Boolean): string
Function ExtractPrimaryConfigPath( aCmdLineParams: TStrings): string
10447:
10448:
10449:
         Function IsHelpRequested : Boolean
         Function IsVersionRequested : boolean
10450:
10451:
          Function GetLanguageSpecified : string
         Function ParamIsOption( ParamIndex : integer; const Option : string) : boolean
10452:
10453:
         Function ParamIsOptionPlusValue(ParamIndex:integer;const Option:string;out AValue:string):bool;
10454:
         Procedure ParseNoGuiCmdLineParams
10455:
         Function ExtractCmdLineFilenames : TStrings
10456:
10457:
10458:
10459: procedure SIRegister LazFileUtils(CL: TPSPascalCompiler);
10460: begin
10461:
         Function CompareFilenames( const Filename1, Filename2 : string) : integer
10462:
         Function CompareFilenamesIgnoreCase( const Filename1, Filename2 : string) : integer
         Function CompareFileExt( const Filename, Ext : string; CaseSensitive : boolean) : integer; Function CompareFileExt1( const Filename, Ext : string) : integer;
10463:
10464:
          Function CompareFilenameStarts( const Filename1, Filename2 : string) : integer
10465:
10466:
          Function CompareFilenames(Filename1:PChar;Len1:integer; Filename2:PChar;Len2:integer):integer
10467:
         Function CompareFilenamesP( Filename1, Filename2 : PChar; IgnoreCase : boolean) : integer
Function DirPathExists( DirectoryName : string) : boolean
10468:
10469:
          Function DirectoryIsWritable( const DirectoryName : string) : boolean
         Function ExtractFileNameOnly( const AFilename : string) : string
10470:
10471:
         Function FilenameIsAbsolute( const TheFilename : string) : boolean
         Function FilenameIsWinAbsolute( const TheFilename : string) : boolean Function FilenameIsUnixAbsolute( const TheFilename : string) : boolean
10472:
10473:
10474:
          \textbf{Function} \  \, \texttt{ForceDirectory}( \  \, \texttt{DirectoryName} \  \, : \  \, \textbf{string}) \  \, : \  \, \texttt{boolean}
10475:
         Procedure CheckIfFileIsExecutable( const AFilename : string)
10476:
         Procedure CheckIfFileIsSymlink( const AFilename : string)
         Function FileIsText( const AFilename : string) : boolean
Function FileIsText2( const AFilename : string; out FileReadable : boolean) : boolean
Function FilenameIsTrimmed( const TheFilename : string) : boolean
Function FilenameIsTrimmed2( StartPos : PChar; NameLen : integer) : boolean
10477:
10479:
10480:
10481:
         Function TrimFilename( const AFilename : string) : string
          Function ResolveDots( const AFilename : string) : string
10482:
          Procedure ForcePathDelims( var FileName : string)
10483:
10484:
          Function GetForcedPathDelims( const FileName : string) : String
         Function CleanAndExpandFilename( const Filename : string) : string
Function CleanAndExpandDirectory( const Filename : string) : string
10485:
10486:
10487:
          Function TrimAndExpandFilename( const Filename: string; const BaseDir: string): string
          Function TrimAndExpandDirectory( const Filename : string; const BaseDir : string) : string
10488:
10489:
          Function TryCreateRelativePath(const Dest,Source:String; UsePointDirectory:book
        AlwaysRequireSharedBaseFolder : Boolean; out RelPath : String) : Boolean
        Function CreateRelativePath( const Filename, BaseDirectory: string; UsePointDirectory: boolean;
10490:
        AlwaysRequireSharedBaseFolder: Boolean) : string
10491:
        Function FileIsInPath( const Filename, Path : string) : boolean
         Function AppendPathDelim( const Path : string) : string
Function ChompPathDelim( const Path : string) : string
10492:
10493:
10494:
          Function CreateAbsoluteSearchPath( const SearchPath, BaseDirectory : string) : string
          Function CreateRelativeSearchPath( const SearchPath, BaseDirectory: string): string
10495:
10496:
         Function MinimizeSearchPath( const SearchPath: string): string
         Function FindPathInSearchPath(APath: PChar; APathLen: int; SearchPath: PChar; SearchPathLen: int): PChar;
10497:
        (*Function FileExistsUTF8( const Filename : string) : boolean Function FileAgeUTF8( const FileName : string) : Longint
10498:
```

```
10500:
             Function DirectoryExistsUTF8( const Directory : string) : Boolean Function ExpandFileNameUTF8( const FileName : string; BaseDir : string) : string
10501:
             Function FindFirstUTF8(const Path:string; Attr: Longint; out Rslt : TSearchRec) : Longint
10503:
             Function FindNextUTF8( var Rslt : TSearchRec) : Longint
10504:
             Procedure FindCloseUTF8( var F : TSearchrec)
             Function FileSetDateUTF8( const FileName : String; Age : Longint) : Longint Function FileGetAttrUTF8( const FileName : String) : Longint
10505:
10506:
             Function FileSetAttrUTF8( const Filename : String; Attr : longint) : Longint
10507:
10508:
             Function DeleteFileUTF8( const FileName : String) : Boolean
10509:
             {\it Function RenameFileUTF8(const OldName, NewName: String): Boolean}
             Function FileSearchUTF8( const Name, DirList : String; ImplicitCurrentDir : Boolean) : String
Function FileIsReadOnlyUTF8( const FileName : String) : Boolean
10510:
10511:
10512:
             Function GetCurrentDirUTF8 : String
10513:
             Function SetCurrentDirUTF8( const NewDir : String) : Boolean
10514:
             Function CreateDirUTF8( const NewDir : String) : Boolean
10515:
             Function RemoveDirUTF8( const Dir : String) : Boolean
             Function ForceDirectoriesUTF8( const Dir : string) : Boolean
10517:
             Function FileOpenUTF8( const FileName : string; Mode : Integer) : THandle
            Function FileOpenDiff( const FileName: String; mode: Integer): THANDLE
Function FileCreateUTF8( const FileName: string): THandle;
Function FileCreateUTF81( const FileName: string; Rights: Cardinal): THandle;
Function FileCreateUtf82( const FileName: String; ShareMode: Integer; Rights: Cardinal): THandle;
Function FileSizeUtf8( const Filename: string): int64
10518:
10519:
10521:
10522:
             {\tt Function} \ {\tt GetFileDescription(\ const\ AFilename\ :\ string)\ :\ string}
10523:
             Function GetAppConfigDirUTF8( Global : Boolean; Create : boolean) : string
Function GetAppConfigFileUTF8( Global : Boolean; SubDir : boolean; CreateDir : boolean) : string
10524:
10525:
             Function GetTempFileNameUTF8( const Dir, Prefix : String) : String*)
10526:
             Function IsUNCPath( const Path : String) : Boolean
             Function ExtractUNCVolume( const Path : String) : String
Function ExtractFileRoot( FileName : String) : String
Function GetDarwinSystemFilename( Filename : string) : string
10527:
10528:
10530:
             Procedure SplitCmdLineParams( const Params : string; ParamList : TStrings; ReadBackslash : boolean)
             Function StrToCmdLineParam( const Param: string): string
Function MergeCmdLineParams( ParamList: TStrings): string
10531:
10532:
             Procedure InvalidateFileStateCache( const Filename : string)
10533:
             Function FindAllFiles(const SearchPath:String;SearchMask:String;SearchSubDirs:Boolean):TStringList);
10535:
             Function FindAllDirectories( const SearchPath : string; SearchSubDirs : Boolean) : TStringList
10536:
             Function ReadFileToString( const Filename : string) : string
10537:
             type
10538:
               TCopyFileFlag = ( cffOverwriteFile,
10539:
                   cffCreateDestDirectory, cffPreserveTime );
10540:
               TCopyFileFlags = set of TCopyFileFlag;*)
               TCopyFileFlag', '(cffOverwriteFile, cffCreateDestDirectory, cffPreserveTime)
TCopyFileFlags', 'set of TCopyFileFlag
10541:
10542:
10543:
               Function CopyDirTree( const SourceDir, TargetDir : string; Flags : TCopyFileFlags) : Boolean
10544: end;
10545:
10546: procedure SIRegister lazMasks(CL: TPSPascalCompiler);
10547: begin
10548:
                TMaskCharType', '( mcChar, mcCharSet, mcAnyChar, mcAnyText )
10549:
               SIRegister_TMask(CL);
10550:
               SIRegister TParseStringList(CL);
               SIRegister_TMaskList(CL);
10551:
             Function MatchesMask( const FileName, Mask: String; const CaseSensitive: Boolean): Boolean
10552:
10553:
             Function MatchesWindowsMask( const FileName, Mask : String; const CaseSensitive : Boolean) : Bool;
             \textbf{Function} \ \ \texttt{MatchesMaskList} \\ (\textbf{const} \ \ \texttt{FileName}, \\ \texttt{Mask:String}; \\ \texttt{Separator:Char}; \\ \textbf{const} \ \ \texttt{CaseSensitive:Boolean}) \\ : \texttt{Bool}; \\ \texttt{Boolean}; \\ \texttt{Boolean}; \\ \texttt{CaseSensitive:Boolean}; \\ \texttt{CaseSen
10554:
             Function MatchesWindowsMaskList(const FileName, Mask:string;Separat:Char;const CaseSensitive:Bool):Bool;
10555:
10556:
10557:
10558:
            procedure SIRegister_JvShellHook(CL: TPSPascalCompiler);
10559: begin
               //PShellHookInfo', '^TShellHookInfo // will not work
10560:
                TShellHookInfo', 'record hwnd : THandle; rc : TRect; end SHELLHOOKINFO', 'TShellHookInfo
10561:
10562:
               SHELLHOOKINFO',
               LPSHELLHOOKINFO', 'PShellHookInfo
TJvShellHookEvent', 'Procedure ( S
10563:
10564:
                                                  'Procedure ( Sender : TObject; var Msg : TMessage)
               SIRegister_TJvShellHook(CL);
10566:
             Function InitJvShellHooks : Boolean
10567:
             Procedure UnInitJvShellHooks
10568: end;
10569:
10570:
            procedure SIRegister_JvExControls(CL: TPSPascalCompiler);
10571: begin
               TDlgCode', '( dcWantAllKeys, dcWantArrows, dcWantChars, dcButton'
10572:
10573:
                 +'. dcHasSetSel. dcWantTab. dcNative )
10574:
                TDlgCodes', 'set of TDlgCode
10575:
              'dcWantMessage','').SetString( dcWantAllKeys);
10576:
               SIRegister_IJvExControl(CL);
10577:
               SIRegister_IJvDenySubClassing(CL);
10578:
               SIRegister_TStructPtrMessage(CL);
10579:
             Procedure SetDotNetFrameColors( FocusedColor, UnfocusedColor : TColor)
             Procedure DrawDotNetControl( Control: TWinControl; AColor: TColor; InControl: Boolean);
Procedure DrawDotNetControl1( DC: HDC; R: TRect; AColor: TColor; UseFocusedColor: Boolean);
10580:
10581:
             Procedure HandleDotNetHighlighting(Control:TWinControl;const Msg:TMessage;MouseOver:Boolean;Color:TColor);
10582:
10583:
             Function CreateWMMessage( Msg : Integer; WParam : Integer; LParam : Longint) : TMessage;
             Function CreateWMMessagel( Msg : Integer; WParam : Integer; LParam : TControl) : TMessage;
10584:
             Function SmallPointToLong( const Pt : TSmallPoint) : Longint Function ShiftStateToKeyData( Shift : TShiftState) : Longint Function GetFocusedControl( AControl : TControl) : TWinControl
10585:
10586:
10587:
10588: Function DlgcToDlgCodes( Value : Longint) : TDlgCodes
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10589:
         Function DlgCodesToDlgc( Value : TDlgCodes) : Longint
10590:
         Procedure GetHintColor( var HintInfo: THintInfo; AControl: TControl; HintColor: TColor)
         Function DispatchIsDesignMsg( Control : TControl; var Msg : TMessage) : Boolean
10592:
          SIRegister_TJvExControl(CL);
10593:
          SIRegister_TJvExWinControl(CL);
          SIRegister_TJvExCustomControl(CL);
10594:
10595:
          SIRegister_TJvExGraphicControl(CL);
10596:
           SIRegister_TJvExHintWindow(CL);
10597:
          SIRegister_TJvExPubGraphicControl(CL);
10598: end;
10599:
10600: (*---
10601: procedure SIRegister_EncdDecd(CL: TPSPascalCompiler);
10602: begin
10603:
        Procedure EncodeStream( Input, Output : TStream)
Procedure DecodeStream( Input, Output : TStream)
10604:
         Function EncodeString1( const Input : string) : string
10605:
10606:
         Function DecodeString1( const Input : string) : string
10607: end;
10608:
10609:
10610:
        procedure SIRegister_SockAppReg(CL: TPSPascalCompiler);
10611: begin
          SIRegister TWebAppRegInfo(CL);
10612:
10613:
          SIRegister_TWebAppRegList(CL);
10614:
         Procedure GetRegisteredWebApps( AList : TWebAppRegList)
10615:
         Procedure RegisterWebApp( const AFileName, AProgID : string)
Procedure UnregisterWebApp( const AProgID : string)
10616:
10617:
         Function FindRegisteredWebApp( const AProgID : string) : string
         Function CreateRegistry( InitializeNewFile : Boolean) : TCustomIniFile
10619:
         'sUDPPort','String').SetString( 'UDPPort
10620: end;
10621:
10622: procedure SIRegister_PJEnvVars(CL: TPSPascalCompiler);
10623:
        begin
10624:
        // TStringDynArray', 'array of string
         // ISLITINGUYHALIAY , ALIAY OL SLITING
FUNCTION GELENVVARVALUE( const VarName : string) : string
Function SetEnvVarValue( const VarName, VarValue : string) : Integer
10625:
10626:
10627:
         Function DeleteEnvVar( const VarName : string) : Integer
         Function CreateEnvBlock(const NewEnv:TStrings;const IncludeCurrent:Bool;const Buffer:string;const
10628:
        BufSize:Int):Int;
         Function ExpandEnvVars( const Str : string) : string
Function GetAllEnvVars( const Vars : TStrings) : Integer
10629:
10630:
         Procedure GetAllEnvVarNames( const Names : TStrings);
         Function GetAllEnvVarNames1 : TStringDynArray;
10632:
10633:
         Function EnvBlockSize : Integer
          TPJEnvVarsEnum', 'Procedure ( const VarName : string; Data : TObject)
10634:
          SIRegister_TPJEnvVarsEnumerator(CL);
10636:
          SIRegister_TPJEnvVars(CL);
          FindClass('TOBJECT'), 'EPJEnvVars
FindClass('TOBJECT'), 'EPJEnvVars
10637:
10638:
10639:
         //Procedure Register
10640: end;
10641:
10642: (*----
10643: procedure SIRegister_PJConsoleApp(CL: TPSPascalCompiler);
10644:
        begin
          'cOneSecInMS','LongInt').SetInt( 1000);
10645:
10646:
         //'cDefTimeSlice','LongInt').SetInt( 50);
         /// cDefMaxExecTime','').SetString( cOneMinInMS);
'cAppErrorMask','LongInt').SetInt( 1 shl 29);
10647:
10648:
10649:
         Function IsApplicationError( const ErrCode : LongWord) : Boolean
          TPJConsoleAppPriority', '(cpDefault, cpHigh, cpNormal, cpIdle, cpRealTime)
TPJConsoleColors', 'record Foreground: TPJConsoleColor; Background: TPJConsoleColor; end;
10650:
10651:
         Function MakeConsoleColors( const AForeground, ABackground: TPJConsoleColors; Function MakeConsoleColors1( const AForeground, ABackground: TColor): TPJConsoleColors;
10652:
10654:
         Function MakeConsoleColors2( const AForeground, ABackground : TAlphaColor) : TPJConsoleColors;
10655:
         Function MakeSize( const ACX, ACY : LongInt) : TSize
10656:
          SIRegister_TPJCustomConsoleApp(CL);
SIRegister_TPJConsoleApp(CL);
10657:
10658:
10659:
10660: procedure SIRegister_ip_misc(CL: TPSPascalCompiler);
10661:
        begin
10662:
         INVALID_IP_ADDRESS','LongWord').SetUInt( $ffffffff);
          t_encoding', '( uuencode, base64, mime )
10663:
10664:
         Function internet_date( date : TDateTime) : string
         Function lookup_hostname( const hostname: string) : longint
10665:
10666:
         Function my hostname : string
         Function my_ip_address : longint
         Function ip_1p_address : longint) : string
Function ip2string( ip_address : longint) : string
Function resolve_hostname( ip : longint) : string
Function address_from( const s : string; count : integer) : string
Function encode_base64( data : TStream) : TStringList
10668:
10669:
10670:
10671:
         Function decode_base64( source : TStringList) : TMemoryStream
10672:
         Function posn( const s, t : string; count : integer) : integer
Function poscn( c : char; const s : string; n : integer) : integer
10673:
10674:
10675: Function filename_of( const s : string) : string
10676: //Function trim( const s : string) : string
```

```
10677:
          //Procedure setlength( var s : string; 1 : byte) Function TimeZoneBias : longint
10678:
          Function eight2seven_quoteprint( const s : string) :
          Function eight2seven_german( const s : string) : string
10680:
10681:
          \textbf{Function} \ \ \texttt{seven2eight\_quoteprint} ( \ \ \textbf{const} \ \ \texttt{s} \ : \ \textbf{string}) \ : \ \textbf{string} \ \textbf{end};
          type in_addr', 'record s_bytes : array[1..4] of byte; end;
Function socketerror : cint
10682:
10683:
10684:
          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
10685:
10686:
          //Function fpbind( s : cint; addrx : psockaddr; addrlen : tsocklen) : cint Function fplisten( s : cint; backlog : cint) : cint
10687:
10689:
          //Function fpaccept( s : cint; addrx : psockaddr; addrlen : plongint) : cint
10690:
          // {\tt Function\ fpconnect(\ s\ :\ cint;\ name\ :\ psockaddr;\ namelen\ :\ tsocklen)\ :\ cint}
10691:
          //Function fpgetsockname( s : cint; name : psockaddr; namelen : psocklen) : cint Function NetAddrToStr( Entry : in_addr) : String
10692:
          Function HostAddrToStr( Entry : in_addr) : String
10693:
          Function StrToHostAddr( IP : String) : in_addr
Function StrToNetAddr( IP : String) : in_addr
SOL_SOCKET','LongWord').SetUInt( $ffff);
10694 :
10695:
10696:
10697:
           cint8', 'shortint
           cuint8', 'byte cchar', 'cint8
10698:
           cchar', 'cint8 cschar', 'cint8
10699:
10700:
                        'cuint8
10701:
           cuchar
10702:
           cint16'
                      , 'smallint
10703:
           cuint16', 'word
           cshort', 'cint16
csshort', 'cint16
cushort', 'cuint16
10704:
10705:
10706:
           cint32',
                        'longint
10707:
           cuint32', 'longword
10708:
           cint', 'cint32
csint', 'cint32
10709:
10710:
10711:
           cuint',
                     'cuint32
           csigned', 'cint
cunsigned', 'cuint
10712:
10713:
           cint64', 'int64
10714:
           clonglong', 'cint64
10715:
10716:
            cslonglong', 'cint64
10717:
           cbool', 'longbool
           cfloat', 'single cdouble', 'double
10718:
10719:
10720:
           clongdouble', 'extended
10721:
10722: procedure SIRegister uLkJSON(CL: TPSPascalCompiler);
10723: begin
            TlkJSONtypes','(jsBase,jsNumber,jsString,jsBoolean,jsNull,jsList,jsObject)
10725:
            SIRegister_TlkJSONdotnetclass(CL);
10726:
            SIRegister TlkJSONbase(CL);
10727:
           SIRegister TlkJSONnumber(CL);
10728:
            SIRegister_TlkJSONstring(CL);
            SIRegister_TlkJSONboolean(CL);
10729:
10730:
            SIRegister_TlkJSONnull(CL);
10731:
           TlkJSONFuncEnum', 'Procedure ( ElName : string; Elem : TlkJSONba'
+'se; data : TObject; var Continue : Boolean)
10732:
            SIRegister_TlkJSONcustomlist(CL);
10733:
10734:
            SIRegister_TlkJSONlist(CL);
10735:
            SIRegister_TlkJSONobjectmethod(CL);
           TlkHashItem', 'record hash : cardinal; index : Integer; end
TlkHashFunction', 'Function ( const ws : WideString) : cardinal
10736:
10737:
            SIRegister_TlkHashTable(CL);
10738:
10739:
            SIRegister_TlkBalTree(CL);
10740:
           SIRegister TlkJSONobject(CL);
10741:
            SIRegister TlkJSON(CL);
10742:
            SIRegister_TlkJSONstreamed(CL);
10743:
          Function GenerateReadableText( vObj : TlkJSONbase; var vLevel : Integer): string
10744: end;
10745:
10746: procedure SIRegister_ZSysUtils(CL: TPSPascalCompiler);
10747: begin
10748:
           TZListSortCompare', 'Function (Item1, Item2 : TObject): Integer
           SIRegister_TZSortedList(CL);
10749:
          Function zFirstDelimiter( const Delimiters, Str : string) : Integer Function zLastDelimiter( const Delimiters, Str : string) : Integer
10750:
10751:
10752:
          //Function MemLCompUnicode( P1, P2 : PWideChar; Len : Integer) : Boolean
          //Function MemLCompAnsi( P1, P2 : PAnsiChar; Len : Integer) : Boolean Function zStartsWith( const Str, SubStr : WideString) : Boolean; Function StartsWithl( const Str, SubStr : RawByteString) : Boolean;
10753:
10754:
10755:
          Function EndsWith( const Str, SubStr: WideString): Boolean;
Function EndsWithl( const Str, SubStr: RawByteString): Boolean;
10757:
          Function SQLStrToFloatDef( Str : RawByteString; Def : Extended) : Extended;
Function SQLStrToFloatDef1( Str : String; Def : Extended) : Extended;
10758:
10759:
          Function SQLStrToFloat( const Str : AnsiString) : Extended
10760:
          //Function BufferToStr( Buffer : PWideChar; Length : LongInt) : string;
10761:
10762: //Function BufferToStr1( Buffer : PAnsiChar; Length : LongInt) : string;
10763: Function BufferToBytes( Buffer : TObject; Length : LongInt) : TByteDynArray
10764: Function StrToBoolEx(Str: string): Boolean
10765: Function BoolToStrEx(Bool: Boolean): String
```

```
10766:
          Function IsIpAddr( const Str : string) : Boolean
          Punction isipator ( const Str., Delimiters : string) : TStrings

Procedure PutSplitString( List : TStrings; const Str, Delimiters : string)
10767:
10769:
          Procedure AppendSplitString( List : TStrings; const Str, Delimiters : string)
          Function ComposeString( List: TStrings; const Delimiter: string): string
Function FloatToSQLStr( Value: Extended): string
Procedure PutSplitStringEx( List: TStrings; const Str, Delimiter: string)
10770:
10771:
10772:
10773:
          Function SplitStringEx( const Str, Delimiter : string) : TStrings
          Procedure AppendSplitStringEx( List : TStrings; const Str, Delimiter : string)
10774:
10775:
          Function zBytesToStr( const Value : TByteDynArray) : AnsiString Function zStrToBytes( const Value : AnsiString) : TByteDynArray;
10776:
          Function StrToBytes1( const Value : UTF8String) : TByteDynArray;
10777:
10778:
          Function StrToBytes2( const Value : RawByteString) : TByteDynArray;
          Function StrToBytes3( const Value : WideString) : TByteDynArray;
10779:
          Function StrToBytes4( const Value : UnicodeString) : TByteDynArray;
10780:
10781:
          Function BytesToVar( const Value : TByteDynArray) : Variant
          Function VarToBytes( const Value : Variant) : TByteDynArray
10782:
10783:
          Function AnsiSQLDateToDateTime( const Value : string) : TDateTime
          Function AmsisymbaterDaterImme( const value : string) : IDateTime

Function TimestampStrToDateTime( const Value : string) : TDateTime

Function DateTimeToAnsiSQLDate( Value : TDateTime; WithMMSec : Boolean) : string
10784:
10785:
          Function EncodeCString( const Value : string) : string
10786:
10787:
          Function DecodeCString( const Value : string) : string
10788:
          \textbf{Function} \  \  \textbf{zReplaceChar( const Source, Target : Char; const Str : string)} \  \  \textbf{:} \  \  \textbf{string})
10789:
          Function MemPas ( Buffer : PChar; Length : LongInt ) : string
          Procedure DecodeSQLVersioning(const FullVersion:Int;out MajorVersion:Int;out MinorVersion:Int;out
10790:
         SubVersion: Int);
10791:
          Function EncodeSQLVersioning(const MajorVersion:Integer;const MinorVersion:Integer;const
         SubVersion: Integer): Int;
          Function FormatSQLVersion( const SQLVersion : Integer) : String
10793:
          Function ZStrToFloat( Value : AnsiChar) : Extended;
10794:
          Function ZStrToFloat1( Value : AnsiString) : Extended;
10795:
          Procedure ZSetString( const Src : AnsiChar; var Dest : AnsiString);
10796:
          Procedure ZSetString1( const Src : AnsiChar; const Len : Cardinal; var Dest : AnsiString);
10797:
          Procedure ZSetString2( const Src : AnsiChar; var Dest : UTF8String);
          Procedure ZSetString3( const Src : AnsiChar; const Len : Cardinal; var Dest : UTF8String);
10798:
          Procedure ZSetString4( const Src : AnsiChar; const Len : Cardinal; var Dest : WideString);
10799:
10800:
          Procedure ZSetString5( const Src : AnsiChar; var Dest : RawByteString);
          Procedure ZSetString6( const Src : AnsiChar; const Len : Cardinal; var Dest : RawByteString);
10801:
10802:
10803:
10804: unit uPSI_ZEncoding;
          Function StringToAnsiEx( const s : String; const FromCP, ToCP : Word) : RawByteString
Function AnsiToStringEx( const s : RawByteString; const FromCP, ToCP : Word) : String
10805:
10806:
          Function ZRawToUnicode( const S : RawByteString; const CP : Word) : WideString
10807:
          Function ZUnicodeToRaw( const US : WideString; CP : Word) : RawByteString
Function ZConvertAnsiToRaw( const Src : AnsiString; const RawCP : Word) : RawByteString
Function ZConvertRawToAnsi( const Src : RawByteString; const RawCP : Word) : AnsiString
10808:
10809:
10810:
          Function ZConvertAnsiToUTF8( const Src : AnsiString) : UTF8String
10812:
          Function ZConvertUTF8ToAnsi( const Src : UTF8String) : AnsiString
          Function ZConvertRawToUTF8( const Src : RawByteString; const CP : Word) : UTF8String
Function ZConvertUTF8ToRaw( const Src : UTF8String; const CP : Word) : RawByteString
10813:
10814:
          Function ZConvertRawToString( const Src : RawByteString; const RawCP, StringCP : Word) : StringFunction ZConvertStringToRaw( const Src : String; const StringCP, RawCP : Word) : RawByteString
10815:
10816:
10817:
          Function ZConvertStringToRawWithAutoEncode(const Src:String;const StringCP,RawCP:Word):RawByteString;
10818:
          Function ZConvertUTF8ToString( const Src : UTF8String; const StringCP : Word) : StringFunction ZConvertStringToUTF8( const Src : String; const StringCP : Word) : UTF8String
10819:
          Function ZConvertStringToUTF8WithAutoEncode( const Src : String; const StringCP: Word): UTF8String
10820:
          Function ZConvertStringToAnsi( const Src : String; const StringCP : Word) : AnsiString
10821:
10822:
          Function ZConvertStringToAnsiWithAutoEncode( const Src : String; const StringCP: Word): AnsiString
          Function ZConvertAnsiToString( const Src : AnsiString; const StringCP : Word) : String
10823:
          Function ZConvertUnicodeToString( const Src : WideString; const StringCP : Word) : String
10824:
10825:
          Function ZConvertUnicodeToString_CPUTF8( const Src : WideString; const StringCP :
          Function ZConvertStringToUnicode( const Src : String; const StringCP : Word) : WideString Function ZConvertString_CPUTF8ToUnicode( const Src : String; const StringCP : Word) : WideString
10826:
10827:
          Function ZConvertStringToUnicodeWithAutoEncode( const Src: String; const StringCP:Word):WideString
Function ZMoveAnsiToRaw( const Src: AnsiString; const RawCP: Word): RawByteString
Function ZMoveRawToAnsi( const Src: RawByteString; const RawCP: Word): AnsiString
10828:
10830:
          Function ZMoveAnsiToUTF8( const Src : AnsiString) : UTF8String
Function ZMoveUTF8ToAnsi( const Src : UTF8String) : AnsiString
10831:
10832:
          Function ZMoveRawToUTF8( const Src : RawByteString; const CP : Word) : UTF8String
Function ZMoveUTF8ToRaw( const Src : UTF8String; const CP : Word) : RawByteString
10833:
10834:
10835:
          Function ZMoveStringToAnsi( const Src : String; const StringCP : Word) : AnsiString
          Function ZMoveAnsiToString( const Src : AnsiString; const StringCP : Word) : String
Function ZMoveRawToString( const Src : RawByteString; const RawCP, StringCP : Word) : String
10836:
10837:
          Function ZMoveRavioString( const Src : RawByteString/ const Src : String(P, RawCP, String(P, Word) : RawByteString Function ZMoveUTF8ToString( const Src : UTF8String; StringCP : Word) : String
10838:
10839:
10840:
          Function ZMoveStringToUTF8( const Src : String; const StringCP : Word) : UTF8String
          Function ZUnknownRawToUnicode( const S : RawByteString; const CP : Word) : WideString
Function ZUnknownRawToUnicodeWithAutoEncode( const S : RawByteString; const CP : Word) : WideString
10841:
10842:
          Function ZUnicodeToUnknownRaw( const US : WideString; CP : Word) : RawByteString
10844:
          Function ZDefaultSystemCodePage : Word
10845:
          Function ZCompatibleCodePages( const CP1, CP2 : Word) : Boolean
10846:
10847:
        procedure SIRegister_BoldComUtils(CL: TPSPascalCompiler);
10848:
10849: begin
          'RPC_C_AUTHN_LEVEL_DEFAULT', 'LongInt').SetInt( 0);
('RPC_C_AUTHN_LEVEL_NONE', 'LongInt').SetInt( 1);
10850:
         'RPC
10851:
         ('RPC_C_AUTHN_LEVEL_CONNECT', 'LongInt').SetInt( 2);
```

```
10853:
           ('RPC C AUTHN LEVEL CALL', 'LongInt').SetInt( 3);
           ('RPC_C_AUTHN_LEVEL_PKT', 'LongInt').SetInt( 4);
10854:
             'RPC_C_AUTHN_LEVEL_PKT_INTEGRITT','LongInt').SetInt( 5);
'RPC_C_AUTHN_LEVEL_PKT_PRIVACY','LongInt').SetInt( 6);
10856:
10857:
             ('alDefault','1').SetString( RPC_C_AUTHN_LEVEL_DEFAULT);
             'alNone','2').SetString( RPC_C_AUTHN_LEVEL_NONE);
'alConnect','3').SetString( RPC_C_AUTHN_LEVEL_CONNECT);
10858:
10859:
             'alCall','4').SetString( RPC_C_AUTHN_LEVEL_CALL);
10860:
             'alPacket','5').SetString( RPC_C_AUTHN_LEVEL_PKT);
10861:
             '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);
10862:
10863:
             'RPC_C_IMP_LEVEL_ANONYMOUS', 'LongInt').SetInt( 1);
'RPC_C_IMP_LEVEL_IDENTIFY', 'LongInt').SetInt( 2);
'RPC_C_IMP_LEVEL_IMPERSONATE', 'LongInt').SetInt( 3);
10865:
10866:
10867:
10868:
             'RPC_C_IMP_LEVEL_DELEGATE','LongInt').SetInt( 4);
             ('ilDefault','0').SetString( RPC_C_IMP_LEVEL_DEFAULT),
10869:
             'ilAnonymous','l').SetString( RPC_C_IMP_LEVEL_ANONYMOUS);
'ilIdentiry','2').SetString( RPC_C_IMP_LEVEL_IDENTIFY);
'ilImpersonate','3').SetString( RPC_C_IMP_LEVEL_IMPERSONATE);
10870 .
10871:
10872:
              10873:
10874:
             'EOAC_DEFAULT','LongWord').SetUInt( $800);
10875:
             BOAC_DEFAULT , DongWord') .SetUInt( $1);
'EOAC_MUTUAL_AUTH', 'LongWord') .SetUInt( $20);
'EOAC_STATIC_CLOACKING', 'LongWord') .SetUInt( $40);
'EOAC_DYNAMIC_CLOAKING', 'LongWord') .SetUInt( $40);
10876:
10877:
10878:
             'EOAC_ANY_AUTHORITY', 'LongWord').SetUInt( $80);
'RPC_C_AUTHN_WINNT', 'LongInt').SetInt( 10);
'RPC_C_AUTHNZ_NONE', 'LongInt').SetInt( 0);
'RPC_C_AUTHNZ_NAME', 'LongInt').SetInt( 1);
10879:
10880:
10881:
10882:
            ('RPC_C_AUTHNZ_DCE','LongInt').SetInt( 2);
FindClass('TOBJECT'),'EBoldCom
10883:
10884:
           Function BoldVariantIsType( V : OleVariant; TypeCode : Integer) : Boolean
10885:
          Function BoldMemoryToVariant( const Buffer, BufSize : Integer) : OleVariant
Function BoldStreamToVariant( Stream : TStream) : OleVariant
10886:
          Function BoldStringsToVariant( Strings : TStram) : OleVariant
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
10888:
10889:
10890:
10891:
10892:
10893:
          Function BoldCreateNamedValues(const Names:array of string;const Values:array of OleVariant):OleVariant;
          Function BoldGetNamedValue( Data : OleVariant; const Name : string) : OleVariant
Procedure BoldSetNamedValue( Data : OleVariant; const Name : string; Value : OleVariant)
10894:
10895:
          Function BoldCreateGUID : TGUID
10896:
10897:
          Function BoldCreateComObject( const ClsId, IId : TGUID; out Obj : variant; out Res : HResult) : Boolean
Function BoldCreateRemoteComObject(const HostName:string;const ClsId,IId:TGUID;out Obj:variant;out
10898:
         Res:HRes):Bool;
10899: Procedure BoldInitializeComSecurity( AuthenticationLevel, ImpersonationLevel : longint)
10900:
          Procedure BoldSetSecurityForInterface(AuthenticationLevel,ImpersonationLevel:longint;Unk:IUnknown);
10901: end;
10902:
10903:
10904: procedure SIRegister_BoldIsoDateTime(CL: TPSPascalCompiler);
10905: begin
10906:
         Function ParseISODate( s : string) : TDateTime
          Function ParseISODateTime(s: string): TDateTime
Function ParseISOTime(str: string): TDateTime
10907:
10908:
10909: end;
10910:
10911: /
10912: procedure SIRegister_BoldGUIDUtils(CL: TPSPascalCompiler);
10913: begin
10914: Function BoldCreateGUIDAsString( StripBrackets : Boolean) : string
10915:
         Function BoldCreateGUIDWithBracketsAsString : string
10916: end;
10917:
10918:
         procedure SIRegister_BoldFileHandler(CL: TPSPascalCompiler);
10919: begin
            FindClass('TOBJECT'),'TBoldFileHandler
FindClass('TOBJECT'),'TBoldDiskFileHandler
10920:
10921:
             //TBoldFileHandlerClass', 'class of TBoldFileHandler
10922:
10923:
            TBoldInitializeFileContents', 'Procedure ( StringList : TStringList)
            SIRegister_TBoldFileHandler(CL);
SIRegister_TBoldDiskFileHandler(CL);
10924:
10925:
10926:
          Procedure BoldCloseAllFilehandlers
           Procedure BoldRemoveUnchangedFilesFromEditor
10927:
10928:
          Function BoldFileHandlerList : TBoldObjectArray
          Function BoldFileHandlerForFile(path,FileName:String; ModuleType:TBoldModuleType;ShowInEditor:Bool;
10929:
         OnInitializeFileContents : TBoldInitializeFileContents) : TBoldFileHandler
10930: end;
10931:
10932: procedure SIRegister BoldWinINet(CL: TPSPascalCompiler);
10933: begin
                           'array of PChar
10934:
            PCharArr',
          Function BoldInternetOpen(Agent:String;
10935:
         AccessType:integer;Proxy:string;ProxyByPass:String;Flags:integer):ptr);
10936: Function BoldInternetOpenUrl(iNet:Pointer;URL: string; Headers:String;Flags,Context:cardinal):Pointer 10937: Function BoldInternetReadFile(hFile:Pointer;Buff:Ptr;NumberOfBytesToRead:Card;var
         NumberOfBytesRead:Card):LongBool;
```

```
10938:
          Function BoldInternetCloseHandle( HINet : Pointer) : LongBool
          Function BoldHttpQueryInfo( hRequest : Pointer; InfoLevel : Cardinal; Buffer : Pointer; BufferLength :
10939:
         Cardinal; Reserved : Cardinal) : LongBool
10040 •
          Function BoldInternetQueryDataAvailable( hFile : Pointer; var NumberOfBytesAvailable : Cardinal; flags :
         Cardinal; Context : Cardinal) : LongBool
10941: Function BoldHttpOpenRequest(hConnect: Pointer; Verb, ObjectName, Version, Referrer: String; AcceptTypes : PCharArr; Flags, Context: Cardinal): Pointer
          Function BoldHttpSendRequest(hRequest:Ptr;Headers:string;Optional:Ptr;OptionalLength:Cardinal): LongBool
10942:
10943:
          Function BoldInternetErrorDlg(hWnd:HWND;hRequest:HINTERNET;dwError,dwFlags:DWORD;var lppvData:Ptr):DWORD
10944:
          Function BoldInternetAttemptConnect( dwReserved : DWORD) : DWORD
Function BoldInternetConnect(hInet: HINTERNET;ServerName:string; nServerPort:INTERNET_PORT;
10945:
         Username: string; Password: string; dwService: DWORD; dwFlags: DWORD; dwContext: DWORD): HINTERNET
10946: Function BoldInternetCrackUrl(Url:PChar;UrlLength,dwFlags:DWORD;var lpUrlComponents:TURLComponents):BOOL;
10947: end;
10948:
10949:
        procedure SIRegister_BoldQueryUserDlg(CL: TPSPascalCompiler);
10950:
         begin
           TBoldQueryResult', '( qrYesAll, qrYes, qrNo, qrNoAll )
10051 .
           SIRegister_TfrmBoldQueryUser(CL);
10952:
10953:
          Function OueryUser( const Title, Ouery : string) : TBoldOueryResult
10954: end
10955:
10956: /*---
10957: procedure SIRegister BoldOueue(CL: TPSPascalCompiler);
10958: begin
10959:
         //('befIsInDisplayList','').SetString( BoldElementFlag0);
10960:
          //('befStronglyDependedOfPrioritized','').SetString( BoldElementFlag1);
          //('befFollowerSelected','').SetString( BoldElementFlag2);
10961:
           FindClass('TOBJECT'),'TBoldQueue
FindClass('TOBJECT'),'TBoldQueueable
10962:
10963:
10964:
            TBoldQueueDisplayMode', '( dmDisplayOne, dmDisplayAll )
            SIRegister_TBoldQueueable(CL);
10965:
10966:
           SIRegister TBoldOueue(CL);
10967:
          Function BoldQueueFinalized : Boolean
          Function BoldInstalledQueue : TBoldQueue
10968:
10969: end;
10970:
10971: procedure SIRegister Barcode(CL: TPSPascalCompiler);
10972:
         begin
10973:
          const mmPerInch','Extended').setExtended( 25.4);
           TBarcodeType', '( bcCode_2_5_interleaved, bcCode_2_5_industrial,'
+' bcCode_2_5_matrix, bcCode39, bcCode39Extended, bcCode128A, bcCode128B, bc'
+'Code128C, bcCode93, bcCode93Extended, bcCodeMSI, bcCodePostNet, bcCodeCoda'
10974:
10975:
10976:
             +'bar, bcCodeEAN8, bcCodeEAN13, bcCodeUPC_A, bcCodeUPC_E0, bcCodeUPC_E1, bcC'
10977:
10978:
             + \verb|'odeUPC_Supp2|, bcCodeUPC_Supp5|, bcCodeEAN128A|, bcCodeEAN128B|, bcCodeEAN128C|
           TBarLineType', '( white, black, black_half )
TBarcodeOption', '( bcoNone, bcoCode, bcoTyp, bcoBoth )
10979:
10980:
            TShowTextPosition', '( stpTopLeft, stpTopRight, stpTopCenter, st'
           +'pBottomLeft, stpBottomRight, stpBottomCe
TCheckSumMethod', '( csmNone, csmModulo10 )
10982:
                                                                 mCenter )
10983:
10984:
           SIRegister TAsBarcode(CL);
10985:
          Function CheckSumModulo10( const data : string) : string
          Function ConvertMmToPixelsX( const Value : Double) : Integer
10986:
10987:
          Function ConvertMmToPixelsY( const Value : Double) : Integer
10988:
          Function ConvertInchToPixelsX( const Value : Double) : Integer
Function ConvertInchToPixelsY( const Value : Double) : Integer
10989:
10990:
10991:
10992:
         procedure SIRegister_Geometry(CL: TPSPascalCompiler); //OpenGL
10993:
        begin
           THomogeneousByteVector', 'array[0..3] of Byte THomogeneousWordVector', 'array[0..3] of Word THomogeneousIntVector', 'array[0..3] of Integer
10994:
10995:
10996:
10997:
            ThomogeneousFltVector', 'array[0..3] of single
10998:
            THomogeneousDblVector', 'array[0..3] of double
            THomogeneousExtVector'
                                           'array[0..3] of extended
10999:
           TAffineByteVector', 'array[0..2] of Byte
TAffineWordVector', 'array[0..2] of Word
TAffineIntVector', 'array[0..2] of Integer
TAffineFltVector', 'array[0..2] of single
TAffineDblVector', 'array[0..2] of double
11000:
11001:
11002:
11003:
11004:
11005:
            TAffineExtVector', 'array[0..2] of extended
           ThomogeneousByteMatrix', 'array[0..3] of ThomogeneousByteVector ThomogeneousWordMatrix', 'array[0..3] of ThomogeneousWordVector ThomogeneousIntMatrix', 'array[0..3] of ThomogeneousIntVector ThomogeneousFltMatrix', 'array[0..3] of ThomogeneousFltVector
11006:
11007:
11008:
11009:
           THomogeneousDblMatrix', 'array[0..3] of THomogeneousDblVector THomogeneousExtMatrix', 'array[0..3] of THomogeneousExtVector
11010:
11011:
            TAffineByteMatrix', 'array[0..2] of TAffineByteVector TAffineWordMatrix', 'array[0..2] of TAffineWordVector TAffineIntMatrix', 'array[0..2] of TAffineIntVector
11012:
11013:
11014:
           TAffineFltMatrix', 'array[0..3] of TAffineFltVector
11015:
11016:
            TAffineDblMatrix',
                                    'array[0..3] of TAffineDblVector
                                    'array[0..3] of TAffineExtVector
11017:
            TAffineExtMatrix',
            TMatrix4b', 'THomogeneousByteMatrix
11018:
                           THomogeneousWordMatrix
11019:
            TMatrix4w',
           TMatrix4i', 'THomogeneousIntMatrix
TMatrix4f', 'THomogeneousFltMatrix
TMatrix4d', 'THomogeneousDblMatrix
11020:
11021:
```

```
11023:
             TMatrix4e', 'THomogeneousExtMatrix
             TMatrix3b', 'TAffineByteMatrix
11024:
              TMatrix3w', 'TAffineWordMatrix
11025:
                                'TAffineIntMatrix
11026
             TMatrix3i',
             TMatrix3f', 'TAffineFltMatrix
11027:
              TMatrix3d', 'TAffineDblMatrix
11028:
             TMatrix3e', 'TAffineExtMatrix
11029:
             //'PMatrix', '^TMatrix // will not work
TMatrixGL', 'THomogeneousFltMatrix
11030:
11031:
11032:
             THomogeneousMatrix', 'THomogeneousFltMatrix
             TAffineMatrix', 'TAffineFltMatrix
TQuaternion', 'record Vector : TVector4f; end
11033:
11035:
             TRectangle',
                                 'record Left : integer; Top : integer; Width : inte'
             +'ger; Height : Integer; end
TTransType', '( ttScaleX, ttScaleY, ttScaleZ, ttShearXY, ttShear
11036:
11037:
11038:
              +'XZ, ttShearYZ, ttRotateX, ttRotateY, ttRotateZ, ttTranslateX, ttTranslateY'
               +', ttTranslateZ, ttPerspectiveX, ttPerspectiveY, ttPerspectiveZ, ttPerspectiveW )
11039:
            'EPSILON','Extended').setExtended( 1E-100);
'EPSILON2','Extended').setExtended( 1E-50);
11040 •
11041:
           Function VectorAddGL( V1, V2 : TVectorGL) : TVectorGL
Function VectorAffineAdd( V1, V2 : TAffineVector) : TAffineVector
11042:
11043:
11044:
            \textbf{Function} \ \ \text{VectorAffineCombine} (\ \text{V1,V2:TAffineVector}; \ \ \text{F1, F2} : \ \ \text{Single}) : \ \ \text{TAffineVector} 
           Function VectorAffineDotProduct( V1, V2 : TAffineVector) : Single
Function VectorAffineLerp( V1, V2 : TAffineVector; t : Single) : TAffineVector
Function VectorAffineSubtract( V1, V2 : TAffineVector) : TAffineVector
11045:
11046:
11047:
11048:
            Function VectorAngle( V1, V2 : TAffineVector) : Single
           Function VectorCombine( V1, V2 : TVectorGL; F1, F2 : Single) : TVectorGL

Function VectorCrossProduct( V1, V2 : TAffineVector) : TAffineVector

Function VectorDotProduct( V1, V2 : TVectorGL) : Single

Function VectorLength( V : array of Single) : Single
11049:
11050:
11051:
11052:
11053:
           Function VectorLerp( V1, V2 : TVectorGL; t : Single) : TVectorGL
           Procedure VectorNegate( V : array of Single)
Function VectorNorm( V : array of Single) : Single
11054:
11055:
           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)
11056:
11057:
11058:
11059:
           Procedure VectorScale( V : array of Single; Factor : Single)
11060:
           Function VectorSubtractGL( V1, V2 : TVectorGL) : TVectorGL
Function CreateRotationMatrixX( Sine, Cosine : Single) : TMatrixGL
11061:
11062:
11063:
           \textbf{Function} \  \, \texttt{CreateRotationMatrixY}( \  \, \texttt{Sine} \,, \, \, \texttt{Cosine} \, : \, \texttt{Single}) \, : \, \texttt{TMatrixGL}
           Function CreateRotationMatrixZ( Sine, Cosine : Single) : TMatrixGL
Function CreateRotationMatrixZ( Sine, Cosine : Single) : TMatrixGL
Function CreateRotationMatrix( V : TAffineVector) : TMatrixGL
11064:
11065:
            Function CreateTranslationMatrix( V : TVectorGL) : TMatrixGL
11066:
11067:
            Procedure MatrixAdjoint( var M : TMatrixGL)
           Function MatrixAffineDeterminant( M : TAffineMatrix) : Single
11068:
           Procedure MatrixAffineTranspose( var M : TAffineMatrix)
11069:
            Function MatrixDeterminant( M : TMatrixGL) : Single
           Procedure MatrixInvert( var M : TMatrixGL)
Function MatrixMultiply( M1, M2 : TMatrixGL) : TMatrixGL
11071:
11072:
11073:
           Procedure MatrixScale( var M : TMatrixGL; Factor : Single)
11074:
            Procedure MatrixTranspose( var M : TMatrixGL)
11075:
            Function QuaternionConjugate( Q : TQuaternion) : TQuaternion
           Function QuaternionFromPoints( V1, V2 : TAffineVector) : TQuaternion
11076:
           Function QuaternionMultiply( qL, qR : TQuaternion) : TQuaternion
Function QuaternionSlerp( QStart,QEnd:TQuaternion; Spin:Integer; t:Single):TQuaternion
11077:
11078:
11079:
            Function QuaternionToMatrix( Q : TQuaternion) : TMatrixGL
           Procedure QuaternionToPoints( Q : TQuaternion; var ArcFrom, ArcTo : TAffineVector)
11080:
11081:
           \textbf{Function} \  \, \texttt{ConvertRotation}(\  \, \texttt{Angles} \  \, : \  \, \texttt{TAffineVector}) \  \, : \  \, \texttt{TVectorGL}
           Function CreateRotationMatrix( Axis : TVector3f; Angle : Single) : TMatrixGL //Function MatrixDecompose( M : TMatrixGL; var Tran : TTransformations) : Boolean Function VectorAffineTransform( V : TAffineVector; M : TAffineMatrix) : TAffineVector
11082:
11083:
11084:
           Function VectorTransform( V : TVector4f; M : TMatrixGL) : TVector4f; Function VectorTransform1( V : TVector3f; M : TMatrixGL) : TVector3f; Function MakeAffineDblVector( V : array of Double) : TAffineDblVector
11085:
11086:
11087:
           Function MakeDblVector( V : array of Double) : THomogeneousDblVector
            Function MakeAffineVector( V : array of Single) : TAffineVector
11089:
11090:
           Function MakeQuaternion( Imag : array of Single; Real : Single) : TQuaternion
11091:
           \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
11092:
11093:
11094:
           \textbf{Function} \ \ \textbf{VectorDblToFlt} ( \ \ \textbf{V} \ : \ \ \textbf{THomogeneousDblVector}) \ : \ \ \textbf{THomogeneousVector} 
11095:
           Function VectorAffineFltToDbl( V : TAffineVector) : TAffineDblVector
           Function VectorFltToDbl( V : TVectorGL) : THomogeneousDblVector
11096:
           Function ArcCosGL( X : Extended) : Extended
Function ArcSinGL( X : Extended) : Extended
11097:
11098:
11099:
           Function ArcTan2GL( Y, X : Extended) : Extended Function CoTanGL( X : Extended) : Extended
11100:
           Function DegToRadGL( Degrees : Extended) : Extended
11101:
            Function RadToDegGL( Radians : Extended) : Extended
11103:
           Procedure SinCosGL( Theta : Extended; var Sin, Cos : Extended)
11104:
           Function TanGL( X : Extended) : Extended
           Function Turn( Matrix : TMatrixGL; Angle : Single) : TMatrixGL;
Function Turn1( Matrix : TMatrixGL; MasterUp : TAffineVector; Angle: Single): TMatrixGL;
Function Pitch( Matrix : TMatrixGL; Angle : Single) : TMatrixGL;
11105:
11106:
11107:
11108: Function Pitchl( Matrix: TMatrixGL; MasterRight: TAffineVector; Angle: Single): TMatrixGL;
11109: Function Roll( Matrix: TMatrixGL; Angle: Single): TMatrixGL;
11110: Function Roll( Matrix: TMatrixGL; MasterDirection: TAffineVector; Angle: Single): TMatrixGL;
111111: end;
```

```
11112:
11113:
11114: procedure SIRegister_JclRegistry(CL: TPSPascalCompiler);
11115:
          Function RegCreateKey( const RootKey : HKEY; const Key, Value : string) : Longint
11116:
          Function RegDeleteEntry( const RootKey : HKEY; const Key, Name : string) : Boolean
Function RegDeleteKeyTree( const RootKey : HKEY; const Key : string) : Boolean
11117:
11118:
          Function RegReadBool( const RootKey : HKEY; const Key, Name : string) : Boolean
11119:
          Function RegReadBoolDef( const RootKey: HKEY; const Key, Name: string; Def: Boolean): Boolean
Function RegReadInteger( const RootKey: HKEY; const Key, Name: string; Def: Boolean): Boolean
Function RegReadInteger( const RootKey: HKEY; const Key, Name: string; Def: Integer)
Function RegReadIntegerDef( const RootKey: HKEY; const Key, Name: string; Def: Integer): Integer
11120:
11121:
11122:
          Function RegReadString( const RootKey: HKEY; const Key, Name: string): string
          Function RegReadStringDef( const RootKey: HKEY; const Key, Name, Def: string): string
Function RegReadDWORD( const RootKey: HKEY; const Key, Name: string): Int64
Function RegReadDWORDDef( const RootKey: HKEY; const Key, Name: string; Def: Int64): Int64
11124:
11125:
11126:
          Procedure RegWriteBool( const RootKey: HKEY; const Key, Name: string; Value: Boolean)
         11128:
11120.
11130:
11131:
11133:
11134:
           AddTypeS('TExecKind', '( ekMachineRun, ekMachineRunOnce, ekUserRun, ekUser' +'RunOnce, ekServiceRun, ekServiceRunOnce)
11135:
11136:
11137:
           AddClassN(FindClass('TOBJECT'),'EJclRegistryError
11138:
          Function UnregisterAutoExec( ExecKind: TExecKind; const Name: string): Boolean
Function RegisterAutoExec( ExecKind: TExecKind; const Name, Cmdline: string): Boolean
Function RegSaveList(const RootKey: HKEY; const Key: string; const ListName: string; const
11139:
11140:
         Items:TStrings):Bool;
11141:
        Function RegLoadList(const RootKey:HKEY;const Key:string;const ListName:string;const
         SaveTo:TStrings):Bool;
11142: Function ReqDelList( const RootKey:HKEY;const Key:string; const ListName:string): Boolean
11143:
11145: procedure SIRegister_JclCOM(CL: TPSPascalCompiler);
11146: begin
        CLSID_StdComponentCategoriesMgr','TGUID').SetString( '{0002E005-0000-0000-C000-00000000046}
11147:
         CATID_SafeForInitializing','TGUID').SetString('\{7DD95802-9882-11CF-9FA9-00AA006C42C4\}\)
CATID_SafeForScripting','TGUID').SetString('\{7DD95801-9882-11CF-9FA9-00AA006C42C4\}\)
icMAX_CATEGORY_DESC_LEN','LongInt').SetInt(128);
11148:
11149:
11150:
          FindClass('TOBJECT'), 'EInvalidParam
Function IsDCOMInstalled : Boolean
11151:
11152:
          Function IsDCOMEnabled : Boolean
11154:
         Function GetDCOMVersion : string
Function GetMDACVersion : string
11155:
          Function MarshalInterThreadInterfaceInVarArray(const iid:TIID;unk:IUnknown;var
11156:
         VarArray:OleVariant):HResult;
          Function MarshalInterProcessInterfaceInStream(const iid:TIID;unk:IUnknown;var stm:IStream):HResult;
11158:
         Function MarshalInterProcessInterfaceInVarArray(const iid:TIID;unk:IUnknown;var
         VarArray:OleVariant):HResult;
          Function MarshalInterMachineInterfaceInStream( const iid:TIID;unk:IUnknown;var stm:IStream):HResult;
11160: Function MarshalInterMachineInterfaceInVarArray(const iid:TIID;unk:IUnknown;var
         VarArray:OleVariant):HResult;
11161:
         Function CreateComponentCategory( const CatID: TGUID; const sDescription: string): HResult Function RegisterCLSIDInCategory( const ClassID: TGUID; const CatID: TGUID): HResult
11162:
          Function UnRegisterCLSIDInCategory( const ClassID : TGUID; const CatID : TGUID) : HResult
          Function ResetIStreamToStart( Stream : IStream) : Boolean
11164:
11165:
          \textbf{Function} \  \, \texttt{SizeOfIStreamContents} ( \  \, \texttt{Stream} \ : \  \, \texttt{IStream}) \  \, : \  \, \texttt{Largeint}
          Function StreamToVariantArray(Stream: TStream): OleVariant;
Function StreamToVariantArrayl(Stream: TStream): OleVariant;
11166:
11167:
          Procedure VariantArrayToStream( VarArray : OleVariant; var Stream : TStream);
11169:
          Procedure VariantArrayToStream1( VarArray : OleVariant; var Stream : IStream);
11170: end;
11171:
        procedure SIRegister_JclUnitConv_mX2(CL: TPSPascalCompiler);
11173:
11174: begin
        Const('CelsiusFreezingPoint','Extended').setExtended( 0.0);
11175:
          FahrenheitFreezingPoint', 'Extended').setExtended( 32.0);
KelvinFreezingPoint', 'Extended').setExtended( 273.15);
11176:
11177:
11178:
          CelsiusAbsoluteZero', 'Extended').setExtended( - 273.15);
          FahrenheitAbsoluteZero','Extended').setExtended( - 459.67);
11179:
          KelvinAbsoluteZero','Extended').setExtended( 0.0);
11180:
          DegPerCycle', 'Extended').setExtended( 360.0);
DegPerGrad', 'Extended').setExtended( 0.9);
11181:
11182:
          DegPerRad','Extended').setExtended( 57.295779513082320876798154814105);
GradPerCycle','Extended').setExtended( 400.0);
11183:
11184:
          GradPerDeg', 'Extended').setExtended( 1.11111111111111111111111111);
11185:
          GradPerRad', 'Extended').setExtended( 63.661977236758134307553505349006);
RadPerCycle', 'Extended').setExtended( 6.283185307179586476925286766559);
11187:
          RadPerDeg', 'Extended').setExtended( 0.017453292519943295769236907684886);
RadPerGrad', 'Extended').setExtended( 0.015707963267948966192313216916398);
11188:
11189:
          11190:
          CyclePerGrad', 'Extended').setExtended( 0.0025);
11191:
          CyclePerRad', 'Extended').setExtended( 0.15915494309189533576888376337251);
11192:
          ArcMinutesPerDeg','Extended').setExtended( 60.0);
11193:
          ArcSecondsPerArcMinute', 'Extended').setExtended( 60.0);
11194:
          Function HowAOneLinerCanBiteYou( const Step, Max : Longint) : Longint
```

```
11196:
        Function MakePercentage( const Step, Max : Longint) : Longint
        Function CelsiusToKelvin( const T : double) : double
11197:
         Function CelsiusToFahrenheit( const T : double) : double
11100.
         Function KelvinToCelsius( const T : double) : double
        Function KelvinToFahrenheit( const T : double) : double
11200:
        Function FahrenheitToCelsius( const T : double) : double
11201:
        Function FahrenheitToKelvin( const T : double) :
                                                                  double
11202:
         Function CycleToDeg( const Cycles : double) : double
11203:
11204:
        Function CycleToGrad( const Cycles : double) : double
        Function CycleToRad( const Cycles : double) : double
Function DegToCycle( const Degrees : double) : double
11205:
11206:
         Function DegToGrad( const Degrees : double) : double
11207:
11208:
        Function DegToRad( const Degrees : double) : double
11209:
        Function GradToCycle( const Grads : double) : double
        Function GradToDeg( const Grads : double) : double
11210:
11211:
        Function GradToRad( const Grads : double) : double
        Function RadToCycle( const Radians : double) : double
11212:
        Function RadToDeg( const Radians : double) : double
Function RadToGrad( const Radians : double) : double
11212:
11214:
        Function DmsToDeg( const D, M : Integer; const S : double) : double
Function DmsToRad( const D, M : Integer; const S : double) : double
11215:
11216:
        Procedure DegToDms( const Degrees : double; out D, M : Integer; out S : double)
11217:
11218:
        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)
11219:
11220:
11221:
         Procedure CartesianToCylinder( const X, Y, Z : double; out R, Phi, Zeta : double)
11222:
         \textbf{Procedure} \ \ \texttt{CartesianToSpheric} ( \ \textbf{const} \ \ \texttt{X}, \ \ \texttt{Y}, \ \ \texttt{Z} \ : \ \texttt{double}; \ \textbf{out} \ \ \texttt{Rho}, \ \ \texttt{Phi}, \ \ \texttt{Theta} \ : \ \ \texttt{double}) 
        11223:
11224:
        Function CmToInch( const Cm : double) : double
11225:
        Function InchToCm( const Inch : double) : double
11226:
        Function FeetToMetre( const Feet : double) : double
Function MetreToFeet( const Metre : double) : double
11227:
11228:
11229:
        Function YardToMetre( const Yard : double) : double
         Function MetreToYard( const Metre : double) : double
11230:
11231:
        Function NmToKm( const Nm : double) : double
11232:
        Function KmToNm( const Km : double) : double
11233:
        Function KmToSm( const Km : double) : double
11234:
        Function SmToKm( const Sm : double) : double
11235:
        Function LitreToGalUs( const Litre : double) : double
11236:
        Function GalUsToLitre( const GalUs : double) : double
        Function GalUsToGalCan( const GalUs : double) : double
11237:
11238:
        Function GalCanToGalUs( const GalCan : double) : double
11239:
        Function GalUsToGalUk( const GalUs : double) : double
11240:
        Function GalUkToGalUs( const GalUk : double) : double
        Function LitreToGalCan( const Litre : double) : double
11241:
        Function GalCanToLitre( const GalCan : double) : double
11242:
11243:
        Function LitreToGalUk( const Litre : double) : double
11244:
        Function GalUkToLitre( const GalUk : double) : double
11245:
        Function KgToLb( const Kg : double) : double
Function LbToKg( const Lb : double) : double
11246:
        Function KgToOz( const Kg : double) : double
11247:
        Function OzToKg( const Oz : double) : double
11248:
        Function CwtUsToKg( const Cwt : double) : double
11249:
        Function CwtUkToKg( const Cwt : double) : double
11250:
11251:
        Function KaratToKg( const Karat : double) : double
11252:
         Function KgToCwtUs( const Kg : double) : double
        Function KgToCwtUk( const Kg : double) : double
11253:
11254:
        Function KgToKarat( const Kg : double) : double
        Function KgToSton( const Kg : double) : double
11255:
        Function KgToLton( const Kg : double) : double
11256:
11257:
        Function StonToKg( const STon : double) : double
11258:
        Function LtonToKg( const Lton : double) : double
11259:
        Function OrUsToKq( const Or : double) : double
        Function QrUkToKg( const Qr : double) : double
11260:
        Function KgToQrUs( const Kg : double) : double
         Function KgToQrUk( const Kg : double) : double
11262:
        Function PascalToBar( const Pa : double) : double
Function PascalToAt( const Pa : double) : double
11263:
11264:
        Function PascalToTorr( const Pa : double) : double
11265:
        Function BarToPascal( const Bar : double) : double
11266:
11267:
        Function AtToPascal( const At : double) : double
11268:
        Function TorrToPascal ( const Torr : double) : double
        Function KnotToMs( const Knot : double) : double
11269:
11270:
        Function HpElectricToWatt( const HpE : double) :
11271:
         Function HpMetricToWatt( const HpM : double) : double
11272:
        Function MsToKnot( const ms : double) : double
        Function WattToHpElectric( const W : double) : double
Function WattToHpMetric( const W : double) : double
11273:
11274:
         function getBigPI: string;
                                           //PI of 1000 numbers
11276:
11277: procedure SIRegister_devcutils(CL: TPSPascalCompiler);
11278: begin
11279:
       Function CDExecuteFile( const FileName, Params, DefaultDir: string; ShowCmd: Integer): THandle
        Procedure CDCopyFile( const FileName, DestName : string)
Procedure CDMoveFile( const FileName, DestName : string)
Procedure CDMoveFile( const FileName, DestName : string)
Function MakeCommaTextToColor( Text : string; Index : Integer; DefaultColor : TColor)
Procedure CDDeleteFiles( Sender : TObject; s : string)
11280:
11281:
11282:
11283:
11284: Function CDGetTempDir : string
```

```
11285:
            Function CDGetFileSize(FileName: string): longint
            Function GetFileTime( FileName : string) : longint
11286:
             Function GetShortName( FileName : string) : string
11287:
11288:
             Function GetFullName(FileName: string): string
11289:
            Function WinReboot : boolean
11290:
            Function WinDir : String
            Function RunFile(FileToRun: string; Params: string; Dir: string; Wait: boolean): cardinal Function RunFile_(Cmd, WorkDir: string; Wait: boolean): Boolean
Function devExecutor: TdevExecutor
11291:
11292:
11293:
11294: end;
11295:
11296: procedure SIRegister_FileAssocs(CL: TPSPascalCompiler);
11297: begin
11298:
           Procedure CheckAssociations // AssociationsCount','LongInt').SetInt( 7);
11299:
            Procedure Associate( Index : integer)
11300:
            Procedure UnAssociate( Index : integer)
            Function IsAssociated( Index : integer) : boolean
11301:
11302:
            Function CheckFiletype( const extension, filetype, description, verb, serverapp : string) : boolean
            Procedure RegisterFiletype( const extension, filetype, description, verb, serverapp, IcoNum: string)
11303:
11304:
            Procedure RegisterDDEServer( const filetype, verb, topic, servername, macro : string)
11305:
            procedure RefreshIcons;
11306: function GetShadeColor(ACanvas: TCanvas; clr: TColor; Value: integer): TColor;
11307: function MergColor(Colors: Array of TColor; TColor; 11308: function NewColor(ACanvas: TCanvas; clr: TColor; Value: integer): TColor;
11309: procedure DimBitmap(ABitmap: TBitmap; Value: integer);
11310: function GrayColor(ACanvas: TCanvas; clr: TColor; Value: integer): TColor;
11311: function GetInverseColor(AColor: TColor): TColor;
11312: procedure GrayBitmap(ABitmap: TBitmap; Value: integer);
11313: procedure DrawBitmapShadow(B: TBitmap; ACanvas: TCanvas; X, Y: integer; ShadowColor: TColor);
11314: procedure DrawCheckMark(ACanvas: TCanvas; X, Y: integer);
11315: Procedure GetSystemMenuFont(Font: TFont);
11316: end;
11317:
11319: function IsStringConstant(const St: string): Boolean;
11320: function IsIntConstant(const St: string): Boolean;
11321: function IsRealConstant(const St: string): Boolean;
11322: function IsIdentifier(const ID: string): Boolean;
11323: function GetStringValue(const St: string): string;
11324: procedure ParseString(const S: string; Ss: TStrings);
11325: function IsStringConstantW(const St: WideString): Boolean;
11326: function IsIntConstantW(const St: WideString): Boolean; 11327: function IsRealConstantW(const St: WideString): Boolean;
11328: function IsIdentifierW(const ID: WideString): Boolean;
11329: function GetStringValueW(const St: WideString): WideString; 11330: procedure ParseStringW(const S: WideString; Ss: TStrings);
11331:
11334:
11335: Function JclSimpleSendMail( const ARecipient, AName, ASubject, ABody: string; const AAttachment:
           TFileName; ShowDialog : Boolean; AParentWND : HWND) : Boolean
11336: Function JclSimpleSendFax( const ARecipient, AName, ASubject, ABody : string; const AAttachment :
TFileName; ShowDialog: Boolean; AParentWND: HWND): Boolean
11337: Function JclSimpleBringUpSendMailDialog(const ASubject,ABody:string;const
           AAttach:TFileName;AParentWND:HWND):Bool
11338: Function MapiCheck( const Res : DWORD; IgnoreUserAbort : Boolean) : DWORD
11339: Function MapiErrorMessage( const ErrorCode : DWORD) : string
11340:
11341: procedure SIRegister_IdNTLM(CL: TPSPascalCompiler);
11342: begin
              //'Pdes_key_schedule', '^des_key_schedule // will not work
11344:
            Function BuildTypelMessage( ADomain, AHost : String) : String
11345: \quad \textbf{Function} \ \ \texttt{BuildType3Message(ADomain,AHost,AUsername:WideString;APassword,ANonce:String):String} : String : Str
11346: Procedure RegisterAuthenticationMethod( MethodName : String; AuthClass : TIdAuthenticationClass)
            Function FindAuthClass( AuthName : String) : TIdAuthenticationClass
11348: GBase64CodeTable','string').SetString('ABCDEFGHIJKLMNOPQRSTUVWXYZabcdefghijklmnopqrstuvwxyz0123456789+/
11349: GXXECodeTable', 'string').SetString('+-0123456789ABCDEFGHIJKLMNOPQRSTUVWXYZabcdefghijklmnopqrstuvwxyz 11350: GUUECodeTable', 'string').SetString('`!"#$\%\''()\*+,-./0123456789:;<=>?@ABCDEFGHIJKLMNOPQRSTUVWXYZ[\]^_
11351:
           end
11352:
11353: procedure SIRegister_WDosSocketUtils(CL: TPSPascalCompiler);
11354: begin
11355: ('IpAny','LongWord').SetUInt( $00000000);
            IpLoopBack', 'LongWord').SetUInt( $7F000001);
IpBroadcast', 'LongWord').SetUInt( $FFFFFFF);
11356:
11357:
            IpNone','LongWord').SetUInt( $FFFFFFFF);
PortAny','LongWord').SetUInt( $0000);
SocketMaxConnections','LongInt').SetInt( 5);
11358:
11359:
11360:
            TIpAddr', 'LongWord
TIpRec', 'record IpB1 : byte; IpB2 : byte; IpB3 : byte; IpB4 : Byte; end
11361:
11362:
            Function HostToNetLong( HostLong : LongWord) : LongWord
11363:
            Function HostToNetShort( HostShort: Word): Word
11364:
11365:
            Function NetToHostLong( NetLong : LongWord) : LongWord
            Function NetToHostShort( NetShort: Word): Word
11366:
11367: Function StrToIp( Ip : string) : TIpAddr
11368: Function IpToStr( Ip : TIpAddr) : string
11369: end;
11370:
```

```
11371: (*----
11372: procedure SIRegister_ALSMTPClient(CL: TPSPascalCompiler);
11373: begin
                TAlSmtpClientAuthType', '( AlsmtpClientAuthNone, alsmtpClientAut'
11374 .
                 +'hPlain, AlsmtpClientAuthLogin, AlsmtpClientAuthCramMD5, AlsmtpClientAuthCr'+'amShal, AlsmtpClientAuthAutoSelect )
11375:
11376:
11377:
                TAlSmtpClientAuthTypeSet', 'set of TAlSmtpClientAuthType
11378:
                SIRegister_TAlSmtpClient(CL);
11379: end;
11380:
11381: procedure SIRegister_WDosPlcUtils(CL: TPSPascalCompiler);
11382: begin
11383: 'TBitNo',
               TStByteNo', 'Integer
StationNo', 'Integer
11384:
11385: TStationNo',
11386: TInOutNo', 'Integer
11387: TIO', '( EE, AA, NE, NA )
11388: TBitSet', 'set of TBitNo
11389: TAddrKind', 'set of ( akBit0, akBit1, akBit2, akOut, akNot, akBus )
11390: TBitAddrRec', 'record Kind : TAddrKind; InOutNo : TInOutNo; ByteNo : Byte; end
11391: TBitAddr', 'LongInt
11392: TByteAddrRec', 'record Kind : TAddrKind; ByteNo : Byte; end
11393: TByteAddr', 'SmallInt
11394: TInOutState', '( iosInit, iosHalt, iosRun, iosError )
11395: Function BitAddr(aIo: TIo; aInOutNo: TInOutNo; aByteNo: Byte; aBitNo: TBitNo): TBitAddr
11396: Function BusBitAddr(aIo:TIo;aInOutNo:TInOutNo;aStat:TStatNo;aStByteNo:TStByteNo;aBitNo:TBitNo):TBitAddr;
11397: Procedure BitAddrToValues(aBitAddr:TBitAdr;var aIo:TIo;var aInOutNo:TInOutNo;var aByteNo:Byte;var
            aBitNo:TBitNo);
11398: Function BitAddrToStr( Value : TBitAddr) : string
11399: Function StrToBitAddr( const Value : string) : TBitAddr
11400:
              Function ByteAddr( alo : Tlo; alnOutNo : TlnOutNo; aByteNo : Byte) : TByteAddr
11401:
              \textbf{Function} \ \ \texttt{BusByteAddr} (\texttt{aIo:TIo}; \texttt{aInOutNo:TInOutNo}; \texttt{aStation:TStationNo}; \texttt{aStByteNo:} \ \ \texttt{TStByteNo}) : \texttt{TByteAddr} (\texttt{aIo:TIo}; \texttt{aInOutNo}; \texttt{aStation:TStationNo}; \texttt{aStByteNo:} \ \ \texttt{TStByteNo}) : \texttt{TByteAddr} (\texttt{aIo:TIo}; \texttt{aInOutNo}; \texttt{aStByteNo}) : \texttt{TStByteNo}) : \texttt{TStByteNo}) : \texttt{TByteAddr} (\texttt{aIo:TIo}; \texttt{aInOutNo}; \texttt{aStByteNo}) : \texttt{TStByteNo}) : \texttt{TByteAddr} (\texttt{aIo:TIo}; \texttt{aInOutNo}; \texttt{aStByteNo}) : \texttt{TStByteNo}) : \texttt{TByteAddr} (\texttt{aIo:TIo}; \texttt{aInOutNo}; \texttt{aStByteNo}) : \texttt{TStByteNo}) : \texttt{TByteAddr} (\texttt{aIo:TIo}; \texttt{aIo:TIo}; 
              Procedure ByteAddrToValues(aByteAddr:TByteAddr;var aIo:TIo;var aInOutNo:TInOutNo;var aByteNo:Byte)
11402:
              Function ByteAddrToStr( Value : TByteAddr) : string
Function StrToByteAddr( const Value : string) : TByteAddr
11403:
11404:
11405:
              Procedure IncByteAddr( var ByteAddr: TByteAddr: Increment: Integer)
              Procedure DecByteAddr( var ByteAddr : TByteAddr; Decrement : Integer)
11406:
              Function InOutStateToStr( State : TInOutState) : string
11407:
              Function MasterErrorToStr( ErrorCode : TErrorCode): string
Function SlaveErrorToStr( ErrorCode : TErrorCode): string
11408:
11409:
11410: end;
11411:
11412: procedure SIRegister_WDosTimers(CL: TPSPascalCompiler);
11413: begin
11414: TIntFreq', '( ifNone, if32768, if16384, if8192, if4096, if2048, '
11415: +'if1024, if512, if256, if128, if64, if32, if16, if8, if4, if2 )
11416: DpmipmVector', 'Int64
11417: 'DInterval', 'LongInt').SetInt( 1000);
              //'DEnabled','Boolean')BoolToStr( True);
'DIntFreq','string').SetString(' if64
11418:
11419:
11420:
             //'DMessages','Boolean').SetString( if64);
                SIRegister_TwdxCustomTimer(CL);
11421:
                 SIRegister_TwdxTimer(CL);
11422:
11423:
                SIRegister_TwdxRtcTimer(CL);
11424:
                SIRegister_TCustomIntTimer(CL);
11425:
                SIRegister TIntTimer(CL);
11426:
                SIRegister_TRtcIntTimer(CL);
              Function RealNow : TDateTime
11427:
11428:
              \textbf{Function} \  \, \texttt{MsToDateTime(MilliSecond:LongInt):TDateTime}
              Function DateTimeToMs( Time : TDateTime) : LongInt
11429:
11430:
            end
11431:
11432: procedure SIRegister_IdSysLogMessage(CL: TPSPascalCompiler);
11433: begin
            TIdSyslogPRI',
                                        'Integer
11434:
11435: TIdSyslogFacility', '( sfKernel, sfUserLevel, sfMailSystem, sfSy
                  +'stemDaemon, sfSecurityOne, sfSysLogInternal, sfLPR, sfNNTP, sfUUCP, sfCloc'
11436:
                  +'kDaemonOne, sfSecurityTwo, sfFTPDaemon, sfNTP, sfLogAudit, sfLogAlert, sfC'
11437:
11438:
                  +'lockDaemonTwo, sfLocalUseZero, sfLocalUseOne, sfLocalUseTwo, sfLocalUseThr'
11439: +'ee, sfLocalUseFour, sfLocalUseFive, sfLocalUseSix, sfLocalUseSeven )
11440: TIdSyslogSeverity','(slEmergency,slAlert,slCritical,slError,slWarning,slNotice,slInformational,slDebug)
11441:
               SIRegister_TIdSysLogMsgPart(CL);
11442:
                SIRegister_TIdSysLogMessage(CL);
              Function FacilityToString( AFac : TIdSyslogFacility) : string
11443:
              Function SeverityToString( ASec : TIdsyslogSeverity) : string
11444:
11445:
              Function NoToSeverity( ASev : Word) : TIdSyslogSeverity
11446:
              Function logSeverityToNo( ASev : TIdSyslogSeverity) : Word
              Function NoToFacility( AFac : Word) : TIdSyslogFacility
11447:
              Function logFacilityToNo( AFac : TIdSyslogFacility) : Word
11448:
11449: end;
11450:
11451: procedure SIRegister TextUtils(CL: TPSPascalCompiler);
11452: begin
11453:
               'UWhitespace', 'String').SetString( '(?:\s*)
              Function StripSpaces( const AText : string) : string
11455:
              Function CharCount( const AText : string; Ch : Char) : Integer
11456: Function BalancedText( const AText: string; const Ch1, Ch2: Char; const Count: Integer): string
11457: Function BalancedTextReg( const AText:string; const Ch1, Ch2: Char; const Count: Integer): string
```

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11459:
11460:
11461: procedure SIRegister ExtPascalUtils(CL: TPSPascalCompiler);
11462:
                      ExtPascalVersion','String').SetString( '0.9.8
11463:
                         AddTypeS('TBrowser', '( brUnknown, brIE, brFirefox, brChrome, brSafari, br' +'Opera, brKonqueror, brMobileSafari)
11464:
11465:
                          AddTypeS('TCSSUnit',
                                                                                      '( cssPX, cssPerc, cssEM, cssEX, cssIN, cssCM, cssMM, cssPT, cssPC, cssnone )
 11466:
                      AddTypeS('TExtProcedure', 'Procedure

Function DetermineBrowser( const UserAgentStr : string) : TBrowser
11467:
11468:
                      Function ExtExtract(const Delims:array of string;var S:string;var Matches:TStringList;Remove:bool):bool;
 11469:
                       Function ExtExplode( Delim : char; const S : string; Separator : char) : TStringList
 11470:
 11471:
                       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
11472:
11473:
 11474:
                       Function StrToJS( const S : string; UseBR : boolean) : string
                      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
 11475:
 11476:
11477:
                      Function SetPaddings(Top:integer;Right:int;Bottom:intr;Left:integer;CSSUnit:TCSSUnit;Header:bool):string;
11478:
 11479:
                       Function SetMargins(Top:integer;Right:int;Bottom:int;Left:integer;CSSUnit:TCSSUnit;Header:bool): string;
11480:
                      Function ExtBefore( const BeforeS, AfterS, S : string) : boolean
11481:
                      Function IsUpperCase( S : string) : boolean
                      Function BeautifyJS(const AScript:string;const StartingLevel:integer;SplitHTMLNewLine: boolean):string;
 11482:
                      Function BeautifyCSS( const AStyle : string) : string
Function LengthRegExp( Rex : string; CountAll : Boolean) : integer
11483:
11484:
11485:
                      Function JSDateToDateTime( JSDate : string) : TDateTime
11486: end;
 11487:
 11488: procedure SIRegister_JclShell(CL: TPSPascalCompiler);
11489: begin
                         TSHDeleteOption', '( doSilent, doAllowUndo, doFilesOnly )
TSHDeleteOptions', 'set of TSHDeleteOption
TSHRenameOption', '( roSilent, roRenameOnCollision )
TSHRenameOptions', 'set of TSHRenameOption
11490:
11491:
11492:
 11493:
11494:
                      Function SHDeleteFiles( Parent : HWND; const Files : string; Options : TSHDeleteOptions) : Boolean
                      Function SHDeleteFolder( Parent : HWND; const Folder : string; Options : TSHDeleteOptions) : Boolean Function SHRenameFile( const Src, Dest : string; Options : TSHRenameOptions) : Boolean
11495:
11496:
                         TEnumFolderFlag', '( efFolders, efNonFolders, efIncludeHidden )
TEnumFolderFlags', 'set of TEnumFolderFlag
 11497:
 11498:
                         TEnumFolderRec', 'record DisplayName : string; Attributes : DWOR'
+'D; IconLarge : HICON; IconSmall : HICON; Item : PItemIdList; EnumIdList : '
+'IEnumIdList; Folder : IShellFolder; end
11499:
11500:
 11501:
                       \textbf{Function} \ \ \texttt{SHEnumFolderFirst} \\ (\textbf{const} \ \ \texttt{Folder:string:} \\ \texttt{Flags:TEnumFolderFlags:var} \\ \ \ \texttt{F:TEnumFolderRec):Boolean:} \\ \textbf{Folder:string:} \\ \textbf{Folder:string:} \\ \textbf{Folder:string:} \\ \textbf{Folder:string:} \\ \textbf{Folder:string:} \\ \textbf{Folder:string:} \\ \textbf{Folder:string:string:string:string:string:string:string:string:string:string:string:string:string:string:string:string:string:string:string:string:string:string:string:string:string:string:string:string:string:string:string:string:string:string:string:string:string:string:string:string:string:string:string:string:string:string:string:string:string:string:string:string:string:string:string:string:string:string:string:string:string:string:string:string:string:string:string:string:string:string:string:string:string:string:string:string:string:string:string:string:string:string:string:string:string:string:string:string:string:string:string:string:string:string:string:string:string:string:string:string:string:string:string:string:string:string:string:string:string:string:string:string:string:string:string:string:string:string:string:string:string:string:string:string:string:string:string:string:string:string:string:string:string:string:string:string:string:string:string:string:string:string:string:string:string:string:string:string:string:string:string:string:string:string:string:string:string:string:string:string:string:string:string:string:string:string:string:string:string:string:string:string:string:string:string:string:string:string:string:string:string:string:string:string:string:string:string:string:string:string:string:string:string:string:string:string:string:string:string:string:string:string:string:string:string:string:string:string:string:string:string:string:string:string:string:string:string:string:string:string:string:string:string:string:string:string:string:string:string:string:string:string:string:string:string:string:string:string:string:string:string:string:string:string:string:string:string:string:string:string:string:string:string:str
11502:
11503:
                       \textbf{Function} \ \ \texttt{SHEnumSpecialFolderFirst} (SpecialFolder: DWORD; Flags: \texttt{TEnumFolderFlags}; \textbf{var} \ \ F: \texttt{TEnumFolderRec}) : \texttt{Bool}; \\ \textbf{Supplementation} (SpecialFolder: \texttt{Supplementation}) : \texttt{Supplementation} (Sp
                      11504:
11505:
                       Function GetSpecialFolderLocation( const Folder : Integer) : string
 11506:
 11507:
                       Function DisplayPropDialog( const Handle : HWND; const FileName : string) : Boolean;
                      Function DisplayPropDialog1( const Handle : HWND; const Item : PItemIdList) : Boolean;
Function DisplayContextMenu( const Handle : HWND; const FileName : string; Pos : TPoint) : Boolean
11508:
11509:
                       Function OpenFolder( const Path : string; Parent : HWND) : Boolean
11510:
                       Function OpenSpecialFolder( FolderID : Integer; Parent : HWND) : Boolean
 11511:
                      Function SHReallocMem( var P : Pointer; Count : Integer) : Boolean
Function SHAllocMem( out P : Pointer; Count : Integer) : Boolean
Function SHGetMem( var P : Pointer; Count : Integer) : Boolean
11512:
11513:
11514:
                       Function SHFreeMem( var P : Pointer) : Boolean
11515:
                      Function DriveToPidlBind( const DriveName : string; out Folder : IShellFolder) : PItemIdList
11516:
                      Function PathToPidl( const Path : string; Folder : IShellFolder) : PItemIdList
Function PathToPidlBind( const FileName : string; out Folder : IShellFolder) : PItemIdList
11517:
11518:
                       Function PidlBindToParent(const IdList:PItemIdList;out Folder:IShellFolder;out Last:PItemIdList):Bool;
11519:
                       Function PidlCompare( const Pidl1, Pidl2 : PItemIdList) : Boolean
11521:
                      \textbf{Function} \ \texttt{PidlCopy}( \ \textbf{const} \ \texttt{Source} \ : \ \texttt{PItemIdList}; \ \textbf{out} \ \texttt{Dest} \ : \ \texttt{PItemIdList}) \ : \ \texttt{Boolean}
11522:
                      Function PidlFree( var IdList : PItemIdList) : Boolean
                      Function PidlGetDepth( const Pidl: PItemIdList): Integer Function PidlGetLength( const Pidl: PItemIdList): Integer
11523:
                       Function PidlGetNext( const Pidl : PItemIdList) : PItemIdList
 11525:
                      Function PidlToPath( IdList : PItemIdList) : string
Function StrRetFreeMem( StrRet : TStrRet) : Boolean
Function StrRetToString( IdList : PItemIdList; StrRet : TStrRet; Free : Boolean) : string
11526:
11527:
 11528:
                          PShellLink', '^TShellLink // will not work
11529:
11530:
                         TShellLink', 'record Arguments : string; ShowCmd : Integer; Work'
11531:
                            +'ingDirectory : string; IdList : PItemIDList; Target : string; Description ' +': string; IconLocation : string; IconIndex : Integer; HotKey : Word; end
11532:
 11533:
                      Procedure ShellLinkFree( var Link : TShellLink)
11534:
                       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;
11535:
11536:
11537:
                      Function ShellLinkGetIcon( const Link : TShellLink; const Icon : TIcon) : Boolean
                       Function SHDllGetVersion( const FileName : string; var Version : TDllVersionInfo) : Boolean
11539:
                       Function GetSystemIcon( IconIndex : Integer; Flags : Cardinal) : HICON
                      Function OverlayIcon( var Icon: HICON; Overlay: HICON; Large: Boolean): Boolean
Function OverlayIconShortCut( var Large, Small: HICON): Boolean
Function OverlayIconShared( var Large, Small: HICON): Boolean
11540:
11541:
11542:
                       Function SHGetItemInfoTip( const Folder : IShellFolder; Item : PItemIdList) : string
11544:
                      \textbf{Function} \ \ \textbf{ShellExecEx} \ (\textbf{const} \ \ \textbf{FileName:string}; \textbf{const} \ \ \textbf{Parameters:string}; \textbf{const} \ \ \textbf{Verb:string}; \ \ \textbf{CmdShow:Int}) : \textbf{Bool}; \\ \textbf{Bool}; \textbf{bool};
                      Function ShellExec(Wnd: Integer;const Operation,FileName,Parameters,Directy:string;ShowCommand:Int):Bool;
Function ShellExecAndWait(const FileName:string;const Paramets:string;const Verb:string;CmdShow:Int):Bool;
11545:
 11546:
11547: Function ShellOpenAs( const FileName : string) : Boolean
```

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11548:
          Function ShellRasDial( const EntryName : string) : Boolean
          Function ShellRunControlPanel( const NameOrFileName:string; AppletNumber:Integer):Boolean
11549:
          Function GetFileNameIcon( const FileName : string; Flags : Cardinal) : HICON
11551:
           TJclFileExeType', '( etError, etMsDos, etWin16, etWin32Gui, etWin32Con )
11552:
          Function GetFileExeType( const FileName : TFileName) : TJclFileExeType
          Function ShellFindExecutable( const FileName, DefaultDir: string): string
Procedure keybd_event( bVk : Byte; bScan : Byte; dwFlags, dwExtraInfo : DWORD)
11553:
11554:
          Function OemKeyScan( wOemChar : Word) : DWORD
11555:
11556:
          Procedure mouse_event( dwFlags, dx, dy, dwData, dwExtraInfo : DWORD)
11557:
         end;
11558:
11559:
         procedure SIRegister_cXMLFunctions(CL: TPSPascalCompiler);
11560: begin
          xmlVersion','String').SetString( '1.0 FindClass('TOBJECT'),'Exml
11561:
11562:
           //Function xmlValidChar( const Ch : AnsiChar) : Boolean;
11563:
          Function xmlValidChar1( const Ch : UCS4Char) : Boolean;
          Function xmlValidChar2( const Ch : WideChar) : Boolean
11564:
          Function xmlIsSpaceChar( const Ch: WideChar): Boolean
Function xmlIsLetter( const Ch: WideChar): Boolean
Function xmlIsDigit( const Ch: WideChar): Boolean
11565:
11566:
11567:
11568:
           Function xmlIsNameStartChar( const Ch : WideChar) :
11569:
          Function xmlIsNameChar( const Ch : WideChar) : Boolean
          Function xmlIsPubidChar( const Ch : WideChar) : Boolean
Function xmlValidName( const Text : UnicodeString) : Boolean
11570:
11571:
          //xmlSpace','Char').SetString( #$20 or #$9 or #$D or #$A);
//Function xmlSkipSpace( var P : PWideChar) : Boolean
11572:
11573:
11574:
          //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)
11575:
11576:
         : TUnicodeCodecClass
11577:
          Function xmlResolveEntityReference( const RefName : UnicodeString) : WideChar
11578:
          \textbf{Function} \ \texttt{xmlTag}(\ \textbf{const} \ \texttt{Tag} \ : \ \texttt{UnicodeString}) \ : \ \texttt{UnicodeString}
11579:
          Function xmlEndTag( const Tag : UnicodeString) : UnicodeString
11580:
          Function xmlAttrTag( const Tag : UnicodeString; const Attr : UnicodeString) : UnicodeString
          Function xmlEmptyTag( const Tag, Attr : UnicodeString) : UnicodeString

Procedure xmlSafeTextInPlace( var Txt : UnicodeString)
11581:
11582:
          Function xmlSafeText( const Txt : UnicodeString) : UnicodeString
Function xmlSpaceIndent( const IndentLength : Integer; const IndentLevel : Integer):UnicodeString
11583:
11584:
          Function xmlTabIndent( const IndentLevel: Integer): UnicodeString
Function xmlComment( const Comment: UnicodeString): UnicodeString
11585:
11586:
11587:
          Procedure SelfTestcXMLFunctions
11588: end;
11589:
11590:
11591:
         procedure SIRegister_DepWalkUtils(CL: TPSPascalCompiler);
11592: begin
11593:
          Function AWaitCursor : IUnknown
          Function ChangeCursor( NewCursor : TCursor) : IUnknown
11594:
11595:
          Procedure SuspendRedraw( AControl : TWinControl; Suspend : boolean)
          Function YesNo( const ACaption, AMsg: string) : boolean

Procedure strTokenize( const S: string; Delims: TSysCharSet; Results: TStrings)
11596:
11597:
          Function GetExpandedLibPath( Version : integer; ForDelphi : boolean) : string
Function GetExpandedLibRoot( Version : integer; ForDelphi : boolean) : string
11598:
11599:
11600:
          Procedure GetPathList( Version : integer; ForDelphi : boolean; Strings : TStrings)
          Procedure GetSystemPaths( Strings : TStrings)
Procedure MakeEditNumeric( EditHandle : integer)
11601:
11602:
11603:
11604:
11605:
         procedure SIRegister_yuvconverts(CL: TPSPascalCompiler);
11606: begin
11607:
           AddTypeS('TVideoCodec','(vcUnknown,vcRGB,vcYUY2,vcUYVY,vcBTYUV,vcYV,U9,vcYUV12,vcY8,vcY211)
           'BI_YUY2','LongWord').SetUInt( $32595559);
11609:
          'BI_UYVY','LongWord').SetUInt( $59565955);
          'BI_BTYUV','LongWord').SetUInt( $50313459);
'BI_YVU9','LongWord').SetUInt( $39555659);
'BI_YUV12','LongWord').SetUInt( $30323449);
11610:
11611:
11612:
          'BI_Y8','LongWord').SetUInt( $20203859);
'BI_Y211','LongWord').SetUInt( $31313259);
11613:
11614:
          Function BICompressionToVideoCodec( Value : DWord) : TVideoCodec
11615:
11616:
          Function ConvertCodecToRGB(Codec:TVideoCodec;Src,Dst:Pointer;AWidth,AHeight:Integer):Boolean;
11617:
11618:
11619:
11620: procedure SIRegister_AviCap(CL: TPSPascalCompiler);
11621: begin
          'WM_USER', 'LongWord').SetUInt( $0400);
11622:
          'WM_CAP_START','LongWord').SetUint($0400);
'WM_CAP_END','longword').SetUint($0400+85);
11623:
11624:
          //WM_CAP_START+ 85
11625:
          /// WM_CAP_SET_CALLBACK_CAPCONTROL = (WM_CAP_START+ 85);
Function capSetCallbackOnError( hwnd : THandle; fpProc : LongInt) : LongInt
11626:
11627:
          Function capSetCallbackOnStatus( hwnd : THandle; fpProc : LongInt) : LongInt
11628:
          Function capSetCallbackOnYield( hwnd : THandle; fpProc : LongInt) : LongInt
Function capSetCallbackOnFrame( hwnd : THandle; fpProc : LongInt) : LongInt
11629:
11630:
          Function capSetCallbackOnVideoStream( hwnd : THandle; fpProc : LongInt) : LongInt
Function capSetCallbackOnWaveStream( hwnd : THandle; fpProc : LongInt) : LongInt
Function capSetCallbackOnCapControl( hwnd : THandle; fpProc : LongInt) : LongInt
11632:
11633:
11634:
          Function capSetUserData( hwnd : THandle; lUser : LongInt) : LongInt
11635: Function capGetUserData( hwnd : THandle) : LongInt
```

```
11636:
           Function capDriverConnect( hwnd : THandle; I : Word) : LongInt
           Function capDriverDisconnect( hwnd : THandle) : LongInt
11637:
           Function capDriverGetName( hwnd : THandle; szName : LongInt; wSize : Word)
           Function capDriverGetVersion( hwnd : THandle; szVer : LongInt; wSize : Word) : LongInt
Function capDriverGetCaps( hwnd : THandle; s : LongInt; wSize : Word) : LongInt
11639:
11640:
           Function capFileSetCaptureFile( hwnd : THandle; szName : LongInt) : LongInt
Function capFileGetCaptureFile( hwnd : THandle; szName : LongInt; wSize : Word):LongInt
11641:
11642:
           Function capFileAlloc( hwnd: THandle; dwSize: LongInt): LongInt
Function capFileSaveAs( hwnd: THandle; szName: LongInt): LongInt
11643:
11644:
11645:
           \textbf{Function} \ \texttt{capFileSetInfoChunk( hwnd : THandle; lpInfoChunk : LongInt) : LongInt}
           Function capFileSaveDIB( hwnd : THandle; szName : LongInt) : LongInt
11646:
           Function capEditCopy( hwnd : THandle) : LongInt
11647:
           Function capSetAudioFormat( hwnd : THandle; s : LongInt; wSize : Word) : LongInt
Function capGetAudioFormat( hwnd : THandle; s : LongInt; wSize : Word) : LongInt
Function capGetAudioFormatSize( hwnd : THandle) : LongInt
11648:
11649:
11650:
11651:
           Function capDlgVideoFormat( hwnd : THandle) : LongInt
           Function capDlgVideoSource( hwnd : THandle) : LongInt
11652:
11653:
           Function capDlgVideoDisplay( hwnd : THandle) : LongInt
           Function capDlgVideoCompression( hwnd : THandle) : LongInt
11654:
           Function capGetVideoFormat( hwnd : THandle; s : LongInt; wSize : Word) : LongInt
11655:
           Function capGetVideoFormatSize( hwnd : THandle) : LongInt
11657:
           Function capSetVideoFormat( hwnd : THandle; s : LongInt; wSize : Word) : LongInt
           Function capPreview( hwnd : THandle; f : Word) : LongInt
Function capPreviewRate( hwnd : THandle; wMS : Word) : LongInt
11658:
11659:
           Function capOverlay( hwnd : THandle; f : Word) : LongInt
11660:
11661:
           Function capPreviewScale( hwnd : THandle; f : Word) : LongInt
11662:
           Function capGetStatus( hwnd: THandle; s: LongInt; wSize: Word): LongInt
Function capSetScrollPos( hwnd: THandle; lpP: LongInt): LongInt
Function capGrabFrame( hwnd: THandle): LongInt
11663:
11664:
           Function capGrabFrameNoStop( hwnd : THandle) : LongInt
11665:
11666:
           Function capCaptureSequence( hwnd : THandle) : LongInt
           Function capCaptureSequenceNoFile( hwnd : THandle) : LongInt Function capCaptureStop( hwnd : THandle) : LongInt
11667:
11668:
           Function capCaptureAbort( hwnd : THandle) : LongInt
11669:
           Function capCaptureSingleFrameOpen( hwnd : THandle) : LongInt
11670:
11671:
           Function capCaptureSingleFrameClose( hwnd : THandle) : LongInt
           Function capCaptureSingleFrame( hwnd : THandle) : LongInt
Function capCaptureGetSetup( hwnd : THandle; s : LongInt; wSize : Word) : LongInt
Function capCaptureSetSetup( hwnd : THandle; s : LongInt; wSize : Word) : LongInt
11672:
11673:
11674:
           Function capSetMCIDeviceName( hwnd: THandle; szName: LongInt): LongInt
Function capGetMCIDeviceName( hwnd: THandle; szName: LongInt; wSize: Word): LongInt
11675:
11676:
           Function capPaletteOpen( hwnd : THandle; szName : LongInt) : LongInt
Function capPaletteSave( hwnd : THandle; szName : LongInt) : LongInt
11677:
11678:
           Function capPalettePaste( hwnd : THandle) : LongInt
11679:
           Function capPaletteAuto( hwnd : THandle; iFrames : Word; iColors : LongInt) : LongInt Function capPaletteManual( hwnd : THandle; fGrab : Word; iColors : LongInt) : LongInt
11680:
11681:
             "/PCapDriverCaps', '~TCapDriverCaps // will not work
TCapDriverCaps', 'record wDeviceIndex: WORD; fHasOverlay: BOOL'
11682:
11683:
11684:
              +'; fHasDlgVideoSource : BOOL; fHasDlgVideoFormat : BOOL; fHasDlgVideoDispla
11685:
              +'y : BOOL; fCaptureInitialized : BOOL; fDriverSuppliesPalettes : BOOL; hVid'
              +'eoIn : THANDLE; hVideoOut : THANDLE; hVideoExtIn:THANDLE; hVideoExtOut:THANDLE; end
11686:
             //PCapStatus', '^TCapStatus // will not work
11687:
                              'record uiImageWidth : UINT; uiImageHeight : UINT; '
11688:
              +'fLiveWindow : BOOL; fOverlayWindow : BOOL; fScale : BOOL; ptScroll : TPOIN'
+'T; fUsingDefaultPalette : BOOL; fAudioHardware : BOOL; fCapFileExists : BO'
+'OL; dwCurrentVideoFrame : DWORD; dwCurrentVideoFramesDropped : DWORD; dwCu'
11689:
11690:
11691:
              +'rrentWaveSamples : DWORD; dwCurrentTimeElapsedMS : DWORD; hPalCurrent
11692:
              +'ALETTE; fCapturingNow : BOOL; dwReturn : DWORD; wNumVideoAllocated : WORD;'
11693:
              +' wNumAudioAllocated : WORD; end
11694:
            +' wnumandoallocated word, end //PCaptureParms', 'TCaptureParms', 'will not work
TCaptureParms', 'record dwRequestMicroSecPerFrame : DWORD; fMake
11695:
11696:
11697:
              +'UserHitOKToCapture : BOOL; wPercentDropForError : WORD; fYield : BOOL; dwI'
              +'ndexSize : DWORD; wChunkGranularity : WORD; fUsingDOSMemory : BOOL; wNumVi' +'deoRequested : WORD; fCaptureAudio : BOOL; wNumAudioRequested : WORD; vKey'
11698:
11699:
11700:
              +'Abort : WORD; fAbortLeftMouse : BOOL; fAbortRightMouse : BOOL; fLimitEnabl'
              +'ed : BOOL; wTimeLimit : WORD; fMCIControl : BOOL; fStepMCIDevice : BOOL; d'
11701:
11702:
              +'wMCIStartTime : DWORD; dwMCIStopTime : DWORD; fStepCaptureAt2x : BOOL; wSt'
11703:
              +'epCaptureAverageFrames : WORD; dwAudioBufferSize : DWORD; fDisableWriteCac'
11704:
              +'he : BOOL; AVStreamMaster : WORD; end
           // PCapInfoChunk', '^TCapInfoChunk // will not work
//TCapInfoChunk', 'record fccInfoID : FOURCC; lpData : LongInt; cbData : LongInt; end
11705:
11706:
           'CONTROLCALLBACK_PREROLL', 'LongInt').SetInt( 1);
'CONTROLCALLBACK_CAPTURING', 'LongInt').SetInt( 2);
11707:
11708:
11709:
           Function capCreateCaptureWindow( lpszWindowName: PChar; dwStyle : DWord; x, y : Integer; nWidth, nHeight
            Integer; hwndParent : THandle; nID : Integer) : THandle
11710:
          \verb|capGetDriverDescription(wDriverIndex:DWord;lpszName:PChar;cbName:Integer;lpszVer:PChar;cbVer:Int):Bool;|
11711:
           'IDS_CAP_BEGIN','LongInt').SetInt( 300);
'IDS_CAP_END','LongInt').SetInt( 301);
'IDS_CAP_INFO','LongInt').SetInt( 401);
11712:
           'IDS_CAP_OUTOFMEM','LongInt').SetInt( 402);
'IDS_CAP_FILEEXISTS','LongInt').SetInt( 403);
'IDS_CAP_ERRORPALOPEN','LongInt').SetInt( 404);
'IDS_CAP_ERRORPALSAVE','LongInt').SetInt( 405);
11714:
11715:
11716:
11717:
           'IDS_CAP_ERRORDIBSAVE', 'LongInt').SetInt( 406);
11718:
           'IDS_CAP_DEFAVIEXT','LongInt').SetInt( 407);
'IDS_CAP_DEFPALEXT','LongInt').SetInt( 408);
'IDS_CAP_CANTOPEN','LongInt').SetInt( 409);
11719:
11720:
11721:
           'IDS_CAP_SEQ_MSGSTART', 'LongInt').SetInt( 410);
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11723:
                 'IDS CAP SEO MSGSTOP', 'LongInt'). SetInt( 411);
                  'IDS_CAP_VIDEDITERR', 'LongInt').SetInt( 412);
11724:
                  'IDS_CAP_READONLYFILE', 'LongInt').SetInt(
                 'IDS_CAP_WRITEERROR','LongInt').SetInt( 413);
'IDS_CAP_WRITEERROR','LongInt').SetInt( 414);
'IDS_CAP_NODISKSPACE','LongInt').SetInt( 415);
'IDS_CAP_SETFILESIZE','LongInt').SetInt( 416);
'IDS_CAP_SAVEASPERCENT','LongInt').SetInt( 417);
'IDS_CAP_DRIVER_ERROR','LongInt').SetInt( 418);
11726
11727:
11728:
11729:
11730:
                  'IDS_CAP_WAVE_OPEN_ERROR','LongInt').SetInt( 419);
'IDS_CAP_WAVE_ALLOC_ERROR','LongInt').SetInt( 420);
11731:
11732:
                    IDS_CAP_WAVE_PREPARE_ERROR', 'LongInt').SetInt( 421);
11733:
                  'IDS_CAP_WAVE_ADD_ERROR', 'LongInt').SetInt( 422);
11734:
                  'IDS_CAP_WAVE_SIZE_ERROR','LongInt').SetInt( 423);
'IDS_CAP_VIDEO_OPEN_ERROR','LongInt').SetInt( 424);
'IDS_CAP_VIDEO_ALLOC_ERROR','LongInt').SetInt( 425);
11735:
11736:
11737:
11738:
                    IDS_CAP_VIDEO_PREPARE_ERROR', 'LongInt').SetInt( 426);
                 'IDS_CAP_VIDEO_FREPARE_ERROR', LongInt').SetInt( 427);
'IDS_CAP_VIDEO_SIZE_ERROR', 'LongInt').SetInt( 428);
'IDS_CAP_FILE_OPEN_ERROR', 'LongInt').SetInt( 429);
'IDS_CAP_FILE_WRITE_ERROR', 'LongInt').SetInt( 430);
11739:
11740 •
11741:
11742:
                 'IDS_CAP_RECORDING_ERROR', 'LongInt').SetInt( 431);
'IDS_CAP_RECORDING_ERROR2', 'LongInt').SetInt( 432);
11743:
11744:
11745:
                  'IDS_CAP_AVI_INIT_ERROR', 'LongInt').SetInt( 433);
                    IDS_CAP_NO_FRAME_CAP_ERROR', 'LongInt').SetInt( 434);
11746:
                  'IDS_CAP_NO_PALETTE_WARN', 'LongInt').SetInt( 435);
11747:
11748:
                  '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_AVI_DRAWDIB_ERROR', 'LongInt').SetInt( 440);
'IDS_CAP_AUDIO_DROP_ERROR', 'LongInt').SetInt( 441);
11749:
11750:
11751:
11752:
11753:
                  'IDS_CAP_STAT_LIVE_MODE', 'LongInt').SetInt( 500);
11754:
                  'IDS_CAP_STAT_OVERLAY_MODE', 'LongInt').SetInt( 501);
11755:
                  'IDS_CAP_STAT_CAP_INIT','LongInt').SetInt( 502);
'IDS_CAP_STAT_CAP_FINI','LongInt').SetInt( 503);
11756:
11757:
                 'IDS_CAP_STAT_PALETTE_BUILD', 'LongInt').SetInt( 504);
'IDS_CAP_STAT_PALETTE_BUILD', 'LongInt').SetInt( 505);
'IDS_CAP_STAT_I_FRAMES', 'LongInt').SetInt( 506);
'IDS_CAP_STAT_L_FRAMES', 'LongInt').SetInt( 507);
11758:
11759:
11760:
11761:
11762:
                  'IDS_CAP_STAT_CAP_L_FRAMES', 'LongInt').SetInt( 508);
11763:
                  'IDS_CAP_STAT_CAP_AUDIO', 'LongInt').SetInt( 509);
                  'IDS_CAP_STAT_VIDEOCURRENT', 'LongInt').SetInt( 510);
'IDS_CAP_STAT_VIDEOAUDIO', 'LongInt').SetInt( 511);
11764:
11765:
                  'IDS_CAP_STAT_VIDEOONLY', 'LongInt').SetInt( 512);
11766:
                  'IDS_CAP_STAT_FRAMESDROPPED','LongInt').SetInt( 513);
11767:
                  'AVICAP32', 'String'). SetString( 'AVICAP32.dll
11768:
11769:
               end;
11770:
11771:
               procedure SIRegister ALFcnMisc(CL: TPSPascalCompiler);
11772: begin
11773:
               Function AlBoolToInt( Value : Boolean) : Integer
                 Function ALMediumPos( LTotal, LBorder, LObject : integer) : Integer Function AlIsValidEmail( const Value : AnsiString) : boolean
11774:
11775:
11776:
                 \textbf{Function} \ \ \texttt{AlLocalDateTimeToGMTDateTime} ( \ \ \textbf{const} \ \ \texttt{aLocalDateTime} : \ \ \texttt{TDateTime}) : \ \ \texttt{TdateTime} 
11777:
                 \label{thm:condition} \begin{array}{ll} \textbf{Function} \  \, \texttt{ALInc}( \  \, \textbf{var} \  \, \texttt{x} : \texttt{integer}; \  \, \texttt{Count} : \texttt{integer}) : \texttt{Integer} \\ \textbf{function} \  \, \texttt{ALCopyStr}(\textbf{const} \  \, \texttt{aSourceString}: \  \, \texttt{AnsiString}; \  \, \texttt{aStart}, \  \, \texttt{aLength}: \  \, \texttt{Integer}) : \  \, \texttt{AnsiString}; \\ \textbf{ansiString}: \  \, \texttt{ansiString}: \  \, \texttt{ansiString}:
11778:
                 function ALGetStringFromFile(filename: AnsiString; const ShareMode: Word = fmShareDenyWrite):AnsiString;
11779:
11780:
                 procedure ALSaveStringtoFile(Str: AnsiString; filename: AnsiString);
                 Function ALIsInteger(const S: AnsiString): Boolean;
function ALIsDecimal(const S: AnsiString): boolean;
11781:
11782:
11783:
                 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;
11784:
11785:
11786:
                 function ALDequotedStr(const S: AnsiString; AQuote: AnsiChar): AnsiString;
                 function AlUTF8removeBOM(const S: AnsiString): AnsiString;
11787:
                 Function ALRandomStr1(const aLength: Longint; const aCharset: Array of Char): AnsiString;
11788:
                 Function ALRandomStr(const aLength: Longint): AnsiString;
11789:
11790:
                 Function ALRandomStrUl(const aLength: Longint; const aCharset: Array of Char): String;
11791:
                 Function ALRandomStrU(const aLength: Longint): String;
11792:
               end
11793:
11794: procedure SIRegister_ALJSONDoc(CL: TPSPascalCompiler);
11795: begin
               Procedure ALUSONTOTStrings(const AlsonStr:AnsiString;aLst:TALStrings; const aNullStr:AnsiString;const
11796:
               aTrueStr: AnsiString; const aFalseStr : AnsiString)
11797:
11798:
11799: procedure SIRegister ALWindows(CL: TPSPascalCompiler);
11800: begin
11801:
                   _ALMEMORYSTATUSEX', 'record dwLength : DWORD; dwMemoryLoad : DWO
                      +'RD; ullTotalPhys : Int64; ullAvailPhys : Int64; ullTotalPageFile : Int64; '+'ullAvailPageFile : Int64; ullTotalVirtual : Int64; ullAvailVirtual : Int64;
11802:
11803:
11804:
                       +'; ullAvailExtendedVirtual : Int64; end
11805:
                   TALMemoryStatusEx', '_ALMEMORYSTATUSEX
                 Function ALGlobalMemoryStatusEx( var lpBuffer : TALMEMORYSTATUSEX) : BOOL
Function ALInterlockedExchange64( var Target : LONGLONG; Value : LONGLONG) : LONGLONG
'INVALID_SET_FILE_POINTER','LongInt').SetInt( DWORD ( - 1 ));
'QUOTA_LIMITS_HARDWS_MIN_DISABLE','LongWord').SetUInt( $2);
'QUOTA_LIMITS_HARDWS_MIN_ENABLE','LongWord').SetUInt( $1);
11806:
11807:
11808:
11809:
```

```
'QUOTA_LIMITS_HARDWS_MAX_DISABLE','LongWord').SetUInt( $8);
'QUOTA_LIMITS_HARDWS_MAX_ENABLE','LongWord').SetUInt( $4);
11811:
11812:
11813:
11814:
11815:
            procedure SIRegister IPCThrd(CL: TPSPascalCompiler);
11816: begin
11817:
               SIRegister_THandledObject(CL);
                SIRegister_TEvent(CL);
11818:
11819:
                SIRegister_TMutex(CL);
11820:
               SIRegister TSharedMem(CL);
              'TRACE_BUFFER','LongInt').SetInt( 200 * 1024);
'TRACE_BUFFER','String').SetString( 'TRACE_BUFFER
11821:
11822:
11823:
              'TRACE_MUTEX', 'String').SetString( 'TRACE_MUTEX
                //PTraceEntry', '^TTraceEntry // will not work
11824:
11825:
                SIRegister TIPCTracer(CL);
              'MAX_CLIENTS','LongInt').SetInt( 6);
'IPCTIMEOUT','LongInt').SetInt( 2000);
11826:
11827:
              'IPCBUFFER_NAME','String').SetString('BUFFER_NAME
'BUFFER_MUTEX_NAME','String').SetString('BUFFER_MUTEX
'MONITOR_EVENT_NAME','String').SetString('MONITOR_EVENT
11828 .
11829:
11830:
              'CLIENT_EVENT_NAME','String').SetString('CLIENT_EVENT'CONNECT_EVENT_NAME','String').SetString('CONNECT_EVENT
11831:
11832:
              'CLIENT_DIR_NAME','String').SetString('CLIENT_DIRECTORY'CLIENT_DIR_MUTEX','String').SetString('DIRECTORY_MUTEX FindClass('TOBJECT'),'EMOnitorActive
11833:
11834:
11835:
11836:
                FindClass('TOBJECT'),'TIPCThread
11837:
                TEventKind', '( evMonitorAttach, evMonitorDetach, evMonitorSigna'
                 +'l, evMonitorExit, evClientStart, evClientStop, evClientAttach, evClientDet' +'ach, evClientSwitch, evClientSignal, evClientExit)
11838:
11839:
11840:
                TClientFlag', '( cfError, cfMouseMove, cfMouseDown, cfResize, cfAttach )
11841:
               TClientFlags', 'set of TClientFlag
               //PEventData', '^TEventData // will not work
TEventData', 'record X : SmallInt; Y : SmallInt; Flag : TClientF'
11842:
11843:
               +'lag; Flags: TClientFlags; end
TConnectEvent', 'Procedure ( Sender: TIPCThread; Connecting: Boolean)
11844:
11845:
               TDirUpdateEvent', 'Procedure ( Sender : TIPCThread)
TIPCNotifyEvent', 'Procedure ( Sender : TIPCThread; Data : TEventData)
//PIPCEventInfo', '^TIPCEventInfo // will not work
11846:
11847:
11848:
11849:
                TIPCEventInfo', 'record FID: Integer; FKind: TEventKind; FData: TEventData; end
11850:
                SIRegister_TIPCEvent(CL);
11851:
                //PClientDirRecords', '^TClientDirRecords // will not work
                SIRegister_TClientDirectory(CL);
11852:
11853:
                                      '( stInActive, stDisconnected, stConnected )
                TIPCState',
                SIRegister_TIPCThread(CL);
11854:
11855:
                SIRegister_TIPCMonitor(CL);
11856:
               STRegister TTPCClient(CL);
11857:
             Function IsMonitorRunning( var Hndl : THandle) : Boolean
11858:
            end;
11859:
11860:
                                                                                                            ----*)
11861: procedure SIRegister_ALGSMComm(CL: TPSPascalCompiler);
11862: begin
11863:
                SIRegister TAlGSMComm(CL);
11864:
             Function AlGSMComm_BuildPDUMessage( aSMSCenter, aSMSAddress, aMessage : AnsiString) : AnsiString
11865:
             Procedure AlGSMComm_DecodePDUMessage(aPDUMessage:AnsiString;var aSMSCenter,aSMSAddress,
            AMessage: AnsiString);
             Function AlgsMcomm_UnicodeTogsM7BitDefaultAlphabet( aMessage : WideString) : AnsiString
             Function AlGSMComm_GSM7BitDefaultAlphabetToUnicode(aMess:AnsiString;const
11867:
            UseGreekAlphabet:Bool):Widestring;
11868:
             function ALMatchesMask(const Filename, Mask: AnsiString): Boolean;
11869:
              end;
11870:
11871:
            procedure SIRegister_ALHttpCommon(CL: TPSPascalCompiler);
11872: begin
11873:
                TALHTTPPropertyChangeEvent','Procedure(sender:Tobject;const PropertyIndex:Integer;
                                                             '( HTTPpv_1_0, HTTPpv_1_1
11874:
                TALHTTPProtocolVersion',
11875:
                TALHTTPMethod', '(HTTPmt_Get, HTTPmt_Post, HTTPmt_Head, HTTPmt_Trace, HTTPmt_Put, HTTPmt_Delete);
11876:
               TInternetScheme', 'integer
             TALIPv6Binary', 'array[1..16] of Char;
// TALIPv6Binary = array[1..16] of ansiChar;
// TInternetScheme = Integer;
11877:
11878:
11879:
11880:
               SIRegister_TALHTTPRequestHeader(CL);
11881:
                SIRegister_TALHTTPCookie(CL);
                SIRegister_TALHTTPCookieCollection(CL);
11882:
11883:
                SIRegister_TALHTTPResponseHeader(CL);
              Function ALHTTPDecode( const AStr : AnsiString) : AnsiString
11884:
11885:
              Procedure ALHTTPEncodeParamNameValues( ParamValues : TALStrings)
            // Procedure ALExtractHTTPFields(Separators, WhiteSpace, Quotes:TSysCharSet;
Content:PAnsiChar;Strings:TALStrings;StripQuotes:Boolean;
11886:
            // Procedure ALExtractHeaderFields( Separators, WhiteSpace, Quotes : TSysCharSet; Content : PAnsiChar;
            Strings : TALStrings; Decode : Boolean; StripQuotes : Boolean)
11888:
            //\ {\tt Procedure}\ {\tt ALExtractHeaderFieldsWithQuoteEscaped(Separators, WhiteSpace, {\tt ALExtractHeaderFieldsWithQuoteEscaped(Separators, {\tt WhiteSpace}, {\tt ALExtractHeaderFieldsWithQuoteEscaped(Separators, {\tt ALExtractHe
            Quotes:TSysCharSet;Content:PAnsiChar;Strings : TALStrings; Decode : Boolean; StripQuotes : Boolean)
Function AlRemoveShemeFromUrl( aUrl : AnsiString) : ansiString
             Function AlExtractShemeFromUrl( aUrl : AnsiString) : TInternetSchem
11890:
             Function AlExtractHostNameFromUrl(aUrl: AnsiString): AnsiString
Function AlExtractDomainNameFromUrl(aUrl: AnsiString): AnsiString
11891:
11892:
             Function AlExtractUrlPathFromUrl( aUrl : AnsiString) : AnsiString
Function AlExtractUrlPathFromUrl( aUrl : AnsiString) : AnsiString
Function AlInternetCrackUrl( aUrl : AnsiString; var SchemeName, HostName, Password, UrlPath,
11893:
11894:
            ExtraInfo : AnsiString; var PortNumber : integer) : Boolean;
```

```
11895: Function AlInternetCrackUrl1( aUrl : AnsiString; var SchemeName, HostName, UserName, Password, UrlPath,
              Anchor : AnsiString; Query : TALStrings; var PortNumber : integer) : Boolean;
                Function AlInternetCrackUrl2(var Url:AnsiString;var Anchor:AnsiString;Query:TALStrings):Boolean;
                Function AlRemoveAnchorFromUrl( aUrl : AnsiString; var aAnchor : AnsiString; Function AlRemoveAnchorFromUrl( aUrl : AnsiString) : AnsiString;
11897:
11898:
                Function AlCombineUrl( RelativeUrl, BaseUrl : AnsiString) : AnsiString;
Function AlCombineUrl1(RelativeUrl, BaseUrl, Anchor : AnsiString; Query:TALStrings) : AnsiString;
11899:
11900:
                Function ALGmtDateTimeToRfc822Str(const aValue : TDateTime) : AnsiString
Function ALDateTimeToRfc822Str(const aValue : TDateTime) : AnsiString
Function ALTryRfc822StrToGMTDateTime(const S : AnsiString; out Value : TDateTime) : Boolean
Function ALRfc822StrToGMTDateTime(const S : AnsiString) : TDateTime
11901:
11902:
11903:
11904:
                Function ALTryIPV4StrToNumeric( aIPv4Str : ansiString; var aIPv4Num : Cardinal) : Boolean
11905:
                Function ALIPV4StrToNumeric( aIPv4 : ansiString) : Cardinal Function ALNumericToIPv4Str( aIPv4 : Cardinal) : ansiString
11906:
11907:
                Function ALZeroIpV6 : TALIPv6Binary
11908:
11909:
                Function ALTryIPV6StrToBinary( aIPv6Str : ansiString; var aIPv6Bin : TALIPv6Binary) : Boolean
               Function ALIPV6StrTobinary( aIPv6 : ansiString) : TALIPv6Binary
Function ALBinaryToIPv6Str( aIPv6 : TALIPv6Binary) : ansiString
Function ALBinaryStrToIPv6Binary( aIPv6BinaryStr : ansiString) : TALIPv6Binary
11910:
11011.
11912:
11913:
              end;
11914:
11915:
              procedure SIRegister_ALFcnHTML(CL: TPSPascalCompiler);
11916: begin
                Procedure ALUTF8ExtractHTMLText(HtmlCont:AnsiString;LstExtractedResourceText:TALStrings;const
11917:
              DecodeHTMLText:Boolean);
11918:
                \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{DecodeHTMLText:Boolean} \cap
11919:
                Function ALXMLCDataElementEncode( Src : AnsiString) : AnsiString
                Function ALXMLTextElementEncode(Src : AnsiString; const useNumericReference : boolean) : AnsiString
Function ALUTF8XMLTextElementDecode( const Src : AnsiString) : AnsiString
11920:
11921:
                Function ALUTF8HTMLEncode(const Src:AnsiStr;const EncodeASCIIHtmlEntities:Bool;const
              useNumRef:bool):AnsiString);
11923:
                Function ALUTF8HTMLDecode( const Src : AnsiString) : AnsiString
                Function ALJavascriptEncode( const Src : AnsiString; const useNumericReference : boolean) : AnsiString
11924:
                Function ALUTF8JavascriptDecode( const Src : AnsiString) : AnsiString
11925:
                Procedure ALHideHtmlUnwantedTagForHTMLHandleTagfunct(var HtmlContent AnsiString; const
              DeleteBodyOfUnwantedTag : Boolean; const ReplaceUnwantedTagCharBy : AnsiChar)
11927:
              Procedure ALCompactHtmlTagParams( TagParams : TALStrings)
11928: end;
11929:
11930:
              procedure SIRegister_ALInternetMessageCommon(CL: TPSPascalCompiler);
11931: begin
11932:
                   SIRegister TALEMailHeader(CL);
11933:
                   SIRegister_TALNewsArticleHeader(CL);
11934:
                Function AlParseEmailAddress(FriendlyEmail:AnsiString;var RealName:AString;const
              decodeRealName:Bool):AnsiString;
Function AlExtractEmailAddress( FriendlyEmail : AnsiString) : AnsiString
11935:
                Function ALMakeFriendlyEmailAddress( aRealName, aEmail : AnsiString) : AnsiString
11936:
                Function ALEncodeRealName4FriendlyEmailAddress( aRealName : AnsiString) : AnsiString
                Function AlGenerateInternetMessageID : AnsiString;
Function AlGenerateInternetMessageID1( ahostname : AnsiString) : AnsiString;
11938:
11939:
11940:
                Function ALDecodeQuotedPrintableString( src : AnsiString) : AnsiString
                Function AlDecodeInternetMessageHeaderInUTF8(aHeaderStr:AnsiString;aDefaultCodePage:Integer):AnsiString;
11941:
11942:
11943:
11944:
11945: procedure SIRegister_ALFcnWinSock(CL: TPSPascalCompiler);
11946: begin
                Function ALHostToIP( HostName : AnsiString; var Ip : AnsiString):Boolean
11947:
11948:
                Function ALIPAddrToName( IPAddr : AnsiString) : AnsiString
Function ALgetLocalIPs : TALStrings
11949:
11950:
                Function ALgetLocalHostName : AnsiString
11951:
11052:
11953: procedure SIRegister ALFcnCGI(CL: TPSPascalCompiler);
11954: begin
11955:
              Procedure AlCGIInitDefaultServerVariablesFromWebRequest(WebRequest:
              TALWebRequest; ServerVariables: TALStrings);
11956:
               Procedure AlCGIInitDefaultServerVariablesFromWebRequest1(WebRequest: TALWebRequest; ServerVariables:
              {\tt TALStrings; ScriptName, ScriptFileName : AnsiString; Url : AnsiString);}\\
                Procedure ALCGIInitDefaultServerVariables (ServerVariables: TALStrings);
Procedure ALCGIInitDefaultServerVariables1(ServerVars:TALStrings)ScriptName,
11957:
              ScriptFileName:AnsiString;Url:AnsiString);
              Procedure AlCGIInitServerVariablesFromWebRequest( WebRequest:TALWebRequest; ServerVariables : TALStrings;
              ScriptName, ScriptFileName : AnsiString; Url : AnsiString);
11960: Procedure AlCGIExec( InterpreterFilename : AnsiString; ServerVariables : TALStrings; RequestContentStream
               : Tstream; ResponseContentStream : Tstream; ResponseHeader : TALHTTPResponseHeader)
11961: Procedure AlCGIExec1(ScriptName,ScriptFileName, Url, X_REWRITE_URL, InterpreterFilename:AnsiString;
              WebRequest : TALIsapiRequest;
              overloadedCookies:AnsiString;overloadedQueryString;AnsiString;overloadedReferer: AnsiString;
                 +'overloadedRequestContentStream:Tstream;var
              {\tt ResponseContentStr:AnsiString;ResponseHeader:TALHTTPResponseHeader;}
11963: Procedure AlCGIExec2(ScriptName, ScriptFileName, Url, X_REWRITE_URL,
               \textbf{InterpreterFilename:AnsiString;WebRequest: TALIsapiRequest: } \textbf{var} \ \texttt{ResponseContentString: AnsiString; WebRequest: } \\ \textbf{TALIsapiRequest: } \textbf{var} \ \texttt{ResponseContentString: AnsiString: An
              ResponseHeader : TALHTTPResponseHeader);
11964: end;
11965:
11966: procedure SIReqister ALFcnExecute(CL: TPSPascalCompiler);
11967: begin
                 TStartupInfoA', 'TStartupInfo
```

```
11969:
            'SE CREATE TOKEN NAME', 'String'). SetString( 'SeCreateTokenPrivilege
11970:
           SE_ASSIGNPRIMARYTOKEN_NAME', 'String').SetString( 'SeAssignPrimaryTokenPrivilege
           SE_LOCK_MEMORY_NAME', 'String').SetString( 'SeLockMemoryPrivilege
           SE_INCREASE_QUOTA_NAME','String').SetString( 'SeIncreaseQuotaPrivilege
11972:
           SE_UNSOLICITED_INPUT_NAME','String').SetString('SeUnsolicitedInputPrivilege
SE_MACHINE_ACCOUNT_NAME','String').SetString('SeMachineAccountPrivilege
SE_TCB_NAME','String').SetString('SeTcbPrivilege
11973:
11974:
11975:
           SE_ICS_NAME','String').SetString( 'SelcorrIvilege

SE_SECURITY_NAME','String').SetString( 'SeSecurityPrivilege

SE_TAKE_OWNERSHIP_NAME','String').SetString( 'SeTakeOwnershipPrivilege

SE_LOAD_DRIVER_NAME','String').SetString( 'SeLoadDriverPrivilege

SE_SYSTEM_PROFILE_NAME','String').SetString( 'SeSystemProfilePrivilege
11976:
11977:
11978:
11979:
           SE_SYSTEMTIME_NAME', 'String').SetString( 'SeSystemtimePrivilege
11980:
           SE_ROF_SINGLE_PROCESS_NAME', 'String').SetString( 'SeProfileSingleProcessPrivilege SE_INC_BASE_PRIORITY_NAME', 'String').SetString( 'SeIncreaseBasePriorityPrivilege SE_CREATE_PAGEFILE_NAME', 'String').SetString( 'SeCreatePagefilePrivilege SE_CREATE_PERMANENT_NAME', 'String').SetString( 'SeCreatePermanentPrivilege
11981:
11982:
11983:
11984:
           SE_RECKEATE_PREMANENT_NAME , String ).SetString ( Secreterers SE_BACKUP_NAME', 'String').SetString ( 'SeBackupPrivilege SE_RESTORE_NAME', 'String').SetString ( 'SeRestorePrivilege SE_SHUTDOWN_NAME', 'String').SetString ( 'SeShutdownPrivilege SE_DEBUG_NAME', 'String').SetString ( 'SeDebugPrivilege SE_AUDIT_NAME', 'String').SetString ( 'SeAuditPrivilege
11985:
11986:
11987:
11988:
11989:
11990:
           SE_SYSTEM_ENVIRONMENT_NAME','String').SetString( 'SeSystemEnvironmentPrivilege
           SE_CHANGE_NOTIFY_NAME','String').SetString( 'SeChangeNotifyPrivilege SE_REMOTE_SHUTDOWN_NAME','String').SetString( 'SeRemoteShutdownPrivilege SE_UNDOCK_NAME','String').SetString( 'SeUndockPrivilege
11991:
11992:
11993:
           SE_SYNC_AGENT_NAME', 'String').SetString( 'SeSyncAgentPrivilege
SE_ENABLE_DELEGATION_NAME', 'String').SetString( 'SeEnableDelegationPrivilege
11994:
11995:
           SE_MANAGE_VOLUME_NAME','String').SetString( 'SeManageVolumePrivilege Function AlGetEnvironmentString: AnsiString
11996:
11997:
           Function ALWinExec32(const FileName, CurrentDir,
11998:
          Environment:AnsiString;InStream:Tstream;OutStream:TStream):Dword;
           Function ALWinExec321(const FileName:AnsiString; InputStream:Tstream;OutputStream:TStream):Dword;
Function ALWinExecAndWait32( FileName : AnsiString; Visibility : integer) : DWORD
Function ALWinExecAndWait32V2( FileName : AnsiString; Visibility : integer) : DWORD
11999:
12000:
12001:
           Function ALNTSetPrivilege( sPrivilege: AnsiString; bEnabled: Boolean): Boolean
12002:
12003:
12004:
12005:
          procedure SIRegister ALFcnFile(CL: TPSPascalCompiler);
12006:
         begin
           Function AlEmptyDirectory(Directory:ansiString;SubDirectory:Bool;IgnoreFiles:array of AnsiString; const
12007:
          RemoveEmptySubDirectory : Boolean; const FileNameMask : ansiString; const MinFileAge : TdateTime):Boolean;
          Function AlEmptyDirectory! (Directory: ansistring; SubDirectory: Boolean; const
RemoveEmptySubDirectory:Bool; const FileNameMask: ansiString; const MinFileAge: TdateTime): Boolean;
12008:
           Function AlCopyDirectory( SrcDirectory, DestDirectory: ansiString; SubDirectory: Boolean; const
          FileNameMask: ansiString; const FailIfExists: Boolean): Boolean
Function ALGetModuleName: ansistring
12010:
           Function ALGetModuleFileNameWithoutExtension : ansistring
12011:
           Function ALGetModulePath : ansiString
12013:
           Function AlGetFileSize( const AFileName : ansistring) : int64
           Function AlGetFileVersion( const AFileName : ansistring) : ansiString
Function ALGetFileCreationDateTime( const aFileName : Ansistring) : TDateTime
12014:
12015:
           Function ALGetFileLastWriteDateTime( const aFileName : Ansistring) : TDateTime
12016:
           Function ALGetFileLastAccessDateTime( const aFileName : Ansistring) : TDateTime
12017:
12018:
           Procedure ALSetFileCreationDateTime( const aFileName : Ansistring; const aCreationDateTime : TDateTime)
           Function ALIsDirectoryEmpty( const directory : ansiString) : boolean
Function ALFileExists( const Path : ansiString) : boolean
12019:
12020:
           Function ALDirectoryExists( const Directory: Ansistring) : Boolean Function ALCreateDir( const Dir : Ansistring) : Boolean
12021:
12022:
12023:
           Function ALRemoveDir( const Dir : Ansistring) : Boolean
           Function ALDeleteFile( const FileName : Ansistring) : Boolean
12024:
           Function ALRenameFile( const OldName, NewName : ansistring) : Boolean
12025:
12026:
12027:
12028: procedure SIRegister ALFcnMime(CL: TPSPascalCompiler);
12029: begin
12030:
             NativeInt', 'Integer
             NativeUInt', 'Cardinal
12031:
12032:
           \textbf{Function} \  \, \texttt{ALMimeBase64EncodeString(} \  \, \textbf{const} \  \, \texttt{S} \  \, \texttt{:} \  \, \texttt{AnsiString)} \  \, \texttt{:} \  \, \texttt{AnsiString}
12033:
           Function ALMimeBase64EncodeStringNoCRLF( const S : AnsiString) : AnsiString
1.2034:
           Function ALMimeBase64DecodeString( const S : AnsiString) : AnsiString
            Function ALMimeBase64EncodedSize( const InputSize : NativeInt) : NativeInt
12035:
12036:
           Function ALMimeBase64EncodedSizeNoCRLF( const InputSize : NativeInt) : NativeInt
12037:
           Function ALMimeBase64DecodedSize( const InputSize : NativeInt) : NativeInt

Procedure ALMimeBase64Encode( const InputBuffer : TByteDynArray; InputOffset : NativeInt; const
12038:
          InputByteCount : NativeInt; out OutputBuffer : TByteDynArray; OutputOffset : NativeInt)
12039:
           Procedure ALMimeBase64EncodeNoCRLF( const InputBuffer : TByteDynArray; InputOffset : NativeInt; const
          InputByteCount : NativeInt; out OutputBuffer : TByteDynArray; OutputOffset : NativeInt)
Procedure ALMimeBase64EncodeFullLines( const InputBuffer : TByteDynArray; InputOffset : NativeInt; const
12040:
          InputByteCount : NativeInt; out OutputBuffer : TByteDynArray; OutputOffset : NativeInt)
          Function ALMimeBase64Decode( const InputBuffer: TByteDynArray; InputOffset: NativeInt; const InputByteCount: NativeInt; out OutputBuffer: TByteDynArray; OutputOffset: NativeInt): NativeInt;
12042: Function ALMimeBase64DecodePartial( const InputBuffer : TByteDynArray; InputOffset : NativeInt; const
          InputByteCount : NativeInt; out OutputBuffer : TByteDynArray; OutputOffset : NativeInt;
+ 'var ByteBuffer : Cardinal; var ByteBufferSpace : Cardinal) : NativeInt;
          Function ALMimeBase64DecodePartialEnd( out OutputBuffer : TByteDynArray; OutputOffset : NativeInt; const ByteBuffer : Cardinal; const ByteBufferSpace : Cardinal) : NativeInt;
12044:
          Procedure ALMimeBase64Encode(const InputBuf:TByteDynArray;const InputByteCnt:NatInt;out
12045:
          OutputBuf:TBvteDvnArray);
          Procedure ALMimeBase64EncodeNoCRLF(const InputBuffer:TByteDynArray; const InputByteCount:NativeInt;out
          OutputBuffer: TByteDynArray);
```

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12047: Procedure ALMimeBase64EncodeFullLines(const InputBuffer:TByteDvnArray;const InputByteCount:NativeInt;out
         OutputBuffer: TByteDynArray)
          Function ALMimeBase64Decodel(const InputBuffer:TByteDynArray;const InputByteCount:NativeInt;out
         OutputBuffer:TByteDynArray):NativeInt;
12049:
         Function ALMimeBase64DecodePartial1(const InputBuffer:TByteDynArray;const InputByteCount:NativeInt;out
         OutputBuffer: TByteDynArray; var ByteBuffer: Cardinal; var ByteBufferSpace: Cardinal): NativeInt; Function ALMimeBase64DecodePartialEndl(out OutputBuffer:TByteDynArray; const ByteBuffer:Cardinal; const
         ByteBufferSpace:Cardinal):NativeInt;
1.2051:
          Procedure ALMimeBase64EncodeFile( const InputFileName, OutputFileName: TFileName
          Procedure ALMimeBase64EncodeFileNoCRLF( const InputFileName, OutputFileName: TFileName)
Procedure ALMimeBase64DecodeFile( const InputFileName, OutputFileName: TFileName)
Procedure ALMimeBase64EncodeStream( const InputStream: TStream; const OutputStream: TStream)
12052:
12053:
12055:
          Procedure ALMimeBase64EncodeStreamNoCRLF( const InputStream : TStream; const OutputStream : TStream)
          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);
12056:
12057:
12058:
          'cALMimeBase64_BUFFER_SIZE','LongInt').SetInt( cALMimeBase64_DECODED_LINE_BREAK * 3 * 4 * 4);
12059:
          Procedure ALFillMimeContentTypeByExtList( AMIMEList: TALStrings)
Procedure ALFillExtByMimeContentTypeList( AMIMEList: TALStrings)
12060:
12061:
          Function ALGetDefaultFileExtFromMimeContentType( aContentType : AnsiString) : AnsiString
12062:
          Function ALGetDefaultMIMEContentTypeFromExt( aExt : AnsiString) : AnsiString
12063:
12064:
12065:
         procedure SIRegister_ALXmlDoc(CL: TPSPascalCompiler);
12066:
12067:
         begin
12068:
            cALXMLNodeMaxListSize','LongInt').SetInt( Maxint div 16);
12069:
           FindClass('TOBJECT'),'TALXMLNode
FindClass('TOBJECT'),'TALXMLNodeList
12070:
12071:
            FindClass('TOBJECT'), 'TALXMLDocument
            TAlXMLParseProcessingInstructionEvent', Procedure (Sender:TObject; const Target,Data:AnsiString)
12072:
12073:
            TAlXMLParseTextEvent', 'Procedure ( Sender : TObject; const str: AnsiString)
           TALXMLParseStartElementEvent', 'Procedure ( Sender : Tobject; co' +'nst Name : AnsiString; const Attributes : TALStrings)
12074:
12075:
            TAlXMLParseEndElementEvent', 'Procedure ( Sender : TObject; const Name : AnsiString)
12076:
12077:
                                  '( ntReserved, ntElement, ntAttribute, ntText,
            TALXmlNodeType',
12078:
             +'ntCData, ntEntityRef, ntEntity, ntProcessingInstr, ntComment, ntDocument, '
12079:
             +'ntDocType, ntDocFragment, ntNotation )
12080:
            TALXMLDocOption', '( doNodeAutoCreate, doNodeAutoIndent )
           TALXMLDocOption', '(doNodeAutoGreate, doNodeAutoIndent')
TALXMLDocOptions', 'set of TALXMLDocOption
TALXMLParseOption', '(poPreserveWhiteSpace, poIgnoreXMLReferences)
TALXMLParseOptions', 'set of TALXMLParseOption
TALXMLPrologItem', '(xpVersion, xpEncoding, xpStandalone)
PALPointerXMLNodeList', '^TALPointerXMLNodeList'/ will not work
12081:
12082:
12083:
12084:
12085:
            SIRegister_EALXMLDocError(CL);
12086:
12087:
            SIRegister_TALXMLNodeList(CL);
12088:
            SIRegister TALXMLNode(CL);
            SIRegister_TALXmlElementNode(CL);
12089:
            SIRegister_TALXmlAttributeNode(CL);
            SIRegister_TALXmlTextNode(CL);
12091:
12092:
            SIRegister_TALXmlDocumentNode(CL);
12093:
            SIRegister TALXmlCommentNode(CL);
12094:
            SIRegister_TALXmlProcessingInstrNode(CL);
12095:
            SIRegister_TALXmlCDataNode(CL);
12096:
            SIRegister_TALXmlEntityRefNode(CL);
12097:
            SIRegister_TALXmlEntityNode(CL);
12098:
            SIRegister_TALXmlDocTypeNode(CL);
12099:
            SIRegister_TALXmlDocFragmentNode(CL);
12100:
            SIRegister_TALXmlNotationNode(CL);
12101:
            SIRegister_TALXMLDocument(CL);
          CALXMLUTF8EncodingStr', 'String').SetString( 'UTF-8 cALXmlUTF8HeaderStr', 'String').SetString('<?xmlversion="1.0"encoding="UTF-8"standalone="yes"?>'+#13#10);
12102:
12103:
12104:
          CALNSDelim','String').SetString( ':
12105:
          CALXML', 'String').SetString( 'xml
          CALVersion', 'String').SetString( 'version CALEncoding', 'String').SetString( 'encoding CALStandalone', 'String').SetString( 'standalone CALDefaultNodeIndent', 'String').SetString( 'standalone CALDefaultNodeIndent', 'String').SetString( '
12106:
12107:
12109:
12110:
          CALXmlDocument','String').SetString( 'DOCUMENT
          Function ALCreateEmptyXMLDocument( const Rootname : AnsiString) : TalXMLDocument Procedure ALClearXMLDocument(const rootname:AnsiString;xmldoc:TalXMLDocument;const
12111:
12112:
         EncodingStr:AnsiString);
12113:
         Function ALFindXmlNodeByChildNodeValue(xmlrec:TalxmlNode;const ChildNodeName
ChildNodeValue:AnsiString;const Recurse: Boolean) : TalxmlNode

12114: Function ALFindXmlNodeByNameAndChildNodeValue( xmlrec : TalxmlNode; const NodeName : ansiString; const
         ChildNodeName, ChildNodeValue : AnsiString; const Recurse : Boolean) : TalxmlNode
          Function ALFindXmlNodeByAttribute(xmlrec:TalxmlNode;const AttributeName,AttributeValue:AnsiString;const
         Recurse: Boolean):TalxmlNode
12116:
          Function ALFindXmlNodeByNameAndAttribute( xmlrec : TalxmlNode; const NodeName : ansiString; const
         AttributeName, AttributeValue : AnsiString; const Recurse : Boolean) : TalxmlNode
12117:
          Function ALExtractAttrValue( const AttrName, AttrLine : AnsiString; const Default : AnsiString) :
         AnsiString
12118: end;
12119:
12120: procedure SIRegister_TeCanvas(CL: TPSPascalCompiler);
         //based on TEEProc, TeCanvas, TEEngine, TChart
12121:
12122: begin
         'TeePiStep','Double').setExtended( Pi / 180.0);
'TeeDefaultPerspective','LongInt').SetInt( 100);
'TeeMinAngle','LongInt').SetInt( 270);
12123:
12124:
```

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12126:
          'teeclMoneyGreen', 'LongWord').SetUInt( TColor ( $CODCCO ));
12127:
          'teeclSkyBlue', 'LongWord').SetUInt( TColor ( $FOCAA6 ));
          'teeclCream', 'LongWord').SetUInt( TColor ( $F0FBFF ));
12120.
          'teeclMedGray', 'LongWord').SetUInt( TColor ( $A4A0A0
12130:
           'teeclMoneyGreen', 'LongWord').SetUInt( TColor ( $CODCCO ));
          'teeclSkyBlue','LongWord').SetUInt( TColor ( $F0CAA6 ));
'teeclCream','LongWord').SetUInt( TColor ( $F0FBFF ));
12131:
12132:
          'teeclMedGray', 'LongWord').SetUInt( TColor ( $A4A0A0 ));
12133:
          'TA_LEFT','LongInt').SetInt( 0);
'TA_RIGHT','LongInt').SetInt( 2);
'TA_CENTER','LongInt').SetInt( 6);
12134:
12135:
12136:
          'TA_TOP','LongInt').SetInt( 0);
12137:
          'TA_BOTTOM','LongInt').SetInt( 8);
'teePATCOPY','LongInt').SetInt( 0);
'NumCirclePoints','LongInt').SetInt( 64);
12138:
12139:
12140:
12141:
          'teeDEFAULT_CHARSET', 'LongInt').SetInt( 1);
          'teeANTIALIASED_QUALITY', 'LongInt').SetInt( 4);
12142:
          'TA_LEFT', 'LongInt').SetInt( 0);
'bs_Solid', 'LongInt').SetInt( 0);
'teepf24Bit', 'LongInt').SetInt( 0);
'teepfDevice', 'LongInt').SetInt( 1);
12143.
12144:
12145:
12146:
12147:
          'CM_MOUSELEAVE', 'LongInt').SetInt( 10000);
          'CM_SYSCOLORCHANGE', LongInt').SetInt( 10001);
'DC_BRUSH', LongInt').SetInt( 18);
'DC_PEN', LongInt').SetInt( 19);
12148:
12149:
12150:
           teeCOLORREF', 'LongWord
TLogBrush', 'record lbStyle : Integer; lbColor : TColor; lbHatch: Integer; end
12151:
12152:
           //TNotifyEvent', 'Procedure ( Sender : TObject)
SIRegister_TFilterRegion(CL);
12153:
12154:
            SIRegister_IFormCreator(CL);
12155:
12156:
           SIRegister_TTeeFilter(CL);
           //TFilterClass', 'class of TTeeFilter
SIRegister_TFilterItems(CL);
12157:
12158:
12159:
           SIRegister_TConvolveFilter(CL);
            SIRegister_TBlurFilter(CL);
12160:
12161:
           SIRegister_TTeePicture(CL);
           TPenEndStyle', '( esRound, esSquare, esFlat )
SIRegister_TChartPen(CL);
12162:
12163:
12164:
            SIRegister_TChartHiddenPen(CL);
12165:
            SIRegister_TDottedGrayPen(CL);
12166:
           SIRegister_TDarkGrayPen(CL);
           SIRegister_TWhitePen(CL);
SIRegister_TChartBrush(CL);
12167:
12168:
            TTeeView3DScrolled', 'Procedure ( IsHoriz : Boolean)
12169:
            TTeeView3DChangedZoom', 'Procedure ( NewZoom : Integer)
12170:
           SIRegister_TView3DOptions(CL);
FindClass('TOBJECT'),'TTeeCanvas
TTeeTransparency', 'Integer
12171:
12172:
12174:
            SIRegister_TTeeBlend(CL)
12175:
           FindClass('TOBJECT'),'TCanvas3D
SIRegister_TTeeShadow(CL);
12176:
12177:
           teeTGradientDirection', '( gdTopBottom, gdBottomTop, gdLeftRight, g'
12178:
              +'dRightLeft, gdFromCenter, gdFromTopLeft, gdFromBottomLeft, gdRadial,gdDiagonalUp,gdDiagonalDown )
12179:
           FindClass('TOBJECT'), 'TSubGradient
           SIRegister_TCustomTeeGradient(CL);
SIRegister_TSubGradient(CL);
12180:
12181:
12182:
            SIRegister_TTeeGradient(CL);
            SIRegister_TTeeFontGradient(CL);
12183:
12184:
           SIRegister_TTeeFont(CL);
           TCanvasBackMode', '( cbmNone, cbmTransparent, cbmOpaque )
TCanvasTextAlign', 'Integer
TTeeCanvasHandle', 'HDC
12185:
12186:
12187:
12188:
            SIRegister_TTeeCanvas(CL);
12189:
           TPoint3DFloat', 'record X : Double; Y : Double; Z : Double; end
           SIRegister_TFloatXYZ(CL);
12190:
           TPoint3D', 'record x : integer; y : integer; z : Integer; end
TRGB', 'record blue: byte; green: byte; red: byte; end
12191:
12192:
12193:
           {TRGB=packed record
12194:
              Blue : Byte;
Green : Byte;
12195:
12196:
              Red : Byte;
12197:
               //$IFDEF CLX //Alpha : Byte; // Linux end;}
12198:
12199: TTeeCanvasCalcPoints', 'Function ( x, z : Integer; var P0, P1 : '
12200: +'TPoint3D; var Color0, Color1: TColor): Boolean
12201: TTeeCanvasSurfaceStyle', '( tcsSolid, tcsWire, tcsDot )
12202: TCanvas3DPlane', '( cpX, cpY, cpZ )
12203: //IInterface', 'IUnknown
12204:
           SIRegister_TCanvas3D(CL);
12205:
           SIRegister_TTeeCanvas3D(CL);
12206:
           TTrianglePoints', 'Array[0..2] of TPoint;
12207:
           TFourPoints', 'Array[0..3] of TPoint;
          Function ApplyDark( Color : TColor; HowMuch : Byte) : TColor
12208:
          Function ApplyBright (Color: TColor; HowMuch: Byte): TColor
12209:
          Function Point3D( const x, y, z : Integer) : TPoint3D
12210:
          Procedure SwapDouble( var a, b : Double)

Procedure SwapInteger( var a, b : Integer)

Procedure RectSize( const R : TRect; var RectWidth, RectHeight : Integer)
12211:
12212:
12213:
12214: Procedure teeRectCenter( const R : TRect; var X, Y : Integer)
```

```
12215:
         Function RectFromPolygon( const Points : array of TPoint; NumPoints : Integer): TRect
12216:
          Function RectFromTriangle( const Points : TTrianglePoints) : TRect
          Function RectangleInRectangle( const Small, Big : TRect) : Boolean
12218 .
          Procedure ClipCanvas( ACanvas : TCanvas; const Rect : TRect)
12219:
          Procedure UnClipCanvas( ACanvas : TCanvas)
         Procedure ClipEllipse( ACanvas : TTeeCanvas; const Rect : TRect)
12220:
         Procedure ClipRoundRectangle(ACanvas:TTeeCanvas;const Rect : TRect; RoundSize : Integer)
12221:
12222:
          Procedure ClipPolygon(ACanvas:TTeeCanvas;const Points:array of TPoint;NumPoints:Integer)
12223:
          'TeeCharForHeight', 'String').SetString( 'W
          'DarkerColorQuantity','Byte').SetUInt( 128);
'DarkColorQuantity','Byte').SetUInt( 64);
TButtonGetColorProc', 'Function : TColor
12224:
12225:
12226:
12227:
           SIRegister_TTeeButton(CL);
12228:
           SIRegister_TButtonColor(CL);
           SIRegister TComboFlat(CL);
12229:
12230:
         Procedure TeeSetTeePen(FPen:TPen; APen : TChartPen; AColor : TColor; Handle:TTeeCanvasHandle)
          Function TeePoint( const aX, aY : Integer) : TPoint
12231:
         Function TEEPointInRect( const Rect : TRect; const P : TPoint) : Boolean;
Function PointInRectl( const Rect : TRect; x, y : Integer) : Boolean;
Function TeeRect( Left, Top, Right, Bottom : Integer) : TRect
12232.
12233:
12234:
          Function OrientRectangle( const R : TRect) : TRect
12235:
         Procedure TeeSetBitmapSize( Bitmap : TBitmap; Width, Height : Integer)
12236:
         Function PolygonBounds( const P : array of TPoint) : TRect
Function PolygonInPolygon( const A, B : array of TPoint) : Boolean
Function RGBValue( const Color : TColor) : TRGB
12237:
12238:
12239:
12240:
          Function EditColor( AOwner : TComponent; AColor : TColor) : TColor
12241:
         Function EditColorDialog( AOwner : TComponent; var AColor : TColor) : Boolean
         Function PointAtDistance( AFrom, ATo : TPoint; ADist : Integer) : TPoint
Function TeeCull( const P : TFourPoints) : Boolean;
Function TeeCull1( const P0, P1, P2 : TPoint) : Boolean;
12242:
12243:
12244:
         TSmoothStretchOption', '( ssBestQuality, ssBestPerformance )

Procedure SmoothStretch( Src, Dst : TBitmap);

Procedure SmoothStretchl( Src, Dst : TBitmap; Option : TSmoothStretchOption);
12245:
12246:
12247:
         Function TeeDistance( const x, y: Double): Double
Function TeeLoadLibrary( const FileName: String): HInst
12248:
12250:
         Procedure TeeFreeLibrary( hLibModule : HMODULE)
12251:
         Procedure TeeBlendBitmaps( const Percent : Double; ABitmap, BBitmap; BBitmap; BOrigin : TPoint)
        //Procedure TecShadowSmooth(Bitmap, Back: TBitmap; Left, Top, Width, Height, horz, vert: Integer; Smoothness: Double; FullDraw: Boolean; ACanvas: TCanvas3D; Clip: Boolean)
12252:
12253:
12254:
           SIRegister_ICanvasHyperlinks(CL);
12255:
           SIRegister ICanvasToolTips(CL);
12256:
         Function Supports (const Instance : IInterface; const IID : TGUID) : Boolean
12257:
12258:
12259: procedure SIRegister_ovcmisc(CL: TPSPascalCompiler);
12260: begin
12261:
           TOvcHdc', 'Integer
           TOVCHUND', 'Cardinal
TOVCHdc', 'HDC
TOVCHWND', 'HWND
12262:
12263:
12264:
         Function LoadBaseBitmap( lpBitmapName : PChar) : HBITMAP
12265:
          Function LoadBaseCursor( lpCursorName : PChar) : HCURSOR
12266:
12267:
         Function ovCompStruct( const S1, S2, Size : Cardinal) : Integer
12268:
         Function DefaultEpoch : Integer
         Function DrawButtonFrame(Canvas:TCanvas;const Client:TRect;IsDown,IsFlat:Bool;Style:TButtonStyle):TRect;
12269:
          Procedure FixRealPrim( P : PChar; DC : Char)
12271:
         Function GetDisplayString( Canvas : TCanvas; const S : string; MinChars, MaxWidth : Integer) : string
         Function GetLeftButton : Byte
Function GetNextDlqItem( Ctrl : TOvcHWnd) : hWnd
12272:
12273:
         Procedure GetRGB( Clr : TColor; var IR, IG, IB : Byte)
12275:
          Function GetShiftFlags : Byte
12276:
         Function ovCreateRotatedFont( F : TFont; Angle : Integer) : hFont
         Function GetTopTextMargin(Font:TFont;BorderStyle:TBorderStyle; Height:Integer;Ctl3D:Boolean): Integer
12277:
12278:
         Function ovExtractWord( N : Integer; const S : string; WordDelims : TCharSet) : string
         Function ovIsForegroundTask : Boolean
12279:
          Function ovTrimLeft( const S : string) : string
12280:
         Function ovTrimRight( const S : string) : string
Function ovQuotedStr( const S : string) : string
12281:
12282:
         Function ov@ordCount( const S : string; const WordDelims : TCharSet) : Integer
Function ovWordPosition(const N:Integer; const S: string; const WordDelims : TCharSet) : Integer
12283:
12284:
12285:
         Function PtrDiff( const P1, P2 : PChar) : Word
12286:
         Procedure PtrInc( var P, Delta : Word)
12287:
         Procedure PtrDec( var P. Delta : Word)
12288:
         Procedure FixTextBuffer( InBuf, OutBuf : PChar; OutSize : Integer)
          Procedure TransStretchBlt( DstDC : TOvcHdc; DstX, DstY, DstW, DstH : Integer; SrcDC : TOvcHdc; SrcX, SrcY,
12289:
          SrcW, SrcH : Integer; MaskDC : TOvcHdc; MaskX, MaskY : Integer)
         Function ovMinI( X, Y : Integer) : Integer
Function ovMaxI( X, Y : Integer) : Integer
12290:
12291:
         Function ovMinL( X, Y : LongInt) : LongInt
Function ovMaxL( X, Y : LongInt) : LongInt
12293:
         Function GenerateComponentName( PF : TWinControl; const Root : string) : string
Function PartialCompare( const S1, S2 : string) : Boolean
Function PathEllipsis( const S : string; MaxWidth : Integer) : string
12294:
12295:
12296:
         Function ovCreateDisabledBitmap( FOriginal : TBitmap; OutlineColor : TColor) : TBitmap
12297:
         Procedure ovCopyParentImage(Control: TControl; Dest: TCanvas)

Procedure ovDrawTransparentBitmap(Dest: TCanvas; X, Y, W, H: Integer; Rect: TRect; Bitmap: TBitmap;
12298:
12299:
        TransparentColor : TColor)
12300: Procedure DrawTransparentBitmapPrim(DC:TOvcHdc;Bitmap:HBitmap;xStart,yStart,Width,Height:Int;Rect;TRect;
         TransparentColor : TColorRef)
```

```
Function ovWidthOf( const R : TRect) : Integer Function ovHeightOf( const R : TRect) : Integer
12301:
12302:
                Procedure ovDebugOutput( const S : string)
12304:
                Function GetArrowWidth( Width, Height : Integer) : Integer
12305:
                Procedure StripCharSeq( CharSeq : string; var Str : string)
12306:
               Procedure StripCharFromEnd( aChr : Char; var Str : string)
               Procedure StripCharFromFront( aChr : Char; var Str : string)
12307:
                Function SystemParametersInfo( uiAction, uiParam : UINT; pvParam : UINT; fWinIni : UINT) : BOOL
12308:
12309:
               \textbf{Function} \ \ \textbf{SystemParametersInfoNCM} ( \textbf{uiAction}, \textbf{uiParam:UINT}; \textbf{pvParam:TNonClientMetrics}; \textbf{fWinIni:UINT}) : \textbf{BOOL}; \textbf{pvParam:TNonClientMetrics}; \textbf{fWinIni:UINT}) : \textbf{DOOL}; \textbf{pvParam:TNonClientMetrics}; \textbf{pvParam:TnonClientMet
12310:
               Function SystemParametersInfoA( uiAction, uiParam : UINT; pvParam : UINT; fWinIni : UINT) : BOOL
               Function CreateEllipticRgn(pl, p2, p3, p4 : Integer) : HRGN
Function CreateEllipticRgnIndirect(const p1 : TRect) : HRGN
12311:
               Function CreateFontIndirect( const p1: TLogFont): HFONT

Function CreateMetaFile( p1: PChar): HDC

Function DescribePixelFormat(DC: HDC;p2:Int;p3:UINT;var p4:TPixelFormatDescriptor): BOOL
12313:
12314:
12315:
                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
12317:
               Function SetMapperFlags( DC : HDC; Flag : DWORD) : DWORD
Function SetGraphicsMode( hdc : HDC; iMode : Integer) : Integer
Function SetMapMode( DC : HDC; p2 : Integer) : Integer
Function SetMetaFileBitsEx( Size : UINT; const Data : PChar) : HMETAFILE
12318 .
12319:
12320:
12321:
                //Function SetPaletteEntries(Palette:HPALETTE;StartIndex,NumEntries:UINT;var PaletteEntries):UINT
12322:
               Function SetPixel( DC : HDC; X, Y : Integer; Color : COLORREF) : COLORREF
Function SetPixelV( DC : HDC; X, Y : Integer; Color : COLORREF) : BOOL
12323:
12324:
               Function SetPolyFillMode( DC : HDC; PixelFormat : Integer; FormatDef : PPixelFormatDescriptor) : BOOL

Function SetPolyFillMode( DC : HDC; PolyFillMode : Integer) : Integer
12326:
12327: Function StretchBlt(DestDC:HDC;X,Y,Width,Height:Int;SrcDC:HDC;XSrc,YSrc,SrcWidth,
              SrcHeight:Int;Rop:DWORD):BOOL
               Function SetRectRgn(Rgn: HRgn; X1, Y1, X2, Y2: Integer): BOOL
Function StretchDIBits(DC: HDC; DestX,DestY,DestWidth,DestHeight,SrcX,SrcY,SrcWidth,
              SrcHeight:Int;Bits:int; var BitsInfo : TBitmapInfo; Usage : UINT; Rop : DWORD) : Integer
             Function SetROP2( DC : HDC; p2 : Integer) : Integer
Function SetStretchBltMode( DC : HDC; StretchMode : Integer) : Integer
12331:
               Function SetSystemPaletteUse( DC : HDC; p2 : UINT) : UINT

Function SetTextCharacterExtra( DC : HDC; CharExtra : Integer) : Integer
12332:
               Function SetTextColor( DC : HDC; Color : COLORREF) : COLORREF
Function SetTextAlign( DC : HDC; Flags : UINT) : UINT
12334:
12335:
               Function SetTextJustification( DC : HDC; BreakExtra, BreakCount : Integer) : Integer
12336:
12337:
                Function UpdateColors( DC : HDC) : BOOL
               Function GetViewportExtEx( DC : HDC; var Size : TSize) : BOOL

Function GetViewportOrgEx( DC : HDC; var Point : TPoint) : BOOL
12338:
12339:
               Function GetWindowExtEx( DC : HDC; var Size : TSize) : BOOL

Function GetWindowOrgEx( DC : HDC; var Point : TPoint) : BOOL
12340:
12341:
             Function IntersectClipRect( DC : HDC; X1, Y1, X2, Y2 : Integer) : Integer
Function InvertRgn( DC : HDC; p2 : HRGN) : BOOL
Function MaskBlt( DestDC : HDC; XDest, YDest, Width, Height : Integer; SrcDC : HDC; XScr, YScr : Integer;
Mask : HBITMAP; xMask, yMask : Integer; Rop : DWORD) : BOOL
12343:
12344:
12345: Function PlgBlt(DestDC:HDC;const PtsArray,SrcDC:HDC;XSrc,YSrc,Widt,Heigh:Int;Mask:HBITMAP;xMask,
             yMask:Int):BOOL;
12346: Function OffsetClipRgn( DC : HDC; XOffset, YOffset : Integer) : Integer
12347: Function OffsetRgn( RGN : HRGN; XOffset, YOffset : Integer) : Integer
               Function OffsetRgn( RGN : HRGN; XOffset, YOffset : Integer) : Integer
Function PatBlt( DC : HDC; X, Y, Width, Height : Integer; Rop : DWORD) : BOOL
Function Pie( DC : HDC; X1, Y1, X2, Y2, X3, Y3, X4, Y4 : Integer) : BOOL
Function PlayMetaFile( DC : HDC; MF : HMETAFILE) : BOOL
Function PaintRgn( DC : HDC; RGN : HRGN) : BOOL
Function PtInRegion( RGN : HRGN; X, Y : Integer) : BOOL
Function PtVisible( DC : HDC; X, Y : Integer) : BOOL
12348:
12350:
12351:
12352:
               Function RectInRegion( RGN : HRGN; const Rect : TRect) : BOOL
12354:
               Function RectVisible( DC : HDC; const Rect : TRect) : BOOL
Function Rectangle( DC : HDC; X1, Y1, X2, Y2 : Integer) : BOOL
Function RestoreDC( DC : HDC; SavedDC : Integer) : BOOL
12355:
12356:
12357:
12358: end;
12359:
12360: procedure SIRegister ovcfiler(CL: TPSPascalCompiler);
12361: begin
12362:
                 SIRegister TOvcAbstractStore(CL);
                  //PExPropInfo', '^TExPropInfo // will not work

TExPropInfo', 'record PI : TPropInfo; AObject : TObject; end
12363:
1.2364: //
12365:
                 SIRegister_TOvcPropertyList(CL);
                  SIRegister TOvcDataFiler(CL);
12366:
               Procedure UpdateStoredList( AForm : TWinControl; AStoredList : TStrings; FromForm : Boolean)
12367:
12368:
               Procedure UpdateStoredList1( AForm : TCustomForm; AStoredList : TStrings; FromForm : Boolean)
               Function CreateStoredItem( const CompName, PropName: string): string
Function ParseStoredItem( const Item: string; var CompName, PropName: string): Boolean
12369:
12370:
12371:
                //Function GetPropType( PropInfo : PExPropInfo) : PTypeInfo
12372:
12373:
12374: procedure SIRegister_ovccoco(CL: TPSPascalCompiler);
12375: begin
                 'ovsetsize','LongInt').SetInt( 16);
                'etSyntax','LongInt').SetInt( 0);
12377:
                 'etSymantic','LongInt').SetInt( 1);
'chCR','Char').SetString( #13);
'chLF','Char').SetString( #10);
12378:
12379:
12380:
                 'chLineSeparator','').SetString( chCR);
12381:
12382:
                  SIRegister_TCocoError(CL);
12383:
                  SIRegister_TCommentItem(CL);
12384:
                  SIRegister_TCommentList(CL);
                  SIRegister_TSymbolPosition(CL);
```

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12386: TGenListType', '( glNever, glAlways, glOnError )
12387: TovBitSet', 'set of Integer
12388: //PStartTable', '^TStartTable // will not work
12389: 'TovCharSet', 'set of AnsiChar
12390: TAfterGenListEvent', 'Procedure ( Sender : TObject; var PrintErrorCount : boolean)
12391: TCommentEvent', 'Procedure ( Sender : TObject; CommentList : TCommentList)
12392: TCustomErrorEvent', 'Function(Sender:TObject;const ErrorCode: longint;const Data:string): string
12393: TovErrorEvent', 'Procedure ( Sender : TObject; Error : TCocoError) 12394: TovErrorProc', 'Procedure ( ErrorCode : integer; Symbol : TSymbolP
12395:
           +'osition; const Data : string; ErrorType : integer)
12396: TFailureEvent', 'Procedure ( Sender : TObject; NumErrors : integer)
12397: TGetCH', 'Function ( pos : longint) : char
12398: TStatusUpdateProc',
                                  'Procedure ( Sender : TObject; Status: string; LineNum:integer)
          SIRegister_TCocoRScanner(CL);
12399:
12400:
          SIRegister TCocoRGrammar(CL);
         '_EF','Char').SetString( #0);
'_TAB','Char').SetString( #09);
12401:
12402:
         '_CR','Char').SetString( #13);
'_LF','Char').SetString( #10);
12403 .
12404:
12405:
          '_EL','
                   ').SetString( CR);
          '_EOF','Char').SetString( #26);
12406:
12407:
          'LineEnds','TCharSet').SetInt(ord(_CR) or ord(_LF) or ord(_EF));
12408: 'minErrDist','LongInt').SetInt(2);
12409: Function ovPadL(S: string; ch: char; L: integer): string
12410: end;
12411:
12412:
           TFormatSettings = record
12413:
             CurrencyFormat: Byte;
12414:
             NegCurrFormat: Byte;
12415:
              ThousandSeparator: Char
12416:
             DecimalSeparator: Char
12417:
             CurrencyDecimals: Byte;
12418:
             DateSeparator: Char;
12419:
             TimeSeparator: Char;
              ListSeparator: Char
12420:
12421:
             CurrencyString: string;
12422:
              ShortDateFormat: string;
12423:
             LongDateFormat: string;
12424:
              TimeAMString: string;
12425:
              TimePMString: string
12426:
              ShortTimeFormat: string;
             LongTimeFormat: string;
ShortMonthNames: array[1..12] of string;
12427:
12428:
              LongMonthNames: array[1..12] of string;
12429:
12430:
              ShortDayNames: array[1..7] of string
             LongDayNames: array[1..7] of string;
12431:
             TwoDigitYearCenturyWindow: Word;
12432:
12433:
           end;
12434:
12435: procedure SIRegister OvcFormatSettings(CL: TPSPascalCompiler);
12436: begin
12437:
         Function ovFormatSettings : TFormatSettings
12438: end;
12439:
12440: procedure SIRegister_ovcstr(CL: TPSPascalCompiler);
12441: begin
           TOvcCharSet', 'set of Char
12442:
           ovBTable', 'array[0..255] of Byte
12443:
12444:
           //BTable = array[0..{$IFDEF UNICODE}{$IFDEF
        HUGE_UNICODE_BMTABLE ) $FFFF { $ELSE } $FF { $ENDIF } { $ELSE } $FF { $ENDIF } ] of Byte;
12445: Function BinaryBPChar( Dest : PChar; B : Byte) : PChar
12446:
          Function BinaryLPChar( Dest : PChar; L : LongInt) : PChar
12447 .
         \textbf{Function} \  \, \texttt{BinaryWPChar}(\  \, \texttt{Dest} \ : \  \, \texttt{PChar}; \  \, \texttt{W} \ : \  \, \texttt{Word}) \ : \  \, \texttt{PChar}
         Procedure BMMakeTable( MatchString : PChar; var BT : ovBTable)
12448:
         Function BMSearch(var Buffer, BufLength: Cardinal; var BT:ovBTable; MatchString: PChar; var Pos: Cardinal): Bool;
12449:
         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
12451:
12452:
         Function HexBPChar( Dest : PChar; B : Byte) : PChar
Function HexLPChar( Dest : PChar; L : LongInt) : PChar
Function HexPtrPChar( Dest : PChar; P : TObject) : PChar
12453:
12454:
12455:
12456:
         Function HexWPChar( Dest : PChar; W : Word) : PChar
12457:
         Function LoCaseChar( C : Char) : Char
         Function OctalLPChar( Dest : PChar; L : LongInt) : PChar
12458:
         Function StrChDeletePrim( P : PChar; Pos : Cardinal) : PChar
12459:
          Function StrChInsertPrim( Dest : PChar; C : Char; Pos: Cardinal) : PChar
12460:
12461:
         \textbf{Function} \  \, \texttt{StrChPos}(\  \, \texttt{P} \  \, \texttt{:} \  \, \texttt{PChar}; \  \, \texttt{C} \  \, \texttt{:} \  \, \texttt{Char}; \  \, \textbf{var} \  \, \texttt{Pos} \  \, \texttt{:} \  \, \texttt{Cardinal}) \  \, \texttt{:} \  \, \texttt{Boolean}
         Procedure StrInsertChars( Dest : PChar; Ch : Char; Pos, Count : Word)
12462:
         Function StrStCopy( Dest, S : PChar; Pos, Count : Cardinal) : PChar
12463:
          Function StrStDeletePrim( P : PChar; Pos, Count : Cardinal) : PChar
12464:
12465:
         Function StrStInsert( Dest, S1, S2 : PChar; Pos : Cardinal) : PChar
         Function StrStInsertPrim( Dest, S : PChar; Pos : Cardinal) : PChar
12466:
         Function StrStPos( P, S : PChar; var Pos : Cardinal) : Boolean
12467:
         Function StrToLongPChar( S : PChar; var I : LongInt) : Boolean
12468:
         Procedure TrimAllSpacesPChar( P : PChar)
12469:
         Function TrimEmbeddedZeros(const S : string) : string
Procedure TrimEmbeddedZerosPChar(P : PChar)
Function TrimTrailPrimPChar(S : PChar) : PChar
12470:
12471:
12472:
12473: Function TrimTrailPChar( Dest, S : PChar) : PChar
```

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12474:
         Function TrimTrailingZeros(const S : string) : string
12475:
         Procedure TrimTrailingZerosPChar( P : PChar)
         Function UpCaseChar( C : Char) : Char
Function ovcCharInSet( C : Char; const CharSet : TOvcCharSet) : Boolean
12477:
         Function ovc32StringIsCurrentCodePage( const S : WideString) : Boolean;
12478:
12479:
         //Function ovc32StringIsCurrentCodePage1( const S:PWideChar; CP : Cardinal) : Boolean;
12480:
12481:
        procedure SIRegister_AfUtils(CL: TPSPascalCompiler);
12482:
12483:
        begin
          //PRaiseFrame', '^TRaiseFrame // will not work
12484:
          TRaiseFrame', 'record NextRaise : PRaiseFrame; ExceptAddr : ___Poin'
12485:
           +'ter; ExceptObject : TObject; ExceptionRecord : PExceptionRecord; end
12486:
         Procedure ExchangeInteger( X1, X2 : Integer)
12487:
12488:
12489:
         Procedure FillInteger( const Buffer, Size, Value : Integer)
         Function LongMulDiv( Mult1, Mult2, Div1 : Longint) : Longint
12490:
12491 .
         Function afCompareMem( P1, P2 : TObject; Length : Integer) : Boolean
12492:
12493:
                                  = 'ADVAPI32.DLL';
             function AbortSystemShutdown; external advapi32 name 'AbortSystemShutdownW';
12494:
12495:
        function AbortSystemShutdown(lpMachineName: PKOLChar): BOOL; stdcall;
12496:
             function AccessCheckAndAuditAlarm(SubsystemName: PKOLChar;
12497:
               HandleId: Pointer; ObjectTypeName, ObjectName: PKOLChar;
SecurityDescriptor: PSecurityDescriptor; DesiredAccess: DWORD;
12498:
12499:
               const GenericMapping: TGenericMapping; ObjectCreation: BOOL;
12500:
               var GrantedAccess: DWORD; var AccessStatus, pfGenerateOnClose: BOOL; stdcall;
             function AccessCheckByTypeAndAuditAlarm(SubsystemName: PKOLChar;
    HandleId: Pointer; ObjectTypeName, ObjectName: PKOLChar;
12501:
12502:
               SecurityDescriptor: PSecurityDescriptor; PrincipalSelfSid: PSID; DesiredAccess: DWORD;
12503:
12504:
               AuditType: AUDIT_EVENT_TYPE; Flags: DWORD; ObjectTypeList: PObjectTypeList;
               ObjectTypeListLength: DWORD; const GenericMapping: TGenericMapping; ObjectCreation: BOOL; var GrantedAccess: DWORD; var AccessStatus, pfGenerateOnClose: BOOL; stdcall;
12505:
12506:
             function AccessCheckByTypeResultListAndAuditAlarm(SubsystemName: PKOLChar;
12507:
               HandleId: Pointer; ObjectTypeName, ObjectName: PKOLChar;
12508:
12509:
               SecurityDescriptor: PSecurityDescriptor; PrincipalSelfSid: PSID; DesiredAccess: DWORD;
               AuditType: AUDIT_EVENT_TYPE; Flags: DWORD; ObjectTypeList: PObjectTypeList;
ObjectTypeListLength: DWORD; const GenericMapping: TGenericMapping; ObjectCreation: BOOL;
12510:
12511:
12512:
               var GrantedAccess: DWORD; var AccessStatusList:DWORD; var pfGenerateOnClose: BOOL): BOOL; stdcall;
12513:
             function BackupEventLog(hEventLog: THandle; lpBackupFileName: PKOLChar): BOOL; stdcall;
12514:
             function ClearEventLog(hEventLog: THandle; lpBackupFileName: PKOLChar): BOOL; stdcall;
             function CreateProcessAsUser(hToken: THandle; lpApplicationName: PKOLChar; lpCommandLine: PKOLChar; lpProcessAttributes: PSecurityAttributes;
12515:
12516:
               lpThreadAttributes: PSecurityAttributes; bInheritHandles: BOOL;
12517:
               dwCreationFlags: DWORD; lpEnvironment: Pointer; lpCurrentDirectory: PKOLChar; const lpStartupInfo: TStartupInfo; var lpProcessInformation: TProcessInformation): BOOL; stdcall;
12518:
12519:
             function GetCurrentHwProfile(var lpHwProfileInfo: THWProfileInfo): BOOL; stdcall;
12520:
             function GetFileSecurity(lpFileName: PKOLChar; RequestedInformation: SECURITY_INFORMATION;
12521:
12522:
               pSecurityDescriptor: PSecurityDescriptor;nLength:DWORD;var lpnLengthNeeded: DWORD):BOOL; stdcall;
             function GetUserName(lpBuffer: PKOLChar; var nSize: DWORD): BOOL; stdcall;
function InitiateSystemShutdown(lpMachineName, lpMessage: PKOLChar;
12523:
12524:
12525:
               dwTimeout: DWORD; bForceAppsClosed, bRebootAfterShutdown: BOOL): BOOL; stdcall;
             function LogonUser(lpszUsername, lpszDomain, lpszPassword: PKOLChark
12526:
12527:
               dwLogonType, dwLogonProvider: DWORD; var phToken: THandle): BOOL; stdcall;
             function LookupAccountName(lpSystemName, lpAccountName: PKOLChar;
    Sid: PSID; var cbSid: DWORD; ReferencedDomainName: PKOLChar;
12528:
12529:
               var cbReferencedDomainName: DWORD; var peUse: SID_NAME_USE): BOOL; stdcall;
12530:
12531:
             function LookupAccountSid(lpSystemName: PKOLChar; Sid: PSID;
             Name: PKOLChar; var cbName: DWORD; ReferencedDomainName: PKOLChar; var cbReferencedDomainName: DWORD; var peUse: SID_NAME_USE): BOOL; stdcall; function LookupPrivilegeDisplayName(lpSystemName, lpName: PKOLChar;
12532:
12533:
12534:
12535:
               lpDisplayName: PKOLChar; var cbDisplayName, lpLanguageId: DWORD): BOOL; stdcall;
12536:
             function LookupPrivilegeName(lpSystemName: PKOLChar;
               var lpLuid: TLargeInteger; lpName: PKOLChar; var cbName: DWORD): BOOL; stdcall;
12537:
             function LookupPrivilegeValue(lpSystemName, lpName: PKOLChar;
var lpLuid: TLargeInteger): BOOL; stdcall;
12538:
12539:
12540:
             function ObjectCloseAuditAlarm(SubsystemName: PKOLChar;
12541:
               HandleId: Pointer; GenerateOnClose: BOOL; stdcall;
12542:
             function ObjectDeleteAuditAlarm(SubsystemName: PKOLChar;
               HandleId: Pointer; GenerateOnClose: BOOL): BOOL; stdcall;
12543:
12544:
             function ObjectOpenAuditAlarm(SubsystemName: PKOLChar; HandleId: Pointer;
12545:
               ObjectTypeName: PKOLChar; ObjectName: PKOLChar; pSecurityDescriptor: PSecurityDescriptor;
12546:
               ClientToken: THandle; DesiredAccess, GrantedAccess: DWORD;
               var Privileges: TPrivilegeSet; ObjectCreation, AccessGranted: BOOL;
12547:
12548:
               var GenerateOnClose: BOOL): BOOL; stdcall;
12549:
             function ObjectPrivilegeAuditAlarm(SubsystemName: PKOLChar;
12550:
               HandleId: Pointer; ClientToken: THandle; DesiredAccess: DWORD;
12551:
               var Privileges: TPrivilegeSet; AccessGranted: BOOL): BOOL; stdcall;
             function OpenBackupEventLog(lpUNCServerName, lpFileName: PKOLChar): THandle; stdcall;
12552:
             function OpenEventLog(lpUNCServerName, lpSourceName; PKOLChar): THandle; stdcall; function PrivilegedServiceAuditAlarm(SubsystemName, ServiceName: PKOLChar):
12553:
12554:
12555:
               ClientToken: THandle; var Privileges: TPrivilegeSet; AccessGranted: BOOL): BOOL; stdcall;
             function ReadEventLog(hEventLog: THandle; dwReadFlags, dwRecordOffset: DWORD;
   lpBuffer: Pointer; nNumberOfBytesToRead: DWORD;
12556:
12557:
               var pnBytesRead, pnMinNumberOfBytesNeeded: DWORD): BOOL; stdcall;
12558:
12559:
             function RegConnectRegistry(lpMachineName: PKOLChar; hKey: HKEY;
12560:
             var phkResult: HKEY): Longint; stdcall;
function RegCreateKey(hKey: HKEY; lpSubKey: PKOLChar;
12561:
12562:
               var phkResult: HKEY): Longint; stdcall;
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function RegCreateKeyEx(hKey: HKEY; lpSubKey: PKOLChar;
  Reserved: DWORD; lpClass: PKOLChar; dwOptions: DWORD; samDesired: REGSAM;
12563:
12564:
                            lpSecurityAttributes: PSecurityAttributes; var phkResult: HKEY;
12565:
12566:
                           lpdwDisposition: PDWORD): Longint; stdcall;
                       function RegDeleteKey(hKey: HKEY; lpSubKey: PKOLChar): Longint; stdcall; function RegDeleteValue(hKey: HKEY; lpValueName: PKOLChar): Longint; stdcall;
12567:
12568:
                       function RegEnumKeyEx(hKey: HKEY; dwIndex: DWORD; lpName: PKOLChar;
12569:
12570:
                            var lpcbName: DWORD; lpReserved: Pointer; lpClass: PKOLChar;
                           lpcbClass: PDWORD; lpftLastWriteTime: PFileTime): Longint; stdcall;
12571:
                       function RegEnumKey(hKey:HKEY; dwIndex:DWORD; lpName:PKOLChar; cbName:DWORD):Longint;stdcall;
function RegEnumValue(hKey: HKEY; dwIndex: DWORD; lpValueName: PKOLChar;
12572:
12573:
12574:
                           var lpcbValueName: DWORD; lpReserved: Pointer; lpType: PDWORD;
                       lpData: PByte; lpcbData: PDWORD): Longint; stdcall; function RegLoadKey(hKey: HKEY; lpSubKey, lpFile: PKOLChar): Longint; stdcall; function RegOpenKey(hKey: HKEY; lpSubKey: PKOLChar; var phkResult: HKEY):Longint; stdcall;
12575:
12576:
12577:
12578:
                        function RegOpenKeyEx(hKey: HKEY; lpSubKey: PKOLChar;
12579:
                           ulOptions: DWORD; samDesired: REGSAM; var phkResult: HKEY): Longint; stdcall;
                       function RegQueryInfoKey(hKey: HKEY; lpClass: PKOLChar;
  lpcbClass: PDWORD; lpReserved: Pointer;
  lpcSubKeys, lpcbMaxSubKeyLen, lpcbMaxClassLen, lpcValues,
12580:
12581:
12582:
                            lpcbMaxValueNameLen, lpcbMaxValueLen, lpcbSecurityDescriptor: PDWORD;
12583:
                           lpftLastWriteTime: PFileTime): Longint; stdcall;
12584:
                       function RegQueryMultipleValues(hKey: HKEY; var ValList;
   NumVals: DWORD; lpValueBuf: PKOLChar; var ldwTotsize: DWORD): Longint; stdcall;
12585:
12586:
                       function RegQueryValue(hKey: HKEY; lpSubKey: PKOLChar;
12587:
12588:
                           lpValue: PKOLChar; var lpcbValue: Longint): Longint; stdcall;
                       function RegQueryValueEx(hKey: HKEY; lpValueName: PKOLChar;
lpReserved: Pointer; lpType: PDWORD; lpData: PByte; lpcbData: PDWORD): Longint; stdcall;
function RegReplaceKey(hKey: HKEY; lpSubKey: PKOLChar;
lpNewFile: PKOLChar; lpOldFile: PKOLChar): Longint; stdcall;
12589:
12590:
12591:
12592:
                       function RegRestoreKey(hKey: HKEY; lpFile: PKOLChar; dwFlags: DWORD): Longint; stdcall;
function RegSaveKey(hKey: HKEY; lpFile: PKOLChar;
 lpSecurityAttributes: PSecurityAttributes): Longint; stdcall;
12593:
12594:
12595:
12596:
                       function RegSetValue(hKey: HKEY; lpSubKey: PKOLChar;
                       function RegSetValue(NRey: HREY: lpSubRey: PROLCHAR;
  dwType: DWORD: lpData: PKOLChar; cbData: DWORD): Longint; stdcall;
function RegSetValueEx(hKey: HKEY; lpValueName: PKOLChar;
  Reserved: DWORD: dwType: DWORD: lpData: Pointer; cbData: DWORD): Longint; stdcall;
function RegUnLoadKey(hKey: HKEY; lpSubKey: PKOLChar): Longint; stdcall;
12597:
12598:
12599:
12600:
12601:
                       function RegisterEventSource(lpUNCServerName, lpSourceName: PKOLChar): THandle; stdcall;
12602:
                       function ReportEvent(hEventLog: THandle; wType, wCategory: Word;
12603:
                           dwEventID: DWORD; lpUserSid: Pointer; wNumStrings: Word;
                       dwDataSize: DWORD; lpStrings, lpRawData: Pointer; BOOL; stdcall; function SetFileSecurity(lpFileName: PKOLChar; SecurityInformation: SECURITY_INFORMATION;
12604:
12605:
                           pSecurityDescriptor: PSecurityDescriptor): BOOL; stdcall;
12606:
12607:
                Function wAddAtom( lpString : PKOLChar) : ATOM
12608:
                Function wBeginUpdateResource( pFileName : PKOLChar; bDeleteExistingResources : BOOL) : THandle
12609:
                 //Function wCallNamedPipe( lpNamedPipeName : PKOLChar; lpInBuffer : Pointer; nInBufferSize : DWORD;
12610:
               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
12611:
12612:
12613:
              Function wCopyFile( lpExistingFileName, lpNewFileName : PKOLChar; bFailIfExists : BOOL) : BOOL
12614: //Function wCopyFileEx( lpExistingFileName, lpNewFileName : PKOLChar; lpProgressRoutine :
TFNProgressRoutine; lpData : Pointer; pbCancel : PBool; dwCopyFlags : DWORD) : BOOL
12615: Function wCreateDirectory( lpPathName : PKOLChar; lpSecurityAttributes : PSecurityAttributes) : BOOL
12614:
                 Function wCreateDirectoryEx(lpTemplateDirectory,
12616:
               lpNewDirectory:PKOLChar;lpSecAttrib:PSecurityAttribts):BOOL;
12617:
                Function wCreateEvent(lpEventAttribes:PSecurityAttrib;bManualReset,
              bInitialState:BOOL;lpName:PKOLChar):THandle;

Function wCreateFile( lpFileName : PKOLChar; dwDesiredAccess, dwShareMode : DWORD; lpSecurityAttributes :
              PSecurity Attributes: \ dw Creation Disposition, \ dw Flags And Attributes: DWORD; h Template File: Thandle): Thandle and the file of th
              Function wCreateFileMapping( hFile : THandle; lpFileMappingAttributes : PSecurityAttributes; flProtect, dwMaximumSizeHigh, dwMaximumSizeHow : DWORD; lpName : PKOLChar) : THandle
12620:
                Function wCreateHardLink(lpFileName,
               lpExistingFileName:PKOLChar;lpSecurityAttributes:PSecurityAttributes):BOOL
12621: Function
               \label{lower} Create \texttt{Mailslot(lpName:PKOLChar;MaxMessSize:DWORD;lReadTimeout:DWORD;lpSecurityAttrib:PSecurityAttributes):Thandle); and the lower than th
12622: Function wCreateNamedPipe( lpName : PKOLChar; dwOpenMode, dwPipeMode, nMaxInstances, nOutBufferSize,
              nInBufferSize, nDefaultTimeOut : DWORD; lpSecurityAttributes : PSecurityAttributes) :
                                                                                                                                                                                                   THandle
               //Function CreateProcess( lpApplicationName : PKOLChar; lpCommandLine : PKOLChar; lpProcessAttributes,
               lpThreadAttributes : PSecurityAttributes; bInheritHandles : BOOL; dwCreationFlags : DWORD; lpEnvironment :
               Pointer; lpCurrentDirectory:PKOLChar; const lpStartupInfo:TStartupInfo; var lpProcessInfo:TProcessInformation): BOOL
                Function wCreateSemaphore(lpSemaphoreAttributes: PSecurityAttributes; lInitialCount, lMaximumCount:
               Longint; lpName : PKOLChar) : THandle
12625: Function
               wCreateWaitableTimer(lpTimerAttributes:PSecurityAttribs;bManualReset:BOOL;lpTimerName:PKOLChar):THandle);
12626: Function wDefineDosDevice( dwFlags : DWORD; lpDeviceName, lpTargetPath : PKOLChar) : BOOL 12627: Function wDeleteFile( lpFileName : PKOLChar) : BOOL
12628:
                Function wEndUpdateResource( hUpdate : THandle; fDiscard : BOOL) : BOOL
12629:
                 //Function
               wEnumCalendarInfo(lpCalInfEnumProc:TFNCalInfEnumProc;Locale:LCID;Calendar:CALID;CalType:CALTYPE):BOOL;
                 //Function wEnumDateFormats(lpDateFmtEnumProc: TFNDateFmtEnumProc; Locale : LCID; dwFlags : DWORD) : BOOL
               // Function wEnumResourceLanguages(hModule:HMODULE;lpType,
12631:
               lpName:PChar;lpEnumFunc:ENUMRESLANGPROC;lParam:Longint:BOOL')
12632:
                //Function
               wEnumResourceNames(hModule:HMODULE:lpTvpe:PKOLChar:lpEnumFunc:ENUMRESNAMEPROC:lParam:Longint):BOOL:
12633: //Function wEnumResourceTypes( hModule:HMODULE; lpEnumFunc:ENUMRESTYPEPROC;lParam:Longint):BOOL;
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12634:
                           // Function \ w Enum System Code Pages ( \ lp Code Page Enum Proc : TFN Code page Enum Proc ; \ dw Flags : DWORD) : BOOL \\ // Function \ w Enum System Locales ( \ lp Locale Enum Proc : TFN Locale Enum Proc ; \ dw Flags : DWORD) : BOOL \\
12635:
                            //Function wEnumTimeFormats(lpTimeFmtEnumProc:TFNTimeFmtEnumProc;Locale:LCID;dwFlags:DWORD):BOOL;
12637 .
                           Function wExpandEnvironmentStrings( lpSrc : PKOLChar; lpDst : PKOLChar; nSize : DWORD) : DWORD
12638:
                           Procedure wFatalAppExit( uAction : UINT; lpMessageText : PKOLChar)
                       //Function wFillConsoleOutputCharacter( hConsoleOutput : THandle; cCharacter : KOLChar; nLength : DWORD; dwWriteCoord : TCoord; var lpNumberOfCharsWritten : DWORD) : BOOL
12639:
12640:
                          Function wFindAtom( lpString : PKOLChar) : ATOM
12641:
                          Function
                        wFindFirstChangeNotification(lpPathName:PKOLChar;bWatchSubtree:BOOL;dwNotifyFilter:DWORD):THandle;bWatchSubtree:BOOL;dwNotifyFilter:DWORD):Thandle;bWatchSubtree:BOOL;dwNotifyFilter:DWORD):Thandle;bWatchSubtree:BOOL;dwNotifyFilter:DWORD):Thandle;bWatchSubtree:BOOL;dwNotifyFilter:DWORD):Thandle;bWatchSubtree:BOOL;dwNotifyFilter:DWORD):Thandle;bWatchSubtree:BOOL;dwNotifyFilter:DWORD):Thandle;bWatchSubtree:BOOL;dwNotifyFilter:DWORD):Thandle;bWatchSubtree:BOOL;dwNotifyFilter:DWORD):Thandle;bWatchSubtree:BOOL;dwNotifyFilter:DWORD):Thandle;bWatchSubtree:BOOL;dwNotifyFilter:DWORD):Thandle;bWatchSubtree:BOOL;dwNotifyFilter:DWORD):Thandle;bWatchSubtree:BOOL;dwNotifyFilter:DWORD):Thandle;bWatchSubtree:BOOL;dwNotifyFilter:DWORD):Thandle;bWatchSubtree:BOOL;dwNotifyFilter:DWORD):Thandle;bWatchSubtree:BOOL;dwNotifyFilter:DWORD):Thandle;bWatchSubtree:BOOL;dwNotifyFilter:DWORD):Thandle;bWatchSubtree:BOOL;dwNotifyFilter:DWORD):Thandle;bWatchSubtree:BOOL;dwNotifyFilter:DWORD):Thandle;bWatchSubtree:BOOL;dwNotifyFilter:DWORD):Thandle;bWatchSubtree:BOOL;dwNotifyFilter:DWORD):Thandle;bWatchSubtree:Boolcong.
                          Function wFindFirstFile( lpFileName : PKOLChar; var lpFindFileData : TWIN32FindData) : THandle
//Function wFindFirstFileEx( lpFileName : PKOLChar; fInfoLevelId : TFindexInfoLevels; lpFindFileData :
12642:
12643:
                        Pointer; fSearchOp : TFindexSearchOps; lpSearchFilter : Pointer; dwAdditionalFlags : DWORD) : BOOL
                          Function wFindNextFile( hFindFile: THandle; var lpFindFileData: TWIN32FindData): BOOL Function wFindResource( hModule: HMODULE; lpName, lpType: PKOLChar): HRSRC
12644:
12645:
12646:
                           Function wFindResourceEx( hModule : HMODULE; lpType, lpName : PKOLChar; wLanguage : Word) : HRSRC
                        wFoldString(dwMapFlags:DWORD;lpSrcStr:PKOLChar;cchSrc:Int;lpDestStr:PKOLChar;cchDest:Integer):Integer);Integer); Integer); I
12648:
                       //Function wFormatMessage( dwFlags : DWORD; lpSource : Pointer; dwMessageId : DWORD; dwLanguageId : DWORD; lpBuffer : PKOLChar; nSize : DWORD; Arguments : Pointer) : DWORD

Function wFreeEnvironmentStrings( EnvBlock : PKOLChar) : BOOL
                           Function wGetAtomName( nAtom : ATOM; lpBuffer : PKOLChar; nSize : Integer) : UINT
12650:
12651:
                           \textbf{Function} \ \ \text{wGetBinaryType} \ ( \ \ \text{lpApplicationName} \ : \ \ \text{PKOLChar}; \ \ \textbf{var} \ \ \ \text{lpBinaryType} \ : \ \ \text{DWORD}) \ : \ \ \text{BOOL}
 12652:
                           Function wGetCommandLine : PKOLChar
                           Function wGetCompressedFileSize( lpFileName : PKOLChar; lpFileSizeHigh : PDWORD) : DWORD Function wGetComputerName( lpBuffer : PKOLChar; var nSize : DWORD) : BOOL
12653:
12654:
12655:
                          Function wGetConsoleTitle( lpConsoleTitle: PKOLChar; nSize: DWORD): DWORD
//Function wGetCurrencyFormat( Locale: LCID; dwFlags: DWORD; lpValue: PKOLChar; lpFormat:
12656:
                        **Polyther of the Courter of the Cou
12658:
                            //Function wGetDateFormat( Locale : LCID; dwFlags : DWORD; lpDate : PSystemTime; lpFormat : PKOLChar;
                        lpDateStr : PKOLChar; cchDate : Integer) : Integer
//Function wGetDefaultCommConfig( lpszName:PKOLChar;var lpCC : TCommConfig;var lpdwSize:DWORD):BOOL
12659:
                        Function wGetDiskFreeSpace( lpRootPathName : PKOLChar; var lpSectorsPerCluster, lpBytesPerSector, lpNumberOfFreeClusters, lpTotalNumberOfClusters : DWORD) : BOOL
12660:
12661:
                             //Function wGetDiskFreeSpaceEx( lpDirectoryName : PKOLChar; var lpFreeBytesAvailableToCaller,
                         lpTotalNumberOfBytes, lpTotalNumberOfFreeBytes : PLargeInteger) : BOOL
12662:
                          Function wGetDriveType( lpRootPathName : PKOLChar) : UINT
                          Function wGetEnvironmentStrings: PKOLChar

Function wGetEnvironmentVariable(lpName: PKOLChar; lpBuffer: PKOLChar; nSize: DWORD): DWORD;

Function wGetFileAttributes(lpFileName: PKOLChar): DWORD
12663:
12664:
12665:
12666:
                           //Function
                        wGetFileAttributesEx(lpFileName:PKOLChar;fInfoLevelId:TGetFileExInfoLevs;lpFileInform:Pointer):BOOL;
12667:
                          \textbf{Function} \ \ \text{wGetFullPathName} ( \ \text{lpFileName} : \ \text{PKOLChar}; \ \text{nBufferLength} : \ \text{WORD}; \ \text{lpBuffer} : \ \text{PKOLChar}; \ \text{var}; 
                        lpFilePart:PKOLChar):DWORD;
12668:
                             //Function wGetLocaleInfo(Locale:LCID; LCType:LCTYPE;lpLCData:PKOLChar;cchData:Integer): Integer
                          //Function wGetLocaleinfo(Localeinto); LeType:LCTPE; TpLCalairFolding; Cellular; Cellular; Integer): In Function wGetLocaleinfolius (Integer): Two WORD; Typungtier : PKOLChar): DWORD

Function wGetModuleFileName( hModule : HINST; Typilename : PKOLChar; nSize : DWORD) : DWORD
12669:
12670:
 12671:
                           Function wGetModuleHandle( lpModuleName : PKOLChar) : HMODULE
                        //Function wGetNamedPipeHandleState( hNamedPipe : THandle; lpState, lpCurInstances, lpMaxCollectionCount, lpCollectDataTimeout : PDWORD; lpUserName : PKOLChar; nMaxUserNameSize : DWORD) : BOOL
12672:
                        //Function wGetNumberFormat( Locale : LCID; dwFlags:DWORD; lpValue:PKOLChar; lpFormat:PNumberFmt; lpNumberStr : PKOLChar; cchNumber : Integer) : Integer
12673:
12674:
                          Function wGetPrivateProfileInt(lpAppName,lpKeyName:PKOLChar;nDefault:Integer;lpFileName:PKOLChar):UINT;
12675:
                          Function
                        wGetPrivateProfileSection(lpAppName:PKOLChar;lpRetrStr:PKOLChar;nSize:DWORD;pFileName:PKOLChar):DWORD;
                           Function wGetPrivateProfileSectionNames(lpszReturnBuffer:PKOLChar;nSize:DWORD;lpFileName:PKOLChar):DWORD;
                          Function wGetPrivateProfileString( lpAppName, lpKeyName, lpDefault : PKOLChar; lpReturnedStr: PKOLChar;
                       nSize:DWORD; lpFileName : PKOLChar) : DWORD

Function wGetProfileInt( lpAppName, lpKeyName : PKOLChar; nDefault : Integer) : UINT
12678:
                           Function wGetProfileSection( lpAppName : PKOLChar; lpReturnedString : PKOLChar; nSize : DWORD) : DWORD
12679:
12680:
                           Function wGetProfileString(lpAppName,lpKeyName,
                        lpDefault:PKOLChar;lpReturnedStr:PKOLChar;nSize:DWORD):DWORD;
12681:
                          Function wGetShortPathName( lpszLongPath:PKOLChar;lpszShortPath: PKOLChar; cchBuffer : DWORD) : DWORD
                           //Procedure wGetStartupInfo( var lpStartupInfo : TStartupInfo)
//Function wGetStringTypeEx(Locale:LCID; dwInfoType:DWORD;lpSrcStr:PKOLChar;cchSrc:Integer;var
12682:
12683:
                         lpCharType):BOOL
12684:
                          Function wGetSystemDirectory( lpBuffer : PKOLChar; uSize : UINT) : UINT
                          Function wGetTempFileName( lpPathName, lpPrefixString: PKOLChar;uUnique:UINT;lpTempFileName:PKOLChar):UINT
Function wGetTempPath( nBufferLength : DWORD; lpBuffer : PKOLChar) : DWORD
12685:
 12686:
                        w \textit{GetTimeFormat(Loc:LCID;} dw \textit{Flgs:DWORD;} lp \textit{Time:PSystemTime:} lp \textit{Frm:PKOLChar;} lp \textit{TimeStr:PKOLChar;} c \textit{Time:Int):Int} is the property of the
12688:
                       //Function wGetVersionEx( var lpVersionInformation : TOSVersionInfo) : BOOL //Function GetVolumeInformation( lpRootPathName : PKOLChar; lpVolumeNameBuffer : PKOLChar; nVolumeNameSize
12689:
                              DWORD; lpVolumeSerialNumber : PDWORD; var lpMaximumComponentLength, lpFileSystemFlags : DWORD;
                         lpFileSystemNameBuffer : PKOLChar; nFileSystemNameSize : DWORD) : BOOL
12690:
                          Function wGetWindowsDirectory( lpBuffer : PKOLChar; uSize : UINT) : UINT
                          Function wellobalAddAtom(lpString:PKOLChar): ATOM
Function wGlobalFindAtom(lpString:PKOLChar): ATOM
12691:
12692:
                           Function wGlobalGetAtomName( nAtom : ATOM; lpBuffer : PKOLChar; nSize : Integer) : UINT
12694:
                           Function wIsBadStringPtr( lpsz : PKOLChar; ucchMax : UINT) : BOOL
12695:
                          Function
                        wLCMapString(Loc:LCID;dwMapFlgs:DWORD;lpSrcStr:PKOLChar;cchSrc:Int;lpDestStr:PKOLChar;cchDest:Int):Int;lpDestStr:PKOLChar;cchDest:Int):Int;lpDestStr:PKOLChar;cchDest:Int):Int;lpDestStr:PKOLChar;cchDest:Int):Int;lpDestStr:PKOLChar;cchDest:Int):Int;lpDestStr:PKOLChar;cchDest:Int):Int;lpDestStr:PKOLChar;cchDest:Int):Int;lpDestStr:PKOLChar;cchDest:Int):Int;lpDestStr:PKOLChar;cchDest:Int):Int;lpDestStr:PKOLChar;cchDest:Int):Int;lpDestStr:PKOLChar;cchDest:Int):Int;lpDestStr:PKOLChar;cchDest:Int):Int;lpDestStr:PKOLChar;cchDest:Int):Int;lpDestStr:PKOLChar;cchDest:Int):Int;lpDestStr:PKOLChar;cchDest:Int):Int;lpDestStr:PKOLChar;cchDest:Int):Int;lpDestStr:PKOLChar;cchDest:Int):Int;lpDestStr:PKOLChar;cchDest:Int):Int;lpDestStr:PKOLChar;cchDest:Int):Int;lpDestStr:PKOLChar;cchDest:Int):Int;lpDestStr:PKOLChar;cchDest:Int):Int;lpDestStr:PKOLChar;cchDest:Int):Int;lpDestStr:PKOLChar;cchDest:Int):Int;lpDestStr:PKOLChar;cchDest:Int;lpDestStr:PKOLChar;cchDest:Int;lpDestStr:PKOLChar;cchDest:Int;lpDestStr:PKOLChar;cchDest:Int;lpDestStr:PKOLChar;cchDest:Int;lpDestStr:PKOLChar;cchDest:Int;lpDestStr:PKOLChar;cchDest:Int;lpDestStr:PKOLChar;cchDest:Int;lpDestStr:PKOLChar;cchDest:Int;lpDestStr:PKOLChar;cchDest:Int;lpDestStr:PKOLChar;cchDest:Int;lpDestStr:PKOLChar;cchDest:Int;lpDestStr:PKOLChar;cchDest:Int;lpDestStr:PKOLChar;cchDest:Int;lpDestStr:PKOLChar;cchDest:Int;lpDestStr:PKOLChar;cchDest:Int;lpDestStr:PKOLChar;cchDest:Int;lpDestStr:PKOLChar;cchDest:Int;lpDestStr:PKOLChar;cchDest:Int;lpDestStr:PKOLChar;cchDest:Int;lpDestStr:PKOLChar;cchDest:Int;lpDestStr:PKOLChar;cchDest:Int;lpDestStr:PKOLChar;cchDest:Int;lpDestStr:PKOLChar;cchDest:Int;lpDestStr:PKOLChar;cchDest:Int;lpDestStr:PKOLChar;cchDest:Int;lpDestStr:PKOLChar;cchDest:Int;lpDestStr:PKOLChar;cchDest:Int;lpDestStr:PKOLChar;cchDest:Int;lpDest:Int;lpDest:Int;lpDest:Int;lpDest:Int;lpDest:Int;lpDest:Int;lpDest:Int;lpDest:Int;lpDest:Int;lpDest:Int;lpDest:Int;lpDest:Int;lpDest:Int;lpDest:Int;lpDest:Int;lpDest:Int;lpDest:Int;lpDest:Int;lpDest:Int;lpDest:Int;lpDest:Int;lpDest:Int;lpDest:I
                          Function wLoadLibrary( lpLibFileName : PKOLChar) : HMODULE
                           Function wLoadLibraryEx( lpLibFileName : PKOLChar; hFile : THandle; dwFlags : DWORD) : HMODULE
12697:
                           Function wMoveFile( lpExistingFileName, lpNewFileName : PKOLChar) : BOOL
12698:
                       Function wMoveFileEx( lpExistingFileName, lpNewFileName: PKOLChar; dwFlags: DWORD): BOOL //Function wMoveFileWithProgress( lpExistingFileName, lpNewFileName: PKOLChar; lpProgressRoutine: TFNProgressRoutine; lpData: Pointer; dwFlags: DWORD): BOOL
12699:
12700:
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12701:
                Function wOpenEvent( dwDesiredAccess : DWORD; bInheritHandle : BOOL; bName:PKOLChar) : THandle
12702:
                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
12704 •
12705:
                Function wOpenWaitableTimer(dwDesiredAccess:DWORD;bInheritHandle:BOOL;lpTimerName:PKOLChar):THandle
                Procedure wOutputDebugString( lpOutputString: PKOLChar)
//Function wPeekConsoleInput(hConsoleInput:THandle;var lpBuffer:TInputRecord;nLength:DWORD;var
12706:
12707:
               lpNumberOfEventsRead:DWORD):BOOL;
12708:
                Function wQueryDosDevice( lpDeviceName : PKOLChar; lpTargetPath : PKOLChar; ucchMax : DWORD) : DWORD
12709:
                 //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
12710:
12711:
                  //Function wReadConsoleInput(hConsInp:THandle;var lpBuf:TInpRec;nLength:DWORD;var
               lpNumbOfEventsRead:DWORD):BOOL;
//Function wReadConsoleOutput( hConsoleOutput : THandle; lpBuffer : Pointer; dwBufferSize, dwBufferCoord
12712:
                 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;
12714:
12715:
               lpClipRectangle : PSmallRect; dwDestinationOrigin : TCoord; var lpFill : TCharInfo) : BOOL
                Function wSearchPath( lpPath, lpFileName, lpExtension: PKOLChar; nBufferLength: DWORD; lpBuffer: PKOLChar; var
12716:
               lpFilePart:PKOLChar):DWORD;
12717:
                Function wSetComputerName( lpComputerName : PKOLChar) : BOOL
                Function wSetConsoleTitle( lpConsoleTitle : PKOLChar) : BOOL
12718:
                Function wSetCurrentDirectory( lpPathName : PKOLChar) : BOOL
12719:
12720:
                 //Function wSetDefaultCommConfig( lpszName : PKOLChar; lpCC : PCommConfig; dwSize : DWORD) : BOOL
                Function wSetEnvironmentVariable( lpName, lpValue : PKOLChar) : BOOL
Function wSetFileAttributes( lpFileName : PKOLChar; dwFileAttributes : DWORD) : BOOL
12721:
12722:
12723:
                 //Function wSetLocaleInfo( Locale : LCID; LCType : LCTYPE; lpLCData : PKOLChar) : BOOL
12724:
                Function wSetVolumeLabel( lpRootPathName : PKOLChar; lpVolumeName : PKOLChar) : BOOL
                 //Function wUpdateResource(hUpdate:THandle;lpType,
12725:
               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
12726:
12727:
12728:
                 //Function wWriteConsole( hConsoleOutput : THandle; const lpBuffer : Pointer; nNumberOfCharsToWrite :
              DWORD; var lpNumberOfCharsWritten : DWORD; lpReserved : Pointer) : BOOL
//Function wWriteConsoleInput( hConsoleInput : THandle; const lpBuffer : TInputRecord; nLength : DWORD;
12729:
               var lpNumberOfEventsWritten : DWORD) : BOOL
                 //Function wWriteConsoleOutput(hConsoleOutput:THandle; lpBuffer:Pointer; dwBufferSize,dwBufferCoord :
12730:
              TCoord; var lpWriteRegion : TSmallRect) : BOOL
              //Function wWriteConsoleOutputCharacter( hConsoleOutput : THandle; lpCharacter : PKOLChar; nLength : DWORD; dwWriteCoord : TCoord; var lpNumberOfCharsWritten : DWORD) : BOOL
12731:
                Function wWritePrivateProfileSection( lpAppName, lpString, lpFileName : PKOLChar) : BOOL
12733:
                Function wWritePrivateProfileString( lpAppName, lpKeyName, lpString, lpFileName : PKOLChar) : BOOL
                Function wWriteProfileSection( lpAppName, lpString : PKOLChar) : BOOL
Function wWriteProfileString( lpAppName, lpKeyName, lpString : PKOLChar) : BOOL
12734:
12735:
                 Function wlstrcat( lpString1, lpString2 : PKOLChar) : PKOLChar
12737:
                Function wlstrcmp( lpString1, lpString2 : PKOLChar) : Integer
                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
12738:
12739:
12740:
12741:
                 // 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
12742:
               PNetConnectInfoStruct) : DWORD
                 //Function wWNetAddConnection2(var lpNetResource:TNetResource:lpPassword.
               lpUserName:PKOLChar;dwFlags:DWORD):DWORD;
12744:
                 //Function wWNetAddConnection3( hwndOwner : HWND; var lpNetResource:TNetResource;lpPassword,
               lpUserName:PKOLChar; dwFlags : DWORD) : DWORD
                Function wWNetAddConnection( lpRemoteName, lpPassword, lpLocalName : PKOLChar) : DWORD
Function wWNetCancelConnection2( lpName : PKOLChar; dwFlags : DWORD; fForce : BOOL) : DWORD
12745:
12746:
12747:
                 Function wWNetCancelConnection( lpName : PKOLChar; fForce : BOOL) : DWORD
                 //Function wWNetConnectionDialog1( var lpConnDlgStruct : TConnectDlgStruct) : DWORD
//Function wWNetDisconnectDialog1( var lpConnDlgStruct : TDiscDlgStruct) : DWORD
12748:
12749:
                //Function wWNetEnumResource(hEnum:THandle,var lpcCount:DWORD;lpBuffer:Ptr,var lpBufferSize:DWORD):DWORD;
Function wWNetGetConnection(lpLocalName:PKOLChar;lpRemoteName:PKOLChar; var lpnLength:DWORD):DWORD;
12750:
                Function wWNetGetLastError( var lpError: DWORD; lpErrorBuf: PKOLChar; nErrorBufSize: DWORD; lpNameBuf
12752:
               : PKOLChar; nNameBufSize : DWORD) : DWORD
                 //Function wWNetGetNetworkInformation(lpProvider:PKOLChar;var lpNetInfoStruct:TNetInfoStruct):DWORD;
                Function wWNetGetProviderName(dwNetType:DWORD;lpProviderName:PKOLChar;var lpBufferSize:DWORD):DWORD;
12754:
12755:
                 //Function wWNetGetResourceParent(lpNetResource:PNetResource;lpBuffer:Pointer;var cbBuffer:DWORD):DWORD;
12756:
               //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;
12758:
12759:
               // Function wWNetSetConnection( lpName : PKOLChar; dwProperties : DWORD; pvValues : Pointer) : DWORD
12760:
                 //Function wWNetUseConnection(hwndOwner:HWND;var
               1p \texttt{NetResource:TNetResource;1} p \texttt{UserID:PKOLChar;1} p \texttt{Password:PKOLChar;} \ d \texttt{wFlags:DWORD;1} p \texttt{AccessName:PKOLChar;var} = \texttt{NoLChar;var} = \texttt{NoLCh
               lpBufferSize:DWORD;var lpResult:DWORD):DWORD
                 Function wGetFileVersionInfo(lptstrFilename:PKOLChar;dwHandle,dwLen:DWORD;lpData:Pointer):BOOL;
12761:
12762:
                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,
12763:
12764:
               szTmpFile : PKOLChar; var lpuTmpFileLen : UINT) : DWORD
12765:
              //Function wVerQueryValue(pBlock:Pointer;lpSubBlock:PKOLChar;var lplpBuffer:Ptr;var puLen:UINT):BOOL;
12766:
              //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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12768:
                        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
12769:
12771 •
12772:
                         //Function wCreateColorSpace( var ColorSpace : TLogColorSpace) : HCOLORSPACE
12773: //Function wCreateDC( lpszDriver, lpszDevice, lpszOutput : PKOLChar; lpdvmInit : PDeviceMode) : HDC 12774: // Function wCreateEnhMetaFile( DC : HDC; FileName : PKOLChar; Rect : PRect; Desc : PKOLChar) : HDC 12775: Function wCreateFont( nHeight, nWidth, nEscapement, nOrientaion, fnWeight : Integer; fdwItalic,
                      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;
12776:
                        Function wCreateFontIndirect( const p1 : TLogFont) : HFONT
                         //Function wCreateFontIndirectEx( const p1 : PEnumLogFontExDV) : HFONT
12777:
12778:
                        // Function wCreateIC( lpszDriver, lpszDevice, lpszOutput : PKOLChar; lpdvmInit : PDeviceMode) : HDC
Function wCreateMetaFile( p1 : PKOLChar) : HDC
Function wCreateScalableFontResource( p1 : DWORD; p2, p3, p4 : PKOLChar) : BOOL
12779:
12780:
12781:
                     //Function wDeviceCapabilities(pDriverNa,pDeviceNam,
                     pPort:PKOLChar;iIdx:Int;pOut:PKOLChar;DevMod:PDeviceMode):Int;
12782.
                     // \ {\it Function w} \\ {\it Enum} \\ {\it FontEmilies}(\ {\it DC}\ :\ {\it HDC};\ p2\ :\ {\it PKOLChar};\ p3\ :\ {\it TFNFontEnumProc};\ p4\ :\ {\it LPARAM})\ :\ {\it BOOLChar};\ p3\ :\ {\it TFNFontEnumProc};\ p4\ :\ {\it LPARAM})\ :\ {\it BOOLChar};\ p3\ :\ {\it TFNFontEnumProc};\ p4\ :\ {\it LPARAM})\ :\ {\it BOOLChar};\ p3\ :\ {\it TFNFontEnumProc};\ p4\ :\ {\it LPARAM})\ :\ {\it BOOLChar};\ p3\ :\ {\it TFNFontEnumProc};\ p4\ :\ {\it LPARAM})\ :\ {\it BOOLChar};\ p3\ :\ {\it TFNFontEnumProc};\ p4\ :\ {\it LPARAM})\ :\ {\it BOOLChar};\ p3\ :\ {\it TFNFontEnumProc};\ p4\ :\ {\it LPARAM})\ :\ {\it BOOLChar};\ p3\ :\ {\it TFNFontEnumProc};\ p4\ :\ {\it LPARAM}
                         //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
12783:
12784:
12785:
                         //Function wExtTextOut(DC:HDC;X,
12786:
                     {\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
12787:
                        //Function wGetCharABCWidths( DC : HDC; FirstChar, LastChar : UINT; const ABCStructs) : BOOL //Function wGetCharABCWidthsFloat( DC : HDC; FirstChar, LastChar : UINT; const ABCFloatSturcts) : BOOL
12788:
12789:
                         //Function wGetCharWidth32( DC : HDC; FirstChar, LastChar : UINT; const Widths) : BOOL
12790:
                      //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
12791:
12792:
                        Function wGetEnhMetaFile(pl: PKOLChar): HENHMETAFILE

Function wGetEnhMetaFile(pl: PKOLChar): HENHMETAFILE

Function wGetEnhMetaFile(pl: PKOLChar): HENHMETAFILE; p2: UINT; p3: PKOLChar): UINT
12793:
12794:
                     // 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;
12795:
12796:
                      lpwBuffer : Pointer; const lpmat2 : TMat2) : DWORD
Function wGetICMProfile( DC : HDC; var Size : DWORD; Name : PKOLChar) : BOOL
12798:
                      // 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
12799:
12800:
12801:
                        //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
12802:
12803:
                        Function wGetTextExtentPoint( DC : HDC; Str : PKOLChar; Count : Integer; var Size : TSize) : BOOL
Function wGetTextExtentPoint( DC : HDC; Str : PKOLChar; Count : Integer; var Size : TSize) : BOOL
Function wGetTextFace( DC : HDC; Count : Integer; Buffer : PKOLChar) : Integer
12804:
12805:
                         //Function wGetTextMetrics( DC : HDC; var TM : TTextMetric) : BOOL
12806:
12807:
                        Function wPolyTextOut( DC : HDC; const PolyTextArray, Strings : Integer) : BOOL
12808:
                        \textbf{Function} \ \ \text{wRemoveFontResource} ( \ \ \text{FileName} \ : \ \ \text{PKOLChar}) \ : \ \ \text{BOOL}
                         //Function wRemoveFontResourceEx( pl : PKOLChar; p2 : DWORD; p3 : PDesignVector) : BOOL 
//Function wResetDC( DC : HDC; const InitData : TDeviceMode) : HDC
12809:
12810:
12811:
                         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
12812:
12813:
                        Function wUpdateICMRegKey( p1 : DWORD; p2, p3 : PKOLChar; p4 : UINT) : BOOL
Function wwglUseFontBitmaps( DC : HDC; p2, p3, p4 : DWORD) : BOOL
12814:
12815:
12816:
                         //Function wwglUseFontOutlines(p1:HDC; p2,p3,p4:DWORD;p5,p6:Single;p7:Int;p8:PGlyphMetricsFloat):BOOL
12817:
                        12818:
12819:
                         //Function
                     wCallWindowProc(lpPrevWndFunc:TFNWndProc;hWnd:HWND;Msg:UINT;wParam:WPARAM;lParam:LPARAM):LRESULT
12820:
                     //Function wChangeDisplaySettings( var lpDevMode : TDeviceMode; dwFlags : DWORD) : Longint // Function wChangeDisplaySettingsEx( lpszDeviceName:PKOLChar; var lpDevMode: TDeviceMode; wnd : HWND; dwFlags : DWORD; lParam : Pointer) : Longint
12821:
                        \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
12823:
                        Function wCharLower( lpsz : PKOLChar) : PKOLChar
12824:
                        Function wCharLowerBuff( lpsz : PKOLChar; cchLength : DWORD) : DWORD
                        Function wCharNext( lpsz : PKOLChar) : PKOLChar
12825:
                        Function wCharNextEx( CodePage : Word; lpCurrentChar : LPCSTR; dwFlags : DWORD) : LPSTR Function wCharNextEx( CodePage : Word; lpSzCurrent : PKOLChar) : PKOLChar)
12827:
                        // Function wCharPrevEx( CodePage : Word; lpStart, lpCurrentChar : LPCSTR; dwFlags : DWORD) : LPSTR Function wCharToOem( lpszSrc : PKOLChar; lpszDst : PKOLChar) : BOOL
12828:
12829:
                        Function wCharToOemBuff( lpszSrc : PKOLChar; lpszDst : PKOLChar; cchDstLength : DWORD) : BOOL
12830:
                         Function wCharUpper( lpsz : PKOLChar) : PKOLChar
12832:
                        Function wCharUpperBuff( lpsz : PKOLChar; cchLength : DWORD) : DWORD
                        Function wCopyAcceleratorTable( hAccelSrc : HACCEL; var lpAccelDst, cAccelEntries : Integer) : Integer Function wCreateAcceleratorTable( var Accel, Count : Integer) : HACCEL
12833:
12834:
12835:
                         //Function wCreateDesktop(lpszDesktop,
                      lpsz Device: PKOLChar; pDevmode: PDeviceMode; dwFlags: DWORD; dwDesiredAccess: DWORD; lpsa: PSecurityAttribs): HDESK DWORD; dwDesiredAccess: DWORD; dwDesi
12836:
                         //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;
12837:
                     hWndParent : HWND; hInstance : HINST; lParam : LPARAM) : HWND
                     //Function wCreateWindowEx(dwExStyle:DWORD;lpClassName:PKOLChar;lpWindowName:PKOLChar;dwStyle DWORD;X,Y,
12839:
                     nWidth, nHeight:Int WndParent:HWND;hMenu:HMENU;hInstance:HINST;lpParam:Pointer):HWND
                          //Function wCreateWindowStation(lpwinsta:PKOLChar;dwReserv,
                     dwDesiredAccess:DWORD;lpsa:PSecurityAttribs):HWINSTA;
12841: Function wDefDlgProc( hDlg : HWND; Msg : UINT; wParam : WPARAM; lParam : LPARAM) : LRESULT
                        Function wDefFrameProc(hWnd,hWndMDIClient:HWND;uMsg:UINT;wParam:WPARAM;lParam:LPARAM):LRESULT;
12842:
                        Function wDefMDIChildProc( hWnd : HWND; uMsg : UINT; wParam : WPARAM; lParam: LPARAM):LRESULT;
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12844:
                  Function wDefWindowProc( hWnd : HWND; Msg : UINT; wParam : WPARAM; lParam:LPARAM): LRESULT
                  //Function wDialogBoxIndirectParam( hInstance : HINST; const lpDialogTemplate : TDlgTemplate; hWndParent
12845:
                    HWND; lpDialogFunc : TFNDlgProc; dwInitParam : LPARAM) : Integer
                  //Function wDialogBoxParam( hInstance : HINST; lpTemplateName : PKOLChar; hWndParent : HWND; lpDialogFunc
                  : TFNDlgProc; dwInitParam : LPARAM) : Integer
Function wDispatchMessage( const lpMsg : TMsg) : Longint
12847:
                  Function wDlgDirList(hDlg:HWND;lpPathSpec:PKOLChar;nIDListBox,
12848:
                nIDStaticPath:Integer;uFileType:UINT):Integer;
12849:
                 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
12852:
                //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
12856:
                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;
12858:
12859:
12860:
12861:
                  Function wGetDlgItemText( hDlg: HWND/nIDDlgItem:Integer/lpString:PKOLChar/nMaxCount:Integer):UINT
12862:
                  Function wGetKeyNameText( lParam : Longint; lpString : PKOLChar; nSize : Integer) : Integer Function wGetKeyNameText( lParam : Longint; lpString : PKOLChar; nSize : Integer) : Integer
12863:
12864:
                  //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;
12865:
12866:
                  Function wGetMessage( var lpMsg: TMsg; hWnd: HWND; wMsgFilterMin, wMsgFilterMax: UINT): BOOL

Function wGetProp( hWnd: HWND; lpString: PKOLChar): THandle
12868:
                  //Function wGetTabbedTextExtent( hDC : HDC; lpString : PKOLChar; nCount, nTabPositions : Integer; var
12869:
                lpnTabStopPositions) : DWORD
12870:
                //Function wGetUserObjectInformation(hObj:THandle;nIndex:Int;pvInfo:Ptr;nLength:DWORD;var
                 lpnLengthNeed:DWORD)BOOL;
                  Function wGetWindowLong( hWnd : HWND; nIndex : Integer) : Longint
12871:
                  Function wGetWindowModuleFileName( hwnd: HWND; pszFileName: PKOLChar; cchFileNameMax: UINT): UINT Function wGetWindowText( hWnd: HWND; lpString: PKOLChar; nMaxCount: Integer): Integer
12872:
12873:
12874:
                  Function wGetWindowTextLength( hWnd : HWND) : Integer
12875:
                 //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
12876:
12877:
12878:
12879:
                  \textbf{Function} \  \, \texttt{wIsCharAlphaNumeric(ch:KOLChar):BOOL}
                  Function wIsCharLower( ch : KOLChar) : BOOL
Function wIsCharUpper( ch : KOLChar) : BOOL
12880:
12881:
                  Function wIsDialogMessage( hDlg : HWND; var lpMsg : TMsg) : BOOL
12883:
                  Function wLoadAccelerators( hInstance : HINST; lpTableName : PKOLChar) : HACCEL
                  Function wLoadBitmap( hInstance : HINST; lpBitmapName : PKOLChar) : HBITMAP
Function wLoadCursor( hInstance : HINST; lpCursorName : PKOLChar) : HCURSOR
12884:
12885:
                  Function wLoadCursorFromFile( lpFileName : PKOLChar) : HCURSOR
12886:
                  Function wLoadIcon( hInstance : HINST; lpIconName : PKOLChar) : HICON
12887:
12888:
                  12889:
                  Function wLoadKeyboardLayout( pwszKLID : PKOLChar; Flags : UINT) : HKL
Function wLoadMenu( hInstance : HINST; lpMenuName : PKOLChar) : HMENU
12890:
12891:
                   //Function wLoadMenuIndirect( lpMenuTemplate : Pointer) : HMENU
                  Function wLoadString(hInstance:HINST;uID: UINT; lpBuffer :PKOLChar;nBufferMax:Integer):Integer
12892:
                  Function wMapVirtualKey( uCode, uMapType : UINT) : UINT
Function wMapVirtualKeyEx( uCode, uMapType : UINT; dwhkl : HKL) : UINT
Function wMessageBox( hWnd : HWND; lpText, lpCaption : PKOLChar; uType : UINT) : Integer
12893:
12894:
12895:
12896:
                  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
12897:
12898:
12899:
12900:
                  //Function woemToChar( lpszSrc : PKOLChar; lpszDst : PKOLChar) : BOOL
Function w0emToCharBuff( lpszSrc : PKOLChar; lpszDst : PKOLChar; cchDstLength : DWORD) : BOOL
12901:
12902:
12903:
                  \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
12904:
12905:
12906:
                  Function wPostMessage( hWnd : HWND; Msg : UINT; wParam : WPARAM; lParam : LPARAM) : BOOL
12907:
                  \textbf{Function} \ \ \text{wPostThreadMessage(idThread:DWORD;Msg} \ : \ \ \text{UINT}; \ \ \text{wParam} \ : \ \ \text{PARAM}; \ \ \text{Param} \ : \ \ \text{LPARAM}) \ : \ \ \text{BOOL}
                  Function wRealGetWindowClass( hwnd : HWND; pszType : PKOLChar; cchType : UINT) : UINT
12908:
12909:
                // Function wRegisterClass( const lpWndClass : TWndClass) : ATOM
                  // Function wRegisterClassEx( const WndClass : TWndClassEx) : ATOM
Function wRegisterClipboardFormat( lpszFormat : PKOLChar) : UINT
12910:
12911:
                   / Function wRegisterDeviceNotification(hRecipient:THandle;NotificFilter:Pointer;Flags:DWORD):HDEVNOTIFY
12912:
                  Function wRegisterWindowMessage( lpString : PKOLChar) : UINT
Function wRemoveProp( hWnd : HWND; lpString : PKOLChar) : THandle
12913:
12915:
                  \textbf{Function} \ \ wSendDlgItemMessage(hDlg:HWND:nIDDlgItem:Integer;Msg:UINT:wParam:WPARAM;lParam:LPARAM):Longint;Minds(hDlg) + (hDlg) + (h
                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
12916:
12917:
                  Function wSendMessageTimeout(hWnd:HWND;Msg:UINT;wParam:WPARAM;lParam:LPARAM; fuFlags,uTimeout:UINT;var
12918:
                lpdwResult:DWORD): LRESULT
               Function wSendNotifyMessage( hWnd : HWND; Msg : UINT; wParam : WPARAM; lParam : LPARAM) : BOOL Function wSetClassLong( hWnd : HWND; nIndex : Integer; dwNewLong : Longint) : DWORD
12920:
                  Function wSetDlgItemText( hDlg : HWND; nIDDlgItem : Integer; lpString : PKOLChar) : BOOL
```

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12922:
            //Function wSetMenuItemInfo( p1 : HMENU; p2 : UINT; p3 : BOOL; const p4 : TMenuItemInfo) : BOOL Function wSetProp( hWnd : HWND; lpString : PKOLChar; hData : THandle) : BOOL
12923:
             // Function wSetUserObjectInformation(hObj:THandle;nIndex:Integer;pvInfo:Pointer;nLength:DWORD):BOOL
            Function wSetWindowLong( hWnd : HWND; nIndex : Integer; dwNewLong : Longint) : Longint Function wSetWindowText( hWnd : HWND; lpString : PKOLChar) : BOOL
12925 .
12926:
             //Function wSetWindowsHook( nFilterType : Integer; pfnFilterProc : TFNHookProc) : HHOOK
//Function wSetWindowsHookEx(idHook:Integer;lpfn:TFNHookProc;hmod:HINST;dwThreadId:DWORD):HHOOK;
12927:
12928:
12929: // Function wSystemParametersInfo( uiAction, uiParam : UINT; pvParam : Pointer; fWinIni: UINT): BOOL
12930:
            lpnTabStopPositions,nTabOrigin:Int):Longint;
            Function wTranslateAccelerator( hWnd : HWND; hAccTable : HACCEL; var lpMsg : TMsg) : Integer
12931:
             Function wUnregisterClass( lpClassName : PKOLChar; hInstance : HINST) : BOOL
12932:
            Function wVkKeyScan( ch : KOLChar) : SHORT
Function wVkKeyScanEx( ch : KOLChar; dwhkl : HKL) : SHORT
12933:
12934:
12935:
             Function wWinHelp( hWndMain : HWND; lpszHelp : PKOLChar; uCommand : UINT; dwData : DWORD) : BOOL
12936:
             Function wwsprintf( Output : PKOLChar; Format : PKOLChar) : Integer
             Function wwwsprintf( Output : PKOLChar; Format : PKOLChar; arglist : va_list) : Integer
12937:
12038 .
12939:
            //TestDrive!
12940:
            'SID_REVISION', 'LongInt').SetInt(1); 'FILENAME_ADVAPI32', 'String').SetString('ADVAPI32.DLL
             'PROC_CONVERTSIDTOSTRINGSIDA', 'String').SetString( 'ConvertSidToStringSidA
12941:
12942:
            Function GetDomainUserSidS(const domainName:String;const userName:String; var foundDomain:String):String;
12943:
            \textbf{Function} \ \ \texttt{GetLocalUserSidStr}( \ \ \textbf{const} \ \ \texttt{UserName} \ : \ \textbf{string}) \ : \ \textbf{string}
            Function getPid4user( const domain : string; const user : string; var pid : dword) : boolean
12944:
            Function Impersonate2User( const domain : string; const user : string)
12945:
                                                                                                                                    : boolean
12946:
             Function GetProcessUserBypid( pid : DWORD; var UserName, Domain : AnsiString) : Boolean
12947:
            Function KillProcessbyname( const exename : string; var found : integer) : integer
12948:
            Function getWinProcessList : TStringList
12949: end;
12950:
12951:
           procedure SIRegister_AfSafeSync(CL: TPSPascalCompiler);
12952: begin
             'AfMaxSyncSlots','LongInt').SetInt( 64);
12953:
              AfSynchronizeTimeout','LongInt').SetInt( 2000);
TAfSyncSlotID', 'DWORD
12954:
12955:
12956:
              {\tt TAfSyncStatistics','record\ MessagesCount:Int;TimeoutMessages:Int;DisabledMessages:Int;end;DisabledMessages:Int;end;DisabledMessages:Int;end;DisabledMessages:Int;end;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;Disabl
12957:
               TAfSafeSyncEvent!.
                                              'Procedure ( ID : TAfSyncSlotID)
12958:
              TAfSafeDirectSyncEvent', 'Procedure
12959:
             Function AfNewSyncSlot( const AEvent :
                                                                              TAfSafeSyncEvent) : TAfSyncSlotID
12960:
             Function AfReleaseSyncSlot( const ID : TAfSyncSlotID) : Boolean
12961:
             Function AfEnableSyncSlot( const ID : TAfSyncSlotID; Enable : Boolean) : Boolean
            Function AfValidateSyncSlot(const ID: TAfSyncSlotID): Boolean
Function AfSyncEvent(const ID: TAfSyncSlotID; Timeout: DWORD): Boolean
12962:
12963:
12964:
             Function AfDirectSyncEvent( Event : TAfSafeDirectSyncEvent; Timeout : DWORD) : Boolean
12965:
            Function AfIsSyncMethod : Boolean
12966:
            Function AfSvncWnd : HWnd
            Function AfSyncStatistics : TAfSyncStatistics
12967:
12968:
            Procedure AfClearSyncStatistics
12969:
12970:
12971: procedure SIRegister_AfComPortCore(CL: TPSPascalCompiler);
12972:
           begin
             regin
'fBinary','LongWord').SetUInt( $00000001);
'fParity','LongWord').SetUInt( $00000002);
'fOutxCtsFlow','LongWord').SetUInt( $00000004);
'fOutxDsrFlow','LongWord').SetUInt( $00000008);
'fDtrControl','LongWord').SetUInt( $00000030);
12973:
12974:
12975:
12976:
12977:
12978:
             'fDtrControlDisable','LongWord').SetUInt( $00000000);
12979:
             'fDtrControlEnable', 'LongWord').SetUInt( $00000010);
             'fDtrControlHandshake','LongWord').SetUInt( $0000020);
'fDsrSensitivity','LongWord').SetUInt( $00000040);
'fTXContinueOnXoff','LongWord').SetUInt( $00000080);
12980:
12981:
12982:
             'fOutX','LongWord').SetUInt( $00000100);
'fInX','LongWord').SetUInt( $00000200);
12983:
12984:
12985:
               fErrorChar', 'LongWord').SetUInt( $00000400);
             'fNull', 'LongWord').SetUInt( $00000800);
12986:
12987:
              'fRtsControl','LongWord').SetUInt( $00003000);
             'fRtsControlDisable','LongWord').SetUInt( $0000000);
'fRtsControlEnable','LongWord').SetUInt( $00001000);
12988:
12989:
             'fRtsControlHandshake', 'LongWord').SetUInt( $00002000);
'fRtsControlToggle', 'LongWord').SetUInt( $00003000);
12990:
12991:
             'fAbortOnError','LongWord').SetUInt( $00004000);
'fDummy2','LongWord').SetUInt( $FFFF8000);
TAfCoreEvent', '( ceOutFree, ceLineEvent, ceNeedReadData, ceException )
12992:
12993:
12994:
              FindClass('TOBJECT'), 'EAfComPortCoreError
FindClass('TOBJECT'), 'TAfComPortCore
12995:
12996:
              TAfComPortCoreEvent', 'Procedure ( Sender : TAfComPortCore; Even'
    +'tKind : TAfCoreEvent; Data : DWORD)
12997:
12998:
12999:
               SIRegister_TAfComPortCoreThread(CL);
               SIRegister_TAfComPortEventThread(CL);
13000:
13001:
               SIRegister TAfComPortWriteThread(CL);
13002:
              SIRegister_TAfComPortCore(CL);
13003:
            Function FormatDeviceName( PortNumber : Integer) : string
13004:
           end;
13005:
13006: procedure SIRegister_ApplicationFileIO(CL: TPSPascalCompiler);
13007: begin
13008:
               TAFIOFileStreamEvent', 'Function ( const fileName : String; mode: Word) : TStream
               TAFIOFileStreamExistsEvent', 'Function ( const fileName : String) : Boolean
```

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13010:
             SIRegister TApplicationFileIO(CL);
             TDataFileCapability', '( dfcRead, dfcWrite )
TDataFileCapabilities', 'set of TDataFileCapability
13011:
13012:
13013:
             SIRegister_TDataFile(CL);
13014:
             //TDataFileClass', 'class of TDataFile
13015:
           Function ApplicationFileIODefined : Boolean
           Function CreateFileStream(const fileName: String; mode: WordfmShareDenyNone):TStream
13016:
13017:
           Function FileStreamExists(const fileName: String) : Boolean
13018:
            //Procedure Register
13019: end;
13020:
13021:
          procedure SIRegister_ALFBXLib(CL: TPSPascalCompiler);
13022:
             TALFBXFieldType', '( uftUnKnown, uftNumeric, uftChar, uftVarchar'
13023:
              +', uftCstring, uftSmallint, uftInteger, uftQuad, uftFloat, uftDoublePrecisi'
+'on, uftTimestamp, uftBlob, uftBlobId, uftDate, uftTime, uftInt64, uftArray, uftNull)
13024:
13025:
             TALFBXScale', 'Integer
13026:
13027 •
             FindClass('TOBJECT'),'EALFBXConvertError
             SIRegister_EALFBXError(CL);
13028:
13029:
             SIRegister_EALFBXException(CL);
             FindClass('TOBJECT'), 'EALFBXGFixError
FindClass('TOBJECT'), 'EALFBXDSQLError
13030:
13031:
             FindClass('TOBJECT'), 'EALFBXDynError
13032:
             FindClass('TOBJECT'), 'EALFBXGBakError
13033:
             FindClass('TOBJECT'), 'EALFBXGSecError
13034:
13035:
             FindClass('TOBJECT'), 'EALFBXLicenseError
13036:
             FindClass('TOBJECT'),'EALFBXGStatError
             //EALFBXExceptionClass', 'class of EALFBXError
TALFBXCharacterSet', '(csNONE, csASCII, csBIG_5, csCYRL, csDOS4'
13037:
13038:
              +'37, csDOS850, csDOS852, csDOS857, csDOS860, csDOS861, csDOS863, csDOS865, '
+'csEUCJ_0208, csGB_2312, csISO8859_1, csISO8859_2, csKSC_5601, csNEXT, csOC'
13039:
13040:
              +'TETS, CSSJIS_0208, CSUNICODE_FSS, CSUTF8, CSWIN1250, CSWIN1251, CSWIN1252,'
+' CSWIN1253, CSWIN1254, CSDOS737, CSDOS775, CSDOS858, CSDOS862, CSDOS864, C'
13041:
13042:
              +'sDOS866, csDOS869, csWIN1255, csWIN1256, csWIN1257, csIS08859_3, csIS08859+'_4, csIS08859_5, csIS08859_6, csIS08859_7, csIS08859_8, csIS08859_9, csIS0
13043:
13044:
               +'8859_13, csKOI8R, csKOI8U, csWIN1258, csTIS620, csGBK, csCP943C )
13045:
             TALFBXTransParam', '( tpConsistency, tpConcurrency, tpShared, tp' +'Protected, tpExclusive, tpWait, tpNowait, tpRead, tpWrite, tpLockRead, tpL' +'ockWrite, tpVerbTime, tpCommitTime, tpIgnoreLimbo, tpReadCommitted, tpAuto'
13046:
13047:
13048:
13049:
               +'Commit, tpRecVersion, tpNoRecVersion, tpRestartRequests, tpNoAutoUndo, tpLockTimeout )
13050:
             TALFBXTransParams', 'set of TALFBXTransParam
           Function ALFBXStrToCharacterSet( const CharacterSet : AnsiString) : TALFBXCharacterSet
13051:
           Function ALFBXCreateDBParams( Params: AnsiString; Delimiter: Char): AnsiString
13052:
           Function ALFBXCreateBlobParams( Params : AnsiString; Delimiter : Char) : AnsiString
13053:
13054:
             'cALFBXMaxParamLength','LongInt').SetInt( 125);
             TALFBXParamsFlag', '( pfNotInitialized, pfNotNullable )
TALFBXParamsFlags', 'set of TALFBXParamsFlag
//PALFBXSQLVar', '^TALFBXSQLVar // will not work
13055:
13056:
             ///PALFBXSQLDaData', ''TALFBXSQLDaData // will not work
TALFBXStatementType', '( stSelect, stInsert, stUpdate, stDelete,'
13058:
13059:
13060:
              +' stDDL, stGetSegment, stPutSegment, stExecProcedure, stStartTrans, stCommi'
13061:
                +'t, stRollback, stSelectForUpdate, stSetGenerator, stSavePoint )
             SIRegister_TALFBXSQLDA(CL);
13062:
             //PALFBXPtrarray', '^TALFBXPtrarray // will not work SIRegister_TALFBXPoolStream(CL);
13063:
13064:
             //PALFBXBlobData', '^TALFBXBlobData // will not work
TALFBXBlobData', 'record Size : Integer; Buffer : string; end
13065:
13066:
             //PALFBXArrayDesc', '^TALFBXArrayDesc // will not work
//TALFBXArrayDesc', 'TISCArrayDesc
//TALFBXBlobDesc', 'TISCBlobDesc
//PALFBXArrayInfo', '^TALFBXArrayInfo // will not work
//TALFBXArrayInfo', 'record index : Integer; size : integer; info: TALFBXArrayDesc; end
13067:
13068:
13069:
13070:
13071:
13072:
             SIRegister_TALFBXSQLResult(CL);
             //TALFBXSQLResultClass', 'class of TALFBXSQLResult \\ SIRegister\_TALFBXSQLParams(CL);
13073:
13074:
13075:
             //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)
13076:
13077:
13078:
13079:
13080:
13081:
             //TALFBXOnGetDBExceptionClass', 'Procedure ( Number : Integer; out'
13082:
             //+' Excep : EALFBXExceptionClass)
SIRegister TALFBXLibrary(CL);
13083:
            'cAlFBXDateOffset','LongInt').SetInt( 15018);
'cALFBXTimeCoeff','LongInt').SetInt( 86400000);
13084:
13085:
13086:
            //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)
13087:
13088:
13089:
13090:
13091:
            //Procedure ALFBXEncodeTimeStamp( const DateTime : TDateTime; v : PISCTimeStamp);
            //Procedure ALFBXEncodeTimeStamp1( const Date : Integer; v : PISCTimeStamp);
//Procedure ALFBXEncodeTimeStamp2( const Time : Cardinal; v : PISCTimeStamp);
13092:
13093:
           Function ALFBXEncodeSQLDate( Year : Integer; Month, Day : Integer) : Integer
Function ALFBXEncodeSQLTime( Hour, Minute, Second : Word; var Fractions : LongWord): Cardinal
13094:
13095:
            TALFBXParamType', '( prNone, prByte, prShrt, prCard, prStrg, prIgno )
TALFBXDPBInfo', 'record Name : AnsiString; ParamType : TALFBXParamType; end
13096:
13097:
           Function ALFBXSQLQuote( const name : AnsiString) : AnsiString
```

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13099: Function ALFBXSOLUnOuote( const name : AnsiString) : AnsiString
13100: end;
13101:
13102:
             procedure SIRegister_ALFBXClient(CL: TPSPascalCompiler);
13103:
             begin
                 TALFBXClientSQLParam', 'record Value : AnsiString; IsNull : Boolean; end TALFBXClientSQLParams', 'array of TALFBXClientSQLParam
13104:
13105:
                 TALFBXClientSelectDataSQL', 'record SQL : AnsiString; Params : T'
13106:
                   +'ALFBXClientSQLParams; RowTag : AnsiString; ViewTag : AnsiString; Skip : in'
13107:
13108:
                    +'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
13109:
13110:
13111:
13112:
13113:
13114:
                  SIRegister_TALFBXClient(CL);
                  SIRegister_TALFBXConnectionStatementPoolBinTreeNode(CL);
13115:
13116:
                  SIRegister_TALFBXConnectionStatementPoolBinTree(CL);
                  SIRegister TALFBXConnectionWithStmtPoolContainer(CL);
13117:
13118:
                  SIRegister_TALFBXConnectionWithoutStmtPoolContainer(CL);
                  SIRegister_TALFBXReadTransactionPoolContainer(CL);
13119:
13120:
                  SIRegister_TALFBXReadStatementPoolContainer(CL);
13121:
                 {\tt SIRegister\_TALFBXStringKeyPoolBinTreeNode(CL)};\\
                 SIRegister_TALFBXConnectionPoolClient(CL);
SIRegister_TALFBXEventThread(CL);
13122:
13123:
13124:
                 Function AlMySqlClientSlashedStr( const Str : AnsiString) : AnsiString
13125: end;
13126:
13127: procedure SIRegister_ovcBidi(CL: TPSPascalCompiler);
13128: begin
13129:
             _OSVERSIONINFOA = record
13130:
                     dwOSVersionInfoSize: DWORD;
13131:
                     dwMajorVersion: DWORD;
13132:
                     dwMinorVersion: DWORD;
                      dwBuildNumber: DWORD;
13134:
                     dwPlatformId: DWORD;
13135:
                     szCSDVersion: array[0..127] of AnsiChar; { Maintenance AnsiString for PSS usage }
13136:
                 end;
               TOSVersionInfoA', '_OSVERSIONINFOA
TOSVersionInfo', 'TOSVersionInfoA
13137:
13138:
               'WS_EX_RIGHT','LongWord').SetUInt( $00001000);
'WS_EX_LEFT','LongWord').SetUInt( $0000000);
13139:
13140:
               WS_EX_LTRREADING', 'LongWord').SetUInt( $00002000);
'WS_EX_LTRREADING', 'LongWord').SetUInt( $00000000);
13141:
13142:
               'WS_EX_LEFTSCROLLBAR','LongWord').SetUInt( $00004000);
'WS_EX_RIGHTSCROLLBAR','LongWord').SetUInt( $00000000);
13143:
13144:
               Function SetProcessDefaultLayout( dwDefaultLayout : DWORD) : BOOL
13145:
13146:
                'LAYOUT_RTL','LongWord').SetUInt( $00000001);
13147:
                'LAYOUT_BTT', 'LongWord').SetUInt( $00000002);
13148:
               'LAYOUT_VBH','LongWord').SetUInt( $00000004);
                'LAYOUT_BITMAPORIENTATIONPRESERVED','LongWord').SetUInt( $00000008);
13149:
                'NOMIRRORBITMAP', 'LongWord').SetUInt( DWORD ( $80000000 ));
13150:
               Function SetLayout( dc : HDC; dwLayout : DWORD) : DWORD
13151:
13152:
               Function GetLayout( dc : hdc) : DWORD
13153:
               Function IsBidi : Boolean
               Function GetCurrentHwProfile( var lpHwProfileInfo : THWProfileInfo) : BOOL
13154:
               Function GetVersionEx( var lpVersionInformation : TOSVersionInfo) : BOOL
13155:
13156:
               Function SetPriorityClass( hProcess : THandle; dwPriorityClass: DWORD) : BOOL
               Function GetPriorityClass( hProcess : THandle) : DWORD
Function OpenClipboard( hWndNewOwner : HWND) : BOOL
Function CloseClipboard : BOOL
13157:
13158:
13159:
13160:
               Function GetClipboardSequenceNumber : DWORD
               Function GetClipboardOwner : HWND
Function SetClipboardViewer( hWndNewViewer : HWND) : HWND
13161:
13162:
               Function GetClipboardViewer : HWND
13163:
               Function ChangeClipboardChain( hWndRemove, hWndNewNext : HWND) : BOOL
13164:
               Function SetClipboardData( uFormat : UINT; hMem : THandle) : THandle Function GetClipboardData( uFormat : UINT) : THandle
13165:
13166:
               Function RegisterClipboardFormat( lpszFormat : PChar) : UINT
Function CountClipboardFormats : Integer
Function EnumClipboardFormats( format : UINT) : UINT
13167:
13168:
13169:
13170:
               \textbf{Function} \ \ \texttt{GetClipboardFormatName} \\ (\texttt{format:UINT:lpszFormatName:PChar:cchMaxCount:Integer}) \\ : \texttt{Integer} \\ (\texttt{Integer}) \\ : \texttt{Integer} \\ (\texttt{In
13171:
               Function EmptyClipboard : BOOL
13172:
               Function IsClipboardFormatAvailable( format : UINT) : BOOL
                 Function GetPriorityClipboardFormat( var paFormatPriorityList, cFormats : Integer) : Integer
13173:
13174:
               Function GetOpenClipboardWindow : HWND
13175:
               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
13176:
13177:
               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
13179:
13180:
               Function CheckRadioButton( hDlg : HWND; nIDFirstButton, nIDLastButton, nIDCheckButton : Integer) : BOOL Function IsDlgButtonChecked( hDlg : HWND; nIDButton : Integer) : UINT
13181:
13182:
               Function SendDlgItemMessage(hDlg:HWND;nIDDlgItem:Int;Msg:UINT;wParam:WPARAM;lParam:LPARAM):Longint;
13183:
13184: end;
13185:
13186: procedure SIRegister_DXPUtils(CL: TPSPascalCompiler);
13187: begin
```

```
13188:
         Function glExecuteAndWait(cmdLine:String; visibility:Word; timeout:Cardinal; killAppOnTimeOut:Bool):Int;
13189:
         Function GetTemporaryFilesPath : String
         Function GetTemporaryFileName : String
13191:
         Function FindFileInPaths( const fileName, paths : String) : String
13192:
         Function PathsToString( const paths : TStrings) : String
         Procedure StringToPaths( const pathsString : String; paths : TStrings)
13193:
13194:
         //Function MacroExpandPath( const aPath : String) : String
13195:
13196:
13197:
        procedure STRegister ALMultiPartBaseParser(CL: TPSPascalCompiler);
13198: begin
13199:
          SIRegister_TALMultiPartBaseContent(CL);
13200:
           SIRegister_TALMultiPartBaseContents(CL);
13201:
          SIRegister_TAlMultiPartBaseStream(CL);
13202:
          SIRegister TALMultipartBaseEncoder(CL);
13203:
          SIRegister_TALMultipartBaseDecoder(CL);
         Function ALMultipartExtractBoundaryFromContentType( aContentType : AnsiString) : AnsiString
13204:
         Function ALMultipartExtractSubValueFromHeaderLine(aHeaderLine:AnsiString;aName:AnsiString):AnsiString;Function ALMultipartSetSubValueInHeaderLine(aHeaderLine:AnsiString;aName,AValue:AnsiString):AnsiString;
13205:
13206:
13207:
        end;
13208:
13209:
        procedure SIRegister_SmallUtils(CL: TPSPascalCompiler);
13210: begin
13211:
          TdriveSize', 'record FreeS : Int64; TotalS : Int64; end
           TWinVerRec', 'record WinPlatform : Integer; WinMajorVersion : In'
13212:
13213:
            +teger; WinMinorVersion: Integer; WinBuildNumber: Integer; WinCSDVersion: String; end
13214:
         Function aAllocPadedMem( Size : Cardinal) : TObject
         Procedure aFreePadedMem( var P : TObject);
13215:
13216:
         Procedure aFreePadedMem1( var P : PChar);
         Function aCheckPadedMem( P : Pointer) : Byte
13217:
         Function aGetPadMemSize( P : Pointer) : Cardinal
13218:
         Function aAllocMem(Size: Cardinal): Pointer
Function aStrLen(const Str: PChar): Cardinal
13219:
13220:
         Function aStrLCopy( Dest : PChar; const Source : PChar; MaxLen : Cardinal) : PChar
Function aStrECopy( Dest : PChar; const Source : PChar) : PChar
13221:
13223:
         Function aStrCopy( Dest : PChar; const Source : PChar) : PChar
         Function aStrEnd( const Str : PChar) : PChar
Function aStrScan( const Str : PChar; aChr : Char) : PChar
13224:
13225:
13226:
         Function aStrMove( Dest : PChar; const Source : PChar; Count : Cardinal) : PChar
         Function aPCharLength( const Str : PChar) : Cardinal
13227:
13228:
         Function aPCharUpper( Str : PChar) : PChar
         Function aPCharLower( Str : PChar) : PChar
13229:
         Function aStrCat( Dest : PChar; const Source : PChar) : PChar
13230:
         Function aLastDelimiter( const Delimiters, S : String) : Integer
13231:
13232:
         Function aCopyTail( const S : String; Len : Integer) : String
         Function aInt2Thos( I : Int64) : String
Function aUpperCase( const S : String) : String
13233:
13234:
         Function aLowerCase( const S : string) : String
13236:
         Function aCompareText( const S1, S2 : string)
         Function aSameText( const S1, S2 : string) : Boolean Function aInt2Str( Value : Int64) : String
13237:
13238:
         Function aStr2Int( const Value : String) : Int64
13239:
         Function aStr2IntDef( const S : string; Default : Int64) : Int64
13240:
13241:
         Function aGetFileExt( const FileName : String) : String
13242:
         Function aGetFilePath( const FileName : String) : String
         Function aGetFileName( const FileName : String) : String
13243:
         Function aChangeExt( const FileName, Extension : String) : String
13244:
         Function aAdjustLineBreaks( const S : string) : string
13245:
13246:
         Function aGetWindowStr( WinHandle : HWND) : String
         Function aDiskSpace( Drive : String) : TdriveSize
13247:
         Function aFileExists( FileName : String) : Boolean
13248:
         Function aFileSize(FileName: String): Int64
Function aDirectoryExists(const Name: string): Boolean
Function aSysErrorMessage(ErrorCode: Integer): string
13249:
13250:
13251:
         Function aShortPathName( const LongName : string) : string
Function aGetWindowVer : TWinVerRec
13252:
13253:
13254:
         procedure InitDriveSpacePtr;
13255: end;
13256:
13257:
        procedure SIRegister MakeApp(CL: TPSPascalCompiler);
13258:
        begin
13259:
         aZero','LongInt').SetInt( 0);
13260:
          'makeappDEF','LongInt').SetInt( - 1);
'CS VREDRAW','LongInt').SetInt( DWORD ( 1 ));
13261:
          'CS_HREDRAW','LongInt').SetInt( DWORD ( 2 ));
13262:
         'CS_KEYCVTWINDOW', 'LongInt').SetInt(4);
13263:
         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);
13264:
13265:
13266:
13267:
13268:
         'CS_NOCLOSE', 'LongWord').SetUInt( $200);
'CS_SAVEBITS', 'LongWord').SetUInt( $800);
13269:
13270:
         'CS_BYTEALIGNCLIENT', 'LongWord').SetUInt( $1000);
13271:
         'CS_BYTEALIGNWINDOW', 'LongWord').SetUInt(
13272:
         'CS_GLOBALCLASS','LongWord').SetUInt( $4000);
'CS_IME','LongWord').SetUInt( $10000);
13273:
13274:
         CS_DROPSHADOW', 'LongWord').SetUInt( $20000);
//PPanelFunc', '^TPanelFunc // will not work
13275:
```

```
TPanelStyle', '(psEdge, psTabEdge, psBorder, psTabBorder, psTab, psNone )
TFontLook', '(flBold, flItalic, flUnderLine, flStrikeOut )
TFontLooks', 'set of TFontLook
TMessagefunc', 'function(hWnd,iMsg,wParam,lParam:Integer):Integer)
13277:
13278:
13279:
13280:
13281:
         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
13282:
13283:
13284:
         Function MakeForm(Left,Top,Width,Height:Integer;const Caption:String;WinStyle:Integer):Integer
13285:
         Procedure RunMsgLoop( Show : Boolean)
         Function MakeFont(Height, Width:Integer; const FontName:String; Look:TFontLooks; Roman:Boolean): Integer
13286:
13287:
         Function MakeButton(Left, Top, Width, Height: Integer; pCaption: PChar; hParent,
        ID_Number:Cardinal;hFont:Int;
13288: 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,
13289:
13290:
        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!
13292:
13293:
13294: end;
13295:
13296: procedure SIRegister_ScreenSaver(CL: TPSPascalCompiler);
13297: begin
          TScreenSaverOption', '( ssoAutoAdjustFormProperties, ssoAutoHook'
13298:
13299:
            +'KeyboardEvents, ssoAutoHookMouseEvents, ssoEnhancedMouseMoveDetection )
13300:
          TScreenSaverOptions', 'set of TScreenSaverOption
13301: 'cDefaultScreenSaverOptions','LongInt').Value.ts32:=ord(ssoAutoAdjustFormProperties) or ord(ssoAutoHookKeyboardEvents) or ord(ssoEnhancedMouseMoveDetection);
13302:
          TScreenSaverPreviewEvent', 'Procedure ( Sender : TObject; previewHwnd: HWND)
          SIRegister_TScreenSaver(CL);
13303:
13304:
          //Procedure Register
13305:
         Procedure SetScreenSaverPassword
13306: end;
13307:
13308:
        procedure SIRegister XCollection(CL: TPSPascalCompiler);
13309: begin
13310:
          FindClass('TOBJECT').'TXCollection
          SIRegister_EFilerException(CL);
13311:
13312:
          SIRegister_TXCollectionItem(CL);
13313:
           //TXCollectionItemClass',
                                         'class of TXCollectionItem
          SIRegister_TXCollection(CL);
13314:
13315:
         Procedure RegisterXCollectionDestroyEvent( notifyEvent: TNotifyEvent)
13316:
         Procedure DeRegisterXCollectionDestroyEvent( notifyEvent : TNotifyEvent)
         Procedure RegisterXCollectionItemClass( aClass : TXCollectionItemClass)
13317:
13318:
         \textbf{Procedure} \ \ \texttt{UnregisterXCollectionItemClass} ( \ \ \texttt{aClass} \ : \ \ \texttt{TXCollectionItemClass})
         Function FindXCollectionItemClass( const className : String) : TXCollectionItemClass
Function GetXCollectionItemClassesList( baseClass : TXCollectionItemClass) : TList
13319:
13320:
13321:
        end;
13322:
13323:
        procedure SIRegister XOpenGL(CL: TPSPascalCompiler);
13324: begin
          TMapTexCoordMode', '(mtcmUndefined, mtcmNull, mtcmMain, mtcmDual, mtcmSecond, mtcmArbitrary);
13325:
         Procedure xglMapTexCoordToNull
13326:
13327:
         Procedure xglMapTexCoordToMain
13328:
         Procedure xqlMapTexCoordToSecond
13329:
         Procedure xglMapTexCoordToDual
         Procedure xglMapTexCoordToArbitrary( const units : array of Cardinal);
13330:
         Procedure xglMapTexCoordToArbitrary1( const bitWiseUnits : Cardinal)
13331:
13332:
         Procedure xglMapTexCoordToArbitraryAdd( const bitWiseUnits : Cardinal)
13333:
         Procedure xalBeginUpdate
13334:
         Procedure xglEndUpdate
13335:
         Procedure xglPushState
13336:
         Procedure xglPopState
13337:
         Procedure xqlForbidSecondTextureUnit
13338:
         Procedure xqlAllowSecondTextureUnit
13339:
         Function xglGetBitWiseMapping : Cardinal
13340:
13341:
13342: procedure SIRegister_VectorLists(CL: TPSPascalCompiler);
13343: begin
          TBaseListOption', '( bloExternalMemory, bloSetCountResetsMemory)
TBaseListOptions', 'set of TBaseListOption
13344:
13345:
          SIRegister_TBaseList(CL);
SIRegister_TBaseVectorList(CL);
13346:
13347:
13348:
           SIRegister_TAffineVectorList(CL);
13349:
           SIRegister_TVectorList(CL);
13350:
          SIRegister_TTexPointList(CL);
13351:
          SIRegister_TXIntegerList(CL);
           //PSingleArrayList', '^TSingleArrayList // will not work
13352:
           SIRegister_TSingleList(CL);
13353:
13354:
          SIRegister_TByteList(CL);
13355:
          SIRegister_TQuaternionList(CL);
         Procedure QuickSortLists( startIndex, endIndex : Integer; refList : TSingleList; objList : TList);
Procedure QuickSortLists( startIndex, endIndex : Integer; refList : TSingleList; objList : TBaseList);
13356:
13357:
13358:
         Procedure FastQuickSortLists(startIndex)
        endIndex:Integer;refList:TSingleList;objList:TPersistentObjectList);
13359:
13360:
13361: procedure SIRegister MeshUtils(CL: TPSPascalCompiler);
```

```
13362: begin
13363:
           Procedure ConvertStripToList( const strip : TAffineVectorList; list : TAffineVectorList);
             Procedure ConvertStripToList1( const strip: TIntegerList; list: TIntegerList);

Procedure ConvertStripToList2(const strip: TAffineVectorList; const
13365:
            indices:TIntegerList;list:TAffineVectorList);
13366:
             Procedure ConvertIndexedListToList(const data:TAffineVectlist;const
           indices:TIntegerList;list:TAffineVectorList);
13367: Function BuildVectorCountOptimizedIndices(const vertices:TAffineVectorList; const
normals:TAffineVectorList; const texCoords: TAffineVectorList): TIntegerList

13368: Procedure RemapReferences( reference: TAffineVectorList; const indices: TIntegerList);

13369: Procedure RemapReferences1( reference: TIntegerList; const indices: TIntegerList);
             Procedure RemapAndCleanupReferences( reference: TAffineVectorList; indices: TIntegerList)
13370:
13371:
             Function RemapIndicesToIndicesMap( remapIndices : TIntegerList) : TIntegerList
             Procedure RemapTrianglesIndices( indices, indicesMap : TIntegerList)
Procedure RemapIndices( indices, indicesMap : TIntegerList)
13372:
13373:
13374:
             Procedure UnifyTrianglesWinding( indices : TIntegerList)
             Procedure InvertTrianglesWinding( indices : TIntegerList)
13375:
             Function BuildNormals( reference : TAffineVectorList; indices : TIntegerList) : TAffineVectorList Function BuildNonOrientedEdgesList(triangleIndices:TIntegerList; triangleEdges : TIntegerList;
13376 .
13377:
           edgesTriangles : TIntegerList) : TIntegerList
             Procedure WeldVertices( vertices: TAffineVectorList; indicesMap: TIntegerList; weldRadius: Single)
13378:
             Function StripifyMesh(indices:TIntegerList;maxVertexIndex:Integer;agglomerateLoneTriangles:Boolean):
13379:
           TPersistentObjectList;
             Procedure IncreaseCoherency( indices : TIntegerList; cacheSize : Integer)

Procedure SubdivideTriangles( smoothFactor : Single; vertices : TAffineVectorList; triangleIndices :
13380:
13381:
            TIntegerList; normals : TAffineVectorList; onSubdivideEdge : TSubdivideEdgeEvent)
13382:
13383:
           procedure SIRegister_JclSysUtils(CL: TPSPascalCompiler);
13384:
           begin
13386:
             Procedure GetAndFillMem( var P : TObject; const Size : Integer; const Value : Byte)
             Procedure FreeMemAndNil( var P : TObject)
13387:
             Function PCharOrNil( const S : string) : PChar
13388:
13389:
               SIRegister_TJclReferenceMemoryStream(CL);
               FindClass('TOBJECT'), 'EJclVMTError
13390:
13391:
              {Function GetVirtualMethodCount( AClass : TClass) : Integer
13392:
             Function GetVirtualMethod( AClass : TClass; const Index : Integer) : Pointer
Procedure SetVirtualMethod( AClass : TClass; const Index : Integer; const Method:Pointer)
13393:
               PDynamicIndexList', '^TDynamicIndexList // will not work
PDynamicAddressList', '^TDynamicAddressList // will not work
13394:
13395:
13396:
             Function GetDynamicMethodCount( AClass : TClass) : Integer
             Function GetDynamicIndexList( AClass : TClass) : PDynamicIndexList
Function GetDynamicAddressList( AClass : TClass) : PDynamicAddressList
13397:
13398:
             Function HasDynamicMethod( AClass : TClass; Index : Integer) : Boolean
13399:
13400:
             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'
13401:
13402:
13403:
13404:
                 +'String;
                                 end
13405:
             Function JIsClass( Address : Pointer) : Boolean
             Function JIsObject( Address : Pointer) : Boolean
13406:
             Function GetImplementorOfInterface( const I : IInterface) : TObject
13407:
13408:
               TDigitCount',
                                       'Integer
13409:
               SIRegister_TJclNumericFormat(CL);
             Function JIntToStrZeroPad( Value, Count : Integer) : AnsiString TTextHandler', 'Procedure ( const Text : string)
13410:
13411:
                 'ABORT_EXIT_CODE', 'LongInt').SetInt( ERROR_CANCELLED 1223);
13412:
             Function JExecute(const
13413:
           \verb|CommandLine:string|| OutputLineCallback: TTextHandler|| RawOutpt: Bool|| AbortPtr: PBool|| : Card|| | Card|| | Card|| : Card|
13414:
             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 !
13415:
13416:
13417:
             '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
13418:
13419:
              Procedure UnloadModule( var Module : TModuleHandle)
13421:
13422:
             \textbf{Function} \ \ \texttt{GetModuleSymbol}( \ \ \texttt{Module} : \ \ \texttt{TModuleHandle}; \ \ \texttt{SymbolName} : \ \ \textbf{string}) : \ \ \texttt{Pointer}
             Function GetModuleSymbolEx( Module : TModuleHandle; SymbolName : string; var Accu : Boolean) : Pointer
13423:
             Function ReadModuleData(Module:TModuleHandle;SymbolName:string;var Buffer,Size: Cardinal):Boolean;
13424:
             Function WriteModuleData(Module:TModuleHandle;SymbolName:string;var Buffer,Size:Cardinal):Boolean;
13425:
13426:
               FindClass('TOBJECT'),'EJclConversionError
13427:
             Function JStrToBoolean( const S : string) : Boolean
             Function JBooleanToStr( B : Boolean) : string
13428:
             Function JIntToBool( I : Integer) : Boolean
Function JBoolToInt( B : Boolean) : Integer
13429:
13430:
              'ListSeparator','String').SetString( ';
'ListSeparator1','String').SetString( '
13431:
13432:
             Procedure ListAddItems( var List : string; const Separator, Items : string)
13433:
             Procedure ListIncludeItems( var List: string; const Separator, Items: string)
Procedure ListRemoveItems( var List: string; const Separator, Items: string)
13435:
13436:
             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
13437:
13438:
             Procedure ListSetItem(var List:string;const Separator:string;const Index:Integer;const Value:string)
13439:
13440:
             Function ListItemIndex( const List, Separator, Item : string) : Integer
             Function SystemTObjectInstance : LongWord Function IsCompiledWithPackages : Boolean
13441:
13442:
13443: Function JJclGUIDToString( const GUID : TGUID) : string
```

```
13444:
              Function JJclStringToGUID( const S : string) : TGUID
13445:
                SIRegister_TJclIntfCriticalSection(CL);
13446:
                 SIRegister_TJclSimpleLog(CL);
13447:
              Procedure InitSimpleLog( const ALogFileName : string)
13448:
            end;
13449:
13450: procedure SIRegister_JclBorlandTools(CL: TPSPascalCompiler);
13451:
            begin
                FindClass('TOBJECT'),'EJclBorRADException
TJclBorRADToolKind', '( brDelphi, brCppBuilder, brBorlandDevStudio )
13452:
13453:
                TJclBorRADToolEdition', '( deOPEN, dePRO, deSVR )
TJclBorRADToolEdition', '( deSTD, dePRO, deCSS, deARC )
13454:
13455:
13456:
                TJclBorRADToolPath', 'string
               '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);
13457:
13458:
13459:
              SurRADToolRepositoryPagesSection', 'String').SetString( 'Repository Pages
BorRADToolRepositoryDialogsPage', 'String').SetString( 'Dialogs
BorRADToolRepositoryFormsPage', 'String').SetString( 'Forms
BorRADToolRepositoryProjectsPage', 'String').SetString( 'Projects
13460:
13461 •
13462:
13463:
               BorRADToolRepositoryDataModulesPage', 'String').SetString( 'Data Modules
13464:
13465:
              BorRADToolRepositoryObjectType','String').SetString( 'Type
13466:
              {\tt BorRADToolRepositoryFormTemplate', 'String'). SetString(''FormTemplate')} \\
              BorRADToolRepositoryProjectTemplate','String').SetString( 'ProjectTemplate BorRADToolRepositoryObjectName','String').SetString( 'Name BorRADToolRepositoryObjectPage','String').SetString( 'Page
13467:
13468:
13469:
13470:
              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
13471:
13472:
13473:
13474:
13475:
13476:
              BorRADToolRepositoryObjectNewForm', 'String').SetString( 'DefaultNewForm BorRADToolRepositoryObjectMainForm', 'String').SetString( 'DefaultMainForm
13477:
13478:
              SourceExtensionDelphiPackage','String').SetString('.dpk
SourceExtensionBCBPackage','String').SetString('.bpk
SourceExtensionDelphiProject','String').SetString('.dpr
13479:
13480:
13481:
              SourceExtensionBCBProject', 'string').SetString( '.bpr SourceExtensionBDSProject', 'string').SetString( '.bdsproj
13482:
13483:
              SourceExtensionDProject', 'string').SetString('.dproj
BinaryExtensionPackage', 'string').SetString('.bpl
BinaryExtensionLibrary', 'string').SetString('.dll
13484:
13485:
13486:
              BinaryExtensionExecutable','String').SetString('.exe
13487:
              CompilerExtensionDCP','String').SetString('.dcp
CompilerExtensionBPI','String').SetString('.bpi
CompilerExtensionLIB','String').SetString('.lib
13488:
13489:
13490:
                                                                                                '.tds
              CompilerExtensionTDS','String').SetString(
13491:
              CompilerExtensionMAP', 'String').SetString(
CompilerExtensionDRC', 'String').SetString(
CompilerExtensionDEF', 'String').SetString(
13492:
                                                                                                '.mar
13493:
                                                                                                '.drc
                                                                                                 '.def
13494:
              SourceExtensionCPP', 'String').SetString(
SourceExtensionH', 'String').SetString('
13495:
                                                                                              .cpp
13496:
              SourceExtensionPAS', 'String').SetString('.pas
SourceExtensionDFM', 'String').SetString('.dfm
SourceExtensionXFM', 'String').SetString('.xfm
13497:
13498:
                                                                                            '.xfm
13499:
              SourceDescriptionPAS', 'String').SetString( 'Pascal source file
13500:
13501:
              SourceDescriptionCPP','String').SetString( 'C++ source file
              DesignerVCL', 'String').SetString( 'VCL
DesignerCLX', 'String').SetString( 'CLX
ProjectTypePackage', 'String').SetString( 'package
ProjectTypeLibrary', 'String').SetString( 'library
13502:
13503:
13504:
13505:
13506:
              ProjectTypeProgram','String').SetString( 'program'
              Personality32Bit', 'String').SetString( '32 bit
Personality64Bit', 'String').SetString( '64 bit
PersonalityDelphi', 'String').SetString( 'Delphi
13507:
13508:
13509:
              PersonalityDelphiDotNet', 'String').SetString( 'Delphi.net PersonalityBcB', 'String').SetString( 'C++Builder PersonalityCSB', 'String').SetString( 'C#Builder PersonalityVB', 'String').SetString( 'Visual Basic
13510:
13511:
13512:
13513:
              PersonalityDesign', 'String').SetString( 'Design PersonalityUnknown', 'String').SetString( 'Unknown personalityUnknown', 'String').SetString( 'Unknown personalityUnknown', 'String').SetString( 'Unknown personalityUnknown', 'String').
13514:
13515:
              PersonalityBDS', 'String').SetString( 'Borland Developer Studio DOFDirectoriesSection', 'String').SetString( 'Directories
13516:
13517:
              DOFUnitOutputDirKey', 'String').SetString( 'UnitOutp
DOFSearchPathName', 'String').SetString( 'SearchPath
13518:
                                                                                               'UnitOutputDir
13519:
              DOFConditionals', 'String').SetString('Conditionals DOFLinkerSection', 'String').SetString('Linker
13520:
13521:
              DOFPackagesKey', 'String').SetString( 'Packages
13522:
              DOFFackagesRey', String').SetString('Compiler DOFFackageNoLinkKey', 'String').SetString('PackageNoLink DOFAdditionalSection', 'String').SetString('Additional DOFOptionsKey', 'String').SetString('Options TJclBorPersonality', '(bpDelphi32, bpDelphi64, bpBCBuilder32, b'
13523:
13524:
13525:
13526:
13527:
                  +'pBCBuilder64, bpDelphiNet32, bpDelphiNet64, bpCSBuilder32, bpCSBuilder64, '
13528:
                   +'bpVisualBasic32, bpVisualBasic64, bpDesign, bpUnknown )
13529:
                TJclBorPersonalities', 'set of TJclBorPersonality
TJclBorDesigner', '( bdVCL, bdCLX )
TJclBorDesigners', 'set of TJclBorDesigner
13530:
13531:
```

```
13533:
          TJclBorPlatform', '( bp32bit, bp64bit )
           FindClass('TOBJECT'),'TJclBorRADToolInstallation
13534:
           SIRegister_TJclBorRADToolInstallationObject(CL);
13535:
13536
           SIRegister_TJclBorlandOpenHelp(CL);
           TJclHelp2Object', '(hoRegisterSession, hoRegister, hoPlugin)
TJclHelp2Objects', 'set of TJclHelp2Object
13537:
13538:
13539:
           SIRegister_TJclHelp2Manager(CL);
13540:
           SIRegister_TJclBorRADToolIdeTool(CL);
13541:
           SIRegister_TJclBorRADToolIdePackages(CL);
13542:
          SIRegister_IJclCommandLineTool(CL);
FindClass('TOBJECT'),'EJclCommandLineToolError
13543:
           SIRegister_TJclCommandLineTool(CL);
13544:
13545:
           SIRegister_TJclBorlandCommandLineTool(CL);
13546:
           SIRegister_TJclBCC32(CL);
          SIRegister_TJclDCC32(CL);
TJclDCC', 'TJclDCC32
13547:
13548:
           SIRegister_TJclBpr2Mak(CL);
13549:
13550:
           SIRegister_TJclBorlandMake(CL);
           SIRegister TJclBorRADToolPalette(CL);
13551:
13552:
           SIRegister_TJclBorRADToolRepository(CL);
           TCommandLineTool', '( clAsm, clBcc32, clDcc32, clDccIL, clMake,clProj2Mak )
TCommandLineTools', 'set of TCommandLineTool
13553:
13554:
13555:
           //TJclBorRADToolInstallationClass', 'class of TJclBorRADToolInstallation
           SIRegister_TJclBorRADToolInstallation(CL);
13556:
13557:
           SIRegister_TJclBCBInstallation(CL);
13558:
           SIRegister_TJclDelphiInstallation(CL);
13559:
           SIRegister_TJclDCCIL(CL);
13560:
           SIRegister_TJclBDSInstallation(CL);
13561:
           TTraverseMethod', 'Function (Installation: TJclBorRADToolInstallation): Boolean
           SIRegister_TJclBorRADToolInstallations(CL);
13562:
13563:
         Function BPLFileName( const BPLPath, PackageFileName : string) : string
         Function BinaryFileName( const OutputPath, ProjectFileName : string) : string
Function IsDelphiPackage( const FileName : string) : Boolean
13564:
13565:
         Function IsDelphiProject( const FileName : string) : Boolean
13566:
          Function IsBCBPackage( const FileName : string) : Boolean
13568:
         Function IsBCBProject( const FileName : string) : Boolean
13569:
         Procedure GetDPRFileInfo(const DPRFileName:string;out BinaryExtensio:string;const LibSuffx:PString);
         Procedure GetBPRFileInfo(const BPRFileName:string;out BinaryFileName:string;const Descript:PString);
13570:
13571:
         Procedure GetDPKFileInfo(const DPKFileName:string;out RunOnly:Bool;const LibSuffix:PString;const
        Descript: PString;
13572:
        Procedure GetBPKFileInfo(const BPKFileName:string;out RunOnly:Bool;const BinaryFName:PString;const
        Descript:PString
        function SamePath(const Path1, Path2: string): Boolean;
13574:
13575:
13576: procedure SIRegister JclFileUtils max(CL: TPSPascalCompiler);
13577:
        begin
13578:
          'ERROR_NO_MORE_FILES', 'LongInt').SetInt( 18);
13579:
          //Function stat64( FileName: PChar; var StatBuffer : TStatBuf64) : Integer
13580:
          //Function fstat64( FileDes: Integer; var StatBuffer : TStatBuf64) : Integer
13581:
          //Function lstat64( FileName: PChar; var StatBuffer : TStatBuf64) : Integer
          'LPathSeparator','String').SetString(
'LDirDelimiter','String').SetString(
13582:
          'LDirDelimiter',
13583:
13584:
          'LDirSeparator', 'String').SetString(
          'JXPathDevicePrefix','String').SetString( '\\.\
'JXPathSeparator','String').SetString( '\
'JXDirDelimiter','String').SetString( '\
13585:
13586:
13587:
13588:
          '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 :'
13589:
13590:
13591:
13592:
13593:
13594:
13595:
                TFileTime; nFileSizeHigh : DWORD; nFileSizeLow : DWORD; end
          TWin32FileAttributeData', '_WIN32_FILE_ATTRIBUTE_DATA
WIN32_FILE_ATTRIBUTE_DATA', '_WIN32_FILE_ATTRIBUTE_DATA
13596:
13597:
13598:
13599:
         Function jxPathAddSeparator( const Path : string) : string
         Function jxPathAddExtension( const Path, Extension: string): string
13600:
          Function jxPathAppend( const Path, Append : string) : string
13601:
13602:
         Function jxPathBuildRoot( const Drive : Byte) : string
         Function jxPathCanonicalize( const Path : string) : string
Function jxPathCommonPrefix( const Path1, Path2 : string) : Integer
13603:
13604:
13605:
         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
13606:
13607:
         Function jxPathExtractFileDirFixed( const S : string)
         Function jxPathExtractFileNameNoExt( const Path : string) : string
13608:
         Function jxPathExtractPathDepth( const Path : string; Depth : Integer) : string
Function jxPathGetDepth( const Path : string) : Integer
13609:
13610:
13611:
         Function jxPathGetLongName( const Path : string) : string
         Function jxPathGetShortName( const Path : string) : string
13612:
         Function jxPathGetLongName( const Path : string) : string
13613:
         Function jxPathGetShortName( const Path : string) : string
13614:
         Function jxPathGetRelativePath( Origin, Destination : string) : string
13615:
13616:
         Function jxPathGetTempPath : string
         Function jxPathIsAbsolute( const Path : string) : Boolean
13617:
13618: Function jxPathIsChild( const Path, Base : string) : Boolean 13619: Function jxPathIsDiskDevice( const Path : string) : Boolean
```

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13620:
              Function jxPathIsUNC( const Path : string) : Boolean
              Function jxPathRemoveSeparator( const Path : string) : string
13621:
              Function jxPathRemoveExtension( const Path : string) : string
13623:
              Function jxPathGetPhysicalPath( const LocalizedPath : string)
              Function jxPathGetLocalizedPath( const PhysicalPath : string) : string
13624:
                JxTFileListOption', '( flFullNames, flRecursive, flMaskedSubfolders) JxTFileListOptions', 'set of TFileListOption
13625:
13626:
                JxTJclAttributeMatch', '( amAny, amExact, amSubSetOf, amSuperSetOf, amCustom )
13627:
             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
13628:
13629:
13630:
13631:
             AttributeMatch:TJclAttributeMatch;const Optis:TFileListOptions;const SubfoldersMask:string;const
             FileMatchFunc:TFileMatchFunc):Bool;
            Function jxVerifyFileAttributeMask( var RejectedAttributes, RequiredAttributes : Int) : Boolean
13632:
13633:
              Function jxIsFileAttributeMatch(FileAttributes,RejectedAttributes,RequiredAttributes:Int):Boolean;
              Function jxFileAttributesStr( const FileInfo : TSearchRec) : string
13635.
              \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)
13636:
              Procedure jxEnumDirectories(const Root:string;const HandleDirectory:TFileHandler;const
13637:
             IncludeHiddenDirects:Boolean; const SubDirectoriesMask : string; Abort : TObject; ResolveSymLinks :
            Boolean)
13638:
              Procedure jxCreateEmptyFile( const FileName : string)
              Function jxCloseVolume( var Volume : THandle) : Boolean
13639:
              Function jxDeleteDirectory( const DirectoryName : string; MoveToRecycleBin : Boolean) : Boolean
13640:
13641:
              \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}
13642:
13643:
              Function jxDelTree( const Path : string) : Boolean
              Function Jakefire Const Path: string; AbortonFailure:Boolean; Progress:TDelTreeProgress):Boolean Function jxDiskInDrive( Drive : Char) : Boolean
13645:
              \textbf{Function} \  \, \texttt{jxDirectoryExists} ( \  \, \textbf{const} \  \, \texttt{Name} \  \, : \  \, \textbf{string}; \  \, \texttt{ResolveSymLinks} \  \, : \  \, \texttt{Boolean}) \  \, : \  \, \texttt{Boolean}
13646:
              Function jxFileCreateTemp( var Prefix : string) : THandle
13647:
13648:
              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
13650:
13651:
              Function ixFileMove( const ExistingFileName, NewFileName: string; ReplaceExisting: Boolean): Boolean
13652:
13653:
              Function jxFileRestore( const FileName : string) : Boolean
              Function jxGetBackupFileName( const FileName: string): string
Function jxIsBackupFileName( const FileName: string): Boolean
13654:
13655:
              Function jxFileGetDisplayName( const FileName : string) : string
13656:
              Function jxFileGetGroupName( const FileName : string; ResolveSymLinks : Boolean) : string
13657:
              Function jxFileGetOwnerName( const FileName : string; ResolveSymLinks : Boolean) : string
13658:
              Function jxFileGetSize( const FileName : string) : Int64
Function jxFileGetTempName( const Prefix : string) : string
13659:
13660:
              Function jxFileGetTypeName( const FileName : string) : string
13661:
              Function jxFindUnusedFileName(FileName:string; const FileExt: string; NumberPrefix: string): string
13662:
13663:
              Function jxForceDirectories( Name : string) : Boolean
              Function jxGetDirectorySize( const Path : string) : Int64
Function jxGetDriveTypeStr( const Drive : Char) : string
13664:
13665:
              Function jxGetFileAgeCoherence( const FileName : string) : Boolean
13666:
              Procedure jxGetFileAttributeList( const Items : TStrings; const Attr : Integer)
13668:
              Procedure jxGetFileAttributeListEx( const Items : TStrings; const Attr : Integer)
              Function jxGetFileInformation( const FileName : string; out FileInfo : TSearchRec) : Boolean;
Function jxGetFileInformation1( const FileName : string) : TSearchRec;
13669:
13670:
               //Function GetFileStatus(const FileName:string;out StatBuf:TStatBuf64;const
13671:
             ResolveSymLinks:Boolean):Integer
             Function jxGetFileLastWrite( const FName : string) : TFileTime;
Function jxGetFileLastWritel( const FName : string; out LocalTime : TDateTime) : Boolean;
Function jxGetFileLastAccess( const FName : string) : TFileTime;
13672:
13673:
13674:
13675:
              Function jxGetFileLastAccess1( const FName : string; out LocalTime : TDateTime) : Boolean;
13676:
              \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;
13677:
13678:
              Function jxGetFileLastWrite1(const FName:string; out LocalTime:TDateTime;ResolveSymLinks:Bool): Bool;
13679:
              Function jxGetFileLastWrite2( const FName : string; ResolveSymLinks : Boolean) : Integer;
13680:
13681:
              \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}: \  \,
13682:
              Function jxGetFileLastAccess1(const FName:string; out LocalTime:TDateTime;ResolveSymLinks:Bool):Bool;
Function jxGetFileLastAccess2(const FName:string; ResolveSymLinks:Boolean): Integer;
13683:
              Function jxGetFileLastAttrChange(const FName:string;out TimeStamp:Integer;ResolveSymLinks:Bool): Bool;
13684:
13685:
              Function jxGetFileLastAttrChangel(const FName:string; out LocalTime:TDateTime;ResolveSymLinks:Bool):Bool;
13686:
              Function jxGetFileLastAttrChange2( const FName : string; ResolveSymLinks:Boolean): Integer;
Function jxGetModulePath( const Module : HMODULE) : string
13687:
                                                                                                             : Int64;
13688:
              Function jxGetSizeOfFile( const FileName : string)
              Function jxGetSizeOfFile1( const FileInfo : TSearchRec) : Int64;
13689:
13690:
              Function jxGetSizeOfFile2( Handle : THandle) : Int64;
              Function jxGetStandardFileInfo( const FileName : string) : TWin32FileAttributeData
Function jxIsDirectory( const FileName : string; ResolveSymLinks : Boolean) : Boolean
13691:
13692:
13693:
              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
13694:
13695:
13696:
              Function jxSetDirLastAccess( const DirName : string; const DateTime : TDateTime) : Boolean
13697:
              Function jxSetDirCreation( const DirName : string; const DateTime : TDateTime) : Boolean
13698:
              Function jxSetFileLastWrite( const FileName : string; const DateTime : TDateTime) : Boolean Function jxSetFileLastAccess( const FileName : string; const DateTime : TDateTime) : Boolean
13699:
13700:
              Function jxSetFileCreation( const FileName : string; const DateTime : TDateTime) : Boolean
13701:
              Procedure jxShredFile( const FileName : string; Times : Integer)
```

```
13703:
            Function ixUnlockVolume( var Handle : THandle) : Boolean
            Function jxCreateSymbolicLink( const Name, Target : string) : Boolean
13704:
            Function jxSymbolicLinkTarget( const Name : string) : string
13706:
              TAttributeInterest', '( aiIgnored, aiRejected, aiRequired
13707:
              SIRegister TJclCustomFileAttrMask(CL);
13708:
              SIRegister TJclFileAttributeMask(CL);
             TFileSearchOption', '( fsIncludeSubDirectories, fsIncludeHiddenS'
13709:
13710:
                 'ubDirectories, fsLastChangeAfter, fsLastChangeBefore, fsMaxSize, fsMinSize)
             TFileSearchOptions', 'set of TFileSearchOption TFileSearchTaskID', 'Integer
13711:
13712:
13713:
                                                            'Procedure ( const ID : TFileSearc'
              TFileSearchTerminationEvent',
               +'hTaskID; const Aborted : Boolean)
13714:
13715:
              TFileEnumeratorSyncMode', '( smPerFile, smPerDirectory )
             SIRegister_IJclFileEnumerator(CL);
SIRegister_TJclFileEnumerator(CL);
13716:
13717:
13718:
            Function JxFileSearch : IJclFileEnumerator
             JxTFileFlag', '( ffDebug, ffInfoInferred, ffPatched,ffPreRelease,ffPrivateBuild, ffSpecialBuild )
13719:
13720 •
              JxTFileFlags
                                      'set of TFileFlag
              FindClass('TOBJECT'),'EJclFileVersionInfoError
13721:
13722:
             SIRegister_TJclFileVersionInfo(CL);
            Function jxOSIdentToString( const OSIdent : DWORD) : string
13723:
13724:
            Function jxOSFileTypeToString( const OSFileType : DWORD; const OSFileSubType : DWORD) : string
13725:
            Function jxVersionResourceAvailable( const FileName : string) : Boolean
13726:
            TFileVersionFormat', '( vfMajorMinor, vfFull )

Function jxFormatVersionString( const HiV, LoV : Word) : string;
13727:
13728:
            Function jxFormatVersionString1( const Major, Minor, Build, Revision : Word) : string;
13729:
            // Function \ Format Version String 2 (\ const\ Fixed Info: TVS Fixed File Info; Version Format: TFile Version Format): striple to the first of th
13730:
            //Procedure VersionExtractFileInfo(const FixedInfo:TVSFixedFileInfo;var Major,Minor,Build,Revision:Word);
13731:
            //Procedure VersionExtractProductInfo(const FixedInfo:TVSFixedFileInfo:var Major.Minor.Build.
           Revision:Word);
13732:
            //Function VersionFixedFileInfo( const FileName : string; var FixedInfo : TVSFixedFileInfo) : Boolean
13733:
            Function jxVersionFixedFileInfoString( const FileName : string; VersionFormat : TFileVersionFormat; const
          NotAvailableText : string) : string
13734:
              SIRegister TJclTempFileStream(CL);
              FindClass('TOBJECT'),'TJclCustomFileMapping
13735:
13736:
              SIRegister_TJclFileMappingView(CL);
13737:
              TJclFileMappingRoundOffset', '( rvDown, rvUp )
              SIRegister_TJclCustomFileMapping(CL);
13738:
13739:
              SIRegister_TJclFileMapping(CL);
13740:
              SIRegister_TJclSwapFileMapping(CL);
13741:
              SIRegister_TJclFileMappingStream(CL);
              TJclMappedTextReaderIndex', '( tiNoIndex, tiFull )
//PPCharArray', '^TPCharArray // will not work
13742:
13743:
13744:
              SIRegister_TJclMappedTextReader(CL);
13745:
              SIRegister_TJclFileMaskComparator(CL);
13746:
              FindClass('TOBJECT'),'EJclPathError
FindClass('TOBJECT'),'EJclFileUtilsError
13747:
              FindClass('TOBJECT'),'EJclTempFileStreamError
13748:
             FindClass('TOBJECT'), 'EJclTempFileStreamError
FindClass('TOBJECT'), 'EJclFileMappingError
FindClass('TOBJECT'), 'EJclFileMappingViewError
13749:
13750:
13751:
13752:
            Function jxPathGetLongName2( const Path : string) : string
            Function jxWin32DeleteFile( const FileName : string; MoveToRecycleBin : Boolean) : Boolean
13753:
13754:
            Function jxWin32MoveFileReplaceExisting( const SrcFileName, DstFileName: string) : Boolean
            13755:
13756:
13757:
            Function jxSamePath( const Path1, Path2 : string) : Boolean
13758:
            Procedure jxPathListAddItems( var List : string; const Items : string)
13759:
            Procedure jxPathListIncludeItems( var List : string; const Items : string)
            Procedure jxPathListDelItems( var List: string; const Items: string)
Procedure jxPathListDelItem( var List: string; const Index: Integer)
13760:
13761:
13762:
            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;
13763:
13764:
13765:
13766:
13767:
            Function jxParamValue(Index : Integer; const Separator : string; TrimValue : Boolean) : string;
13768:
            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
13769:
           AllowedPrefixCharacters : string) : Integer
13770: end;
13771:
13772: procedure SIRegister FileUtil(CL: TPSPascalCompiler);
          begin
13774:
            'UTF8FileHeader','String').SetString( #$ef#$bb#$bf);
13775:
            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 |
13776:
13777:
            Function 1CompareFilenames(Filename1:PChar;Len1:int;Filename2:PChar;Len2:int;ResolveLinks:boolean):int;
13778:
13779:
            Function lFilenameIsAbsolute( const TheFilename : string) : boolean
13780:
            Function lFilenameIsWinAbsolute( const TheFilename : string) : boolean
13781:
            Function | Filename | SUnixAbsolute ( const The Filename : string) : boolean
13782:
            Procedure lCheckIfFileIsExecutable( const AFilename : string)
            Procedure lCheckIfFileIsSymlink( const AFilename : string)
13783:
            Function lFileIsReadable( const AFilename : string) : boolean Function lFileIsWritable( const AFilename : string) : boolean
13784:
13785:
13786:
            Function lFileIsText( const AFilename : string) : boolean
            Function lFileIsText( const AFilename : string; out FileReadable : boolean) : boolean
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13788:
          Function lFileIsExecutable( const AFilename : string) : boolean
13789:
          Function lFileIsSymlink( const AFilename : string) : boolean
          Function lFileIsHardLink( const AFilename : string)
                                                                             : boolean
13791:
          Function lFileSize( const Filename : string) : int64;
13792:
          Function | GetFileDescription( const AFilename : string) : string
13793:
          Function lReadAllLinks( const Filename : string; ExceptionOnError : boolean) : string
13794:
          Function lTryReadAllLinks( const Filename : string) : string
          Function lDirPathExists( const FileName : String) : Boolean
Function lForceDirectory( DirectoryName : string) : boolean
13795:
13796:
          Function | DeleteDirectory( const DirectoryName : string; OnlyChildren : boolean) : boolean
13797:
13798:
          Function 1ProgramDirectory : string
          Function | DirectoryIsWritable( const DirectoryName : string) : boolean
13799:
          Function lExtractFileNameOnly( const AFilename : string) : string
Function lExtractFileNameWithoutExt( const AFilename : string) : string
Function lCompareFileExt( const Filename, Ext : string; CaseSensitive : boolean) : integer;
13800:
13801:
13802:
13803:
          Function | CompareFileExt( const Filename, Ext : string) : integer;
          Function lFilenameIsPascalUnit( const Filename : string) : boolean
13804:
          Function lAppendPathDelim( const Path : string) : string
Function lChompPathDelim( const Path : string) : string
13805:
13806:
          Function lTrimFilename( const AFilename: string): string
Function lCleanAndExpandFilename( const Filename: string)
13807:
13808:
          Function lCleanAndExpandDirectory( const Filename : string) : string
13809:
13810:
          Function lCreateAbsoluteSearchPath( const SearchPath, BaseDirectory : string) : string
        Function lCreateRelativePath( const Filename, BaseDirectory: string; UsePointDirectory: boolean; AlwaysRequireSharedBaseFolder: Boolean): string
13811:
13812:
          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( '*
13813:
13814:
13815:
13817:
13818:
          Function | GetAllFilesMask : string
13819:
          Function lGetExeExt : string
13820:
          Function | SearchFileInPath( const Filename, BasePath, SearchPath, Delimiter : string; Flags :
         TSearchFileInPathFlags) : string
13821: Function | SearchAllFilesInPath( const Filename, BasePath, SearchPath, Delimiter:string;Flags:
         TSearchFileInPathFlags) : TStrings
13822: Function lFindDiskFilename( const Filename : string) : string
13823:
          Function lFindDiskFileCaseInsensitive( const Filename : string) : string
          Function lFindDefaultExecutablePath( const Executable : string; const BaseDir: string):string
13824:
13825:
          Function | GetDarwinSystemFilename(Filename: string) : string
13826:
           STRegister TFileIterator(CL);
           TFileFoundEvent', 'Procedure (FileIterator: TFileIterator)
13827:
           TDirectoryFoundEvent', 'Procedure (FileIterator: TFileIterator)
TDirectoryEnterEvent', 'Procedure (FileIterator: TFileIterator)
13828:
13829:
13830:
           SIRegister TFileSearcher(CL);
          Function 1FindAllFiles(const SearchPath:String;SearchMsk:String;SearchSubDirs:Bool):TStringList
13831:
13832:
          Function lFindAllDirectories( const SearchPath : string; SearchSubDirs : Boolean) : TStringList
          // TCopyFileFlag', '( cffOverwriteFile, cffCreateDestDirectory, cffPreserveTime , // TCopyFileFlags', 'set of TCopyFileFlag
13833:
13834:
          Function | CopyFile( const SrcFilename, DestFilename : string; Flags : TCopyFileFlags) : boolean
13835:
          Function | CopyFile( const SrcFilename, DestFilename : string; PreserveTime : boolean) : boolean
13836:
          Function lCopyDirTree( const SourceDir, TargetDir: string; Flags: TCopyFileFlags): Boolean
13838:
          Function lReadFileToString( const Filename : string) : string
13839:
          Function lGetTempFilename( const Directory, Prefix : string) : string
13840:
          {Function NeedRTLAnsi : boolean
13841:
          Procedure SetNeedRTLAnsi( NewValue : boolean)
          Function UTF8ToSys( const s : string) : string
13842:
13843:
          Function SysToUTF8( const s : string) : string
          Function ConsoleToUTF8( const s : string) : string
Function UTF8ToConsole( const s : string) : string)
13844:
13845:
13846:
          Function FileExistsUTF8( const Filename : string)
          Function FileAgeUTF8( const FileName : string) : Longint
Function DirectoryExistsUTF8( const Directory : string) : Boolean
Function ExpandFileNameUTF8( const FileName : string) : string
13847:
13848:
13849:
          Function ExpandUNCFileNameUTF8( const FileName : string)
                                                                                   : string
          Function ExtractShortPathNameUTF8( const FileName : String) : String
13851:
13852:
          Function FindFirstUTF8(const Path: string; Attr : Longint; out Rslt : TSearchRec) : Longint
          Function FindNextUTF8( var Rslt : TSearchRec) : Longint
Procedure FindCloseUTF8( var F : TSearchrec)
Function FileSetDateUTF8( const FileName : String; Age : Longint) : Longint
13853:
13854:
13855:
13856:
          Function FileGetAttrUTF8( const FileName : String) : Longint
          Function FileSetAttrUTF8( const Filename : String; Attr : longint) : Longint Function DeleteFileUTF8( const FileName : String) : Boolean Function RenameFileUTF8( const OldName, NewName : String) : Boolean
13857:
13858:
13859:
          Function FileSearchUTF8( const Name, DirList : String; ImplicitCurrentDir : Boolean) : String
13860:
          Function FileIsReadOnlyUTF8( const FileName : String) : Boolean
Function GetCurrentDirUTF8 : String
13861:
13862:
          Function SetCurrentDirUTF8( const NewDir : String) : Boolean
13863:
          Function CreateDirUTF8( const NewDir : String) : Boolean
13865:
          Function RemoveDirUTF8( const Dir : String) : Boolean
13866:
          Function ForceDirectoriesUTF8( const Dir : string) : Boolean
          Function FileOpenUTF8( const FileName : string; Mode : Integer) : THandle Function FileCreateUTF8( const FileName : string) : THandle;
13867:
13868:
          Function FileCreateUTF81( const FileName : string; Rights : Cardinal) : THandle;
13869:
13870: Function ParamStrUTF8( Param : Integer): string
13871: Function GetEnvironmentStringUTF8( Index: Integer): string
13872: Function GetEnvironmentVariableUTF8( const EnvVar: string): String
13873: Function GetAppConfigDirUTF8( Global: Boolean; Create: boolean): string
```

```
13874:
         Function GetAppConfigFileUTF8(Global:Boolean; SubDir:boolean; CreateDir : boolean) : string
13875:
         Function SysErrorMessageUTF8( ErrorCode : Integer) : String
13876: end
13877:
13878: procedure SIRegister Keyboard(CL: TPSPascalCompiler);
13879: begin
          //VK_F23 = 134;
13880:
           //{$EXTERNALSYM VK_F24}
13881:
           //VK_F24 = 135;
13882:
13883:
         TVirtualKeyCode', 'Integer
'VK_MOUSEWHEELUP','integer').SetInt(134);
13884:
         'VK_MOUSEWHEELDOWN','integer').SetInt(135);
13885:
13886:
         Function glisKeyDown( c : Char) : Boolean;
         Function glisKeyDown1( vk : TVirtualKeyCode) : Boolean;
Function glKeyPressed( minVkCode : TVirtualKeyCode) : TVirtualKeyCode
13887:
13888:
13889:
         Function glVirtualKeyCodeToKeyName( vk : TVirtualKeyCode) : String
         Function glKeyNameToVirtualKeyCode( const keyName : String) : TVirtualKeyCode
13890:
        Function glCharToVirtualKeyCode( c : Char) : TVirtualKeyCode
Procedure glKeyboardNotifyWheelMoved( wheelDelta : Integer)
13891 .
13892:
13893: end;
13894:
13895:
        procedure SIRegister_GLCrossPlatform(CL: TPSPascalCompiler);
13896: begin
           TGLPoint', 'TPoint
13897:
           //PGLPoint', '^TGLPoint // will not work
13898:
           TGLRect', 'TRect
//PGLRect', 'ATGLRect // will not work
13899:
13900:
           TDelphiColor', 'TColor
TGLPicture', 'TPicture
TGLGraphic', 'TGraphic
TGLBitmap', 'TBitmap
13901:
13902:
13903:
13904:
           TGLBatmap', IDLUMAP
//TGraphicClass', 'class of TGraphic
TGLTextLayout', '( tlTop, tlCenter, tlBottom )
13905:
           13906:
13907:
13908:
           +'Button; Shift: TShiftState; X, Y: Integer)
TGLMouseMoveEvent', 'TMouseMoveEvent
13909:
13910:
           TGLKeyEvent', 'TKeyEvent
13911:
           TGLKeyPressEvent', 'TKeyP:
EGLOSError', 'EWin32Error
EGLOSError', 'EWin32Error
13912:
                                  'TKeyPressEvent
13913:
13914:
          EGLOSError', 'EOSError
'glsAllFilter','string').SetString('All // sAllFilter
13915:
13916:
         Function GLPoint( const x, y : Integer) : TGLPoint
13917:
         Function GLRGB( const r, g, b : Byte) : TColor
Function GLColorTORGB( color : TColor) : TColor
13918:
13919:
         Function GLGetRValue( rgb : DWORD) : Byte
13920:
         Function GLGetGValue( rgb : DWORD) : Byte
13921:
13922:
         Function GLGetBValue( rgb : DWORD) : Byte
13923:
         Procedure GLInitWinColors
13924:
         Function GLRect( const aLeft, aTop, aRight, aBottom : Integer) : TGLRect
         Procedure GLInflateGLRect( var aRect : TGLRect; dx, dy : Integer)
13925:
         Procedure GLIntersectGLRect( var aRect : TGLRect; const rect2 : TGLRect)
13926:
13927:
         Procedure GLInformationDlg( const msg : String)
         Function GLQuestionDlg( const msg : String) : Boolean
13928:
         Function GLInputDlg( const aCaption, aPrompt, aDefault : String) : String
Function GLSavePictureDialog( var aFileName : String; const aTitle : String) : Boolean
13929:
13930:
         Function GLOpenPictureDialog( var aFileName : String; const aTitle : String) : Boolean
13931:
13932:
         Function GLApplicationTerminated : Boolean
13933:
         Procedure GLRaiseLastOSError
13934:
         Procedure GLFreeAndNil( var anObject: TObject)
13935:
          Function GLGetDeviceLogicalPixelsX( device : Cardinal) : Integer
13936:
         \textbf{Function} \ \ \texttt{GLGetCurrentColorDepth} \ : \ \ \texttt{Integer}
         \textbf{Function} \ \ \texttt{GLPixelFormatToColorBits} ( \ \ \texttt{aPixelFormat} \ : \ \ \texttt{TPixelFormat}) \ : \ \ \texttt{Integer}
13937:
         Function GLBitmapScanLine( aBitmap; TGLBitmap; aRow : Integer) : Pointer
Procedure GLSleep( length : Cardinal)
13938:
13940:
         Procedure GLQueryPerformanceCounter( var val : Int64)
13941:
         \textbf{Function} \  \, \texttt{GLQueryPerformanceFrequency}( \  \, \textbf{var} \  \, \texttt{val} \  \, : \  \, \texttt{Int64}) \  \, : \  \, \texttt{Boolean}
13942:
         Function GLStartPrecisionTimer : Int64
         Function GLPrecisionTimerLap( const precisionTimer : Int64) : Double
13943:
         Function GLStopPrecisionTimer( const precisionTimer : Int64) : Double
13944:
13945:
         Function GLRDTSC : Int64
         Procedure GLLoadBitmapFromInstance( ABitmap : TBitmap; AName : string)
13946:
         Function GLOKMessageBox( const Text, Caption : string) : Integer Procedure GLShowHTMLUrl( Url : String)
13947:
13948:
13949:
         Procedure GLShowCursor( AShow : boolean)
13950:
         Procedure GLSetCursorPos( AScreenX, AScreenY : integer)
         Procedure GLGetCursorPos( var point : TGLPoint)
Function GLGetScreenWidth : integer
13951:
13952:
         Function GLGetScreenHeight : integer
13953:
         Function GLGetTickCount : int64
13954:
         function RemoveSpaces(const str : String) : String;
13955:
13956:
            TNormalMapSpace', '( nmsObject, nmsTangent )
         Procedure CalcobjectSpaceLightVectors(Light:TAffineVector;Vertices TAffineVectorList;Colors:TVectorList)
13957:
13958: Procedure SetupTangentSpace( Vertices, Normals, TexCoords, Tangents, BiNormals : TAffineVectorIst)
13959: Procedure CalcTangentSpaceLightVectors( Light : TAffineVector; Vertices, Normals, Tangents, BiNormals :
        TAffineVectorList; Colors: TVectorList)
         Function CreateObjectSpaceNormalMap( Width, Height:Integer; HiNormals,
        HiTexCoords:TAffineVectorList):TGLBitmap
```

```
13961: Function CreateTangentSpaceNormalMap( Width, Height : Integer; HiNormals, HiTexCoords, LoNormals,
         LoTexCoords, Tangents, BiNormals : TAffineVectorList) : TGLBitmap
13963:
         procedure SIRegister GLStarRecord(CL: TPSPascalCompiler);
13964:
13965: begin
13966:
           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
13967:
13968:
13969:
13970:
          Function StarRecordColor( const starRecord: TGLStarRecord; bias: Single): TVector
13971:
13972:
13973:
13974: procedure SIRegister GeometryBB(CL: TPSPascalCompiler);
13975: begin
13976:
                      'record min : TAffineVector; max : TAffineVector; end
          //PAABB', '^TAABB // will not work
TBSphere', 'record Center : TAffineVector; Radius : single; end
13977 •
13978:
13979:
          TClipRect
                           'record Left : Single; Top:Single; Right:Single; Bottom : Single; end
13980:
                                  '(scNoOverlap, scContainsFully, scContainsPartially)
          Function AddBB( var c1 : THmgBoundingBox; const c2 : THmgBoundingBox) : THmgBoundingBox
13981:
13982:
          Procedure AddAABB( var aabb : TAABB; const aabb1 : TAABB)
          Procedure SetBB( var c : THmgBoundingBox; const v : TVector
13983:
          Procedure SetAABB( var bb : TAABB; const v : TVector)
13984:
13985:
          Procedure BBTransform( var c : THmgBoundingBox; const m : TMatrix)
13986:
          Procedure AABBTransform( var bb : TAABB; const m : TMatrix)
          Procedure AABBScale( var bb : TAABB; const v : TAffineVector)
Function BBMinX( const c : THmgBoundingBox) : Single
13987:
13988:
          Function BBMaxX( const c : THmgBoundingBox) : Single
13989:
13990:
          Function BBMinY( const c : THmgBoundingBox) : Single
13991:
          Function BBMaxY( const c : THmgBoundingBox) : Single
13992:
          Function BBMinZ( const c : THmgBoundingBox) : Single
13993:
          Function BBMaxZ( const c : THmgBoundingBox) : Single
          Procedure AABBInclude( var bb : TAABB; const p : TAffineVector)
13994:
13995:
          Procedure AABBFromSweep( var SweepAABB : TAABB; const Start, Dest : TVector; const Radius : Single)
13996:
          Function AABBIntersection( const aabb1, aabb2 : TAABB) : TAABB
          Function BBToAABB( const aBB : THmgBoundingBox) : TAABB
13997:
13998:
          Function AABBToBB( const anAABB : TAABB) : THmgBoundingBox;
13999:
          Function AABBToBB1( const anAABB : TAABB; const m : TMatrix) : THmgBoundingBox;
14000:
          Procedure OffsetAABB( var aabb : TAABB; const delta : TAffineVector);
          Procedure OffsetAABB1( var aabb : TAABB; const delta : TVector);
14001:
          Function IntersectAABBs( const aabb1, aabb2 : TAABB; const m1To2, m2To1 : TMatrix) : Boolean;
14002:
          14003:
14004:
          Function IntersectAABBsAbsoluteXZ( const aabb1, aabb2 : TAABB) : Boolean
14005:
          \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;
14006:
          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
14008:
14009:
14010:
          Procedure ExtractAABBCorners( const AABB : TAABB; var AABBCorners : TAABBCorners)
14011:
          Procedure AABBToBSphere( const AABB : TAABB; var BSphere : TBSphere)
14012:
14013:
          Procedure BSphereToAABB( const BSphere : TBSphere; var AABB : TAABB);
          Function BSphereToAABB1( const center : TAFfineVector; radius : Single) : TAABB;
Function BSphereToAABB2( const center : TVector; radius : Single) : TAABB;
14014:
14015:
          Function AABBContainsAABB( const mainAABB, testAABB : TAABB) : TSpaceContains
          Function BSphereContainsAABB( const mainBSphere : TBSphere; const testAABB : TAABB) : TSpaceContains
14017:
          Function BSphereContainsBSphere( const mainBSphere, testBSphere: TBSphere): TSpaceContains
Function AABBContainsBSphere( const mainAABB: TAABB; const testBSphere: TBSphere): TSpaceContains
14018:
14019:
          Function PlaneContainsBSphere(const Location, Normal:TAffineVector; const
14020:
         testBSphere: TBSphere): TSpaceContains
14021 •
          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
14022:
14023:
          Function BSphereIntersectsBSphere( const mainBSphere, testBSphere: TBSphere): boolean
          Procedure IncludeInClipRect( var clipRect : TClipRect; x, y : Single)
14025:
14026:
          Function AABBToClipRect(const aabb:TAABB; modelViewProjection:TMatrix; viewportSizeX,
         viewportSizeY:Int):TClipRect
14027:
         end
14028:
14029:
         procedure SIRegister_GeometryCoordinates(CL: TPSPascalCompiler);
14030:
         begin
14031:
          Procedure Cylindrical Cartesian (const r, theta, z1 : single; var x, y, z : single);
          Procedure Cylindrical_Cartesian1( const r, theta, z1 : double; var x, y, z : double);
          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);
14033:
14034:
          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;
14035:
14036:
          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);
14038:
          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);
14039:
14040:
14041:
          Procedure Cartesian_Sphericall( const v : TAffineVector; var r, theta, phi : Single);
14042:
          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);
14043:
14044:
14045:
```

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14047:
            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);
14048:
14050 .
            Procedure OblateSpheroidal_Cartesian3( const xi,eta,phi,a:double; var x,y,z:double; var ierr:integer);
14051:
            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);
14052:
14053:
            Procedure BipolarCylindrical_Cartesian2(const u,v,z1,a: single;var x,y,z:single; var ierr : integer);
14054:
14055:
            Procedure BipolarCylindrical_Cartesian3(const u,v,zl,a: double;var x,y,z:double; var ierr : integer);
14056:
           end;
14057:
           procedure SIRegister_VectorGeometry(CL: TPSPascalCompiler);
14059:
             'EPSILON', 'Single').setExtended( 1e-40);
14060:
              'EPSILON2', 'Single').setExtended( 1e-30);
14061:
14062:
            TRenderContextClippingInfo', 'record origin : TVector; clippingD'
                +'irection : TVector; viewPortRadius : Single; farClippingDistance:Single; frustum: TFrustum; end
14063:
14064
            THmgPlane', 'TVector
              TDoubleHmgPlane', 'THomogeneousDblVector
14065:
14066:
             {TTransType', '( ttScaleX, ttScaleY, ttScaleZ, ttShearXY, ttShear'
               +'XZ, ttShearYZ, ttRotateX, ttRotateY, ttRotateZ, ttTranslateX, ttTranslateY'
+', ttTranslateZ, ttPerspectiveX, ttPerspectiveY, ttPerspectiveZ, ttPerspectiveW)}
14067:
14068:
              TSingleArray', 'array of Single TTransformations', 'array [0..15] of Single)
TPackedRotationMatrix', 'array [0..2] of Smallint)
14069:
14070:
14071:
14072:
              TVertex', 'TAffineVector
14073:
              //TVectorGL', 'THomogeneousFltVector
//TMatrixGL', 'THomogeneousFltMatrix
14074:
            // TPackedRotationMatrix = array [0..2] of SmallInt;
Function glTexPointMake( const s, t : Single) : TTexPoint
14075:
14076:
            Function glAffineVectorMake( const x, y, z : Single) : TAffineVector; Function glAffineVectorMakel( const v : TVectorGL) : TAffineVector; Procedure glSetAffineVector( var v : TAffineVector; const x, y, z : Single);
14077:
14078:
14079:
            Procedure glSetVector( var v : TAffineVector; const v, y, z : Single);

Procedure glSetVector( var v : TAffineVector; const vSrc : TVectorGL);
14080:
14081:
14082:
            Procedure glSetVector2( var v : TAffineVector; const vSrc : TAffineVector);
            Procedure glSetVector3( var v : TAffineDblVector; const vSrc : TAffineVector);
Procedure glSetVector4( var v : TAffineDblVector; const vSrc : TVectorGL);
14083:
14084:
            Function glVectorMake( const v : TaffineVector; w : Single) : TVectorGL;
Function glVectorMakel( const x, y, z : Single; w : Single) : TVectorGL;
14085:
14086:
14087:
            Function glPointMake( const x, y, z : Single) : TVectorGL;
Function glPointMakel( const v : TAffineVector) : TVectorGL;
14088:
            Function glPointMake2( const v : TVectorGL) : TVectorGL;
14089:
            Procedure glSetVector5( var v : TVectorGL; const x, y, z : Single; w : Single);

Procedure glSetVector6( var v : TVectorGL; const av : TAffineVector; w : Single);
14090:
14091:
            Procedure glglSetVector7( var v : TVectorGL; const vSrc : TVectorGL);
14092:
            Procedure glMakePoint( var v : TVectorGL; const x, y, z : Single);

Procedure glMakePoint1( var v : TVectorGL; const x, y, z : Single);
14093:
14095:
            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);
14096:
14097:
14098:
            Procedure glMakeVector3( var v : TVectorGL; const av : TVectorGL);
14099:
14100:
            Procedure glRstVector( var v : TAffineVector);
            Procedure glRstVector1( var v : TVectorGL);
14101:
            Function glVectorAdd( const v1, v2 : TAffineVector) : TAffineVector;
14102:
            Procedure glVectorAdd1( const v1, v2 : TAffineVector; var vr : TAffineVector);
14103:
             //Procedure VectorAdd2( const v1, v2 : TAffineVector; vr : PAffineVector);
14104:
            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;
14105:
14106:
14107:
14108:
             Function glVectorAdd6( const v : TVectorGL; const f : Single)
14109:
            Procedure glAddVector7( var v1 : TAffineVector; const v2 : TAffineVector);
Procedure glAddVector8( var v1 : TAffineVector; const v2 : TVectorGL);
14110:
            Procedure glAddVector9( var v1 : TVectorGL; const v2 : TVectorGL);
14111:
            Procedure glAddVector10( var v : TAffineVector; const f : Single);
            Procedure glAddVector11( var v : TVectorGL; const f : Single)
14113:
14114:
             //Procedure TexPointArrayAdd(const src:PTexPointArray;const delta:TTexPoint;const
           nb:Int;dest:PTexPointArray);
//Procedure TexPointArrayScaleAndAdd(const src:PTexPointArray;const delta:TTexPoint;const
14115:
           nb:Integer;const scale: TTexPoint; dest : PTexPointArray);
14116:
             //Procedure VectorArrayAdd(const src:PAffineVectorArray,const delta:TAffineVector;const nb:Integer;dest:
           PAffineVectorArray);
           Function glVectorSubtract( const V1, V2 : TAffineVector) : TAffineVector;
14117:
            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);
14119:
14120:
14121:
14122:
             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;
14124:
14125:
            Procedure glSubtractVector9( var V1 : TAffineVector; const V2 : TAffineVector);

Procedure glSubtractVector10( var V1 : TVectorGL; const V2 : TVectorGL);
14126:
14127:
             \textbf{Procedure} \ \ \text{glCombineVector}( \ \textbf{var} \ \ \text{vr} \ : \ \text{TAffineVector}; \ \textbf{const} \ \ \text{v} \ : \ \text{TAffineVector}; \ \textbf{var} \ \ \text{f} \ : \ \text{Single}); 
14128:
           //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;
14129:
14130:
14131:
```

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14133:
               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);
14134:
                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;
14136:
14137:
               Procedure glVectorCombine9(const V1:TVectorGL;const V2:TAffineVector;const F1,F2:Single;var vr:TVectorGL);
14138:
               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;
14139:
14140:
14141:
14142:
14143:
               Function glVectorDotProduct1( const V1, V2 : TVectorGL) : Single;
Function glVectorDotProduct2( const V1, V2 : TVectorGL) : Single;
Function glVectorDotProduct2( const V1 : TVectorGL; const V2 : TAffineVector) : Single;
14145:
               Function glPointProject( const p, origin, direction : TAffineVector) : Single;
Function glPointProject1( const p, origin, direction : TVectorGL) : Single;
14146:
14147:
               Function glvectorCrossProduct( const V1, V2 : TAffineVector) : TAffineVector;
Function glVectorCrossProduct1( const V1, V2 : TVectorGL) : TVectorGL;
14148:
               Procedure glVectorCrossProduct2( const v1, v2 : TVectorGL; var vr : TVectorGL);
Procedure glVectorCrossProduct3( const v1, v2 : TAffineVector; var vr : TVectorGL);
14150 .
14151:
               Procedure glVectorCrossProduct4( const v1, v2 : TVectorGL; var vr : TAffineVector);
14152:
                Procedure glVectorCrossProduct5( const v1, v2 : TAffineVector; var vr : TAffineVector);
14154:
               Function glLerp( const start, stop, t : Single) : Single
               Function glAngleLerp( start, stop, t : Single) : Single
14155:
               Function glDistanceBetweenAngles( angle1, angle2 : Single) : Single
Function glTexPointLerp( const t1, t2 : TTexPoint; t : Single) : TTexPoint;
14156:
14157:
14158:
               Function glVectorLerp( const v1, v2 : TAffineVector; t : Single) : TAffineVector;
14159:
               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);
14160:
14161:
               Function glVectorAngleLerp( const v1, v2 : TAffineVector; t : Single) : TAffineVector;
               \textbf{Function} \ \ \text{glVectorAngleCombine(} \ \ \textbf{const} \ \ \text{v1, v2} \ : \ \ \text{TAffineVector}; \ \ \text{f: Single)} \ : \ \ \text{TAffineVector}; \ \ \text{TAffineV
14163:
             // Procedure VectorArrayLerp( const src1, src2:PVectorArray; t:Single; n:Integer; dest:PVectorArray); // Procedure VectorArrayLerp1( const src1, src2 : PAffineVectorArray; t : Single; n : Integer; dest :
14164:
14165:
             PAffineVectorArray);
               Function glVectorLength( const x, y : Single) : Single;
               Function glVectorLength1( const x, y, z : Single) : Single;
Function glVectorLength2( const v : TAffineVector) : Single;
14167:
14168:
               Function glVectorLength3( const v : TVectorGL) : Single;
14169:
14170:
               Function glVectorLength4( const v : array of Single) : Single;
14171:
               Function glVectorNorm( const x, y : Single) : Single;
14172:
               Function glVectorNorm1( const v : TAffineVector) : Single;
               Function alVectorNorm2( const v : TVectorGL) : Single;
14173:
               Function glVectorNorm3( var V : array of Single) : Single;
14174:
               Procedure glNormalizeVector( var v : TAffineVector);
14175:
14176:
               \textbf{Procedure} \  \, \texttt{glNormalizeVector1(} \  \, \textbf{var} \  \, \texttt{v} \  \, \texttt{:} \  \, \texttt{TVectorGL)} \, ; \\
               14177:
               Function glVectorNormalize1( const v : TVectorGL) : TVectorGL;
14178:
              // Procedure NormalizeVectorArray( list : PAffineVectorArray; n : Integer);
               Function glVectorAngleCosine( const V1,
14180:
                                                                                               V2 : TAffineVector)
               Function glVectorNegate( const v : TAffineVector) : TAffineVector;
Function glVectorNegate( const v : TVectorGL) : TVectorGL;
Procedure glNegateVector( var V : TAffineVector);
14181:
14182:
14183:
               Procedure glNegateVector2( var V : TVectorGL);
14184:
14185:
               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);
14186:
14187:
14188:
               Procedure glScaleVector3( var v : TVectorGL; const factor : TVectorGL);
14189:
               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;
14190:
14191:
14192:
14193:
                Procedure glVectorScale3( const v : TVectorGL; factor : Single; var vr : TVectorGL);
14194:
               Procedure glVectorScale4( const v : TVectorGL; factor : Single; var vr : TAffineVector);
14195:
               Procedure glDivideVector( var v : TVectorGL; const divider : TVectorGL);
               Function glVectorEquals( const V1, V2 : TVectorGL) : Boolean;
Function glVectorEquals( const V1, V2 : TAffineVector) : Boolean;
14196:
14198:
               Function glAffineVectorEquals( const V1, V2 : TVectorGL) : Boolean;
14199:
               \textbf{Function} \  \, \texttt{glVectorIsNull(} \  \, \textbf{const} \  \, \texttt{v} \  \, \texttt{i} \  \, \texttt{TVectorGL)} \  \, \texttt{i} \  \, \texttt{Boolean;}
14200:
               Function glVectorIsNull1( const v : TAffineVector) : Boolean;
               Function glVectorSpacing( const v1, v2 : TTexPoint) : Single:
Function glVectorSpacing( const v1, v2 : TAffineVector) : Si
14201:
14202:
14203:
               Function glVectorSpacing2( const v1, v2 : TVectorGL) : Single;
14204:
               \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;
14205:
14206:
               Function glVectorDistance21( const v1, v2 : TVectorGL) : Single;
14207:
               Function glVectorPerpendicular( const V, N : TAffineVector) : TAffineVector

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

Procedure glRotateVector( var vector : TVectorGL; const axis : TAffineVector; angle : Single);
14208:
14209:
14210:
                Procedure glRotateVector1( var vector : TVectorGL; const axis : TVectorGL; angle : Single);
14212:
               Procedure glRotateVectorAroundY( var v : TAffineVector; alpha : Single)
               Function glVectorRotateAroundX( const v : TAffineVector; alpha : Single) : TAffineVector;
Function glVectorRotateAroundY( const v : TAffineVector; alpha : Single) : TAffineVector;
14213:
14214:
14215:
               Procedure glVectorRotateAroundY1(const v : TAffineVector; alpha : Single; var vr : TAffineVector);
               \textbf{Function} \  \, \texttt{glVectorRotateAroundZ(} \  \, \textbf{const} \  \, \textbf{v} \  \, \texttt{:} \  \, \texttt{TAffineVector;} \  \, \textbf{alpha} \  \, \texttt{:} \  \, \texttt{Single)} \  \, \texttt{:} \  \, \texttt{TAffineVector}
14216:
               Procedure glAbsVector( var v : TVectorGL);
Procedure glAbsVector1( var v : TAffineVector);
14217:
14218:
               Function glVectorAbs( const v : TVectorGL) : TVectorGL;
14219:
               Function glVectorAbs1( const v : TAffineVector) : TAffineVector;
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14221:
           Procedure glSetMatrix( var dest : THomogeneousDblMatrix; const src : TMatrixGL);
            Procedure glSetMatrix1( var dest : TAffineMatrix; const src : TMatrixGL);
14222:
            Procedure glSetMatrix2( var dest : TMatrixGL; const src : TAffineMatrix);
14224 .
            Procedure glSetMatrixRow( var dest : TMatrixGL; rowNb : Integer; const aRow : TVectorGL);
            Function glCreateScaleMatrix( const v : TAffineVector) : TMatrixGL;
14225:
            Function glCreateScaleMatrix1( const v : TVectorGL) : TMatrixGL;
14226:
14227:
            Function glCreateTranslationMatrix( const V : TAffineVector) : TMatrixGL;
            Function glCreateTranslationMatrix1( const V : TVectorGL) : TMatrixGL;
14228:
           Function glCreateScaleAndTranslationMatrix( const scale, offset : TVectorGL) : TMatrixGL;
Function glCreateRotationMatrixX( const sine, cosine : Single) : TMatrixGL;
14229:
14230:
            Function glCreateRotationMatrixX1( const angle : Single) : TMatrixGL;
14231:
            Function glCreateRotationMatrixY( const sine, cosine : Single) : TMatrixGL;
14233:
            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;
14234:
14235:
14236:
            Function glCreateRotationMatrix1( const anAxis : TVectorGL; angle : Single) : TMatrixGL;
14237:
           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);
14238:
14239:
14240:
14241:
           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;
14242:
14243:
14244:
14245:
14246:
            Function glMatrixDeterminant( const M : TAffineMatrix)
                                                                                                : Single;
14247:
            Function glMatrixDeterminant1( const M : TMatrixGL) : Single;
           Procedure glAdjointMatrix( var M : TMatrixGL);
Procedure glAdjointMatrix1( var M : TAffineMatrix);
14248:
14249:
            Procedure glScaleMatrix( var M : TAffineMatrix; const factor : Single);
14251:
            Procedure glScaleMatrix1( var M : TMatrixGL; const factor : Single)
           Procedure glTranslateMatrix( var M : TMatrixGL; const v : TAffineVector);
Procedure glTranslateMatrix1( var M : TMatrixGL; const v : TVectorGL);
14252:
14253:
14254:
            Procedure glNormalizeMatrix( var M : TMatrixGL)
            Procedure glTransposeMatrix( var M : TAffineMatrix);
14255:
14256:
           Procedure glTransposeMatrix1( var M : TMatrixGL);
14257:
           Procedure glInvertMatrix( var M : TMatrixGL);
Procedure glInvertMatrix1( var M : TAffineMatrix);
14258:
14259:
            Function glanglePreservingMatrixInvert( const mat : TMatrixGL) : TMatrixGL
14260:
            Function glMatrixDecompose( const M : TMatrixGL; var Tran : TTransformations) : Boolean
14261:
            \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;
14262:
14263:
14265:
            Procedure glSetPlane( var dest : TDoubleHmgPlane; const src : THmgPlane)
14266:
            Procedure glNormalizePlane( var plane : THmgPlane)
           Function glPlaneEvaluatePoint( const plane: THmgPlane; const point: TAffineVector): Single;
Function glPlaneEvaluatePoint1( const plane: THmgPlane; const point: TVectorGL): Single;
14267:
14268:
14269:
            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);
14270:
14271:
           Function glPointIsInHalfSpace( const point, planePoint, planeNormal : TVectorGL) : Boolean;
Function glPointIsInHalfSpace1( const point, planePoint, planeNormal : TAffineVector) : Boolean;
14272:
14273:
14274:
            Function glPointPlaneDistance( const point, planePoint, planeNormal : TVectorGL) : Single;
           Function glPointPlaneDistancel( const point, planePoint, planeNormal : TAffineVector) : Single;
Function glPointSegmentClosestPoint( const point, segmentStart, segmentStop:TAffineVector):TAffineVector
14275:
14276:
           Function glPointSegmentDistance( const point, segmentStart, segmentStop: TAffineVector): single Function glPointLineClosestPoint( const point, linePoint, lineDirection: TAffineVector): TAffineVector
14278:
          Function glPointLineDistance( const point, linePoint, lineDirection: TAffineVector): Single Procedure SglegmentSegmentClosestPoint( const SOStart, SOStop, SlStart, SlStop: TAffineVector; var SegmentOClosest, SegmentlClosest: TAffineVector)
14279:
14280:
           Function glSegmentSegmentDistance( const S0Start, S0Stop, S1Start, S1Stop: TAffineVector): single
14282:
            TEulerOrder',
                                 '( eulXYZ, eulXZY, eulYXZ, eulYZX, eulZXY, eulZYX)
14283:
            \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
14284:
            Procedure glNormalizeQuaternion( var Q : TQuaternion)
14286:
           Pronction glQuaternionFromPoints( const V1, V2 : TAffineVector) : TQuaternion

Procedure glQuaternionToPoints( const Q : TQuaternion; var ArcFrom, ArcTo : TAffineVector)
14287:
14288:
            Function glOuaternionFromMatrix( const mat : TMatrixGL) : TOuaternion
14289:
            Function glQuaternionToMatrix( quat : TQuaternion) : TMatrixGL
14290:
14291:
            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
14292:
14293:
14294:
14295:
           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
14296:
14297:
14298:
            Function glLog10( X : Extended) : Extended
           Function glLog2( X : Extended) : Extended;
Function glLog21( X : Single) : Single;
14300:
14301:
           Function glLogN( Base, X : Extended) : Extended
Function glIntPower( Base : Extended; Exponent : Integer) : Extended
14302:
14303:
            Function glPower( const Base, Exponent : Single) : Single;
14304:
           Function glPower1( Base : Single; Exponent : Integer) : Single;
14305:
           Function glDegToRad( const Degrees : Extended) : Extended;
Function glDegToRad1( const Degrees : Single) : Single;
14306:
14307:
           Function glRadToDeg( const Radians : Extended) : Extended;
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14309:
           Function glRadToDeg1( const Radians : Single) : Single;
           Function glNormalizeAngle( angle : Single) : Single
14310:
           Function glNormalizeDegAngle( angle : Single) : Single
14312:
           Procedure glSinCos( const Theta : Extended; var Sin, Cos : Extended);
           Procedure glSinCos1( const Theta : Double; var Sin, Cos : Double);
14313:
           Procedure glSinCos( const Theta : Single; var Sin, Cos : Single);
Procedure glSinCos1( const theta, radius : Double; var Sin, Cos :
14314:
14315:
           Procedure glSinCos2( const theta, radius : Double; var Sin, Cos : Double);
14316:
14317:
           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;
14318:
14319:
           Function glArcCosl( const x : Single) : Single;
14321:
           Function glArcSin( const X : Extended) : Extended;
           Function glarcSin1( const X : Single) : Single;
14322:
           Function glArcTan21( const Y, X : Extended) : Extended;
Function glArcTan21( const Y, X : Single) : Single;
14323:
14324:
           Function glFastArcTan2( y, x : Single) : Single
14325:
          Function glTan( const X : Extended) : Extended;
Function glTan1( const X : Single) : Single;
Function glCoTan( const X : Extended) : Extended;
14326 .
14327:
14328:
           Function glCoTanl( const X : Single) : Single;
14329:
           Function glSinh( const x : Single) : Single;
14330:
14331:
           Function glSinh1( const x : Double) : Double;
           Function glCosh( const x : Single) : Single;
Function glCosh1( const x : Double) : Double;
14332:
14333:
14334:
           Function glRSqrt( v : Single) : Single
14335:
           Function glRLength( x, y : Single) : Single
           Function glISqrt( i : Integer) : Integer
Function glILength( x, y : Integer) : Integer;
Function glILength1( x, y, z : Integer) : Integer;
14336:
14337:
14339:
           Procedure glRegisterBasedExp
14340:
           Procedure glRandomPointOnSphere( var p : TAffineVector)
           Function glRoundInt( v : Single) : Single;
14341:
           Function glRoundInt1( v : Extended) : Extended;
14342:
           Function glTrunc( v : Single) : Integer
14344:
           Function glTrunc64( v : Extended) : Int64;
          Function glInt( v : Single) : Single;
Function glInt( v : Extended) : Extended;
14345:
14346:
           Function glFrac( v : Single) : Single;
Function glFrac( v : Extended) : Extended;
14347:
14348:
14349:
           Function glRound( v : Single) : Integer;
           Function glRound64( v : Single) : Int64;
Function glRound641( v : Extended) : Int64;
14350:
14351:
           Function glTrunc( X : Extended) : Int64
Function glRound( X : Extended) : Int64
14352:
14353:
           Function glFrac( X : Extended) : Into4
Function glFrac( X : Extended) : Extended
Function glCeil( v : Single) : Integer;
14354:
14355:
           Function glCeil64( v : Extended) : Int64;
          Function glFloor( v : Single) : Integer;
Function glFloor64( v : Extended) : Int64;
14357:
14358:
           Function glScaleAndRound( i : Integer; var s : Single) : Integer Function glSign( x : Single) : Integer
14359:
14360:
           Function glIsInRange( const x, a, b : Single) : Boolean;
14361:
          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;
14362:
14363:
14364:
14365:
           //Function MinFloat1( values : PDoubleArray; nbItems : Integer) : Double;
14366:
           //Function MinFloat2( values : PExtendedArray; nbItems : Integer) : Extended;
Function glMinFloat3( const v1, v2 : Single) : Single;
Function glMinFloat4( const v : array of Single) : Single;
14367:
14368:
14369:
           Function glMinFloat5( const v1, v2 : Double) : Double;
Function glMinFloat6( const v1, v2 : Extended) : Extended;
14370:
14371:
           Function glMinFloat7( const v1, v2, v3 : Single) : Single; Function <math>glMinFloat8( const v1, v2, v3 : Double) : Double;
14372:
14373:
           Function glMinFloat9( const v1, v2, v3 : Extended) : Extended;
14374:
14375:
           //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;
14376:
14377:
14378:
           Function glMaxFloat3( const v1, v2: Single): Single;
Function glMaxFloat4( const v1, v2: Double): Double;
14379:
14380:
14381:
           Function glMaxFloat5( const v1, v2 : Extended) : Extended;
14382:
           Function glMaxFloat6( const v1, v2, v3 : Single) : Single;
           Function glMaxFloat7( const v1, v2, v3 : Double) : Double;
14383:
           Function glMaxFloat8( const v1, v2, v3 : Extended) : Extended;
14384:
           Function glMinInteger9( const v1, v2 : Integer) : Integer;
Function glMinInteger( const v1, v2 : Cardinal) : Cardinal;
14385:
14386:
           Function glMaxInteger( const v1, v2 : Integer) : Integer;
14387:
           Function glMaxInteger1( const v1, v2 : Cardinal) : Cardinal;
14389:
           Function glTriangleArea( const p1, p2, p3 : TAffineVector) : Single;
14390:
           /\!/ 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;
14391:
14392:
           //Procedure ScaleFloatArray( values : PSingleArray; nb : Integer; var factor : Single);
14393:
14394:
           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);
14395:
14396:
```

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14398:
          Function glMaxXYZComponent( const v : TVectorGL) : Single;
          Function glMaxXYZComponent1( const v : TAffineVector) : single;
14399:
          Function glMinXYZComponent( const v : TVectorGL) : Single;
Function glMinXYZComponent1( const v : TAffineVector) : single;
14400:
14401:
          Function glMaxAbsXYZComponent( v : TVectorGL) : Single Function glMinAbsXYZComponent( v : TVectorGL) : Single
14402:
14403:
          Procedure glMaxVector( var v : TVectorGL; const v1 : TVectorGL);
14404:
          Procedure glMaxVector1( var v : TAffineVector; const v1 : TAffineVector);
14405:
          Procedure glMinVector( var v : TVectorGL);

Procedure glMinVector( var v : TVectorGL);

Procedure glMinVectorl( var v : TAffineVector; const vl : TAffineVector);
14406:
14407:
          Procedure glSortArrayAscending( var a : array of Extended)
14408:
          Function glClampValue( const aValue, aMin, aMax : Single) : Single;
14410:
          Function glClampValue1( const aValue, aMin : Single) : Single;
          \textbf{Function} \  \, \texttt{glGeometryOptimizationMode} \  \, \textbf{String}
14411:
          Procedure glBeginFPUOnlySection
14412:
14413:
          Procedure glEndFPUOnlySection
14414:
          \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
14415:
14416:
          Function glVectorAffineDblToFlt( const v : TAffineDblVector) : TAffineVector
14417:
          \textbf{Function} \  \, \texttt{glVectorDblToFlt}( \  \, \textbf{const} \  \, \texttt{v} : \  \, \texttt{THomogeneousDblVector}) : \  \, \texttt{THomogeneousVector}
14418:
14419:
          Function glVectorAffineFltToDbl( const v : TAffineVector) : TAffineDblVector
14420:
          \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)
14421:
14422:
14423:
          Function glTurn( const Matrix : TMatrixGL; angle : Single) : TMatrixGL;
14424:
          Function glTurn1( const Matrix : TMatrixGL; const MasterUp:TAffineVector;Angle:Single):TMatrixGL;
Function glPitch( const Matrix : TMatrixGL; Angle : Single) : TMatrixGL;
14425:
14426:
          Function glPitchl( const Matrix:TMatrixGL; const MasterRight:TAffineVector; Angle:Single):TMatrixGL;
          Function glRoll( const Matrix: TMatrixGL; Angle : Single) : TMatrixGL;
14427:
14428:
          Function glRoll1(const Matrix: TMatrixGL;const MasterDirection:TAffineVector;Angle: Single): TMatrixGL;
14429:
          \textbf{Function} \  \, \texttt{glRayCastIntersectsSphere}( \  \, \textbf{const} \  \, \texttt{rayStart}, \  \, \texttt{rayVector} : \  \, \texttt{TVectorGL}; \  \, \textbf{const}
14430:
         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
14432:
14433:
14434:
          Function glIsVolumeClipped( const objPos : TVectorGL; const objRadius : Single; const rcci :
         TRenderContextClippingInfo) : Boolean;
14435:
         Function glIsVolumeClipped1( const objPos : TAffineVector; const objRadius : Single; const rcci :
         TRenderContextClippingInfo) : Boolean;
14436: Function glIsVolumeClipped2(const min, max:TAffineVector; const rcci : TRenderContextClippingInfo) : Bool;
14437:
          Function glIsVolumeClipped3(const objPos:TAffineVector;const objRadius:Single;const
         Frustum:TFrustum):Bool;
        Function glMakeParallelProjectionMatrix( const plane : THmgPlane; const dir : TVectorGL) : TMatrixGL
          Function glMakeShadowMatrix( const planePoint, planeNormal, lightPos: TVectorGL): TMatrixGL

Function glMakeReflectionMatrix( const planePoint, planeNormal : TAffineVector): TMatrixGL
14439:
          Function glPackRotationMatrix( const mat : TMatrixgL) : TPackedRotationMatrix
Function glUnPackRotationMatrix( const packedMatrix : TPackedRotationMatrix) : TMatrixGL
14441:
14442:
14443:
           'cPI', 'Single').setExtended( 3.141592654);
          'cPIdiv180','Single').setExtended( 0.017453292);
'c180divPI','Single').setExtended( 57.29577951);
14444:
14445:
14446:
          'c2PI', 'Single').setExtended( 6.283185307);
          'cPIdiv4', 'Single').setExtended( 1.570796326);
'cPIdiv4', 'Single').setExtended( 0.785398163);
14447:
14448:
          'c3PIdiv4','Single').setExtended( 2.35619449);
14449:
14450:
          'cInv2PI', 'Single').setExtended( 1 / 6.283185307);
14451:
          'cInv360','Single').setExtended( 1 / 360);
          'c180', 'Single').setExtended( 180);
'c360', 'Single').setExtended( 360);
14452:
14453:
14454:
          'cOneHalf', 'Single').setExtended( 0.5)
14455:
          'cLn10','Single').setExtended( 2.302585093);
          {'MinSingle','Extended').setExtended( 1.5e-45);
'MaxSingle','Extended').setExtended( 3.4e+38);
'MinDouble','Extended').setExtended( 5.0e-324);
14456:
14457:
14459:
           'MaxDouble', 'Extended').setExtended( 1.7e+308);
          'MinExtended','Extended').setExtended( 3.4e-4932);
'MaxExtended','Extended').setExtended( 1.1e+4932);
14460:
14461:
           'MinComp','Extended').setExtended( - 9.223372036854775807e+18);
14462:
          'MaxComp','Extended').setExtended( 9.223372036854775807e+18);}
14463:
14464: end;
14465:
14466:
        procedure SIRegister_GLVectorFileObjects(CL: TPSPascalCompiler);
14467:
         begin
           AddClassN(FindClass('TOBJECT'),'TMeshObjectList
14468:
           (FindClass('TOBJECT'),'TFaceGroups
TMeshAutoCentering', '( macCenterX, macCenterY, macCenterZ, macUseBarycenter )
14469:
14470:
14471:
            TMeshAutoCenterings', 'set of TMeshAutoCentering
           TMeshObjectMode', '( momTriangle SIRegister_TBaseMeshObject(CL);
                                   '( momTriangles, momTriangleStrip, momFaceGroups )
14473:
14474:
            (FindClass('TOBJECT'), 'TSkeletonFrameList
14475:
            TSkeletonFrameTransform', '( sftRotation, sftOuaternion )
            SIRegister_TSkeletonFrame(CL);
14476:
            SIRegister_TSkeletonFrameList(CL);
14477:
            (FindClass('TOBJECT'),'TSkeleton
(FindClass('TOBJECT'),'TSkeletonBone
14478:
14479:
14480:
           SIRegister_TSkeletonBoneList(CL);
14481:
           SIRegister_TSkeletonRootBoneList(CL);
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14482:
           SIRegister TSkeletonBone(CL);
14483:
           (FindClass('TOBJECT'), 'TSkeletonColliderList
           SIRegister_TSkeletonCollider(CL);
14484:
14485:
           SIRegister_TSkeletonColliderList(CL);
           (FindClass('TOBJECT'),'TGLBaseMesh
TBlendedLerpInfo', 'record frameIndex1 : Integer; frameIndex2 :
14486:
14487:
            +'Integer; lerpFactor : Single; weight : Single; externalPositions : TAffine'
14488:
14489:
             +'VectorList; externalRotations : TAffineVectorList; externalQuaternions : T'
14490:
             +'OuaternionList; end
           SIRegister_TSkeleton(CL);
14491:
           TMeshObjectRenderingOption', '( moroGroupByMaterial )
TMeshObjectRenderingOptions', 'set of TMeshObjectRenderingOption
14492:
14493:
14494:
           SIRegister_TMeshObject(CL);
           SIRegister_TMeshObjectList(CL);
14495:
           //TMeshObjectListClass', 'class of TMeshObjectList (FindClass('TOBJECT'), 'TMeshMorphTargetList
14496:
14497:
           SIRegister_TMeshMorphTarget(CL);
14498:
14499 .
           SIRegister_TMeshMorphTargetList(CL);
14500:
           SIRegister_TMorphableMeshObject(CL);
14501:
           TVertexBoneWeight', 'record BoneID : Integer; Weight : Single; end
           //PVertexBoneWeightArray', 'TVertexBoneWeightArray // will not wo'rk
//PVerticesBoneWeights', '^TVerticesBoneWeights // will not work
14502:
14503:
           TVertexBoneWeightDynArray', 'array of TVertexBoneWeight SIRegister_TSkeletonMeshObject(CL);
14504:
14505:
           SIRegister_TFaceGroup(CL);
14506:
           TFaceGroupMeshMode', '( fgmmTriangles, fgmmTriangleStrip, fgmmFl' +'atTriangles, fgmmTriangleFan, fgmmQuads )
SIRegister_TFGVertexIndexList(CL);
14507:
14508:
14509:
14510:
           SIRegister_TFGVertexNormalTexIndexList(CL);
14511:
           SIRegister_TFGIndexTexCoordList(CL);
14512:
           SIRegister_TFaceGroups(CL);
           TMeshNormalsOrientation', '( mnoDefault, mnoInvert )
SIRegister_TVectorFile(CL);
14513:
14514:
            //TVectorFileClass', 'class of TVectorFile
14515:
           SIRegister_TGLGLSMVectorFile(CL);
14516:
14517:
           SIRegister_TGLBaseMesh(CL);
14518:
           SIRegister TGLFreeForm(CL);
           TGLActorOption', '( aoSkeletonNormalizeNormals )
TGLActorOptions', 'set of TGLActorOption
14519:
14520:
14521:
            cDefaultGLActorOptions','LongInt').Value.ts32:= ord(aoSkeletonNormalizeNormals);
           (FindClass('TOBJECT'), 'TGLActor
14522:
           TActorAnimationReference', '( aarMorph, aarSkeleton, aarNone )
SIRegister_TActorAnimation(CL);
14523:
14524:
14525:
           TActorAnimationName', 'String
14526:
           SIRegister_TActorAnimations(CL);
14527:
           SIRegister TGLBaseAnimationControler(CL);
           SIRegister_TGLAnimationControler(CL);
14528:
14529:
           TActorFrameInterpolation', '( afpNone, afpLinear )
14530:
           TActorAnimationMode', '( aamNone, aamPlayOnce, aamLoop, aamBounc'
           +'eForward, aamBounceBackward, aamLoopBackward, aamExternal )
SIRegister_TGLActor(CL);
14531:
14532:
           SIRegister_TVectorFileFormat(CL);
14533:
14534:
           SIRegister_TVectorFileFormatsList(CL);
          (FindClass('TOBJECT'),'EInvalidVectorFile
Function GetVectorFileFormats: TVectorFileFormatsList
Function VectorFileFormatsFilter: String
14535:
14536:
14537:
14538:
          Function VectorFileFormatsSaveFilter : String
14539:
          Function VectorFileFormatExtensionByIndex( index : Integer) : String
          Procedure RegisterVectorFileFormat( const aExtension, aDescription : String; aClass : TVectorFileClass)
Procedure UnregisterVectorFileClass( aClass : TVectorFileClass)
14540:
14541:
14542:
         end
14543:
14544:
        procedure SIRegister_AxCtrls(CL: TPSPascalCompiler);
14545:
        begin
          'Class_DColorPropPage','TGUID').SetString( '{5CFF5D59-5946-11D0-BDEF-00A024D1875C}
'Class_DFontPropPage','TGUID').SetString( '{5CFF5D5B-5946-11D0-BDEF-00A024D1875C}
14546:
14547:
          'Class_DPicturePropPage','TGUID').SetString( '{5CFF5D5A-5946-11D0-BDFF-00A024D1875C}'Class_DStringPropPage','TGUID').SetString( '{F42D677E-754B-11D0-BDFB-00A024D1875C}
14548:
14549:
14550:
           SIRegister TOleStream(CL);
           (FindClass('TOBJECT'), 'TConnectionPoints
TConnectionKind', '( ckSingle, ckMulti )
14551:
14552:
14553:
           SIRegister_TConnectionPoint(CL);
14554:
           SIRegister TConnectionPoints(CL);
           TDefinePropertyPage', 'Procedure ( const GUID : TGUID) (FindClass('TOBJECT'), 'TActiveXControlFactory
14555:
14556:
14557:
           SIRegister_TActiveXControl(CL);
           //TActiveXControlClass', 'class of TActiveXControl
SIRegister_TActiveXControlFactory(CL);
SIRegister_TActiveFormControl(CL);
14558:
14559:
14560:
14561:
           SIRegister_TActiveForm(CL);
14562:
            //TActiveFormClass', 'class of TActiveForm
14563:
           SIRegister_TActiveFormFactory(CL);
14564:
            (FindClass('TOBJECT'), 'TPropertyPageImpl
           SIRegister_TPropertyPage(CL);
14565:
           //TPropertyPageClass', 'class of TPropertyPage
SIRegister_TPropertyPageImpl(CL);
14566:
14567:
14568:
           SIRegister_TActiveXPropertyPage(CL);
14569:
           SIRegister_TActiveXPropertyPageFactory(CL);
14570:
           SIRegister_TCustomAdapter(CL);
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14571:
           SIRegister TAdapterNotifier(CL);
           SIRegister_IFontAccess(CL);
14572:
14573:
            SIRegister_TFontAdapter(CL);
14574 .
            SIRegister_IPictureAccess(CL);
14575:
           SIRegister TPictureAdapter(CL);
14576:
           SIRegister_ToleGraphic(CL);
14577:
           SIRegister_TStringsAdapter(CL);
14578:
           SIRegister_TReflectorWindow(CL);
14579:
          Procedure EnumDispatchProperties(Dispatch:IDispatch:PropType:TGUID;VTCode:Int;PropList:TStrings);
          Procedure GetOleFont( Font : TFont; var OleFont : IFontDisp)
Procedure SetOleFont( Font : TFont; OleFont : IFontDisp)
14580:
14581:
          Procedure GetOlePicture( Picture : TPicture; var OlePicture : IPictureDisp)
14583:
          Procedure SetOlePicture( Picture : TPicture; OlePicture : IPictureDisp)
          Procedure GetOleStrings( Strings: TStrings; var OleStrings: IStrings)
14584:
          Procedure SetOleStrings (Strings: TStrings; OleStrings: IStrings)
14585:
14586:
          Function ParkingWindow : HWND
14587: end;
14588 .
        procedure SIRegister synaip(CL: TPSPascalCompiler);
14589:
14590: begin
        // TIp6Bytes = array [0..15] of Byte;
{:binary form of IPv6 adress (for string conversion routines)}
14591:
14592:
14593:
          // TIp6Words = array [0..7] of Word;
           AddTypeS('TIp6Bytes', 'array [0..15] of Byte;');
AddTypeS('TIp6Words', 'array [0..7] of Word;');
14594:
14595:
           AddTypeS('TIPAdr', 'record Oct1 : Byte; Oct2 : Byte; Oct3 : Byte; Oct4: Byte; end');
14596:
14597:
         AddDelphiFunction('Function synaIsIP( const Value : string) : Boolean');
          Function synaIsIP6( const Value : string) : Boolean');
Function synaIPToID( Host : string) : Ansistring');
14598:
14599:
          Function synaffron (value : string) : TIp6Bytes);
Function synaffron (value : TIp6Bytes);
Function synaffron (value : TIp6Bytes) : string');
14601:
         Function synaStrToIp( value : string) : integer');
Function synaIpToStr( value : integer) : string');
14602:
14603:
          Function synaReverseIP( Value : AnsiString) : AnsiString');
Function synaReverseIP6( Value : AnsiString) : AnsiString');
14604:
14606:
          Function synaExpandIP6( Value : AnsiString) : AnsiString');
         Function xStrToIP( const Value : String) : TIPAdr');
Function xIPToStr( const Adresse : TIPAdr) : String');
14607:
14608:
         Function IPToCardinal( const Adresse : TIPAdr) : Cardinal');
Function CardinalToIP( const Value : Cardinal) : TIPAdr');
14609:
14610:
14611:
        end;
14612:
14613: procedure SIRegister_synacode(CL: TPSPascalCompiler);
14614:
        begin
          AddTypeS('TSpecials', 'set of Char');
Const('SpecialChar','TSpecials').SetSet( '=()[]<>:;,@/?\"
14615:
14616:
          Const('URLFullSpecialChar','TSpecials').SetSet(';/?:@=&#+');
14617:
          Const('TableBase64'ABCDEFGHIJKLMNOPQRSTUVWXYZabcdefghijklmnopqrstuvwxyz0123456789+/=');
14619:
                  'TableBase64mod'ABCDEFGHIJKLMNOPQRSTUVWXYZabcdefghijklmnopqrstuvwxyz0123456789+,=');
          Const('TableUU'(`!"#$%&''()*+,-./0123456789:;<=>?@ABCDEFGHIJKLMNOPQRSTUVWXYZ[\]^_');
Const('TableXX'(+-0123456789ABCDEFGHIJKLMNOPQRSTUVWXYZabcdefghijklmnopqrstuvwxyz');
14620:
14621:
          Function DecodeTriplet( const Value : AnsiString; Delimiter : Char) : AnsiString');
14622:
          Function DecodeQuotedPrintable( const Value : AnsiString) : AnsiString');
14623:
14624:
          Function DecodeURL( const Value : AnsiString) : AnsiString');
          Function EncodeTriplet( const Value : AnsiString; Delimiter : Char; Specials : TSpecials) : AnsiString');
Function EncodeQuotedPrintable( const Value : AnsiString) : AnsiString');
14625:
14626:
14627:
          Function EncodeSafeQuotedPrintable( const Value : AnsiString) : AnsiString');
          Function EncodeURLElement( const Value : AnsiString) : AnsiString');
14628:
          Function EncodeURL( const Value : AnsiString) : AnsiString');
Function Decode4to3( const Value, Table : AnsiString) : AnsiString');
Function Decode4to3Ex( const Value, Table : AnsiString) : AnsiString');
14629:
14630:
14631:
14632:
          Function Encode3to4( const Value, Table : AnsiString) : AnsiString');
14633:
          Function synDecodeBase64( const Value : AnsiString) : AnsiString');
14634:
          Function synEncodeBase64( const Value : AnsiString) : AnsiString');
          Function DecodeBase64mod( const Value : AnsiString) : AnsiString');
14635:
          Function EncodeBase64mod( const Value : AnsiString)
                                                                              : AnsiString');
          Function DecodeUU( const Value : AnsiString) : AnsiString');
Function EncodeUU( const Value : AnsiString) : AnsiString');
14637:
14638:
14639:
          Function DecodeXX( const Value : AnsiString) : AnsiString');
          Function DecodeYEnc( const Value : AnsiString) : AnsiString');
Function UpdateCrc32( Value : Byte; Crc32 : Integer) : Integer');
14640:
14641:
14642:
          Function synCrc32( const Value : AnsiString) : Integer');
14643:
          Function UpdateCrc16( Value : Byte; Crc16 : Word) : Word');
Function Crc16( const Value : AnsiString) : Word');
14644:
          Function symMD5( const Value : AnsiString) : AnsiString');
Function HMAC_MD5( Text, Key : AnsiString) : AnsiString');
14645:
14646:
14647:
          Function MD5LongHash( const Value : AnsiString; Len : integer) : AnsiString');
          Function synSHA1( const Value : AnsiString) : AnsiString');
Function HMAC_SHA1( Text, Key : AnsiString) : AnsiString');
14648:
14649:
          Function SHAlLongHash( const Value : AnsiString; Len : integer) : AnsiString');
14651:
          Function synMD4( const Value : AnsiString) : AnsiString');
14652: end;
14653:
14654: procedure SIRegister_synachar(CL: TPSPascalCompiler);
14655: begin
           AddTypeS('TMimeChar', '( ISO_8859_1, ISO_8859_2, ISO_8859_3, ISO_8859_4, I'
14656:
            +'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'
+'4, CP1255, CP1256, CP1257, CP1258, KOI8_R, CP895, CP852, UCS_2, UCS_4, UTF'
14657:
14658:
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+'_8, UTF_7, UTF_7mod, UCS_2LE, UCS_4LE, UTF_16, UTF_16LE, UTF_32, UTF_32LE,'
+' C99, JAVA, ISO_8859_16, KOI8_U, KOI8_RU, CP862, CP866, MAC, MACCE, MACICE'
14660:
14661:
                        +', MACCRO, MACRO, MACCYR, MACUK, MACGR, MACTU, MACHEB, MACAR,
                                                                                                                                                                                     MACTH,
                        +', NEXTSTEP, ARMASCII, GEORGIAN_AC, GEORGIAN_PS, KOI8_T, MULELAO, CP1133, T'
+'IS620, CP874, VISCII, TCVN, ISO_IR_14, JIS_X0201, JIS_X0208, JIS_X0212, GB'
14663:
14664:
                        +'1988_80, GB2312_80, ISO_IR_165, ISO_IR_14, UIS_AUZU, UIS_AUZU, UIS_AUZU, GB+'1988_80, GB2312_80, ISO_IR_165, ISO_IR_149, EUC_JP, SHIFT_JIS, CP932, ISO_'
+'2022_JP, ISO_2022_JP1, ISO_2022_JP2, GB2312, CP936, GB18030, ISO_2022_CN, '+'ISO_2022_CNE, HZ, EUC_TW, BIG5, CP950, BIG5_HKSCS, EUC_KR, CP949, CP1361, '+'ISO_2022_KR, CP737, CP775, CP853, CP855, CP857, CP858, CP860, CP861, CP863'
14665:
14666:
14667:
14668:
                      +', CP864, CP865, CP869, CP1125 )');
AddTypeS('TMimeSetChar', 'set of TMimeChar');
14669:
14670:
                   Function CharsetConversion(const Value:AnsiString;CharFrom:TMimeChar;CharTo:TMimeChar):AnsiString;
14672:
                   \textbf{Function} \ \texttt{CharsetConversionEx} \\ (\textbf{const} \ \texttt{Value:AnsiString}; \texttt{CharFrom:TMimeChar}; \texttt{CharTo:TMimeChar}; \\ \textbf{const} \\ \\ \textbf{const} \\
                TransformTable : array of Word) : AnsiString');
Function CharsetConversionTrans( Value : AnsiString; CharFrom : TMimeChar; CharTo : TMimeChar; const
TransformTable : array of Word; Translit : Boolean) : AnsiString');
14673:
                 Function GetCurCP : TMimeChar');
14675:
                   Function GetCurOEMCP : TMimeChar');
                   Function GetCPFromID( Value : AnsiString) : TMimeChar');
Function GetIDFromCP( Value : TMimeChar) : AnsiString');
14676:
14677:
                    Function NeedCharsetConversion( const Value : AnsiString) : Boolean');
14678:
14679:
                   Function IdealCharsetCoding(const Value:AnsiString;CharFrom:TMimeChar;CharTo:TMimeSetChar):TMimeChar;
                   Function GetBOM( Value : TMimeChar) : AnsiString');
Function StringToWide( const Value : AnsiString) : WideString');
14680:
14681:
14682:
                   Function WideToString( const Value : WideString) : AnsiString');
14683: end;
14684:
14685:
                 procedure SIRegister_synamisc(CL: TPSPascalCompiler);
14686: begin
                   AddTypeS('TProxySetting', 'record Host : string; Port : string; Bypass : string; end');

Procedure WakeOnLan( MAC, IP : string)');
14688:
14689:
                   Function GetDNS : string');
                   Function GetIEProxy( protocol : string) : TProxySetting');
Function GetLocalIPs : string');
14690:
14691:
14692:
                 end;
14693:
14694:
14695: procedure SIRegister synaser(CL: TPSPascalCompiler);
14696:
                 begin
                   AddConstantN('synCR','Char').SetString( #$0d);
Const('synLF','Char').SetString( #$0a);
Const('cSerialChunk','LongInt').SetInt( 8192);
14697:
14698:
14699:
                                   'LockfileDirectory', 'String').SetString( '/var/lock');
14700:
                   Const (
                                   'PortIsClosed', 'LongInt').SetInt( - 1);
14701:
                   Const('ErrAlreadyOwned','LongInt').SetInt( 9991);
Const('ErrAlreadyInUse','LongInt').SetInt( 9992);
14702:
14703:
                   Const('ErrWrongParameter','LongInt').SetInt( 9993);
14704:
                                   'ErrPortNotOpen','LongInt').SetInt( 9994);
14705:
                   Const (
14706:
                    Const (
                                    'ErrNoDeviceAnswer', 'LongInt').SetInt( 9995);
                   Const('ErrMaxBuffer','LongInt').SetInt( 9996);
Const('ErrTimeout','LongInt').SetInt( 9997);
Const('ErrNotRead','LongInt').SetInt( 9998);
14707:
14708:
14709:
14710:
                                   'ErrFrame', 'LongInt').SetInt( 9999);
                    Const (
                   Const('ErrOverrun','LongInt').SetInt( 10000);
Const('ErrRxOver','LongInt').SetInt( 10001);
14711:
14712:
                   Const('ErrTxxParity','LongInt').SetInt( 10002);
Const('ErrTxxFull','LongInt').SetInt( 10003);
Const('dcb_Binary','LongWord').SetUInt( $00000001);
14713:
14714:
14715:
                   Const('dcb_ParityCheck','LongWord').SetUInt( $00000002);
Const('dcb OutxCtsFlow','LongWord').SetUInt( $00000004);
14716:
14717:
                                    'dcb_OutxDsrFlow','LongWord').SetUInt(
14718:
                                                                                                                                   $00000008);
                   Const (
14719:
                    Const (
                                   'dcb_DtrControlMask','LongWord').SetUInt( $00000030);
                                   dcb_btrControlDisable','LongWord').SetUInt( $0000000);
'dcb_btrControlEnable','LongWord').SetUInt( $00000000);
'dcb_DtrControlHandshake','LongWord').SetUInt( $00000020);
'dcb_DsrSensivity','LongWord').SetUInt( $00000040);
14720:
                   Const (
14721:
                   Const (
14722:
                   Const (
14723:
                   Const (
14724:
                                   'dcb_TXContinueOnXoff','LongWord').SetUInt( $00000080);
                    Const (
                   Const('dcb_OutX','LongWord').SetUInt( $00000100);
Const('dcb_InX','LongWord').SetUInt( $00000200);
14725:
14726:
                                   'dcb_ErrorChar','LongWord').SetUInt( $0000400);
'dcb_NullStrip','LongWord').SetUInt( $00000800);
14727:
                   Const (
14728:
14729:
                    Const('dcb_RtsControlMask','LongWord').SetUInt( $00003000);
                   Const('dcb_RtsControlDisable','LongWord').SetUInt( $00000000);
Const('dcb_RtsControlEnable','LongWord').SetUInt( $00001000);
14730:
14731:
                                    'dcb_RtsControlHandshake','LongWord').SetUInt(
14732:
                   Const (
                                                                                                                                                       $00002000);
14733:
                    Const('dcb_RtsControlToggle','LongWord').SetUInt( $00003000);
                   Const('dcb_AbortOnError','LongWord').SetUInt( $00004000);
Const('dcb_Reserveds','LongWord').SetUInt( $FFFF8000);
Const('synSB1','LongInt').SetInt( 0);
14734:
14735:
14736:
                    Const (
                                   'SBlandHalf', 'LongInt').SetInt( 1);
14738:
                    Const('synSB2','LongInt').SetInt( 2);
14739:
                   Const('synINVALID_HANDLE_VALUE','LongInt').SetInt( THandle ( - 1 ));
14740:
                   Const('CS7fix','LongWord').SetUInt( $0000020);
                      AddTypeS('synTDCB', 'record DCBlength : DWORD; BaudRate : DWORD; Flags : Long' +'int; wReserved : Word; XonLim : Word; XoffLim : Word; ByteSize : Byte; Par'
14741:
14742:
                   +'ity: Byte; StopBits: Byte; XonChar: CHAR; XoffChar: CHAR; ErrorChar: '
+'CHAR; EofChar: CHAR; EvtChar: CHAR; WReservedl: Word; end');
//AddTypeS('PDCB', '^TDCB // will not work');
//Const('MaxRates','LongInt').SetInt( 18);
14743:
14744:
14745:
```

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14747:
          //Const('MaxRates','LongInt').SetInt( 30);
//Const('MaxRates','LongInt').SetInt( 19);
14748:
           Const('O_SYNC','LongWord').SetUInt( $0080);
Const('synOK','LongInt').SetInt( 0);
14750 .
           Const('synErr','LongInt').SetInt( integer ( - 1 ));
14751:
            AddTypeS('THookSerialReason', '( HR_SerialClose, HR_Connect, HR_CanRead, HR_CanWrite, HR_ReadCount,
14752:
         HR_WriteCount, HR_Wait )');
14753:
         Type('ThookSerialStatus', Procedure(Sender: TObject; Reason:ThookSerialReason; const Value:string)');
14754:
            SIRegister_ESynaSerError(CL);
14755:
            SIRegister TBlockSerial(CL);
          Function GetSerialPortNames : string');
14756:
14757:
14758:
14759: procedure SIRegister_synaicnv(CL: TPSPascalCompiler);
14760: begin
14761:
          Const('DLLIconvName','String').SetString( 'libiconv.so');
          Const ('DLLIconvName', 'String').SetString( 'iconv.dll');
AddTypeS('size_t', 'Cardinal');
AddTypeS('iconv_t', 'Integer');
14762:
14763:
14764:
14765:
            //AddTypeS('iconv_t', 'Pointer');
                                      'iconv_t');
14766:
            AddTypeS('argptr',
14767:
          Function SynaIconvOpen( const tocode, fromcode : Ansistring) : iconv_t');
          Function SynaIconvOpen( const tocode, fromcode : Ansistring) : iconv_t');
Function SynaIconvOpenIgnore( const tocode, fromcode : Ansistring) : iconv_t');
Function SynaIconv( cd : iconv_t; inbuf : AnsiString; var outbuf : AnsiString) : integer');
Function SynaIconvClose( var cd : iconv_t) : integer');
14768:
14769:
14771:
14772:
          Function SynaIconvCtl( cd : iconv_t; request : integer; argument : argptr) : integer');
14773:
          Function IsIconvloaded : Boolean');
14774:
          Function InitIconvInterface : Boolean');
          Function DestroyIconvInterface : Boolean');
14775:
          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);
Const('ICONV_SET_DISCARD_ILSEQ','LongInt').SetInt( 4);
14776:
14777:
14778:
14779:
14780:
14781: end;
14782:
14783: procedure SIRegister pingsend(CL: TPSPascalCompiler);
14784:
         begin
14785:
          Const 'ICMP_ECHO', 'LongInt').SetInt( 8);
14786:
          Const('ICMP_ECHOREPLY','LongInt').SetInt( 0);
Const('ICMP_UNREACH','LongInt').SetInt( 3);
14787:
           Const('ICMP_TIME_EXCEEDED','LongInt').SetInt( 11);
14788:
           Const('ICMP6_ECHO','LongInt').SetInt( 128);
14789:
          Const('ICMP6_ECHOREPLY','LongInt').SetInt( 129);
Const('ICMP6_UNREACH','LongInt').SetInt( 1);
14790:
14791:
          Const('ICMP6_TIME_EXCEEDED','LongInt').SetInt(3);
AddTypeS('TICMPError', '(IE_NoError, IE_Other, IE_TTLExceed, IE_UnreachOt'
14792:
14794:
              +'her, IE_UnreachRoute, IE_UnreachAdmin, IE_UnreachAddr, IE_UnreachPort )');
14795:
           SIRegister TPINGSend(CL);
14796:
          Function PingHost( const Host : string) : Integer');
14797:
          Function TraceRouteHost( const Host : string) : string');
14798:
14799:
14800:
         procedure SIRegister asnlutil(CL: TPSPascalCompiler);
14801: begin
14802:
          AddConstantN('synASN1_BOOL','LongWord').SetUInt( $01);
           Const('synASN1_INT','LongWord').SetUInt( $02);
14803:
          Const('synASN1_OCTSTR','LongWord').SetUInt( $04);
Const('synASN1_NULL','LongWord').SetUInt( $05);
Const('synASN1_OBJID','LongWord').SetUInt( $06);
14804:
14805:
14806:
          Const('synASN1_ENUM','LongWord').SetUInt( $00);
Const('synASN1_ENUM','LongWord').SetUInt( $0a);
Const('synASN1_SEQ','LongWord').SetUInt( $31);
Const('synASN1_SETOF','LongWord').SetUInt( $41);
Const('synASN1_IPADDR','LongWord').SetUInt( $41);
14807:
14808:
14809:
14810:
14811:
14812:
           Const('synASN1_GAUGE','LongWord').SetUInt($42);
14813:
           Const('synASN1_TIMETICKS','LongWord').SetUInt( $43);
14814:
          Const('synASN1_OPAQUE','LongWord').SetUInt( $44);
Function synASNEncOIDItem( Value : Integer) : AnsiString');
14815:
           Function synASNDecOIDItem( var Start : Integer; const Buffer : AnsiString) : Integer');
14816:
14817:
          Function synASNEncLen( Len : Integer) : AnsiString');
          Function synASNDecLen( var Start : Integer; const Buffer : AnsiString) : Integer');
Function synASNEncInt( Value : Integer) : AnsiString');
Function synASNEncUInt( Value : Integer) : AnsiString');
14818:
14819:
14820:
           Function synASNObject( const Data : AnsiString; ASNType : Integer) : AnsiString');
14821:
14822:
          Function synASNItem(var Start:Integer;const Buffer:AnsiString;var ValueType:Integer):AnsiString;
          Function symMibToId( Mib : String) : AnsiString');
Function symIdToMib( const Id : AnsiString) : String');
14823:
14824:
          Function syntathibToStr( const Value : AnsiString); AnsiString');
Function ASNdump( const Value : AnsiString) : AnsiString');
14826:
14827: Function GetMailServers( const DNSHost, Domain: AnsiString; const Servers:TStrings): Boolean');
14828: Function LDAPResultDump( const Value: TLDAPResultList): AnsiString');
14829:
         end;
14830:
14831: procedure SIRegister_ldapsend(CL: TPSPascalCompiler);
14832: begin
14833:
          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);
14835:
14836:
14837:
          Const ('LDAP_ASN1_SEARCH_ENTRY', 'LongWord').SetUInt( $64);
Const ('LDAP_ASN1_SEARCH_DONE', 'LongWord').SetUInt( $65);
14838:
14839:
          Const('LDAP_ASN1_SEARCH_REFERENCE', 'LongWord').SetUInt( $73);
Const('LDAP_ASN1_MODIFY_REQUEST', 'LongWord').SetUInt( $66);
14840:
14841:
14842:
                   'LDAP_ASN1_MODIFY_RESPONSE', 'LongWord').SetUInt( $67);
           Const (
          Const('LDAP_ASN1_MODIFI_RESPONSE', LongWord').SetUInt($68);
Const('LDAP_ASN1_ADD_RESPONSE', 'LongWord').SetUInt($69);
Const('LDAP_ASN1_DEL_REQUEST', 'LongWord').SetUInt($4A);
Const('LDAP_ASN1_DEL_RESPONSE', 'LongWord').SetUInt($6B);
14843:
14844:
14845:
14846:
          Const('LDAP_ASN1_MODIFYDN_REQUEST','LongWord').SetUInt( $6C);
Const('LDAP_ASN1_MODIFYDN_RESPONSE','LongWord').SetUInt( $6D);
14847:
14848:
          Const('LDAP_ASN1_COMPARE_RESUBST','LongWord').SetUInt( $6E);
Const('LDAP_ASN1_COMPARE_RESPONSE','LongWord').SetUInt( $6F);
Const('LDAP_ASN1_ABANDON_REQUEST','LongWord').SetUInt( $70);
14849:
14850:
14851:
          Const('LDAP_ASN1_EXT_REQUEST','LongWord').SetUInt( $77);
Const('LDAP_ASN1_EXT_RESPONSE','LongWord').SetUInt( $78);
14852 .
14853:
14854:
            SIRegister_TLDAPAttribute(CL);
            SIRegister_TLDAPAttributeList(CL);
14855:
14856:
            SIRegister_TLDAPResult(CL);
14857:
            SIRegister_TLDAPResultList(CL);
            AddTypeS('TLDAPModifyOp', '( MO_Add, MO_Delete, MO_Replace )');
AddTypeS('TLDAPSearchScope', '( SS_BaseObject, SS_SingleLevel, SS_WholeSubtree )');
14858:
14859:
14860:
            AddTypeS('TLDAPSearchAliases', '( SA_NeverDeref, SA_InSearching, SA_FindingBaseObj, SA_Always )');
14861:
           SIRegister TLDAPSend(CL);
          Function LDAPResultDump( const Value : TLDAPResultList) : AnsiString');
14862:
14863: end;
14864:
14865:
14866: procedure SIRegister slogsend(CL: TPSPascalCompiler);
14867: begin
14868:
          Const('cSysLogProtocol','String').SetString( '514');
14869:
           Const('FCL_Kernel','LongInt').SetInt( 0);
          Const('FCL_UserLevel','LongInt').SetInt( 1);
Const('FCL_MailSystem','LongInt').SetInt( 2);
Const('FCL_System','LongInt').SetInt( 3);
14870:
14871:
14872:
          Const('FCL_Security','LongInt').SetInt( 4)
Const('FCL_Syslogd','LongInt').SetInt( 5);
14873:
14874:
          Const('FCL_Printer','LongInt').SetInt( 6);
14875:
          Const('FCL_News','LongInt').SetInt( 7);
Const('FCL_UUCP','LongInt').SetInt( 8);
14876:
14877:
          Const('FCL_Clock','LongInt').SetInt( 9);
14878:
          Const('FCL_Authorization','LongInt').SetInt( 10);
Const('FCL_FTP','LongInt').SetInt( 11);
Const('FCL_NTP','LongInt').SetInt( 12);
14879:
14880:
14881:
14882:
          Const('FCL_LogAudit','LongInt').SetInt( 13);
14883:
          Const (
                   'FCL_LogAlert', 'LongInt').SetInt(
          Const('FCL_Time','LongInt').SetInt( 15);
Const('FCL_Local0','LongInt').SetInt( 16);
14884:
14885:
14886:
          Const('FCL_Locall','LongInt').SetInt( 17);
           Const('FCL_Local2','LongInt').SetInt( 18);
14887:
14888:
          Const('FCL_Local3','LongInt').SetInt( 19);
          Const('FCL_Local4','LongInt').SetInt( 20);
14889:
14890:
          Const('FCL_Local5','LongInt').SetInt( 21);
14891:
          Const('FCL_Local6','LongInt').SetInt( 22);
          Const('FCL_Local7','LongInt').SetInt( 23);
14892:
14893:
           AddTypeS('TSyslogSeverity',
    +' Notice, Info, Debug )');
                                                   '( Emergency, Alert, Critical, Error, Warning, '
14894:
            SIRegister_TSyslogMessage(CL);
14895:
14896:
            SIRegister_TSyslogSend(CL);
14897: Function ToSysLog(const SyslogServer:string; Facil:Byte; Sever:TSyslogSeverity; const
         Content: string): Boolean;
14898: end;
14899:
14900:
14901: procedure SIRegister_mimemess(CL: TPSPascalCompiler);
14902: begin
            AddTypeS('TMessPriority', '( MP_unknown, MP_low, MP_normal, MP_high )');
14903:
            SIRegister_TMessHeader(CL);
14904:
14905:
            //AddTypeS('TMessHeaderClass', 'class of TMessHeader');
14906:
            SIRegister_TMimeMess(CL);
14907:
         end;
14908:
1.4909:
         procedure SIRegister_mimepart(CL: TPSPascalCompiler);
14910: begin
            (FindClass('TOBJECT'),'TMimePart');
14911:
            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 )');
14912:
14913:
14914:
14915:
            SIRegister_TMimePart(CL);
          Const('MaxMimeType', 'LongInt').SetInt( 25);
14916:
14917:
          Function GenerateBoundary : string');
14918: end;
14919:
14920: procedure SIRegister_mimeinln(CL: TPSPascalCompiler);
14921: begin
14922: Function InlineDecode( const Value : string; CP : TMimeChar) : string');
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Function InlineEncode( const Value : string; CP, MimeP : TMimeChar) : string');
14923:
         Function NeedInline( const Value : AnsiString) : boolean');
14924:
         Function InlineCodeEx( const Value : string) : string');
Function InlineCode( const Value : string) : string');
14926 .
         Function InlineEmailEx( const Value : string; FromCP : TMimeChar) : string;;;
14927:
         Function InlineEmail( const Value : string) : string');
14928:
14929:
14930:
14931:
        procedure SIRegister_ftpsend(CL: TPSPascalCompiler);
14932: begin
         Const('cFtpProtocol','String').SetString('21');
14933:
         Const('cFtpPtotocol', String').SetString( 21 );
Const('cFtpDataProtocol', 'String').SetString( '20');
Const('FTP_OK', 'LongInt').SetInt( 255);
Const('FTP_ERR', 'LongInt').SetInt( 254);
AddTypeS('TFTPStatus', 'Procedure ( Sender : TObject; Response : Boolean; const Value : string)');
14935:
14936:
14937:
14938:
          SIRegister_TFTPListRec(CL);
14939:
          SIRegister TFTPList(CL);
14940 •
          SIRegister TFTPSend(CL);
14941: Function FtpGetFile( const IP, Port, FileName, LocalFile, User, Pass : string) : Boolean');
        Function FtpPutFile( const IP, Port, FileName, LocalFile, User, Pass : string) : Boolean');
14942:
         Function FtpInterServerTransfer(const FromIP,FromPort, FromFile, FromUser, FromPass: string; const ToIP,
14943:
        ToPort, ToFile, ToUser, ToPass : string) : Boolean');
14944: end;
14945:
14946: procedure SIRegister_httpsend(CL: TPSPascalCompiler);
14947: begin
14948:
        Const('cHttpProtocol','String').SetString('80');
          AddTypeS('TTransferEncoding', '( TE_UNKNOWN, TE_IDENTITY, TE_CHUNKED )');
14949:
14950:
          SIRegister_THTTPSend(CL);
14951:
         Function HttpGetText( const URL : string; const Response : TStrings) : Boolean');
14952:
         Function HttpGetBinary( const URL : string; const Response : TStream) : Boolean');
14953:
         Function HttpPostBinary( const URL : string; const Data : TStream) : Boolean');
14954:
         Function HttpPostURL( const URL, URLData : string; const Data : TStream) : Boolean');
         Function HttpPostFile(const URL,FieldName,FileName:string;const Data:TStream;const
14955:
        ResultData: TStrings): Boolean;
14956: end;
14957:
14958: procedure SIRegister smtpsend(CL: TPSPascalCompiler);
14959:
        begin
         Const('cSmtpProtocol','String').SetString('25');
14960:
14961:
          SIRegister_TSMTPSend(CL);
         Function SendToRaw(const MailFrom, MailTo, SMTPHost: string; const MailData: TStrings; const Usrname.
14962:
        Passw:string):Bool;
         Function SendTo(const MailFrom, MailTo, Subject, SMTPHost:string; const MailData:TStrings):Boolean;
         Function SendToEx(const MailFrom, MailTo, Subject, SMTPHost: string; const MailData: TStrings; const
14964:
        Username, Password : string):Boolean');
14965:
       end;
14966:
14967:
        procedure SIRegister_snmpsend(CL: TPSPascalCompiler);
14968: begin
14969:
         Const('cSnmpProtocol','String').SetString('161');
14970:
         Const('cSnmpTrapProtocol','String').SetString('162');
14971:
                 'SNMP_V1','LongInt').SetInt(
14972:
                 'SNMP_V2C','LongInt').SetInt( 1);
         Const (
         Const('SNMP_V3','LongInt').SetInt( 3);
Const('PDUGetRequest','LongWord').SetUInt( $A0);
14973:
14974:
                 'PDUGetNextRequest', 'LongWord').SetUInt( $A1);
14975:
         Const (
14976:
         Const('PDUGetResponse','LongWord').SetUInt( $A2);
14977:
         Const('PDUSetRequest','LongWord').SetUInt( $A3);
         Const('PDUTrap', 'LongWord').SetUInt( $A4);
Const('PDUGetBulkRequest', 'LongWord').SetUInt( $A5);
14978:
14979:
14980:
         Const (
                 'PDUInformRequest', 'LongWord').SetUInt( $A6);
14981:
         Const('PDUTrapV2','LongWord').SetUInt( $A7);
                 'PDUReport','LongWord').SetUInt( $A8);
'ENoError','LongInt').SetInt( 0);
'ETooBig','LongInt').SetInt( 1);
14982:
         Const (
14983:
         Const (
14984:
         Const (
14985:
         Const('ENoSuchName', 'LongInt').SetInt( 2);
14986:
         Const('EBadValue','LongInt').SetInt( 3);
         Const('EReadOnly','LongInt').SetInt( 4);
Const('EGenErr','LongInt').SetInt( 5);
Const('ENoAccess','LongInt').SetInt( 6);
14987:
14988:
14989:
14990:
                 'EWrongType','LongInt').SetInt( 7);
         Const (
                 'EWrongLength','LongInt').SetInt( 8);
'EWrongEncoding','LongInt').SetInt( 9);
14991:
         Const (
14992:
         Const (
                'EWrongValue', 'LongInt').SetInt( 10);
'ENoCreation', 'LongInt').SetInt( 11);
14993:
         Const (
14994:
         Const('EInconsistentValue','LongInt').SetInt( 12);
Const('EResourceUnavailable','LongInt').SetInt( 13);
14995:
14996:
         Const('ECommitFailed','LongInt').SetInt( 14);
14997:
         Const('EUndoFailed','LongInt').SetInt( 15);
14998:
         Const('EAuthorizationError','LongInt').SetInt( 16);
14999:
15000:
         Const('ENotWritable','LongInt').SetInt( 17);
         Const('ElnconsistentName','LongInt').SetInt( 18);
AddTypeS('TV3Flags', '( NoAuthNoPriv, AuthNoPriv, AuthPriv )');
15001:
15002:
          AddTypeS('TV3Auth', '( AuthMD5, AuthSHA1 )');
AddTypeS('TV3Priv', '( PrivDES, Priv3DES, PrivAES )');
15003:
15004:
15005:
          SIRegister_TSNMPMib(CL);
AddTypeS('TV3Sync', 'record EngineID : AnsiString; EngineBoots : integer; '
15006:
           +'EngineTime : integer; EngineStamp : Cardinal; end');
```

```
15008:
            SIRegister TSNMPRec(CT.);
            SIRegister_TSNMPSend(CL);
15009:
          Function SNMPGet( const OID, Community, SNMPHost : AnsiString; var Value : AnsiString) : Boolean');
          Function SNMPSet( const OID, Community, SNMPHost, Value : AnsiString; ValueType : Integer) : Boolean');
Function SNMPGetNext(var OID:AnsiString;const Community,SNMPHost:AnsiString;var Value:AnsiString):Boolean;
15011:
15012:
          Function SNMPGetTable(const BaseOID, Community, SNMPHost: AnsiString; const Value: TStrings): Boolean;
Function SNMPGetTableElement(const BaseOID,RowID,ColID,Community,SNMPHost:AnsiStr;var Value:AnsiStr):
15013:
15014:
15015: 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');
15016:
15017: end;
15018:
15019: procedure SIRegister NetWork(CL: TPSPascalCompiler);
15020: begin
15021:
         Function GetDomainName2: AnsiString');
15022:
          Function GetDomainController( Domain : AnsiString) : AnsiString');
          Function GetDomainUsers( Controller : AnsiString) : AnsiString');
15023:
15024:
          Function GetDomainGroups( Controller : AnsiString) : AnsiString');
15025:
          Function GetDateTime( Controller : AnsiString) : TDateTime');
15026: Function GetFullName2( Controller, UserID : AnsiString) : AnsiString');
15027: end;
15028:
15029:
         procedure SIRegister_wwSystem(CL: TPSPascalCompiler);
15030: begin
15031:
           AddTypeS('TwwDateOrder', '( doMDY, doDMY, doYMD )');
          AddTypeS('TwwDateTimeSelection','(wwdsDay,wwdsMonth,wwdsYear,wwdsHour,wwdsMinute,wwdsSecond,wwdsAMPM);
Function wwStrToDate( const S : string) : boolean');
15032:
15033:
          Function wwStrToTime( const S : string)
                                                                : boolean');
15034:
15035:
          Function wwStrToDateTime( const S : string) : boolean');
          Function wwStrToTimeVal( const S : string) : TDateTime');
Function wwStrToDateVal( const S : string) : TDateTime');
15036:
15037:
          Function wwStrToDateTimeVal(const S: string): TDateTime');
Function wwStrToInt(const S: string): boolean');
Function wwStrToFloat(const S: string): boolean');
15038:
15039:
15040:
          Function wwGetDateOrder( const DateFormat : string) : TwwDateOrder');
Function wwNextDay( Year, Month, Day : Word) : integer');
Function wwPriorDay( Year, Month, Day : Word) : integer');
15041:
15042:
15043:
15044:
          Function wwDoEncodeDate( Year, Month, Day : Word; var Date : TDateTime) : Boolean');
15045:
          Function wwDoEncodeTime( Hour, Min, Sec, MSec : Word; var Time : TDateTime) : Boolean');
          Function wwGetDateTimeCursorPosition(SelStart:int;Text:string;TimeOnly:Bool):TwwDateTimeSelection');
15046:
          Function wwGetTimeCursorPosition(SelStart: integer; Text: string): TwwDateTimeSelection');
Function wwScanDate( const S: string; var Date: TDateTime): Boolean');
15047:
15048:
15049:
          \textbf{Function} \  \, \textbf{wwScanDateEpoch} ( \  \, \textbf{const} \  \, \textbf{S} \  \, : \  \, \textbf{string}; \  \, \textbf{var} \  \, \textbf{Date} \  \, : \  \, \textbf{TDateTime}; \  \, \textbf{Epoch} \  \, : \  \, \textbf{integer}) \  \, : \  \, \textbf{Boolean'}); \\
          Procedure wwSetDateTimeCursorSelection(dateCursor:TwwDateTimeSelection;edit:TCustomEdit;TimeOnly:Bool;
15050:
15051: Function wwStrToFloat2( const S : string; var FloatValue : Extended; DisplayFormat: string): boolean');
15052: end;
15053:
15054: unit uPSI Themes;
15055: Function ThemeServices : TThemeServices');
15056: Function ThemeControl( AControl: TControl): Boolean');
15057: Function UnthemedDesigner( AControl : TControl) : Boolean');
15058: procedure SIRegister_UDDIHelper(CL: TPSPascalCompiler);
15059: begin
15060: Function GetBindingkeyAccessPoint(const Operator : String; const key : String) : String');
15061:
         end;
15062: Unit uPSC_menus;
         Function StripHotkey( const Text : string) : string');
15063:
          Function GetHotkey( const Text : string) : string');
Function AnsiSameCaption( const Text1, Text2 : string) : Boolean');
15064:
15065:
15066:
          Function IsAltGRPressed : boolean');
15067:
15068: procedure SIRegister IdIMAP4Server(CL: TPSPascalCompiler);
15069: begin
15070:
            TCommandEvent', 'Procedure(Thread:TIdPeerThread: const Tag, CmdStr:String; var Handled:Boolean);
15071:
            SIRegister_TIdIMAP4Server(CL);
15072: end;
15073:
15074: procedure SIRegister VariantSymbolTable(CL: TPSPascalCompiler);
15075: begin
15076:
           'HASH_SIZE','LongInt').SetInt( 256);
           CL.FindClass('TOBJECT'), 'EVariantSymbolTable');
CL.AddTypeS('TSymbolType', '( stInteger, stFloat, stDate, stString )');
//CL.AddTypeS('PSymbol', '^TSymbol // will not work');
CL.AddTypeS('TSymbol', 'record Name : String; BlockLevel : integer; HashValue'
+' : Integer; Value : Variant; end');
15077:
15078:
15079:
15080:
15081:
            //CL.AddTypeS('PSymbolArray', '^TSymbolArray // will not work');
SIRegister_TVariantSymbolTable(CL);
15082:
15083:
15084:
15085:
15086: procedure SIRegister udf glob(CL: TPSPascalCompiler);
15087: begin
15088:
            SIRegister TThreadLocalVariables(CL);
          Function MakeResultString( Source, OptionalDest : PChar; Len : DWORD) : PChar');
15089:
15090: //CL.AddDelphiFunction('Function MakeResultQuad( Source, OptionalDest : PISC_QUAD) : PISC_QUAD');
15091: Function ThreadLocals : TThreadLocalVariables');
15092: CL.AddDelphiFunction('Procedure WriteDebug( sz : String)');
15093: CL.AddConstantN('UDF_SUCCESS', 'LongInt').SetInt( 0);
```

```
15094:
              'UDF FAILURE', 'LongInt'). SetInt( 1);
               'cSignificantlyLarger', 'LongInt').SetInt( 1024 * 4);
15095:
              CL.AddTypeS('mTByteArray', 'array of byte;');
function ChangeOEPFromBytes(bFile:mTByteArray):Boolean;
15097.
15098:
              function ChangeOEPFromFile(sFile:string; sDestFile:string):Boolean;
15099:
              procedure CopyEXIF(const FileNameEXIFSource, FileNameEXIFTarget: string);
15100:
              function IsNetworkConnected: Boolean;
              function IsInternetConnected: Boolean;
15101:
15102:
              function IsCOMConnected: Boolean;
15103:
              function IsNetworkOn: Boolean;
              function IsInternetOn: Boolean;
15104:
15105:
              function IsCOMOn: Boolean;
              Function SetTimer( hWnd : HWND; nIDEvent, uElapse : UINT; lpTimerFunc : TFNTimerProc) : UINT');
Function KillTimer( hWnd : HWND; uIDEvent : UINT) : BOOL');
Function wIsWindowUnicode( hWnd : HWND) : BOOL');
15106:
15107:
15108:
15109:
              Function wEnableWindow( hWnd : HWND; bEnable : BOOL) : BOOL');
              Function wIsWindowEnabled( hWnd : HWND) : BOOL');
15110:
15111: Function GetMenu( hWnd : HWND) : HMENU');
15112: Function SetMenu( hWnd : HWND; hMenu : HMENU) : BOOL');
15113: end;
15114:
15115:
            procedure SIRegister_SockTransport(CL: TPSPascalCompiler);
15116: begin
               SIRegister IDataBlock(CL);
15117:
15118:
                SIRegister_ISendDataBlock(CL);
15119:
                SIRegister_ITransport(CL);
15120:
                SIRegister_TDataBlock(CL);
                //CL.AddTypeS('PIntArray', '^TIntArray // will not work');
15121:
               //CL.AddTypeS('FVariantArray', 'Intartay', will not work');
//CL.AddTypeS('FVariantArray', '^TVariantArray // will not work');
CL.AddTypeS('TVarFlag', '( vfByRef, vfVariant )');
CL.AddTypeS('TVarFlags', 'set of TVarFlag');
15122:
15123:
15124:
15125:
                SIRegister_TCustomDataBlockInterpreter(CL);
15126:
                SIRegister_TSendDataBlock(CL);
                'CallSig','LongWord').SetUInt( $D800);
'ResultSig','LongWord').SetUInt( $D400);
15127:
15128:
15129:
                'asMask','LongWord').SetUInt( $00FF);
               CL.AddClassN(CL.FindClass('TOBJECT'), 'EInterpreterError');
CL.AddClassN(CL.FindClass('TOBJECT'), 'EsocketConnectionError');
15130:
15131:
15132:
              Procedure CheckSignature( Sig : Integer)');
15133: end;
15134:
            procedure SIRegister_WinInet(CL: TPSPascalCompiler);
15135:
15136: begin
               CL.AddTypeS('HINTERNET', '___Pointer');
//CL.AddTypeS('PHINTERNET', 'AHINTERNET // will not work');
//CL.AddTypeS('LPHINTERNET', 'PHINTERNET');
CL.AddTypeS('INTERNET_PORT', 'Word');
15137:
15138:
15139:
15140:
               //CL.AddTypeS('PINTERNET_PORT', '^INTERNET_PORT'/ will not work');
//CL.AddTypeS('LPINTERNET_PORT', 'PINTERNET_PORT');
15141:
15142:
15143:
               Function InternetTimeFromSystemTime(const pst:TSystemTime; dwRFC:DWORD; lpszTime:LPSTR;
            cbTime:DWORD):BOOL');
              'INTERNET_RFC1123_FORMAT','LongInt').SetInt( 0);
'INTERNET_RFC1123_BUFSIZE','LongInt').SetInt( 30);
15144:
15145:
              Function InternetCrackUrl(lpszUrl:PChar; dwUrlLength,dwFlags:DWORD; var
15146:
            lpUrlComponents:TURLComponents):BOOL;
15147: Function InternetCreateUrl( var lpUrlComponents: TURLComponents; dwFlags: DWORD; lpszUrl: PChar; var
            dwUrlLength : DWORD) : BOOL');
15148: Function InternetDial( hwndParent : HWND; lpszConnectoid : Pchar; dwFlags : DWORD; lpdwConnection :
            DWORD; dwReserved : DWORD) : DWORD');
              Function InternetHangUp ( dwConnection : DWORD; dwReserved : DWORD) : DWORD');
15149:
              Function InternetGoOnline( |pszURL : pchar; hwndParent : HWND; dwFlags : DWORD) : BOOL');
Function InternetAutodial( dwFlags : DWORD; dwReserved : DWORD) : BOOL');
15150:
              Function InternetAutodialHangup( dwReserved : DWORD) : BOOL');
15152:
              Function InternetGetConnectedState( lpdwFlags : DWORD; dwReserved : DWORD) : BOOL');
15153:
              Function InternetCanonicalizeUrl(lpszUrl:PChar;lpszBuffer:PChar; var
15154:
            lpdwBufferLength:DWORD;dwFlags:DWORD):BOOL');
              Function InternetCombineUrl( lpszBaseUrl, lpszRelativeUrl : PChar; lpszBuffer : PChar; var
lpdwBufferLength : Function InternetCloseHandle( hInet : HINTERNET) : BOOL');
15156: Function InternetConnect( hInet : HINTERNET; lpszServerName : PChar; nServerPort : INTERNET_PORT;
            lpszUsername : PChar; lpszPassword : PChar; dwService : DWORD; dwFlags : DWORD; dwContext : DWORD) :
            HINTERNET');
15157: \quad \textbf{Function} \quad \texttt{InternetQueryDataAvailable(hFile:HINTERNET; \textbf{var}} \quad \texttt{lpdwNumberOfBytesAvailable:DWORD; dwFlags} \\ \text{InternetQueryDataAvailable(hFile:HINTERNET; \textbf{var})} \\ \text{InternetQueryDataAvailable(hFile:HI
15159: Function WFtpPutFile( hConnect : HINTERNET; lpszLocalFile : PChar; lpszNewRemoteFile:PChar; dwFlags:DWORD;
            dwContext : DWORD) : BOOL');
15160: Function FtpDeleteFile( hConnect : HINTERNET; lpszFileName : PChar) : BOOL');
15161: Function FtpRenameFile( hConnect : HINTERNET; lpszExisting : PChar; lpszNew : PChar) : BOOL');
15162:
            \label{lower}  \texttt{FtpOpenFile(hConnect:HINTER;lpszFileName:PChar;dwAccess:DWORD;dwFlags:DWORD;dwContext:DWORD):HINTER;} \\
15163: Function FtpCreateDirectory( hConnect : HINTERNET; lpszDirectory : PChar) : BOOL');
15164: Function FtpRemoveDirectory( hConnect : HINTERNET; lpszDirectory : PChar) : BOOL');
15165:
              Function FtpSetCurrentDirectory( hConnect : HINTERNET; lpszDirectory : PChar) : BOOL');
              Function FtpGetCurrentDirectory(hConnect:HINTER;lpszCurrentDir:PChar;var lpdwCurrentDirectory:DWORD):
15166:
            BOOT.;
15167: Function
            FtpCommand(hConnect:HINTER;fExpectResponse:BOOL;dwFlags:DWORD;lpszCommand:PChar;dwContext:DWORD):BOOL;
15168: Function IS_GOPHER_FILE( GopherType : DWORD) : BOOL');
```

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Function IS_GOPHER_DIRECTORY( GopherType : DWORD) : BOOL');
15169:
15170:
              Function IS_GOPHER_PHONE_SERVER( GopherType : DWORD) : BOOL');
               Function IS_GOPHER_ERROR( GopherType : DWORD) : BOOL');
15172:
               Function IS_GOPHER_INDEX_SERVER( GopherType : DWORD) : BOOL');
15173:
              Function IS_GOPHER_TELNET_SESSION( GopherType : DWORD) : BOOL');
              Function IS_GOPHER_BACKUP_SERVER( GopherType : DWORD) : BOOL');
Function IS_GOPHER_TN3270_SESSION( GopherType : DWORD) : BOOL');
15174:
15175:
               Function IS_GOPHER_ASK( GopherType : DWORD)
15176:
                                                                                                  : BOOL');
              Function IS_GOPHER_PLUS( GopherType : DWORD) : BOOL');
15177:
15178:
              Function IS_GOPHER_TYPE_KNOWN( GopherType : DWORD) : BOOL');
15179:
              Function
             GopherCreateLocator(lpszHost:PChar;nServerPort:INTERNET_PORT;lpszDisplayString:PChar;lpszSelectorString:
             PChar; dwGopherType:DWORD;lpszLocator:PChar; var lpdwBufferLength:DWORD):BOOL;
Function GopherGetLocatorType( lpszLocator : PChar; var lpdwGopherType : DWORD):BOOL');
15180:
15181:
              Function
              \texttt{GopherOpenFile}(\texttt{hConnect:HINTERNET;lpszLocator:PChar;lpszView:PChar;dwFlags:DWORD;dwContext:DWORD):HINTERNET;dyncoloring (\texttt{hConnect:HINTERNET;lpszLocator:PChar;lpszView:PChar;dwFlags:DWORD;dwContext:DWORD): \texttt{hINTERNET;lpszLocator:PChar;lpszView:PChar;lpszView:PChar;lpszLocator:PChar;lpszView:PChar;lpszLocator:PChar;lpszView:PChar;lpszLocator:PChar;lpszView:PChar;lpszLocator:PChar;lpszLocator:PChar;lpszView:PChar;lpszLocator:PChar;lpszView:PChar;lpszLocator:PChar;lpszView:PChar;lpszLocator:PChar;lpszLocator:PChar;lpszView:PChar;lpszLocator:PChar;lpszView:PChar;lpszLocator:PChar;lpszView:PChar;lpszLocator:PChar;lpszView:PChar;lpszLocator:PChar;lpszLocator:PChar;lpszLocator:PChar;lpszLocator:PChar;lpszLocator:PChar;lpszLocator:PChar;lpszLocator:PChar;lpszLocator:PChar;lpszLocator:PChar;lpszLocator:PChar;lpszLocator:PChar;lpszLocator:PChar;lpszLocator:PChar;lpszLocator:PChar;lpszLocator:PChar;lpszLocator:PChar;lpszLocator:PChar;lpszLocator:PChar;lpszLocator:PChar;lpszLocator:PChar;lpszLocator:PChar;lpszLocator:PChar;lpszLocator:PChar;lpszLocator:PChar;lpszLocator:PChar;lpszLocator:PChar;lpszLocator:PChar;lpszLocator:PChar;lpszLocator:PChar;lpszLocator:PChar;lpszLocator:PChar;lpszLocator:PChar;lpszLocator:PChar;lpszLocator:PChar;lpszLocator:PChar;lpszLocator:PChar;lpszLocator:PChar;lpszLocator:PChar;lpszLocator:PChar;lpszLocator:PChar;lpszLocator:PChar;lpszLocator:PChar;lpszLocator:PChar;lpszLocator:PChar;lpszLocator:PChar;lpszLocator:PChar;lpszLocator:PChar;lpszLocator:PChar;lpszLocator:PChar;lpszLocator:PChar;lpszLocator:PChar;lpszLocator:PChar;lpszLocator:PChar;lpszLocator:PChar;lpszLocator:PChar;lpszLocator:PChar;lpszLocator:PChar;lpszLocator:PChar;lpszLocator:PChar;lpszLocator:PChar;lpszLocator:PChar;lpszLocator:PChar;lpszLocator:PChar;lpszLocator:PChar;lpszLocator:PChar;lpszLocator:PChar;lpszLocator:PChar;lpszLocator:PChar;lpszLocator:PChar;lpszLocator:PChar;lpszLocator:PChar;lpszLocator:PChar;lpszLocator:PChar;lpszLocator:PChar;lpszLocator:PChar;lpszLocator:PChar;lpszLocator:PChar;lpszLocator:PChar;l
             Function HttpOpenRequest( hConnect : HINTERNET; lpszVerb : PChar; lpszObjectName : PChar; lpszVersion : PChar; lpszReferrer : PChar; lplpszAcceptTypes : PLPSTR; dwFlags : DWORD; dwContext : DWORD) : HINTERNET');
15183:
              Function
             \texttt{HttpAddRequestHeaders}(\texttt{hReq:HINTERNET;lpszHeaders:PChar;dwHeadersLength:DWORD;dwModifiers:DWORD):BOOL;} \\
              Function HttpSendRequest(hRequest: HINTERNET; lpszHeaders : PChar; dwHeadersLength : DWORD; lpOptional :
             Tobject; dwOptionalLength:DWORD):BOOL;
15185: Function InternetGetCookie(lpszUrl,lpszCookieName,lpszCookieData:PChar;var lpdwSize:DWORD):BOOL;
15186:
              Function InternetAttemptConnect( dwReserved : DWORD) : DWORD');
Function InternetCheckConnection( lpszUrl : PChar; dwFlags : DWORD; dwReserved : DWORD) : BOOL');
15187:
15188:
               Function InternetErrorDlg(hWnd:HWND;hRequest:HINTERNET;dwError,dwFlags:DWORD;var lppvData:TObject):DWORD;
              Function InternetConfirmZoneCrossing( hWnd : HWND; szUrlPrev, szUrlNew : LPSTR; bPost : BOOL) : DWORD');
Function CreateUrlCacheGroup( dwFlags : DWORD; lpReserved : TObject) : Int64');
Function DeleteUrlCacheGroup( GroupId : Int64; dwFlags : DWORD; lpReserved : TObject) : Bool');
15189:
15190:
15191:
              Function FindFirstUrlCacheEntry(lpszUrlSearchPattern PChar; var
15192:
             {\tt lpFirstCacheEntryInfo:TInternetCacheEntryInfo}; \ {\tt var} \ \ {\tt lpdwFirstCacheEntryInfoBufferSize:DWORD):THandle}; \\ {\tt lpdwFirstCacheEntryInfoBufferSize:DWORD}:Thandle}; \\ {\tt lpdwFirstCacheEntryInfoBufferSize:DwOrD}:Tha
              Function FindNextUrlCacheEntry( hEnumHandle : THandle; var lpNextCacheEntryInfo :
15193:
             TInternetCacheEntryInfo; var lpdwNextCacheEntryInfoBufferSize : DWORD) : BOOL;
              Function FindCloseUrlCache( hEnumHandle : THandle):BOOL;
Function DeleteUrlCacheEntry( lpszUrlName : LPCSTR):BOOL;
15194:
15196:
              Function InternetDial(hwndParent:HWND; lpszConnectoid : Pchar; dwFlags : DWORD; lpdwConnection : DWORD;
             dwReserved : DWORD) : DWORD');
15197: \quad \textbf{Function} \quad \texttt{InternetSetDialState( lpszConnectoid : PChar; dwState : DWORD; dwReserved : DWORD) : BOOL');}
15198: end;
15199:
15200:
15201: Functions_max hex in the box maxbox
15202: functionslist.txt
15203: FunctionsList1 3.9.9.86/88/91/92
15204:
15206: Procedure
15207: PROCEDURE SIZE 7474 7401 6792 6310 5971 4438 3797 3600
15209: Procedure ( ACol, ARow: Integer; Items: TStrings)
15210: Procedure ( Agg: TAggregate)
                                   ASender : TComponent; const AReplyStatus : TReplyStatus)
15211: Procedure (
15212: Procedure
                                   ASender : TComponent; const AString : String; var AMsg : TIdMessage)
15213: Procedure
                                   ASender : TComponent; var AMsg : TIdMessage)
15214: Procedure
                                   ASender : TObject; const ABytes : Integer)
ASender : TObject; VStream : TStream)
15215: Procedure (
15216: Procedure (
                                   AThread : TIdThread)
15217: Procedure (
                                   AWebModule : TComponent)
                                   Column: TColumn)
const AUsername: String; const APassword: String; AAuthenticationResult: Boolean)
15218: Procedure
15219: Procedure (
15220: Procedure (
                                   const iStart : integer; const sText : string)
15221: Procedure
                                    Control : TCustomTabControl; TabIndex : Integer; const Rect : TRect; Active : Boolean)
15222: Procedure
                                   Database : TDatabase; LoginParams : TStrings)
15223: Procedure (DataSet:TCustomClientDataSet;E:EReconcileError;UpdateKind:TUpdateKind;var Action:
             TReconcileAction)
15224: Procedure (
                                   DATASET : TDATASET)
                                    \texttt{DataSet:TDataSet}; \ \texttt{E:EDatabaseError;UpdateKind:TUpdateKind:TUpdateAction:} \ \ \texttt{TUpdateAction})
15225: Procedure
15226: Procedure
                                   DATASET : TDATASET; E : TObject; var ACTION : TDATAACTION)
15227: Procedure (
                                   DataSet : TDataSet; UpdateKind : TUpdateKind; var UpdateAction : TUpdateAction)
                                   DATASET : TDATASET; var ACCEPT : BOOLEAN)
15228: Procedure (
15229: Procedure
                                    DBCtrlGrid : TDBCtrlGrid; Index : Integer)
                                   Done : Integer)
15230: Procedure
15231: Procedure
                                   HeaderControl: TCustomHeaderControl; Section: THeaderSection)
15232: Procedure (HeaderControl:TCustomHeaderControl;Section:THeaderSection; const Rect:TRect;Pressed:Boolean)
15233: Procedure
             (\texttt{HeaderControl:} TCustom \texttt{HeaderControl:} Section: THeaderSection: \texttt{Width:} Integer: State: TSectionTrackState)) \\
15234: Procedure ( HeaderControl : THeaderControl; Section : THeaderSection)
15235: Procedure (HeaderControl:TheaderControl;Section: TheaderSection; const Rect:TRect; Pressed : Boolean)
15236: Procedure (HeaderControl:TheaderControl;Section:TheaderSection;Width:Integer;State : TSectionTrackState)
15237: Procedure (Sender: TCustomListView;const ARect: TRect;Stage:TCustomDrawStage;var DefaultDraw: Boolean)
15238: Procedure
                                   Sender : TCustomListView; const ARect : TRect; var DefaultDraw : Boolean)
15239: Procedure (
                                   Sender : TCustomListView; Item : TListItem; Rect : TRect; State : TOwnerDrawState)
                                   Sender : TCustomTreeView; const ARect : TRect; var DefaultDraw : Boolean)
15240: Procedure
15241: Procedure
                                   SENDER :
                                                     TFIELD; const TEXT : String)
15242: Procedure
                                                     TFIELD; var TEXT : STRING; DISPLAYTEXT : BOOLEAN)
                                    SENDER :
15243: Procedure
                                   {\tt Sender} \; : \; {\tt TIdTelnet}; \; {\tt const} \; {\tt Buffer} \; : \; {\tt String})
15244: Procedure ( Sender : Tidtelnet; Status : TidtelnetCommand)
15245: Procedure ( SENDER : TOBJECT; ACANVAS : TCANVAS; ARECT : TRECT; SELECTED : BOOLEAN)
15246: Procedure ( SENDER : TOBJECT; ACANVAS : TCANVAS; ARECT : TRECT; STATE : TOWNERDRAWSTATE)
```

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15247: Procedure ( SENDER : TOBJECT; ACANVAS : TCANVAS; var WIDTH, HEIGHT : INTEGER)
15248: Procedure (
                    Sender :
                              TObject; ACol, ARow : Longint; const Value : string)
15249: Procedure
                    Sender :
                               TObject; ACol, ARow : Longint; Rect : TRect; State
15250: Procedure
                    Sender :
                              TObject; ACol, ARow : Longint; var CanSelect : Boolean)
15251: Procedure
                    Sender :
                              TObject; ACol, ARow : Longint; var Value : string)
                              TObject; Button : TMPBtnType)
TObject; Button : TMPBtnType; var DoDefault : Boolean)
15252: Procedure
                    Sender :
15253: Procedure
                    Sender :
                               TObject; Button : TUDBtnType)
15254: Procedure
                    Sender :
15255: Procedure
                    Sender : TObject; Canvas : TCanvas; PageRect : TRect; var DoneDrawing : Boolean)
                    Sender: TObject; ClientSocket: TServerClientWinSocket; var SocketThread: TServerClientThread)
15256: Procedure (
                    Sender: TObject; Column: TListColumn; Point: TPoint)
15257: Procedure (
15258: Procedure
15259: Procedure (Sender: TObject; Connecting: Boolean)
15260: Procedure (Sender: TObject; const PapSize: SmallInt; const Orient: TPrtOrient; const PageTy: TPageTy; var
       DoneDraw: Bool
15261: Procedure (Sender: TObject; const Rect : TRect; DataCol : Integer; Column: TColumn; State : TGridDrawState)
                    Sender : TObject; const Rect : TRect; Field : TField; State : TGridDrawState)
15262: Procedure
15263: Procedure
                   Sender: TObject; const UserString:string;var DateAndTime:TDateTime;var AllowChange:Boolean)
15264: Procedure
                              TObject; E : Exception; var Handled : Boolean)
                    Sender :
                               TObject; FromIndex, ToIndex : Longint)
15265: Procedure
                    Sender
15266: Procedure
                    Sender
                               TObject; FromSection, ToSection: THeaderSection; var AllowDrag: Boolean)
15267: Procedure
                    Sender :
                               TObject; Index : LongInt)
15268: Procedure
                    Sender :
                              TObject; Item : TListItem)
15269: Procedure
                    Sender :
                              TObject; Item : TListItem; Change : TItemChange)
15270: Procedure
                               TObject; Item: TListItem; Change: TItemChange; var AllowChange: Boolean)
                    Sender
15271: Procedure
                    Sender
                               TObject; Item : TListItem; Selected : Boolean)
15272: Procedure
                    Sender :
                              TObject; Item : TListItem; var AllowEdit : Boolean)
15273: Procedure
                    Sender :
                              {\tt TObject;\ Item\ :\ TListItem;\ var\ S\ :\ string)}
                              TObject; Item1, Item2: TListItem; Data: Integer; var Compare: Integer)
TObject; ModalResult: TModalResult; var CanClose: Boolean)
15274: Procedure
                    Sender :
15275: Procedure
                    Sender :
15276: Procedure
                    Sender :
                              TObject; Month : LongWord; var MonthBoldInfo : LongWord)
15277: Procedure
                    Sender :
                              TObject; NewTab : Integer; var AllowChange : Boolean)
15278: Procedure
                    Sender :
                              TObject; Node : TTreeNode)
15279: Procedure
                    Sender :
                               TObject; Node: TTreeNode; var AllowChange: Boolean)
                               TObject; Node : TTreeNode; var AllowCollapse : Boolean)
15280: Procedure
                    Sender
15281: Procedure
                    Sender :
                              TObject; Node : TTreeNode; var AllowEdit : Boolean)
15282: Procedure
                    Sender :
                              TObject; Node : TTreeNode; var AllowExpansion : Boolean)
15283: Procedure
                              TObject; Node : TTreeNode; var S : string)
                    Sender :
                              TObject; Nodel, Node2: TTreeNode; Data: Integer; var Compare: Integer)
TObject; NumObjects, NumChars: Integer; var SaveClipboard: Boolean)
15284: Procedure
                    Sender :
15285: Procedure
                    Sender :
15286: Procedure
                    Sender :
                              TObject; Rect : TRect)
                              TObject; Request : TWebRequest; Response : TWebResponse; var Handled : Boolean)
                    Sender :
15287: Procedure
15288: Procedure (Sender:TObject;Shift:TShiftState;X,Y:Integer;Orient:TPageScrollerOrientation;var Delta:Int
15289: Procedure
                    Sender : TObject; Socket : TCustomWinSocket)
15290: Procedure
                   Sender:TObject; Socket:TCustomWinSocket;ErrorEvent: TErrorEvent; var ErrorCode : Integer)
                  ( Sender : TObject; Socket : TCustomWinSocket; SocketEvent : TSocketEvent)
15291: Procedure
                               TObject; Socket : TSocket; var ClientSocket : TServerClientWinSocket)
15292: Procedure
                    Sender :
                               TOBJECT; SOURCE : TMENUITEM; REBUILD : BOOLEAN)
15293: Procedure
                    SENDER :
15294: Procedure
                    Sender
                               TObject; StartPos, EndPos : Integer; var AllowChange : Boolean)
                              TObject; TabCanvas : TCanvas; R : TRect; Index : Integer; Selected : Boolean)
TObject; TabIndex : Integer; var ImageIndex : Integer)
15295: Procedure
                    Sender :
15296: Procedure
                    Sender :
15297: Procedure
                    Sender :
                               TObject; Thread : TServerClientThread)
                               TObject; TickCount : Cardinal; var Reset : Boolean)
15298: Procedure
                    Sender :
15299: Procedure
                    Sender :
                              TObject; Username, Password : string)
15300: Procedure
                    Sender :
                              TObject; var AllowChange : Boolean; NewValue : SmallInt; Direction:TUpDownDirection)
15301: Procedure
                    Sender :
                               TObject; var Caption : string; var Alignment : THTMLCaptionAlignment)
15302: Procedure
                    Sender :
15303: Procedure
                    Sender : TObject; var Continue : Boolean)
15304: Procedure
                   Sender:TObject; var dest:string; var NumRedirect:Int; var Handled:bool; var VMethod:TIdHTTPMethod)
15305: Procedure
                    Sender :
Sender :
                              TObject; var Username : string)
TObject; Wnd : HWND)
15306: Procedure
15307: Procedure
                    Sender :
                               TToolbar; Button : TToolButton)
15308: Procedure
                    Sender : TToolBar; const ARect : TRect; Stage : TCustomDrawStage; var DefaultDraw : Boolean)
Sender : TToolBar; const ARect : TRect; var DefaultDraw : Boolean)
15309: Procedure
                    Sender: TToolbar; Index: Integer; var Allow: Boolean)
Sender: TToolbar; Index: Integer; var Button: TToolButton)
15310: Procedure (
15311: Procedure (
                    StatusBar : TCustomStatusBar; Panel : TStatusPanel; const Rect : TRect)
15312: Procedure
15313: Procedure ( StatusBar : TStatusBar; Panel : TStatusPanel; const Rect : TRect)
15314: Procedure (var FieldNames:TWideStrings; SOL:WideString; var BindAllFields:Boolean; var TableName: WideString)
15315: Procedure ( var FieldNames : TWideStrings; SQL : WideString; var TableName : WideString)
15316: procedure (Sender: TObject)
15317: procedure (Sender: TObject; var Done: Boolean)
15318: procedure (Sender: TObject; var Key: Word; Shift: TShiftState);
15319: procedure T(Name: tbtString; v: Variant);
15320: Procedure AbandonSignalHandler( RtlSigNum : Integer)
15321: Procedure Abort
15322: Procedure About1Click( Sender : TObject)
15323: Procedure Accept( Socket : TSocket)
15324: Procedure AESSymetricExecute(const plaintext, ciphertext, password: string)
15325: Procedure AESEncryptFile(const plaintext, ciphertext, password: string)
15326: Procedure AESDecryptFile(const replaintext, ciphertext, password: string)
15327: Procedure AESEncryptString(const plaintext: string; var ciphertext: string; password: string)
15328: Procedure AESDecryptString(var plaintext: string; const ciphertext: string; password: string)
15329: Procedure Add( Addend1, Addend2 : TMyBigInt)
15330: Procedure ADD( const AKEY, AVALUE : VARIANT)
15331: Procedure Add( const Key : string; Value : Integer)
15332: Procedure ADD( const NAME, FIELDS : String; OPTIONS : TINDEXOPTIONS)
15333: Procedure ADD( FIELD : TFIELD)
15334: Procedure ADD( ITEM : TMENUITEM)
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15335: Procedure ADD( POPUP : TPOPUPMENU)
15336: Procedure AddCharacters( xCharacters : TCharSet)
15337: Procedure AddDriver( const Name : string; List : TStrings)
15338: Procedure AddImages( Value : TCustomImageList)
15339: Procedure AddIndex( const Name, Fields: string; Options: TIndexOptions; const DescFields: string)
15340: Procedure AddLambdaTransitionTo( oState: TniRegularExpressionState)
15341: Procedure AddLoader( Loader : TBitmapLoader)
15342: Procedure ADDPARAM( VALUE : TPARAM)
15343: Procedure AddPassword( const Password: string)
15344: Procedure AddStandardAlias( const Name, Path, DefaultDriver : string)
15345: Procedure AddState( oState : TniRegularExpressionState)
15346: Procedure AddStrings (Strings : TStrings);
15347: procedure AddStrings(Strings: TStrings);
15348: Procedure AddStrings1( Strings : TWideStrings);
15349: Procedure AddStringTerm( var sString: string; const sTerm: string; const sSeparator: string)
15350: Procedure AddToRecentDocs( const Filename : string)
15351: Procedure AddTransitionTo( oState : TniRegularExpressionState; xCharacters : TCharset)
15352: Procedure AllFunctionsList1Click( Sender : TObject)
15353: procedure AllObjectsList1Click(Sender: TObject);
15354: Procedure Allocate( AAllocateBytes : Integer)
15355: procedure AllResourceList1Click(Sender: TObject);
15356: Procedure AnsiAppend( var dst : AnsiString; const src : AnsiString)
15357: Procedure AnsiAssign( var dst : AnsiString; var src : AnsiString)
15358: Procedure AnsiDelete( var dst : AnsiString; index, count : Integer)
15359: Procedure AnsiFree( var s : AnsiString)
15360: Procedure AnsiFromWide( var dst : AnsiString; const src : WideString)
15361: Procedure AnsiInsert( var dst : AnsiString; const src : AnsiString; index : Integer)
15362: Procedure AnsiSetLength( var dst : AnsiString; len : Integer)
15363: Procedure AnsiString_to_stream( const Value : ansistring; Destin : TStream)
15364: Procedure AntiFreeze;
15365: Procedure APPEND
15366: Procedure Append( const S : WideString)
15367: procedure Append(S: string);
15368: Procedure AppendByte( var VBytes: TIdBytes; AByte: byte)
15369: Procedure AppendBytes( var VBytes : TIdBytes; AAdd : TIdBytes)
15370: Procedure AppendChunk( Val : OleVariant)
15371: Procedure AppendData( const Data : OleVariant; HitEOF : Boolean)
15372: Procedure AppendStr( var Dest : string; S : string)
15373: Procedure AppendString( var VBytes: TIdBytes; const AStr: String; ALength: Integer)
15374: Procedure ApplyRange
15375: procedure Arc(X1, Y1, X2, Y2, X3, Y3, X4, Y4: Integer);
15376: Procedure Arrange (Code : TListArrangement)
15377: procedure Assert(expr : Boolean; const msg: string);
15378: procedure Assert2(expr : Boolean; const msg: string);
15379: Procedure Assign( AList : TCustomBucketList)
15380: Procedure Assign( Other : TObject)
15381: Procedure Assign( Source : TDragObject)
15382: Procedure Assign( Source : TPersistent)
15383: Procedure Assign(Source: TPersistent)
15384: procedure Assign2(mystring, mypath: string);
15385: Procedure AssignCurValues( Source : TDataSet);
15386: Procedure AssignCurValues1( const CurValues : Variant);
15387: Procedure ASSIGNFIELD( FIELD : TFIELD)
15388: Procedure ASSIGNFIELDVALUE( FIELD : TFIELD; const VALUE : VARIANT)
15389: Procedure AssignFile(var F: Text; FileName: string)
15390: procedure AssignFile(var F: TextFile; FileName: string)
15391: procedure AssignFileRead(var mystring, myfilename: string);
15392: procedure AssignFileWrite(mystring, myfilename: string);
15393: Procedure AssignTo( Other : TObject)
15394: Procedure AssignValues (Value : TPARAMS)
15395: Procedure ASSIGNVALUES (VALUE : TPARAMS)
15396: Procedure AssociateExtension( IconPath, ProgramName, Path, Extension : string)
15397: Procedure Base64_to_stream( const Base64 : ansistring; Destin : TStream)
15398: Procedure Base64ToVar( NatData : Pointer; const SoapData : WideString); 15399: Procedure Base64ToVar1( var V : Variant; const SoapData : WideString); 15400: Procedure BcdAdd( const bcdIn1, bcdIn2 : TBcd; var bcdOut : TBcd)
15401: Procedure BcdDivide( Dividend, Divisor : string; var bcdOut : TBcd);
15402: Procedure BcdDividel( const Dividend, Divisor : TBcd; var bcdOut : TBcd);
15403: Procedure BcdDivide2( const Dividend : TBcd; const Divisor : Double; var bcdOut : TBcd); 15404: Procedure BcdDivide3( const Dividend : TBcd; const Divisor : string; var bcdOut : TBcd);
15405: Procedure BcdMultiply( const bcdIn1, bcdIn2 : TBcd; var bcdOut : TBcd);
15406: Procedure BcdMultiply1( const bcdIn: TBcd; const DoubleIn: Double; var bcdOut: TBcd);
15407: Procedure BcdMultiply2( const bcdIn: TBcd; const StringIn: string; var bcdOut: TBcd);
15408: Procedure BcdMultiply3( StringIn1, StringIn2: string; var bcdOut: TBcd);
15409: Procedure BcdSubtract( const bcdIn1, bcdIn2: TBcd; var bcdOut: TBcd);
15410: Procedure BcdToBytes( Value : TBcd; Bytes : array of byte)
15411: procedure Beep
15412: Procedure BeepOk
15413: Procedure BeepOuestion
15414: Procedure BeepHand
15415: Procedure BeepExclamation
15416: Procedure BeepAsterisk
15417: Procedure BeepInformation
15418: procedure BEGINDRAG(IMMEDIATE:BOOLEAN)
15419: Procedure BeginLayout
15420: Procedure BeginTimer( const Delay, Resolution : Cardinal)
15421: Procedure BeginUpdate
15422: procedure BeginUpdate;
15423: procedure BigScreen1Click(Sender: TObject);
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15424: procedure BinToHex(Buffer: PChar; Text: PChar; BufSize: Integer);
15425: Procedure BitsToBooleans( const Bits : Byte; var B : TBooleanArray; AllBits : Boolean);
15426: Procedure BitsToBooleans1( const Bits : Word; var B : TBooleanArray; AllBits : Boolean);
15427: Procedure BitsToBooleans2( const Bits : Integer; var B : TBooleanArray; AllBits : Boolean);
15428: Procedure BitsToBooleans3( const Bits : Into4; var B : TBooleanArray; AllBits : Boolean);
15429: Procedure BoldDays(Days: array of LongWord; var MonthBoldInfo: LongWord)
15430: Procedure BooleansToBits( var Dest : Byte; const B : TBooleanArray);
15431: Procedure BooleansToBits1( var Dest : Word; const B : TBooleanArray);
15432: Procedure BooleansToBits2( var Dest : Integer; const B : TBooleanArray);
15433: Procedure BooleansToBits3( var Dest : Int64; const B : TBooleanArray);
15434: Procedure BreakPointMenuClick( Sender : TObject)
15435: procedure BRINGTOFRONT
15436: procedure BringToFront;
15437: Procedure btnBackClick( Sender : Tobject)
15438: Procedure btnBrowseClick( Sender : TObject)
15439: Procedure BtnClick( Index : TNavigateBtn)
15440: Procedure btnLargeIconsClick( Sender : TObject)
15441: Procedure BuildAndSendRequest( AURI : TIdURI)
15442: Procedure BuildCache
15443: Procedure BurnMemory( var Buff, BuffLen : integer)
15444: Procedure BurnMemoryStream( Destructo : TMemoryStream)
15445: Procedure CalculateFirstSet
15446: Procedure Cancel
15447: procedure CancelDrag;
15448: Procedure CancelEdit
15449: procedure CANCELHINT
15450: Procedure CancelRange
15451: Procedure CancelUpdates
15452: Procedure CancelWriteBuffer
15453: Procedure Capture1(ADest:TStream;out VLineCount:Integer;const ADelim:string;const AIsRFCMessage:Bool;
15454: Procedure Capture2( ADest : TStrings; const ADelim : string; const AIsRFCMessage : Boolean);
15455: Procedure Capture3(ADest:TStrings; out VLineCount:Integer; const ADelim: string; const AIsRFCMessage:Bool
15456: procedure CaptureScreenFormat(vname: string; vextension: string);
15457: procedure CaptureScreenPNG(vname: string);
15458: procedure CardinalsToI64(var I: Int64; const LowPart, HighPart: Cardinal);
15459: procedure CASCADE
15460: Procedure CastNativeToSoap(Info:PTypeInfo;var SoapData:WideString;NatData:Pointer;var IsNull: Boolean)
15461: Procedure CastSoapToVariant( SoapInfo : PTypeInfo; const SoapData : WideString; NatData : Pointer);
15462: Procedure cbPathClick( Sender : TObject)
15463: Procedure cbPathKeyDown( Sender : TObject; var Key : Word; Shift : TShiftState)
15464: Procedure cedebugAfterExecute( Sender : TPSScript)
15465: Procedure cedebugBreakpoint (Sender: TObject; const FileName: String; Position, Row, Col: Cardinal)
15466: Procedure cedebugCompile( Sender : TPSScript)
15467: Procedure cedebugExecute( Sender : TPSScript)
15468: Procedure cedebugIdle( Sender : TObject)
15469: Procedure cedebugLineInfo( Sender : TObject; const FileName : String; Position, Row, Col : Cardinal)
15470: Procedure CenterHeight (const pc, pcParent : TControl)
15471: Procedure CenterDlg(AForm: TForm; MForm: TForm); { Zentriert Forms }
15472: Procedure CenterForm(AForm: TForm; MForm: TForm);
15473: Procedure Change
15474: procedure ChangeBiDiModeAlignment(var Alignment: TAlignment);
15475: Procedure Changed
15476: Procedure ChangeDir( const ADirName : string)
15477: Procedure ChangeDirUp
15478: \textbf{ Procedure } \texttt{ChangeEntryTransitions} ( \textbf{ oNewState } : \texttt{TniRegularExpressionState})
15479: Procedure ChangeLevelBy( Value : TChangeRange)
15480: Procedure ChDir(const s: string)
15481: Procedure Check(Status: Integer)
15482: Procedure CheckCommonControl( CC : Integer)
15483: Procedure CHECKFIELDNAME( const FIELDNAME: String)
15484: Procedure CHECKFIELDNAMES( const FIELDNAMES: String)
15485: Procedure CheckForDisconnect(const ARaiseExceptionIfDisconnected: boolean;const AIgnoreBuffer:bool)
15486: Procedure CheckForGracefulDisconnect( const ARaiseExceptionIfDisconnected : Boolean)
15487: Procedure CheckToken( T : Char)
15488: procedure CheckToken(t:char)
15489: Procedure CheckTokenSymbol( const S : string)
15490: procedure CheckTokenSymbol(s:string)
15491: Procedure CheckToolMenuDropdown( ToolButton : TToolButton)
15492: procedure Chord(X1, Y1, X2, Y2, X3, Y3, X4, Y4: Integer);
15493: Procedure CIED65ToCIED50( var X, Y, Z : Extended)
15494: Procedure CIELABTOBGR( const Source, Target : Pointer; const Count : Cardinal);
15495: procedure CipherFilelClick(Sender: TObject);
15496: Procedure Clear;
15497: Procedure ClearClick( Sender : TObject)
15498: Procedure ClearColor( Color : TColor)
15499: Procedure CLEARITEM( AITEM : TMENUITEM)
15500: Procedure ClearMapping
15501: Procedure ClearSelection( KeepPrimary : Boolean)
15502: Procedure ClearWriteBuffer
15503: Procedure Click
15504: Procedure Close
15505: Procedure CloselClick( Sender : TObject)
15506: Procedure CloseDatabase( Database : TDatabase)
15507: Procedure CloseDataSets
15508: Procedure CloseDialog
15509: Procedure CloseFile(var F: Text);
15510: Procedure Closure
15511: Procedure CMYKToBGR( const Source, Target : Pointer; const BitsPerSample : Byte; Count : Cardinal);
15512: Procedure CMYKToBGR1( const C, M, Y, K, Target : Pointer; const BitsPerSample : Byte; Count : Cardinal);
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15513: Procedure CodeCompletionList1Click( Sender : TObject)
15514: Procedure ColEnter
15515: Procedure Collapse
15516: Procedure Collapse( Recurse : Boolean)
15517: Procedure ColorRGBToHLS( clrRGB : TColorRef; var Hue, Luminance, Saturation : Word)
15518: Procedure CommaSeparatedToStringList( AList : TStrings; const Value : string)
15519: Procedure CommitFreeAndNil( var Transaction : TDBXTransaction)
15520: Procedure Compile1Click( Sender : TObject)
15521: procedure ComponentCount1Click(Sender: TObject);
15522: Procedure Compress(azipfolder, azipfile: string)
15523: Procedure DeCompress(azipfolder, azipfile: string)
15524: Procedure XZip(azipfolder, azipfile: string)
15525: Procedure XUnZip(azipfolder, azipfile: string
15526: Procedure Connect( const ATimeout : Integer)
15527: Procedure Connect( Socket : TSocket)
15528: procedure ConsolelClick(Sender: TObject);
15529: Procedure Continue
15530: Procedure ContinueCount( var Counter : TJclCounter)
15531: procedure CONTROLDESTROYED(CONTROL:TCONTROL)
15532: Procedure ConvertStreamFromAnsiToUTF8( Src, Dst : TStream; cp : integer)
15533: Procedure ConvertStreamFromUTF8ToAnsi( Src, Dst : TStream; cp : integer)
15534: Procedure ConvertImage(vsource, vdestination: string);
15535: // Ex. ConvertImage(Exepath+'my233_bmp.bmp',Exepath+'mypng111.png')
15536: Procedure ConvertToGray(Cnv: TCanvas);
15537: Procedure Copy( Buffer : TRecordBuffer; Dest : TBytes; Offset : Integer; Length : Integer)
15538: Procedure Copy( Buffer : TValueBuffer; Dest : TBytes; Offset : Integer; Count : Integer);
15539: Procedure Copyl( Source : TBytes; Offset : Integer; Buffer : TValueBuffer; Count : Integer);
15540: Procedure CopyBytesToHostLongWord(const ASource:TIdBytes;const ASourceIndex:Integer;var VDest:LongWord)
15541: Procedure CopyBytesToHostWord( const ASource: TIdBytes; const ASourceIndex: Integer; var VDest: Word)
15542: Procedure CopyFrom( mbCopy : TMyBigInt)
15543: Procedure CopyMemoryStream( Source, Destination : TMemoryStream)
15544: procedure CopyRect(const Dest: TRect; Canvas: TCanvas;const Source: TRect);
15545: Procedure CopyTIdByteArray( const ASource: array of Byte; const ASourceIndex: Integer; var VDest: array of Byte; const ADestIndex: Integer; const ALength: Integer)
15546: Procedure CopyTidBytes(const ASrc:TidBytes;const ASrcidx:Int;var VDest:TidBytes;const ADestIdx:Int;const
       ALen:Int)
15547: Procedure CopyTIdCardinal( const ASource : Cardinal; var VDest : TIdBytes; const ADestIndex : Integer)
15548: Procedure CopyTidInt64( const ASource : Int64; var VDest : TIdBytes; const ADestIndex : Integer)
15549: Procedure CopyTidiPV6Address(const ASource:TidiPv6Address; var VDest: TidBytes; const ADestIndex:
                                                                                                                     Integer)
15550: Procedure CopyTldLongWord( const ASource : LongWord; var VDest : TldBytes; const ADestIndex : Integer)
15551: Procedure CopyTIdNetworkLongWord( const ASource : LongWord; var VDest : TIdBytes; const ADestIndex:Integer)
15552: Procedure CopyTIdNetworkWord( const ASource: Word; var VDest: TIdBytes; const ADestIndex: Integer)
15553: Procedure CopyTIdString(const ASource:String; var VDest:TIdBytes; const ADestIndex:Integer)
15554: Procedure CopyTldWord( const ASource : Word; var VDest : TldBytes; const ADestIndex : Integer)
15555: Procedure CopyToClipboard
15556: Procedure CountParts
15557: Procedure CreateDataSet
15558: Procedure CreateEmptyFile( const FileName : string)
15559: Procedure CreateFileFromString( const FileName, Data : string)
15560: Procedure CreateFromDelta( Source : TPacketDataSet)
15561: procedure CREATEHANDLE
15562: Procedure CreateProcAsUser( const UserDomain, UserName, PassWord, CommandLine : string)
15563: Procedure CreateProcAsUserEx(const UserDomain, UserName, Password, CommandLine: string; const Environment: PChar)
15564: Procedure CreateTable
15565: Procedure CreateUDLFile (const FileName, ProviderName, DataSourceName: WideString)
15566: procedure CSyntaxlClick(Sender: TObject);
15567: Procedure CurrencyToComp( Value : Currency; var Result : Comp)
15568: Procedure CURSORPOSCHANGED
15569: procedure CutFirstDirectory(var S: String)
15570: Procedure DataBaseError(const Message: string)
15571: Procedure DateTimeToString( var Result : string; Format : string; DateTime : TDateTime);
15572: procedure DateTimeToString(var Result: string; const Format: string; DateTime: TDateTime)
15573: Procedure DateTimeToSystemTime( DateTime: TDateTime; var SystemTime: TSystemTime
15574: procedure DateTimeToSystemTime(const DateTime: TDateTime; var SystemTime: TSystemTime);
15575: Procedure DBIError(errorCode: Integer)
15576: Procedure DebugOutput( const AText : string)
15577: Procedure DebugRunlClick( Sender : TObject)
15578: procedure Dec;
15579: Procedure DecodeDate( DateTime : TDateTime; var Year, Month, Day : Word)
15580: procedure DecodeDate(const DateTime: TDateTime; var Year, Month, Day: Word);
15581: Procedure DecodeDateDay( const AValue : TDateTime; out AYear, ADayOfYear : Word)
15582: Procedure DecodeDateMonthWeek(const AValue:TDateTime;out AYear, AMonth,AWeekOfMonth,ADayOfWeek : Word)
15583: Procedure DecodeDateTime(const AValue:TDateTime;out AYear,AMonth,ADay,AHour,AMin,ASec,AMillSec:Word)
15584: Procedure DecodeDateWeek( const AValue : TDateTime; out AYear, AWeekOfYear, ADayOfWeek : Word)
15585: Procedure DecodeDayOfWeekInMonth(const AValue:TDateTime;out AYear,AMonth,ANthDayOfWeek,ADayOfWeek:Word)
15586: Procedure DecodeTime( DateTime: TDateTime: var Hour, Min, Sec, MSec: Word)
15587: procedure DecodeTime(const DateTime: TDateTime; var Hour, Min, Sec, MSec: Word);
15588: Procedure Decompile1Click( Sender : TObject)
15589: Procedure DefaultDrawColumnCell(const Rect: TRect; DataCol:Integer;Column:TColumn;State:TGridDrawState)
15590: Procedure DefaultDrawDataCell( const Rect : TRect; Field : TField; State : TGridDrawState)
15591: Procedure DeferLayout
15592: Procedure defFileread
15593: procedure DEFOCUSCONTROL(CONTROL:TWINCONTROL; REMOVING:BOOLEAN)
15594: Procedure DelayMicroseconds ( const MicroSeconds : Integer)
15595: Procedure Delete
15596: Procedure Delete( const AFilename : string)
15597: Procedure Delete( const Index : Integer)
15598: Procedure DELETE( INDEX : INTEGER)
15599: Procedure Delete( Index : LongInt)
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15600: Procedure Delete( Node : TTreeNode)
15601: procedure Delete(var s: AnyString; ifrom, icount: Longint);
15602: Procedure DeleteAlias( const Name : string)
15603: Procedure DeleteDriver( const Name : string)
15604: Procedure DeleteIndex( const Name : string)
15605: Procedure DeleteKey( const Section, Ident : String)
15606: Procedure DeleteRecords
15607: Procedure DeleteRecords( AffectRecords : TAffectRecords)
15608: Procedure DeleteString( var pStr : String; const pDelStr : string)
15609: Procedure DeleteTable
15610: procedure DelphiSitelClick(Sender: TObject);
15611: Procedure Deselect
15612: Procedure Deselect( Node : TTreeNode)
15613: procedure DestroyComponents
15614: Procedure DestroyHandle
15615: Procedure Diff( var X : array of Double)
15616: procedure Diff(var X: array of Double);
15617: procedure DISABLEALIGN
15618: Procedure DisableConstraints
15619: Procedure Disconnect
15620: Procedure Disconnect( Socket : TSocket)
15621: Procedure Dispose
15622: procedure Dispose(P: PChar)
15623: Procedure DivMod( Dividend : Integer; Divisor : Word; var Result, Remainder : Word)
15624: Procedure DoKey( Key : TDBCtrlGridKey)
15625: Procedure DomToTree(anXmlNode: IXMLNode; aTreeNode: TTreeNode; aTreeView: TTreeView);
15626: Procedure DomToTreeJ(anXmlNode: TJvXMLNode; aTreeNode: TTreeNode; aTreeView: TTreeView);
15627: Procedure Dormant
15628: Procedure DoubleToBcd1( const AValue : Double; var bcd : TBcd);
15629: Procedure DoubleToBytes (Value : Double; Bytes : array of byte)
15630: Procedure DoubleToComp( Value : Double; var Result : Comp)
15631: Procedure Draw( Canvas : TCanvas; X, Y, Index : Integer; Enabled : Boolean); 15632: procedure Draw(X, Y: Integer; Graphic: TGraphic);
15633: Procedure Draw1(Canvas: TCanvas; X,Y,
           Index:Int;ADrawingStyle:TDrawingStyle;AImageType:TImageType;Enabled:Bool);
15634: Procedure DrawArrow( ACanvas : TCanvas; Direction : TScrollDirection; Location : TPoint; Size : Integer)
15635: Procedure DrawCheck( ACanvas : TCanvas; Location : TPoint; Size : Integer; Shadow : Boolean)
15636: Procedure DrawChevron( ACanvas : TCanvas; Direction : TScrollDirection; Location : TPoint; Size : Integer)
15637: Procedure DrawColumnCell( const Rect : TRect; DataCol : Integer; Column : TColumn; State : TGridDrawState)
15638: procedure DrawFocusRect(const Rect: TRect);
15639: Procedure DrawHDIBTOTBitmap( HDIB: THandle; Bitmap: TBitmap)
15640: Procedure DRAWMENUITEM( MENUITEM: TMENUITEM; ACANVAS: TCANVAS; ARECT: TRECT; STATE: TOWNERDRAWSTATE)
15641: Procedure DrawOverlay(Canvas:TCanvas;X,Y:Integer;ImageIndex:Integer;Overlay:TOverlay;Enabled: Boolean);
15642: Procedure DrawOverlay1(Canvas: TCanvas: X,Y:Int; ImageIndex:Int; Overlay: TOverlay: ADrawingStyle
TDrawingStyle; AImageType: TImageType; Enabled: Boolean);
15643: procedure drawPlot(vPoints: TPointArray; cFrm: TForm; vcolor: integer);
15644: Procedure DrawPolyLine( const Canvas: TCanvas; var Points: TPointArray; const ClipRect: TRect)
15645: Procedure DropConnections
15646: Procedure DropDown
15647: Procedure DumpDescription( oStrings : TStrings)
15648: Procedure DumpStateTable( oStrings : TStrings)
15649: Procedure EDIT
15650: Procedure EditButtonClick
15651: Procedure EditFontlClick( Sender : TObject)
15652: procedure Ellipse(X1, Y1, X2, Y2: Integer);
15653: Procedure Ellipse1( const Rect : TRect);
15654: Procedure EMMS
15655: Procedure Encode( ADest : TStream)
15656: procedure ENDDRAG(DROP:BOOLEAN)
15657: Procedure EndEdit( Cancel : Boolean)
15658: Procedure EndTimer
15659: Procedure EndUpdate
15660: Procedure EraseSection( const Section : string)
15661: Procedure Error( const Ident : string)
15662: procedure Error(Ident:Integer)
15663: Procedure ErrorFmt( const Ident : string; const Args : array of const)
15664: Procedure ErrorStr( const Message : string)
15665: procedure ErrorStr(Message:String)
15666: Procedure Exchange(Index1, Index2: Integer)
15667: procedure Exchange(Index1, Index2: Integer);
15668: Procedure Exec(FileName, Parameters, Directory: string)
15669: Procedure ExecProc
15670: Procedure ExecSQL( UpdateKind : TUpdateKind)
15671: Procedure Execute
15672: Procedure Execute( const CommandText : WideString; var Params, OwnerData : OleVariant)
15673: Procedure ExecuteAndWait(FileName: string; Visibility: Integer)
15674: Procedure ExecuteCommand(executeFile, paramstring: string)
15675: Procedure ExecuteShell(executeFile, paramstring: string)
15676: Procedure ExitThread(ExitCode: Integer); stdcall;
15677: Procedure ExitProcess(ExitCode: Integer); stdcall;
15678: Procedure Expand( AUserName : String; AResults : TStrings)
15679: Procedure Expand( Recurse : Boolean)
15680: Procedure ExportClipboard1Click( Sender : TObject)
15681: Procedure ExportDataSetToExcel( DataSet : TDataSet; OnExportProgress : TOnExportProgress)
15682: Procedure ExtractContentFields( Strings : TStrings)
15683: Procedure ExtractCookieFields( Strings : TStrings)
15684: Procedure ExtractFields( Separators, WhiteSpace : TSysCharSet; Content : PChar; Strings : TStrings)
15685: Procedure ExtractHeaderFields(Separ,
           \label{local:model} WhiteSpace: TSysChSet; Cont: PChar; Strings: TStrings; Decode: Bool; StripQuots: Bool); StripQuots: Bool; Bool; Stri
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15686: Procedure ExtractHTTPFields(Separators, WhiteSpace:
         TSysCharSet;Content:PChar;Strings:TStrings;StripQuotes:Bool)
15687: Procedure ExtractQueryFields( Strings: TStrings)
15688: Procedure FastDegToGrad
15689: Procedure FastDegToRad
15690: Procedure FastGradToDeq
15691: Procedure FastGradToRad
15692: Procedure FastRadToDeg
15693: Procedure FastRadToGrad
15694: Procedure FileClose( Handle : Integer)
15695: Procedure FileClose(handle: integer)
15696: procedure FilesFromWildcard(Dir,Mask:string;var Files:TStringList;Subdirs,ShowDirs,Multitasking:Bool)
15697: Procedure FileStructure( AStructure: TIdFTPDataStructure)
15698: Procedure FillByte2(var X: Byte ; count: integer; value: byte)
15699: Procedure FillBytes( var VBytes : TIdBytes; const ACount : Integer; const AValue : Byte)
15700: Procedure FillChar( Buffer : TRecordBuffer; Length : Integer; value : Byte)
15701: Procedure FillChar2(var X: PChar ; count: integer; value: char)
15702: Procedure FillCharS(var p: string; count: integer; value: char); //fix3.8
15703: Procedure FillIPList
15704: procedure FillRect(const Rect: TRect);
15705: Procedure FillTStrings( AStrings: TStrings)
15706: Procedure FilterOnBookmarks( Bookmarks: array of const)
15707: procedure FinalizePackage(Module: HMODULE)
15708: procedure FindClose;
15709: procedure FindClose2(var F: TSearchRec)
15710: Procedure FindMatches( const sString: string; xNotify: TniRegularExpressionMatchFoundEvent);
15711: Procedure FindMatches1(const sString:string:iStart:integer;xNotify:TniRegularExpressionMatchFoundEvent);
15712: Procedure FindNearest( const KeyValues : array of const)
15713: Procedure FinishContext
15714: Procedure FIRST
15715: Procedure FloatToDegMinSec( const X : Float; var Degs, Mins, Secs : Float)
15716: Procedure FloatToDecimal(var Result:TFloatRec;const Value:extend;ValueType:TFloatValue;Precis,Decs:Int);
15717: Procedure FloodFill( X, Y : Integer; Color : TColor; FillStyle : TFillStyle)
15718: Procedure FlushSchemaCache( const TableName : string)
15719: procedure FmtStr(var Result: string; const Format: string; const Args: array of const)
15720: procedure FOCUSCONTROL(CONTROL:TWINCONTROL)
15721: Procedure FormlClose( Sender : TObject; var Action : TCloseAction) 15722: Procedure FormActivate( Sender : TObject)
15723: procedure FormatLn(const format: String; const args: array of const); //alias
15723: procedure Formalin(const formal: String, const args: array of const 15724: Procedure FormClose( Sender : Tobject; var Action : TCloseAction)
15725: Procedure FormCreate( Sender : Tobject)
15726: Procedure FormDestroy( Sender : Tobject)
15727: Procedure FormKeyPress( Sender : Tobject; var Key : Char)
15728: procedure FormOutputlClick(Sender: TObject);
15729: Procedure FormToHtml( Form : TForm; Path : string)
15730: procedure FrameRect(const Rect: TRect);
15731: Procedure Frame3D(Canvas:TCanvas; var Rect:TRect; TopColor,BottomColor:TColor; Width: Integer)
15732: Procedure NotebookHandlesNeeded( Notebook: TNotebook)
15733: Procedure Free( Buffer : TRecordBuffer)
15734: Procedure Free( Buffer : TValueBuffer)
15735: Procedure Free;
15736: Procedure FreeAndNil(var Obj:TObject)
15737: Procedure FreeImage
15738: procedure FreeMem(P: PChar; Size: Integer)
15739: Procedure FreeTreeData( Tree : TUpdateTree)
15740: Procedure Frexp( const X : Extended; var Mantissa : Extended; var Exponent : Integer)
15741: Procedure FullCollapse
15742: Procedure FullExpand
15743: Procedure GenerateDPB(sl: TStrings; var DPB: string; var DPBLength: Short); //InterBase 15744: Procedure GenerateTPB(sl: TStrings; var TPB: string; var TPBLength: Short); 15745: Procedure OUTPUTXML( SQLOBJECT : TIBSQL; OUTPUTOBJECT : TIBOUTPUTXML)
15746: Procedure Get1( AURL : string; const AResponseContent : TStream);
15747: Procedure Get1( const ASourceFile : string; ADest : TStream; AResume : Boolean);
15748: Procedure Get2(const ASourceFile, ADestFile: string; const ACanOverwrite: boolean; AResume: Boolean);
15749: Procedure GetAliasNames( List : TStrings)
15750: Procedure GetAliasParams( const AliasName :
                                                               string; List : TStrings)
15751: Procedure GetApplicationsRunning( Strings : TStrings)
15752: Procedure GetCommandTypes( List : TWideStrings)
15753: Procedure GetConfigParams( const Path, Section : string; List : TStrings)
15754: Procedure GetConnectionNames( List : TStrings; Driver : string; DesignMode : Boolean)
15755: Procedure GetConvFamilies( out AFamilies : TConvFamilyArray)
15756: Procedure GetConvTypes( const AFamily : TConvFamily; out ATypes : TConvTypeArray)
15757: Procedure GetDatabaseNames( List : TStrings)
15758: Procedure GetDataPacket( DataSet : TDataSet; var RecsOut : Integer; out Data : OleVariant)
15759: Procedure GetDIBSizes(Bitmap: HBITMAP; var InfoHeaderSize: longWORD; var ImageSize: longWORD)
15760: Procedure GetDir(d: byte; var s: string)
15761: Procedure GetDirList( const Search : string; List : TStrings; Recursive : Boolean)
15762: Procedure GetDriverNames( List : TStrings) Hist : Istrings | Rel 15762: Procedure GetDriverNames( List : TStrings) DesignMode : Boolean)
15764: Procedure GetDriverParams( const DriverName : string; List : TStrings) 15765: Procedure GetEMailslClick( Sender : TObject)
15766: Procedure getEnvironmentInfo;
15767: Function getEnvironmentString: string;
15768: Procedure GetFieldNames( const DatabaseName, TableName : string; List : TStrings)
15769: Procedure GetFieldNames( const TableName: string; List: TStrings); 15770: Procedure GetFieldNames( const TableName: string; List: TStrings);
15771: Procedure GetFieldNames( const TableName : WideString; List : TWideStrings); 15772: Procedure GETFIELDNAMES( LIST : TSTRINGS)
15773: Procedure GetFieldNames1( const TableName : string; List : TStrings);
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15774: Procedure GetFieldNames1 (const TableName : string; SchemaName : string; List : TStrings);
15775: Procedure GetFieldNames2( const TableName : WideString; SchemaName : WideString; List : TWideStrings);
15776: Procedure GetFieldNames3( const TableName : WideString; List : TWideStrings);
15777: Procedure GetFileAttributeList( const Items : TStrings; const Attr : Integer)
15778: Procedure GetFileAttributeListEx( const Items : TStrings; const Attr : Integer)
15779: Procedure GetFMTBcd( Buffer : TRecordBuffer; var value : TBcd)
15780: Procedure GetFormatSettings
15781: Procedure GetFromDIB( var DIB : TBitmapInfo)
15782: Procedure GetFromHDIB( HDIB : HBitmap)
15783: Procedure GetIcon( Index : Integer; Image : TIcon);
15784: Procedure GetIcon1(Index : Integer; Image:TIcon; ADrawingStyle:TDrawingStyle; AImageType:TImageType);
15785: Procedure GetIndexInfo( IndexName : string)
15786: Procedure GetIndexNames( const TableName, SchemaName : string; List : TStrings);
15787: Procedure GetIndexNames( List: TStrings)
15788: Procedure GetIndexNames1( const TableName : WideString; List : TWideStrings);
15789: Procedure GetIndexNames2( const TableName, SchemaName: WideString; List: TWideStrings);
15790: Procedure GetIndexNames4( const TableName : string; List : TStrings);
15791: Procedure GetInternalResponse
15792: Procedure GETITEMNAMES( LIST: TSTRINGS)
15793: procedure GetMem(P: PChar; Size: Integer)
15794: Procedure GETOLE2ACCELERATORTABLE(var ACCELTABLE: HACCEL; var ACCELCOUNT: INTEGER; GROUPS: array of INTEGER)
15795: procedure GetPackageDescription(ModuleName: PChar): string)
15796: Procedure GetPackageNames( List : TStrings);
15797: Procedure GetPackageNames1( List : TWideStrings);
15798: Procedure GetParamList( List : TList; const ParamNames : WideString)
15799: Procedure GetProcedureNames(List: TStrings);
15800: Procedure GetProcedureNames(List: TWideStrings);
15801: Procedure GetProcedureNames1( const PackageName : string; List : TStrings); 15802: Procedure GetProcedureNames1( List : TStrings);
15803: Procedure GetProcedureNames2( const PackageName, SchemaName : string; List : TStrings);
15804: Procedure GetProcedureNames3( List : TWideStrings);
15805: Procedure GetProcedureNames4( const PackageName : Widestring; List : TWideStrings);
15806: Procedure GetProcedureNames5( const PackageName, SchemaName : WideString; List : TWideStrings);
15807: Procedure GetProcedureParams( ProcedureName : WideString; List : TList);
15808: Procedure GetProcedureParams1( ProcedureName, PackageName : WideString; List : TList);
15809: Procedure GetProcedureParams2( ProcedureName, PackageName, SchemaName : Widestring; List : TList);
15810: Procedure GetProviderNames( Names : TWideStrings); 15811: Procedure GetProviderNames( Proc : TGetStrProc)
15812: Procedure GetProviderNames1( Names : TStrings);
15813: procedure GetQrCode2(Width, Height: Word; Correct_Level: string; const Data: string; apath: string);
15814: procedure GetQrCode3(Width, Height: Word; Correct_Level: string; const Data: string; apath: string); //no autoopen
        image
15815: Function GetOrCode4(Width, Height:Word;Correct_Level:string; const
        Data: string; aformat: string): TLinearBitmap;
15816: Procedure GetRGBValue( const Color : TColor; out Red, Green, Blue : Byte)
15817: Procedure GetSchemaNames (List: TStrings);
15818: Procedure GetSchemaNames1( List : TWideStrings);
15819: Procedure GetSessionNames( List : TStrings)
15820: Procedure GetStoredProcNames( const DatabaseName : string; List : TStrings)
15821: Procedure GetStrings( List : TStrings)
15822: Procedure GetSystemTime; stdcall;
15823: Procedure GetTableNames(const DatabaseName, Pattern: string; Extensions, SystemTables: Boolean; List: TStrings)
15824: Procedure GetTableNames( List : TStrings; SystemTables : Boolean) 15825: Procedure GetTableNames( List : TStrings; SystemTables : Boolean);
15826: Procedure GetTableNames( List : TWideStrings; SystemTables : Boolean);
15827: Procedure GetTableNames1( List : TStrings; SchemaName : WideString; SystemTables : Boolean);
15828: Procedure GetTableNames1( List : TStrings; SystemTables : Boolean);
15829: Procedure GetTableNames2( List : TWideStrings; SchemaName : WideString; SystemTables : Boolean);
15830: Procedure GetTransitionsOn( cChar : char; oStateList : TList)
15831: Procedure GetVisibleWindows( List : Tstrings)
15832: Procedure GoBegin
15833: Procedure GotoCurrent( DataSet : TCustomClientDataSet)
15834: Procedure GotoCurrent( Table : TTable)
15835: procedure GotoEndlClick(Sender: TObject);
15836: Procedure GotoNearest
15837: Procedure GradientFillCanvas(const ACanvas: TCanvas; const AStartCol, AEndCol: TColor; const ARect: TRect; const
        Direction: TGradientDirection)
15838: Procedure HandleException( E : Exception; var Handled : Boolean)
15839: procedure HANDLEMESSAGE
15840: procedure HandleNeeded;
15841: Procedure Head( AURL : string)
15842: Procedure Help( var AHelpContents : TStringList; ACommand : String)
15843: Procedure HexToBinary( Stream: TStream) 15844: procedure HexToBinary(Stream:TStream)
15845: Procedure HideDragImage
15846: Procedure HideFormCaption( FormHandle : THandle; Hide : Boolean)
15847: Procedure HideTraybar
15848: Procedure HideWindowForSeconds(secs: integer);
                                                              {//3 seconds}
15849: Procedure HideWindowForSeconds2(secs: integer; apphandle, aself: TForm); {//3 seconds}
15850: Procedure HookOSExceptions
15851: Procedure HookSignal (RtlSigNum : Integer)
15852: Procedure HSLTORGB( const H, S, L : Single; out R, G, B : Single); 15853: Procedure HTMLSyntaxlClick( Sender : TObject)
15854: Procedure IFPS3ClassesPlugin1CompImport( Sender : TObject; x : TPSPascalCompiler)
15855: Procedure IFPS3ClassesPlugin1ExecImport( Sender : TObject; Exec : TPSExec; x : TPSRuntimeClassImporter)
15856: Procedure ImportfromClipboard1Click( Sender : Tobject)
15857: Procedure ImportfromClipboard2Click( Sender : Tobject)
15858: Procedure IncAMonth( var Year, Month, Day : Word; NumberOfMonths : Integer)
15859: procedure Incb(var x: byte);
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15860: Procedure Include1Click( Sender : TObject)
15861: Procedure IncludeOFF; //preprocessing
15862: Procedure IncludeON;
15863: procedure InfolClick(Sender: TObject);
15864: Procedure InitAltRecBuffers( CheckModified : Boolean)
15865: Procedure InitContext( Request : TWebRequest; Response : TWebResponse)
15866: Procedure InitContext(WebModuleList:TAbstractWebModuleList;Request:TWebRequest;Response:TWebResponse)
15867: Procedure InitData( ASource : TDataSet)
15868: Procedure InitDelta( ADelta : TPacketDataSet);
15869: Procedure InitDeltal( const ADelta : OleVariant);
15870: Procedure InitErrorPacket( E : EUpdateError; Response : TResolverResponse)
15871: Procedure Initialize
15872: procedure InitializePackage(Module: HMODULE)
15873: Procedure INITIATEACTION
15874: Procedure initHexArray(var hexn: THexArray); //THexArray', 'array[0..15] of char;'
15875: Procedure InitKeyFields( Tree : TUpdateTree; ADelta : TPacketDataSet)
15876: Procedure InitModule( AModule : TComponent)
15877: Procedure InitStdConvs
15878: Procedure InitTreeData( Tree : TUpdateTree)
15879: Procedure INSERT
15880: Procedure Insert( Index : Integer; AClass : TClass)
15881: Procedure Insert( Index : Integer; AComponent : TComponent)
15882: Procedure Insert( Index : Integer; AObject: TObject)
15883: Procedure Insert( Index : Integer; Const S : WideString)
15884: Procedure Insert( Index : Integer; Image, Mask : TBitmap)
15885: Procedure Insert(Index: Integer; const S: string);
15886: procedure Insert(Index: Integer; S: string);
15887: procedure Insert(s: AnyString; var s2: AnyString; iPos: Longint);
15888: procedure InsertComponent(AComponent:TComponent)
15889: procedure InsertControl(AControl: TControl);
15890: Procedure InsertIcon( Index : Integer; Image : TIcon)
15891: Procedure InsertMasked( Index : Integer; Image : TBitmap; MaskColor : TColor)
15892: Procedure InsertObject( Index : Integer; const S : WideString; AObject : TObject)
15893: procedure InsertObject(Index:Integer;S:String;AObject:TObject)
15894: Procedure Intl6ToBytes( Value : SmallInt; Bytes : array of byte)
15895: Procedure Int32ToBytes( Value : Integer; Bytes : array of byte)
15896: Procedure Int64ToBytes( Value : Int64; Bytes : array of byte)
15897: procedure I64ToCardinals(I: Int64; var LowPart, HighPart: Cardinal);
15898: Procedure InternalBeforeResolve( Tree : TUpdateTree)
15899: Procedure InvalidateModuleCache
15900: Procedure InvalidateTitles
15901: Procedure InvalidDateDayError( const AYear, ADayOfYear : Word)
15902: Procedure InvalidDateMonthWeekError( const AYear, AMonth, AWeekOfMonth, ADayOfWeek : Word)
15903: Procedure InvalidDateTimeError(const AYear,AMth,ADay,AHour,AMin,ASec,AMilSec:Word;const
        ABaseDate:TDateTime)
15904: Procedure InvalidDateWeekError(const AYear, AWeekOfYear, ADayOfWeek : Word)
15905: Procedure InvalidDayOfWeekInMonthError( const AYear, AMonth, ANthDayOfWeek, ADayOfWeek: Word)
15906: procedure JavaSyntax1Click(Sender: TObject);
15907: Procedure JclLocalesInfoList( const Strings: TStrings; InfoType: Integer)
15908: Procedure KillDataChannel
15909: Procedure Largefont1Click( Sender : TObject)
15910: Procedure LAST
15911: Procedure LaunchCpl(FileName: string
15912: Procedure Launch(const AFile: string)
15913: Procedure Launch(const AFile: string)
15914: Procedure LetFileList(FileList: TStringlist; apath: string);
15915: Procedure lineToNumber(xmemo: String; met: boolean)
15916: Procedure ListViewCustomDrawItem(Sender:TCustListView;Item:TListItem;State:TCustDrawState;var
        DefaultDraw:Bool)
15917: Procedure ListViewCustomDrawSubItem( Sender : TCustomListView; Item : TListItem; SubItem : Integer; State
        : TCustomDrawState; var DefaultDraw : Boolean)
15918: Procedure ListViewData( Sender : TObject; Item : TListItem)
15919: Procedure ListViewDataFind(Sender:TObject; Find: TItemFind; const FindString: String; const FindPosition
: TPoint; FindData:Pointer; StartIndex:Integer;Direction:TSearchDirection;Wrap:Boolean;var Index: Integer)
15920: Procedure ListViewDataHint( Sender : TObject; StartIndex, EndIndex : Integer)
15921: Procedure ListViewDblClick( Sender : TObject)
15922: Procedure ListViewKeyDown( Sender : TObject; var Key : Word; Shift : TShiftState)
15923: Procedure ListDLLExports(const FileName: string; List: TStrings);
15924: Procedure Load( const WSDLFileName : WideString; Stream : TMemoryStream) 15925: procedure LoadBytecodelClick(Sender: TObject);
15926: procedure LoadFilefromResource(const FileName: string; ms: TMemoryStream);
15927: Procedure LoadFromClipboardFormat (AFormat : Word; AData : THandle; APalette : HP)
15928: Procedure LoadFromClipboardFormat (AFormat : Word; AData : THandle; APalette : HPALETTE)
15929: Procedure LoadFromFile(AFileName : string)
15930: Procedure LoadFromFile( const AFileName : string; const AHeadersOnly : Boolean)
15931: Procedure LoadFromFile( const FileName : string)
15932: Procedure LOADFROMFILE( const FILENAME : String; BLOBTYPE : TBLOBTYPE)
15933: Procedure LoadFromFile( const FileName : string; DataType : TDataType)
15934: Procedure LoadFromFile( const FileName : WideString)
15935: Procedure LoadFromFile( const FileName, FileType : string; Bitmap : TLinearBitmap)
15936: Procedure LoadFromFile(const AFileName: string)
15937: procedure LoadFromFile(FileName: string);
15938: procedure LoadFromFile(FileName:String)
15939: Procedure LoadFromResourceID( Instance : THandle; ResID : Integer)
15940: Procedure LoadFromResourceName( Instance: THandle; const ResName: String)
15941: Procedure LoadFromStream( AStream: TStream; const AHeadersOnly: Boolean)
15942: Procedure LoadFromStream( const Stream: TStream)
15943: Procedure LoadFromStream( S: TStream)
15944: Procedure LoadFromStream( Stream : TSeekableStream; const Ext : string; Bitmap : TLinarBitmap)
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15945: Procedure LoadFromStream( Stream: TSeekableStream; const Ext: string; Bitmap: TLinearBitmap)
15946: Procedure LoadFromStream( Stream : TStream)
15947: Procedure LOADFROMSTREAM( STREAM: TSTREAM; BLOBTYPE: TBLOBTYPE)
15948: Procedure LoadFromStream( Stream: TStream; DataType: TDataType)
15949: procedure LoadFromStream(Stream: TStream);
15950: Procedure LoadFromStream1( Stream : TSeekableStream; const FormatExt : string);
15951: Procedure LoadFromStream2( Stream : TStream; const FormatExt : string);
15952: Procedure LoadFromStrings( AStrings: TStrings; const MimeSeparator
15953: Procedure LoadLastFile1Click( Sender : TObject)
15954: { LoadIcoToImage loads two icons from resource named NameRes,
         into two image lists Alarge and ASmall}
15956: Procedure LoadIcoToImage(ALarge, ASmall: ImgList.TCustomImageList; const NameRes: string);
15957: Procedure LoadMemo
15958: Procedure LoadParamsFromIniFile( FFileName : WideString)
15959: Procedure Lock
15960: Procedure Login
15961: Procedure MakeAlphaChannelFromAlphaPalette( Source : TLinearBitmap)
15962: Procedure MakeAlphaChannelFromColorKey( Source : TLinearBitmap; ColorKey : TColor)
15963: Procedure MakeCaseInsensitive
15964: Procedure MakeDeterministic( var bChanged : boolean)
15965: Procedure MakeGrayPal( var Palette, ColorCount : Integer)
15966: // type TVolumeLevel = 0..127; , savaFilePath as C:\MyFile.wav
15967: Procedure MakeSound(Frequency{Hz}, Duration{mSec}: Int; Volume: TVolumeLevel; savefilePath: string);
15968: Procedure MakeComplexSound(N:integer;freqlist:TStrings;Duration{mSec}:Int:pinknoise:bool;Volume:Byte);
15969: Procedure SetComplexSoundElements(freqedt, Phaseedt, AmpEdt, WaveGrp:integer);
15970: Procedure SetRectComplexFormatStr( const S : string)
15971: Procedure SetPolarComplexFormatStr( const S : string)
15972: Procedure AddComplexSoundObjectToList(newf,newp,newa,news:integer; freqlist: TStrings);
15973: Procedure MakeVisible
15974: Procedure MakeVisible( PartialOK : Boolean)
15975: Procedure ManuallClick( Sender : TObject)
15976: Procedure MarkReachable
15977: Procedure maxbox; //shows the exe version data in a win box
15978: Procedure MeanAndStdDev( const Data : array of Double; var Mean, StdDev : Extended)
15979: Procedure MemolChange (Sender: TObject)
15980: Procedure MemolReplaceText(Sender:TObject;const ASearch,AReplace:String;Line,Column:Int;var
       Action: TSynReplaceAction)
15981: Procedure MemolSpecialLineColors (Sender: Tobject; Line: Integer; var Special: Boolean; var FG, BG: TColor)
15982: Procedure MemolStatusChange( Sender : TObject; Changes : TSynStatusChanges)
15983: procedure Memory1Click(Sender: TObject);
15984: Procedure MERGE ( MENU : TMAINMENU)
15985: Procedure MergeChangeLog
15986: procedure MINIMIZE
15987: Procedure MinimizeMaxbox;
15988: Procedure MkDir(const s: string)
15989: Procedure mnuPrintFont1Click( Sender : TObject)
15990: procedure ModalStarted
15991: Procedure Modified
15992: Procedure ModifyAlias( Name : string; List : TStrings)
15993: Procedure ModifyDriver( Name : string; List : TStrings)
15994: Procedure MomentSkewKurtosis(const Data:array of Double;var M1,M2,M3,M4, Skew,Kurtosis:Extended)
15995: Procedure MouseToCell( X, Y : Integer; var ACol, ARow : Longint)
15996: Procedure Move ( CurIndex, NewIndex : Integer)
15997: procedure Move(CurIndex, NewIndex: Integer);
15998: procedure Move2(const Source: TByteArray; var Dest: TByteArray; Count: Integer)
15999: Procedure MoveChars(const ASource: String; ASourceStart:int; var ADest: String; ADestStart, ALen:integer)
16000: Procedure moveCube( o : TMyLabel)
16001: Procedure MoveTo( Destination : LongInt; AttachMode : TAttachMode)
16002: procedure MoveTo(X, Y: Integer);
16002: procedure MoveYo(x, r. integer),
16003: procedure MoveWindowOrg(DC: HDC; DX, DY: Integer);
16004: Procedure MovePoint(var x,y:Extended; const angle:Extended);
16005: Procedure Multiply( Multiplier1, Multiplier2 : TMyBigInt);
16006: Procedure Multiply1( Multiplier1 : TMyBigInt; Multiplier2 : Integer);
16007: Procedure MsgAbout(Handle:Int;const Msg,Caption:string;const IcoName:string = 'MAINICON';Flags:DWORD=MB_OK);
16008: Procedure mxButton(x,y,width,height,top,left,ahandle: integer);
16009: Procedure New( Width, Height : Integer; PixFormat : TPixelFormat)
16010: procedure New(P: PChar)
16011: procedure NewlClick(Sender: TObject);
16012: procedure NewInstancelClick(Sender: TObject);
16013: Procedure NEXT
16014: Procedure NextMonth
16015: Procedure Noop
16016: Procedure NormalizePath( var APath : string)
16017: procedure ObjectBinaryToText(Input, Output: TStream)
16018: procedure ObjectBinaryToText1(Input, Output: TStream; var OriginalFormat: TStreamOriginalFormat)
16019: procedure ObjectResourceToText(Input, Output: TStream)
16020: procedure ObjectResourceToText1(Input, Output: TStream; var OriginalFormat: TStreamOriginalFormat)
16021: procedure ObjectTextToBinary(Input, Output: TStream)
16022: procedure ObjectTextToBinary1(Input, Output: TStream; var OriginalFormat: TStreamOriginalFormat)
16023: procedure ObjectTextToResource(Input, Output: TStream)
16024: procedure ObjectTextToResource1(Input, Output: TStream; var OriginalFormat: TStreamOriginalFormat)
16025: Procedure Open( const Name, Address, Service: string; Port: Word; Block: Boolean) 16026: Procedure Open( const UserID: WideString; const Password: WideString);
16027: Procedure Open;
16028: Procedure open1Click( Sender : TObject)
16029: Procedure OpenCdDrive
16030: Procedure OpenCloseCdDrive( OpenMode : Boolean; Drive : Char)
16031: Procedure OpenCurrent
16032: Procedure OpenFile(vfilenamepath: string)
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16033: Procedure OpenDirectorylClick( Sender : TObject)
16034: Procedure OpenIndexFile( const IndexName : string)
16035: Procedure OpenSchema(const Schema: TSchemaInf; const Restricts: OleVar; const
       SchemaID: OleVariant; DataSet: TADODataSet)
16036: Procedure OpenWriteBuffer( const AThreshhold : Integer)
16037: Procedure OptimizeMem
16038: Procedure Options1( AURL : string);
16039: Procedure OutputDebugString(lpOutputString : PChar)
16040: Procedure PackBuffer
16041: Procedure Paint.
16042: Procedure PaintToCanvas ( Canvas : TCanvas; const Dest : TRect; HalftoneStretch : Boolean)
16043: Procedure PaintToTBitmap( Target : TBitmap)
16044: Procedure PaletteChanged
16045: Procedure ParentBiDiModeChanged
16046: Procedure PARENTBIDIMODECHANGED( ACONTROL: TOBJECT)
16047: Procedure PasteFromClipboard;
16048: Procedure PasteImage( Source : TLinearBitmap; X, Y : Integer)
16049: Procedure PathExtractElements( const Source: string; var Drive, Path, FileName, Ext: string) 16050: Procedure PerformEraseBackground(Control: TControl; DC: HDC);
16051: Procedure PError( Text : string)
16052: procedure Pie(X1, Y1, X2, Y2, X3, Y3, X4, Y4: Integer);
16053: procedure Pie(X1:Integer;Y1:Integer;X2:Integer;Y2:Integer;X3:Int;Y3:Integer;X4:Integer;Y4:Integer);
16054: Procedure Play( FromFrame, ToFrame : Word; Count : Integer)
16055: procedure playmp3(mpath: string);
16056: Procedure PlayMP31Click( Sender : TObject)
16057: Procedure PointCopy( var Dest : TPoint; const Source : TPoint)
16058: Procedure PointMove( var P : TPoint; const DeltaX, DeltaY : Integer) 16059: procedure PolyBezier(const Points: array of TPoint);
16060: procedure PolyBezierTo(const Points: array of TPoint);
16061: procedure Polygon(const Points: array of TPoint);
16062: procedure Polyline(const Points: array of TPoint);
16063: Procedure Pop
16064: Procedure POPULATEOLE2MENU(SHAREDMENU: HMENU; GROUPS: array of INT; var WIDTHS: array of LONGINT)
16065: Procedure PopulationVarianceAndMean( const X : TDynFloatArray; var Variance, Mean : Float)
16066: Procedure POPUP( X, Y : INTEGER)
16067: Procedure PopupURL(URL : WideString);
16068: Procedure POST
16069: Procedure Post4( AURL : string; const ASource : TStrings; const AResponseContent : TStream);
16070: Procedure Post5( AURL : string; const ASource, AResponseContent : TStream);
16071: Procedure Post6 (AURL: string; const ASource: TIdMultiPartFormDataStream; AResponseContent: TStream);
16072: Procedure PostUser( const Email, FirstName, LastName: WideString)
16073: Procedure PostKeyEx32(key: Word; const shift: TShiftState; specialkey: Boolean);
16074: procedure Pred(X: int64);
16075: Procedure Prepare
16076: Procedure PrepareStatement
16077: Procedure PreProcessXML( AList : TStrings)
16078: Procedure PreventDestruction
16079: Procedure Print( const Caption : string)
16080: procedure PrintBitmap(aGraphic: TGraphic; Title: string);
16081: procedure printf(const format: String; const args: array of const);
16082: Procedure PrintList(Value: TStringList);
16083: Procedure PrintImage(aValue:TBitmap;Style:TBitmapStyle);//TBitmapStyle=(bsNormal,bsCentered,bsStretched)
16084: Procedure PrintoutlClick( Sender : TObject)
16085: Procedure ProcessHeaders
16086: Procedure PROCESSMENUCHAR( var MESSAGE : TWMMENUCHAR)
16087: Procedure ProcessMessage( AMsg : TIdMessage; AHeaderOnly : Boolean);
16088: Procedure ProcessMessage1 ( AMsg : TIdMessage; const AStream : TStream; AHeaderOnly : Boolean);
16089: Procedure ProcessMessage2 AMsg : TIdMessage; const AFilename : string; AHeaderOnly : Boolean);
16090: Procedure ProcessMessagesOFF;
                                          //application.processmessages
16091: Procedure ProcessMessagesON;
16092: Procedure ProcessPath(const EditText:string; var Drive:Char; var DirPart:string; var FilePart : string)
16093: Procedure ProcessPath1(const EditText:string; var Drive:Char; var DirPart:string; var FilePart:string);
16094: Procedure Proclist Size is: 3797 /1415
16095: Procedure procMessClick( Sender : Tobject)
16096: Procedure PSScriptCompile(Sender: TPSScript)
16097: Procedure PSScriptExecute(Sender: TPSScript)
16098: Procedure PSScriptLine( Sender : TObject)
16099: Procedure Push( ABoundary : string)
16100: procedure PushItem(AItem: Pointer)
16101: Procedure Put2( AURL : string; const ASource, AResponseContent : TStream);
16102: Procedure Put2( const ASourceFile : string; const ADestFile : string; const AAppend : boolean);
16103: procedure PutLinuxLines(const Value: string)
16104: Procedure Ouit
16105: Procedure RaiseConversionError( const AText : string);
16106: Procedure RaiseConversionError1( const AText : string; const AArgs : array of const);
16107: Procedure RaiseConversionRegError( AFamily : TConvFamily; const ADescription : string)
16108: procedure RaiseException(Ex: TIFException; Param: String);
16109: Procedure RaiseExceptionForLastCmdResult;
16110: procedure RaiseLastException;
16111: procedure RaiseException2;
16112: Procedure RaiseLastOSError
16113: Procedure RaiseLastWin32;
16114: procedure RaiseLastWin32Error)
16115: Procedure RaiseListError( const ATemplate : string; const AData : array of const)
16116: Procedure RandomFillStream( Stream : TMemoryStream)
16117: procedure randomize;
16118: Procedure Rasterize (Rasterizer: TRasterizer: Dst : TBitmap32: DstRect : TRect)
16119: Procedure RCS
16120: Procedure Read( Socket : TSocket)
```

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16121: Procedure ReadBlobData
16122: procedure ReadBuffer(Buffer:String;Count:LongInt)
16123: procedure ReadOnly1Click(Sender: TObject);
16124: Procedure ReadSection( const Section : string; Strings : TStrings)
16125: Procedure ReadSections( Strings : TStrings) 16126: Procedure ReadSections( Strings : TStrings);
16127: Procedure ReadSections1( const Section : string; Strings : TStrings);
16128: Procedure ReadSectionValues( const Section : string; Strings : TStrings)
16129: Procedure ReadStream (AStream : TStream; AByteCount:LongInt; const AReadUntilDisconnect : boolean)
16130: Procedure ReadStrings (ADest : TStrings; AReadLinesCount : Integer)
16131: Procedure ReadVersion2(aFileName: STRING; aVersion : TStrings);
16132: Function ReadVersion(aFileName: STRING; aVersion: TStrings): boolean;
16133: Procedure Realign;
16134: procedure Rectangle(X1, Y1, X2, Y2: Integer);
16135: Procedure Rectangle1( const Rect : TRect);
16136: Procedure RectCopy( var Dest : TRect; const Source : TRect)
16137: Procedure RectFitToScreen( var R : TRect)
16138: Procedure RectGrow( var R : TRect; const Delta : Integer)
16139: Procedure RectGrowX( var R : TRect; const Delta : Integer)
16140: Procedure RectGrowY( var R : TRect; const Delta : Integer)
16141: Procedure RectMove( var R : TRect; const DeltaX, DeltaY : Integer)
16142: Procedure RectMoveTo( var R : TRect; const X, Y : Integer)
16143: Procedure RectNormalize( var R : TRect)
16144: // TFileCallbackProcedure = procedure(filename:string);
16145: Procedure RecurseDirectory(Dir: String;IncludeSubs: boolean;callback: TFileCallbackProcedure);
16146: Procedure RecurseDirectory2(Dir: String; IncludeSubs: boolean);
16147: \textbf{Procedure} \ \texttt{RedirectTransition} (\texttt{oOldState:TniRegularExpressionState}; \ \texttt{oNewState}: \ \texttt{TniRegularExpressionState})
16148: Procedure Refresh;
16149: Procedure RefreshData( Options : TFetchOptions)
16150: Procedure REFRESHLOOKUPLIST
16151: Procedure RegisterAuthenticationMethod( MethodName : String; AuthClass : TIdAuthenticationClass)
16152: Procedure RegisterChanges( Value : TChangeLink)
16153: Procedure RegisterConversionFormat( const AExtension : string; AConversionClass : TConversionClass)
16154: Procedure RegisterFileFormat( const AExtension, ADescription: string; AGraphicClass: TGraphicClass)
16155: Procedure RegisterFileFormat(Extension, AppID: string; Description: string; Executable: string; IconIndex: Int)
16156: Procedure ReInitialize( ADelay : Cardinal)
16157: procedure RELEASE
16158: Procedure Remove ( const ABvteCount : integer)
16159: Procedure REMOVE( FIELD : TFIELD)
16160: Procedure REMOVE( ITEM : TMENUITEM)
16161: Procedure REMOVE( POPUP : TPOPUPMENU)
16162: Procedure RemoveAllPasswords
16163: procedure RemoveComponent(AComponent:TComponent)
16164: Procedure RemoveDir( const ADirName : string)
16165: Procedure RemoveLambdaTransitions( var bChanged : boolean)
16166: Procedure REMOVEPARAM( VALUE : TPARAM)
16167: Procedure RemoveTransitionTo( oState : TniReqularExpressionState; xCharacters : TCharset);
16168: Procedure RemoveTransitionTol( oState : TniRegularExpressionState);
16169: Procedure Rename ( const ASourceFile, ADestFile : string)
16170: Procedure Rename ( const FileName : string; Reload : Boolean)
16171: Procedure RenameTable( const NewTableName : string)
16172: Procedure Replace (Index : Integer; Image, Mask : TBitmap)
16173: Procedure Replace1Click( Sender : TObject)
16174: Procedure ReplaceDate( var DateTime : TDateTime; NewDate : TDateTime)
16175: procedure ReplaceDate(var DateTime: TDateTime; const NewDate: TDateTime))
16176: Procedure ReplaceIcon( Index : Integer; Image : TIcon)
16177: Procedure ReplaceMasked( Index : Integer; NewImage : TBitmap; MaskColor : TColor)
16178: Procedure ReplaceTime (var DateTime: TDateTime; NewTime: TDateTime) 16179: procedure ReplaceTime (var DateTime: TDateTime; const NewTime: TDateTime);
16180: Procedure Requery( Options : TExecuteOptions)
16181: Procedure Reset
16182: Procedure Reset1Click( Sender : TObject)
16183: Procedure ResizeCanvas( XSiz, YSiz, XPos, YPos : Integer; Color : TColor)
16184: procedure ResourceExplore1Click(Sender: TObject);
16185: Procedure RestoreContents
16186: Procedure RestoreDefaults
16187: Procedure RestoreOtherInstance( MainFormClassName, MainFormCaption : string)
16188: Procedure RetrieveHeaders
16189: Procedure RevertRecord
16190: Procedure RGBATOBGRA( const Source, Target : Pointer; const BitsPerSample : Byte; Count : Cardinal)
16191: Procedure RGBToBGR( const Source, Target : Pointer; const BitsPerSample : Byte; Count : Cardinal)
16192: Procedure RGBToBGR1( const R, G, B, Target : Pointer; const BitsPerSample : Byte; Count : Cardinal);
16193: Procedure RGBTOHSL( const R, G, B : Single; out H, S, L : Single);
16194: Procedure RGBTOHSL1( const RGB : TColor32; out H, S, L : Single);
16195: Procedure RGBTOHSV( r, g, b : Integer; var h, s, v : Integer)
16196: Procedure RGBCompress2( Stream : TStream)
16197: Procedure RleDecompress2( Stream : TStream)
16198: Procedure RmDir(const S: string)
16199: Procedure Rollback
16200: Procedure Rollback( TransDesc : TTransactionDesc)
16201: Procedure RollbackFreeAndNil( var Transaction : TDBXTransaction)
16202: Procedure RollbackIncompleteFreeAndNil( var Transaction : TDBXTransaction)
16203: Procedure RollbackTrans
16204: procedure RoundRect(X1, Y1, X2, Y2, X3, Y3: Integer);
16205: Procedure RoundToAllocGranularity64( var Value : Int64; Up : Boolean)
16206: Procedure RoundToAllocGranularityPtr( var Value : Pointer; Up : Boolean)
16207: Procedure RunDll32Internal( Wnd : HWnd; const DLLName, FuncName, CmdLine : string; CmdShow : Integer)
16208: Procedure S_AddMessageToStrings( AMessages : TStrings; AMsg : string)
16209: Procedure S_EBox( const AText : string)
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16210: Procedure S GetEncryptionKeys(DateTime1,DateTime2:TDateTime;var StartKey:int;var MultKey:integer;var
         AddKey:int
16211: Procedure S_IBox( const AText : string)
16212: Procedure S_ReplaceChar( var cStr : string; cOldChr, cNewChr : char)
16213: Procedure S_ReplaceStringInFile( AFileName : string; ASearchString, AReplaceString : string)
16214: Procedure S TokenInit( cBuffer : PChar; const cDelimiters : string)
16215: Procedure SampleVarianceAndMean
16216: ( const X : TDynFloatArray; var Variance, Mean : Float)
16217: Procedure Save2Click( Sender : TObject)
16218: Procedure Saveas3Click( Sender : TObject)
16219: Procedure SavebeforelClick( Sender : TObject)
16220: Procedure SaveBytesToFile(const Data: TBytes; const FileName: string);
16221: procedure SaveCanvas2(vCanvas: TCanvas; FileName: string);
16222: Procedure SaveConfigFile
16223: Procedure SaveOutput1Click( Sender : TObject)
16224: procedure SaveScreenshotClick(Sender: TObject);
16225: Procedure SaveIn(pathname, content: string); //SaveIn(exepath+'mysaveIntest.txt', memo2.text);
16226: Procedure SaveToClipboardFormat( var AFormat : Word; var AData : THandle; var APalette : HPALETTE)
16227: Procedure SaveToClipboardFormat( var Format : Word; var Data : THandle; var APalette : HPALETTE)
16228: Procedure SaveToFile( AFileName : string)
16229: Procedure SAVETOFILE( const FILENAME : String)
16230: Procedure SaveToFile( const FileName : WideString)
16231: Procedure SaveToFile( const FileName : WideString; Format : TPersistFormat)
16232: Procedure SaveToFile( const FileName, FileType : string; Bitmap : TLinearBitmap)
16233: procedure SaveToFile(FileName: string);
16234: procedure SaveToFile(FileName:String)
16235: Procedure SaveToStream( AStream : TStream; const AHeadersOnly : Boolean)
16236: Procedure SaveToStream( OutStream: TSeekableStream; const Ext: string; Bitmap: TLinarBitmap)
16237: Procedure SaveToStream( S : TStream)
16238: Procedure SaveToStream( Stream: TSeekableStream; const Ext: string; Bitmap: TLinearBitmap)
16239: Procedure SaveToStream( Stream : TStream)
16240: Procedure SaveToStream( Stream: TStream; Format: TDataPacketFormat) 16241: procedure SaveToStream(Stream: TStream);
16242: procedure SaveToStream(Stream:TStream)
16243: Procedure SaveToStream1(Stream : TSeekableStream; const FormatExt : string);
16244: Procedure SaveToStream2(Stream : TStream; const FormatExt : string);
16245: Procedure SaveToStrings( AStrings: TStrings; const MimeSeparator: Char)
16246: procedure Sav(const sText: string)
16247: Procedure SBytecodelClick( Sender : TObject)
16248: Procedure ScaleImage( const SourceBitmap, ResizedBitmap: TBitmap; const ScaleAmount: Double)
16249: procedure ScriptExplorer1Click(Sender: TObject);
16250: Procedure Scroll( Distance : Integer)
16251: Procedure Scroll( DX, DY : Integer)
16252: procedure ScrollBy(DeltaX, DeltaY: Integer);
16253: procedure SCROLLINVIEW(ACONTROL:TCONTROL)
16254: Procedure ScrollTabs( Delta : Integer)
16255: Procedure Search1Click( Sender : TObject)
16256: procedure SearchAndOpenDoc(vfilenamepath: string)
16257: procedure SearchAndOpenFile(vfilenamepath: string)
16258: procedure SearchAndReplace(aStrList: TStrings; aSearchStr, aNewStr: string)
16259: procedure SearchAndCopy(aStrList: TStrings; aSearchStr, aNewStr: string; offset: integer);
16260: Procedure SearchNext1Click( Sender : TObject)
16261: Procedure Select( Node : TTreeNode; ShiftState : TShiftState);
16262: Procedure Select1( const Nodes : array of TTreeNode);
16263: Procedure Select2( Nodes : TList);
16264: Procedure SelectNext( Direction : Boolean)
16265: Procedure SelectNextPage( GoForward : Boolean; CheckTabVisible : Boolean)
16266: Procedure SelfTestPEM //unit uPSI_cPEM
16267: Procedure Send( AMsg : TIdMessage)
16267: Procedure Send( AMsg : TIdMessage)
16268: //config forst in const MAILINIFILE = 'maildef.ini';
16269: //ex.: SendEmail('max@kleiner.ch','max@kleiner.com','this test7','maxbox the SSL fox','
16270: Procedure SendEmail(mFrom, mTo, mSubject, mBody, mAttachment: variant);
16271: Procedure SendMail(mFrom, mTo, mSubject, mBody, mAttachment: variant);
16272: Procedure SendMsg( AMsg : TIdMessage; const AHeadersOnly : Boolean)
16273: Procedure SendMsg(AMsg: TIdMessage; const AHeadersOnly: Boolean = False)
16274: Procedure SendResponse
16275: Procedure SendStream( AStream: TStream)
16276: Procedure Set8087CW( NewCW : Word)
16277: Procedure SetAll( One, Two, Three, Four : Byte)
16278: Procedure SetAltRecBuffers( Old, New, Cur : PChar)
16279: Procedure SetAppDispatcher( const ADispatcher: TComponent)
16280: procedure SetArrayLength;
16281: procedure SetArrayLength2String(arr: T2StringArray; asize1, asize2: integer); //2 dimension
16282: procedure SetArrayLength2Integer(arr: T2IntegerArray; asize1, asize2: integer);
16283: Procedure SetAsHandle( Format : Word; Value : THandle)
16284: procedure SetBounds(ALeft, ATop, AWidth, AHeight: Integer)
16285: procedure SetCaptureControl(Control: TControl);
16286: Procedure SetColumnAttributes
16287: \textbf{ Procedure } \texttt{SetCookieField(Values:TStrings;const } \texttt{ADomain,APath:string;} \texttt{AExpires:TDateTime;} \texttt{ASecure:Boolean)}
16288: Procedure SetCustomHeader( const Name, Value : string)
16289: Procedure SetExprParams(const Text:Widestring;Opts:TFilterOpts;ParserOpts:TParserOpts;const
        FieldName:Widestring)
16290: Procedure SetFMTBcd( Buffer : TRecordBuffer; value : TBcd)
16291: Procedure SetFocus
16292: procedure SetFocus; virtual;
16293: Procedure SetInitialState
16294: Procedure SetKey
16295: procedure SetLastError(ErrorCode: Integer)
16296: procedure SetLength;
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16297: Procedure SetLineBreakStyle( var T : Text; Style : TTextLineBreakStyle) 16298: Procedure SETOLE2MENUHANDLE( HANDLE : HMENU)
16299: Procedure SetParams( ADataset : TDataset; UpdateKind : TUpdateKind);
16300: procedure SETPARAMS(APOSITION, AMIN, AMAX:INTEGER)
16301: Procedure SetParams1( UpdateKind : TUpdateKind);
16302: Procedure SetPassword( const Password : string)
16303: Procedure SetPointer( Ptr : Pointer; Size : Longint)
16304: Procedure SetPrimalityTest( const Method : TPrimalityTestMethod)
16305: Procedure SetPrinter( ADevice, ADriver, APort : PChar; ADeviceMode : THandle)
16306: Procedure SetProvider( Provider: TComponent)
16307: Procedure SetProxy( const Proxy: string)
16308: Procedure SetPSResult( var PSResult : TPSResult; Value : TObject)
16309: Procedure SetRange( const StartValues, EndValues : array of const)
16310: Procedure SetRangeEnd
16311: Procedure SetRate( const aPercent, aYear : integer) 16312: procedure SetRate(const aPercent, aYear: integer)
16313: Procedure Set_ReportMemoryLeaksOnShutdown(abo: boolean)
16314: Procedure SetSafeCallExceptionMsg( Msg : String)
16315: procedure SETSELTEXTBUF(BUFFER: PCHAR)
16316: Procedure SetSize( AWidth, AHeight : Integer)
16317: procedure SetSize(NewSize:LongInt)
16318: procedure SetString(var s: string; buffer: PChar; len: Integer)
16319: Procedure SetStrings( List : TStrings)
16320: Procedure SetText( Text : PwideChar)
16321: procedure SetText(Text: PChar);
16322: Procedure SetTextBuf( Buffer : PChar)
16323: procedure SETTEXTBUF(BUFFER:PCHAR)
16324: Procedure SetTick( Value : Integer)
16325: Procedure SetTimeout( ATimeOut: Integer)
16326: Procedure SetTraceEvent( Event: TDBXTraceEvent)
16327: Procedure SetUserName( const UserName: string)
16328: Procedure SetWallpaper( Path : string);
16329: procedure ShellStyle1Click(Sender: TObject);
16330: Procedure SHORTCUTTOKEY( SHORTCUT : TSHORTCUT; var KEY : WORD; var SHIFT : TSHIFTSTATE)
16331: Procedure ShowFileProperties( const FileName : string)
16332: Procedure ShowInclude1Click( Sender : TObject)
16333: Procedure ShowInterfaces1Click( Sender : TObject)
16334: Procedure ShowLastException1Click( Sender : TObject)
16335: Procedure ShowMessage( const Msg : string)
16336: Procedure ShowMessageBig(const aText : string);
16337: Procedure ShowMessageBig2(const aText : string; aautosize: boolean);
16338: Procedure ShowMessageBig3(const aText : string; fsize: byte; aautosize: boolean);
16339: Procedure MsgBig(const aText : string);
                                                              //alias
16340: procedure showmessage(mytext: string);
16341: Procedure ShowMessageFmt( const Msg : string; Params : array of const)
16342: procedure ShowMessageFmt(const Msg: string; Params: array of const))
16343: Procedure ShowMessagePos( const Msq : string; X, Y : Integer
16344: procedure ShowMessagePos(const Msg: string; X: Integer; Y: Integer))
16345: Procedure ShowSearchDialog( const Directory : string)
16346: Procedure ShowSpecChars1Click( Sender : TObject)
16347: Procedure ShowBitmap(bmap: TBitmap); //draw in a form!
16348: Procedure ShredFile( const FileName : string; Times : Integer)
16349: procedure Shuffle(vQ: TStringList);
16350: Procedure ShuffleList( var List: array of Integer; Count: Integer) 16351: Procedure SimulateKeystroke( Key: byte; Shift: TShiftState)
16352: Procedure SinCos( const Theta : Extended; var Sin, Cos : Extended)
16353: Procedure SinCosE( X : Extended; out Sin, Cos : Extended)
16354: Procedure Site( const ACommand : string)
16355: Procedure SkipEOL
16356: Procedure Sleep( ATime : cardinal)
16357: Procedure Sleep( milliseconds : Cardinal)
16358: Function SleepEx( dwMilliseconds : DWORD; bAlertable : BOOL) : DWORD
16359: Procedure Slinenumbers1Click( Sender : TObject)
16360: Procedure Sort.
16361: Procedure SortColorArray(ColorArray:TColorArray;L,R:Int;SortType:TColorArraySortType;Reverse:Bool)
16362: procedure Speak(const sText: string) //async like voice 16363: procedure Speak2(const sText: string) //sync
16364: procedure Split(Str: string; SubStr: string; List: TStrings);
16365: Procedure SplitNameValue( const Line : string; var Name, Value : string)
16366: Procedure SplitColumns( const AData : String; AStrings : TStrings; const ADelim : String)
16367: Procedure SplitColumnsNoTrim( const AData : String; AStrings : TStrings; const ADelim : String)
16368: Procedure SplitLines( AData : PChar; ADataSize : Integer; AStrings : TStrings)
16369: Procedure SplitString( const AStr, AToken: String; var VLeft, VRight: String) 16370: procedure SQLSyntaxlClick(Sender: TObject);
16371: Procedure SRand( Seed : RNG_IntType)
16372: Procedure Start
16373: Procedure StartCount( var Counter : TJclCounter; const Compensate : Boolean)
16374: procedure StartFileFinder3(spath,aext,searchstr: string; arecursiv: boolean; reslist: TStringlist); 16375: Procedure StartTransaction( TransDesc : TTransactionDesc)
16376: Procedure Status( var AStatusList : TStringList)
16377: Procedure StatusBarlDblClick( Sender : TObject)
16378: Procedure StepIntolClick( Sender : TObject)
16379: Procedure StepIt
16380: Procedure StepOutlClick( Sender : TObject)
16381: Procedure Stop
16382: procedure stopmp3;
16383: procedure StartWeb(aurl: string);
16384: Procedure Str(aint: integer; astr: string); //of system
16385: Procedure StrDispose( Str : PChar)
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16386: procedure StrDispose(Str: PChar)
16387: Procedure StrReplace(var Str: String; Old, New: String);
16388: Procedure StretchDIBits( DC : THandle; const Dest : TRect; HalftoneStretch : Boolean)
16389: procedure StretchDraw(const Rect: TRect; Graphic: TGraphic);
16390: Procedure StringToBytes( Value : String; Bytes : array of byte) 16391: procedure StrSet(c : Char; I : Integer; var s : String);
16392: Procedure StrSplitP(const Delimiter: Char; Input: string; const Strings: TStrings);
16393: Procedure StructureMount( APath : String)
16394: procedure STYLECHANGED(SENDER: TOBJECT)
16395: Procedure Subselect( Node : TTreeNode; Validate : Boolean)
16396: procedure Succ(X: int64);
16397: Procedure SumsAndSquares (const Data : array of Double; var Sum, SumOfSquares : Extended)
16398: procedure SwapChar(var X,Y: char); //swapX follows
16399: Procedure SwapFloats( var X, Y: Float)
16400: procedure SwapGrid(grd: TStringGrid);
16401: Procedure SwapOrd( var I, J : Byte);
16402: Procedure SwapOrd( var X, Y : Integer)
16403: Procedure SwapOrd1( var I, J : Shortint);
16404: Procedure SwapOrd2( var I, J : Smallint);
16405: Procedure SwapOrd3( var I, J : Word);
16406: Procedure SwapOrd4( var I, J : Integer);
16407: Procedure SwapOrd5( var I, J : Cardinal);
16408: Procedure SwapOrd6( var I, J : Int64);
16409: Procedure SymetricCompareFiles(const plaintext, replaintext: string)
16410: Procedure Synchronizel( Method : TMethod);
16411: procedure SyntaxCheck1Click(Sender: TObject);
16412: Procedure SysFreeString(const S: WideString); stdcall;
16413: Procedure TakeOver( Other : TLinearBitmap)
16414: Procedure Talkln(const sText: string) //async voice
16415: procedure tbtn6resClick(Sender: TObject);
16416: Procedure tbtnUseCaseClick( Sender : TObject)
16417: procedure TerminalStyle1Click(Sender: TObject);
16418: Procedure Terminate
16419: Procedure texSyntax1Click( Sender : TObject)
16420: procedure TextOut(X, Y: Integer; Text: string);
16421: Procedure TextRect( Rect : TRect; X, Y : Integer; const Text : string);
16422: procedure TextRect(Rect: TRect; X: Integer; Y: Integer; const Text: string);
16423: Procedure TextRect1( var Rect: TRect; var Text: string; TextFormat: TTextFormat);
16424: Procedure TextStart
16425: procedure TILE
16426: Procedure TimeStampToBytes( Value : TBcd; Bytes : array of byte)
16427: Procedure TitleClick( Column : TColumn)
16428: Procedure ToDo
16429: procedure toolbtnTutorialClick(Sender: TObject);
16430: Procedure Tracel( AURL : string; const AResponseContent : TStream); 16431: Procedure TransferMode( ATransferMode : TIdFTPTransferMode)
16432: Procedure Truncate
16433: procedure Tutorial101Click(Sender: TObject);
16434: procedure Tutorial10Statistics1Click(Sender: TObject);
16435: procedure Tutoriall1Forms1Click(Sender: TObject)
16436: procedure Tutorial12SOL1Click(Sender: TObject);
16437: Procedure tutorial1Click( Sender : TObject)
16438: Procedure tutorial21Click( Sender : TObject
16439: Procedure tutorial31Click( Sender : TObject)
16440: Procedure tutorial4Click( Sender : TObject) 16441: Procedure Tutorial5Click( Sender : TObject)
16442: procedure Tutorial6Click(Sender: TObject);
16443: procedure Tutorial91Click(Sender: TObject);
16444: Procedure UnhookSignal( RtlSigNum : Integer; OnlyIfHooked : Boolean)
16445: procedure UniqueString(var str: AnsiString)
16446: procedure UnloadLoadPackage(Module: HMODULE)
16447: Procedure Unlock
16448: Procedure UNMERGE ( MENU : TMAINMENU)
16449: Procedure UnRegisterChanges( Value : TChangeLink)
16450: Procedure UnregisterConversionFamily( const AFamily: TConvFamily)
16451: Procedure UnregisterConversionType( const AType : TConvType)
16452: Procedure UnRegisterProvider( Prov : TCustomProvider)
16453: Procedure UPDATE
16454: Procedure UpdateBatch( AffectRecords : TAffectRecords)
16455: Procedure UPDATECURSORPOS
16456: Procedure UpdateFile
16457: Procedure UpdateItems( FirstIndex, LastIndex : Integer)
16458: Procedure UpdateResponse ( AResponse : TWebResponse)
16459: Procedure UpdateScrollBar
16460: Procedure UpdateViewlClick( Sender : TObject)
16461: procedure Val(const s: string; var n, z: Integer)
16462: procedure VarArraySet(c : Variant; I : Integer; var s : Variant); 16463: Procedure VarFMTBcdCreate( var ADest : Variant; const ABcd : TBcd);
16464: Procedure VariantAdd( const src : Variant; var dst : Variant)
16465: Procedure VariantAnd( const src : Variant; var dst : Variant)
16466: Procedure VariantArrayRedim( var V : Variant; High : Integer)
16467: Procedure VariantCast( const src : Variant; var dst : Variant; vt : Integer)
16468: Procedure VariantClear( var V : Variant)
16469: Procedure VariantCpy( const src : Variant; var dst : Variant)
16470: Procedure VariantDiv( const src : Variant; var dst : Variant)
16471: Procedure VariantMod( const src : Variant; var dst : Variant)
16472: Procedure VariantMul( const src : Variant; var dst : Variant)
16473: Procedure VariantOr( const src : Variant; var dst : Variant)
16474: Procedure VariantPutElement( var V : Variant; const data : Variant; i1 : integer);
```

```
16475: Procedure VariantPutElement1( var V : Variant; const data : Variant; i1, i2 : integer);
16476: Procedure VariantPutElement2( var V : Variant; const data : Variant; i1, i2, i3 : integer);
16477: Procedure VariantPutElement3( var V : Variant; const data : Variant; i1, i2, i3, i4 : integer);
16478: Procedure VariantPutElement4( var V : Variant; const data : Variant; i1, i2, i3, i4, i5 : integer);
16479: Procedure VariantShl( const src : Variant; var dst : Variant)
16480: Procedure VariantShr( const src : Variant; var dst : Variant)
16481: Procedure VariantSub( const src : Variant; var dst :
                                                                       Variant.
16482: Procedure VariantXor( const src : Variant; var dst : Variant
16483: Procedure VarCastError;
16484: Procedure VarCastError1( const ASourceType, ADestType: TVarType);
16485: Procedure VarInvalidOp
16486: Procedure VarInvalidNullOp
16487: Procedure VarOverflowError( const ASourceType, ADestType: TVarType)
16488: Procedure VarRangeCheckError( const ASourceType, ADestType: TVarType)
16489: Procedure VarArrayCreateError
16490: Procedure VarResultCheck( AResult : HRESULT);
16491: Procedure VarResultCheck1( AResult : HRESULT; ASourceType, ADestType : TVarType);
16492: Procedure HandleConversionException( const ASourceType, ADestType: TVarType)
16493: Function VarTypeAsText( const AType : TVarType) : string
16494: procedure Voice(const sText: string) //async
16495: procedure Voice2(const sText: string) //sync
16496: Procedure WaitMiliSeconds( AMSec : word)
16497: Procedure WideAppend( var dst : WideString; const src : WideString) 16498: Procedure WideAssign( var dst : WideString; var src : WideString) 16499: Procedure WideDelete( var dst : WideString; index, count : Integer)
16500: Procedure WideFree( var s : WideString)
16501: Procedure WideFromAnsi( var dst : WideString; const src : AnsiString) 16502: Procedure WideFromPChar( var dst : WideString; src : PChar)
16503: Procedure WideInsert( var dst : WideString; const src : WideString; index : Integer)
16504: Procedure WideSetLength( var dst : WideString; len : Integer)
16505: Procedure WideString2Stream( aWideString : WideString; oStream : TStream)
16506: Procedure WideStringToBytes( Value : WideString; Bytes : array of byte)
16507: Procedure WinColorToOpenGLColor( const Color: TColor; out Red, Green, Blue: Float)
16508: Procedure WinInet_HttpGet(const Url: string; Stream:TStream);
16509: Procedure HttpGet(const Url: string; Stream:TStream);
16510: Procedure WordToTwoBytes( AWord : Word; ByteArray : TIdBytes; Index : integer)
16511: Procedure WordWrap1Click( Sender : TObject)
16512: Procedure Write( const AOut : string)
16513: Procedure Write( Socket : TSocket)
16514: procedure Write(S: string);
16515: Procedure WriteBinaryStream( const Section, Name : string; Value : TStream)
16516: Procedure WriteBool( const Section, Ident : string; Value : Boolean)
16517: Procedure WriteBuffer( const ABuffer, AByteCount : Longint; const AWriteNow : Boolean)
16518: procedure WriteBuffer(Buffer:String;Count:LongInt)
16519: Procedure WriteCardinal( AValue : Cardinal; const AConvert : Boolean)
16520: Procedure WriteChar( AValue : Char)
16521: Procedure WriteDate( const Section, Name : string; Value : TDateTime)
16522: Procedure WriteDateTime( const Section, Name : string; Value : TDateTime)
16523: Procedure WriteFloat( const Section, Name : string; Value : Double)
16524: Procedure WriteHeader( AHeader : TStrings)
16525: Procedure WriteInteger( AValue : Integer; const AConvert : Boolean)
16526: Procedure WriteInteger( const Section, Ident : string; Value : Longint)
16527: Procedure WriteLn( const AOut : string)
16528: procedure Writeln(s: string);
16529: Procedure WriteLog( const FileName, LogLine : string)
16530: Procedure WriteRFCReply( AReply : TIdRFCReply)
16531: Procedure WriteRFCStrings( AStrings : TStrings)
16532: Procedure WriteSmallInt( AValue : SmallInt; const AConvert : Boolean)
16533: Procedure WriteStream(AStream:TStream;const AAll:Bool;const AWriteByteCount:Bool;const ASize:Int)
16534: Procedure WriteString( const Section, Ident, Value : String)
16535: Procedure WriteStrings( AValue : TStrings; const AWriteLinesCount : Boolean)
16536: Procedure WriteTime( const Section, Name : string; Value : TDateTime)
16537: Procedure WriteObjectResourceHeader( ObjStream, Output : TStream)
16538: Procedure Write16bitResourceHeader( const AName : TBytes; DataSize : Integer; Output : TStream)
16539: Procedure Write32bitResourceHeader( const AName : TBytes; DataSize : Integer; Output : TStream)
16540: procedure WStrSet(c : AnyString; I : Integer; var s : AnyString);
16541: procedure XMLSyntax1Click(Sender: TObject);
16542: Procedure XOR_Streams2( Dest, Srce : TMemoryStream)
16543: Procedure XOR_Streams3( Dest, SrceA, SrceB : TMemoryStream)
16544: Procedure ZeroFillStream( Stream : TMemoryStream) 16545: procedure XMLSyntaxlClick(Sender: TObject);
16546: Procedure ZeroMemory( Ptr : Pointer; Length : Longint)
16547: procedure(Control: TWinControl; Index: Integer; Rect: TRect; State: Byte)
16548: procedure(Control: TWinControl; Index: Integer; var Height: Integer)
16549: procedure (Sender, Source: TObject; X, Y: Integer; State: TDragState; var Accept: Boolean)
16550: procedure(Sender, Source: TObject; X, Y: Integer)
16551: procedure(Sender, Target: TObject; X, Y: Integer)
16552: procedure(Sender: TObject; ASection, AWidth: Integer)
16553: procedure (Sender: TObject; ScrollCode: TScrollCode; var ScrollPos: Integer)
16554: procedure (Sender: TObject; Shift: TShiftState; X, Y: Integer);
16555: procedure (Sender: TObject; var Action: TCloseAction)
16556: procedure(Sender: TObject; var CanClose: Boolean)
16557: procedure(Sender: TObject; var Key: Char);
16558: ProcedureName ProcedureNames ProcedureParametersCursor @
16560: ************Now Constructors constructor **********
16561: Size is: 1231 1115 996 628 550 544 501 459 (381) 16562: Attach( VersionInfoData : Pointer; Size : Integer)
16563: constructor Create( ABuckets : TBucketListSizes)
```

```
16564: Create( ACallBackWnd : HWND)
16565:
        Create( AClient : TCustomTaskDialog)
         Create( AClient : TIdTelnet)
16567:
         Create( ACollection : TCollection)
16568:
        Create( ACollection : TFavoriteLinkItems)
16569:
        Create( ACollection : TTaskDialogButtons)
        Create( AConnection : TIdCustomHTTP)
16570:
         Create( ACreateSuspended : Boolean)
16571:
        Create( ADataSet : TCustomSQLDataSet)
CREATE( ADATASET : TDATASET)
16572:
16573:
16574:
        Create( Aggregates : TAggregates; ADataSet : TCustomClientDataSet);
        Create( AGrid : TCustomDBGrid)
16575:
16576:
         Create( AGrid : TStringGrid; AIndex : Longint)
        Create( AHTTP : TIdCustomHTTP)
16577:
16578:
        Create( AListItems : TListItems)
16579:
        Create( AOnBytesRemoved : TIdBufferBytesRemoved)
        Create( AOnBytesRemoved : TIdBufferBytesRemoved)
16580:
16581:
         Create( AOwner : TCommonCalendar)
16582:
        Create( AOwner : TComponent)
16583:
        CREATE ( AOWNER :
                           TCOMPONENT)
16584:
         Create( AOwner : TCustomListView)
16585:
        Create( AOwner : TCustomOutline)
16586:
        Create( AOwner : TCustomRichEdit)
16587:
        Create( AOwner :
                           TCustomRichEdit; AttributeType : TAttributeType)
16588:
        Create( AOwner :
                           TCustomTreeView)
16589:
         Create( AOwner : TIdUserManager)
16590:
        Create( AOwner : TListItems)
16591:
        Create(
       AOwner: TObject; Handle: hDBICur; CBType: CBType; CBBuf: Ptr; CBBufSize: Int; CallbackEvent: TBDECallbackEvent;
       Chain: Bool)
16592: CREATE( AOWNER : TPERSISTENT)
16593:
        Create( AOwner : TPersistent)
16594:
        Create( AOwner : TTable)
16595:
        Create( AOwner : TTreeNodes)
                 AOwner : TWinControl; const ClassName : string
16596:
         Create(
16597:
        Create( AParent : TIdCustomHTTP)
16598:
        Create( AParent : TUpdateTree; AResolver : TCustomResolver)
        Create( AProvider : TBaseProvider)
16599:
16600:
        Create( AProvider : TCustomProvider)
16601:
         Create( AProvider : TDataSetProvider)
16602:
        Create( ASocket : TCustomWinSocket; TimeOut : Longint)
        Create( ASocket : TSocket)
16603:
        Create( AStrings : TWideStrings)
16604:
         Create( AToolBar : TToolBar)
16605:
        Create( ATreeNodes : TTreeNodes)
Create( Autofill : boolean)
16606:
16607:
        Create( AWebPageInfo : TAbstractWebPageInfo)
16608:
        Create( AWebRequest : TWebRequest)
16609:
16610:
         Create( Collection : TCollection)
16611:
        Create( Collection : TIdMessageParts; ABody : TStrings)
        Create( Collection : TIdMessageParts; const AFileName : TFileName)
16612:
        Create( Column : TColumn)
16613:
         Create( const AConvFamily : TConvFamily; const ADescription : string)
16614:
16615: Create( const AConvFamily: TConvFamily; const ADescription: string; const AFactor: Double)
16616: Create( const AConvFamily: TConvFamily; const ADescription: string; const AToCommonProc,
       AFromCommonProc : TConversionProc
16617:
       Create( const AInitialState : Boolean; const AManualReset : Boolean)
        Create( const ATabSet : TTabSet)
16618:
        Create( const Compensate : Boolean)
Create( const FileMap : TJclCustomFileMapping; Access, Size : Cardinal; ViewOffset : Int64)
Create( const FileName : string)
16619:
16620:
16621:
16622:
        Create( const FileName : string; FileMode: Cardinal; const Name: string; Protect: Cardinal; const MaximumSize
        : Int64; const SecAttr : PSecurityAttributes);
16623: Create( const FileName : string; FileMode : WordfmShareDenyWrite)
16624:
        Create( const MaskValue : string)
         Create(const Name:string; Protect:Cardinal;const MaximumSize:Int64;const SecAttr:PSecurityAttributes)
16626:
         Create( const Prefix : string)
16627:
        \texttt{Create(} \ \textbf{const} \ \texttt{sRegularExpression} : \ \textbf{string}; \ \texttt{xFlags} : \ \texttt{TniRegularExpressionMatchFlags})
        Create( const sRule : string; xFlags : TniRegularExpressionMatchFlags)
Create( const sRule : string; xFlags : TniRegularExpressionMatchFlags)
16628:
16629:
         Create( CoolBar : TCoolBar)
16630:
        Create( CreateSuspended : Boolean; ASocket : TServerClientWinSocket; Create( CreateSuspended : Boolean; ASocket : TServerWinSocket)
16631:
16632:
16633: Create( DataSet : TDataSet; const
        Text:Widestring;Options:TFilterOptions;ParserOptions:TParserOptions;const FieldName : Widestring;
        DepFields : TBits; FieldMap : TFieldMap)
16634: Create( DBCtrlGrid : TDBCtrlGrid)
        Create( DSTableProducer : TDSTableProducer)
16635:
        Create( DSTableProducer: TDSTableProducer; ColumnClass: THTMLTableColumnClass)
16636:
         Create( ErrorCode : DBIResult)
16638:
         Create( Field : TBlobField; Mode : TBlobStreamMode)
        Create( Grid : TCustomDBGrid; ColumnClass : TColumnClass)
16639:
        Create( HeaderControl : TCustomHeaderControl)
16640:
        Create( HTTPRequest : TWebRequest)
16641:
        Create( iStart : integer; sText : string)
Create( iValue : Integer)
16642:
16643:
        Create( Kind : TMmTimerKind; Notification : TMmNotificationKind)
16644:
16645:
        Create( MciErrNo : MCIERROR; const Msg : string)
16646: Create(MemoryStream:TCustomMemStream;FreeStream:Boolean;const AIndexOption:TJclMappedTextReaderIndex);
```

```
16647:
         Create( Message : string; ErrorCode : DBResult)
16648:
         Create( Msq : string)
          Create( NativeError, Context : string; ErrCode, PrevError : Integer; E : Exception)
16650:
          Create( NativeError, Context : string; ErrorCode, PreviousError : DBResult)
          \texttt{Create( oExpression: TniRegularExpression; eType: TniRegularExpressionStateType)}
16651:
         Create( oOwner : ThiRegularExpression; xFlags : ThiRegularExpressionMatchFlags)
Create(oSource:ThiRegularExpressState; oDestination:ThiRegularExprState; xCharacts:TCharSet; bLambda:bool)
16652:
16653:
          Create( Owner : EDBEngineError; ErrorCode : DBIResult; NativeError : Longint; Message : PChar)
16654:
16655:
         Create( Owner : TCustomComboBoxEx)
16656:
         CREATE( OWNER : TINDEXDEFS; const NAME, FIELDS: String; OPTIONS: TINDEXOPTIONS)
         Create( Owner : TPersistent)
16657:
         Create( Params : TStrings)
16659:
          Create( Size : Cardinal)
         Create( Socket : TSocket; ServerWinSocket : TServerWinSocket)
Create( StatusBar : TCustomStatusBar)
16660:
16661:
16662:
         Create( WebDispatcher : TCustomWebDispatcher; ItemClass : TCollectionItemClass)
          Create( WebResponse : TWebResponse; ItemClass : TCollectionItemClass)
16663:
16664:
          Create(AHandle:Integer)
         Create(AOwner: TComponent); virtual;
16665:
16666:
         Create(const AURI : string)
          Create(FileName:String; Mode:Word)
16667:
          Create(Instance:THandle;ResName:String;ResType:PChar)
16668:
16669:
         Create(Stream : TStream)
16670:
         Createl( ADataset : TDataset);
16671:
         Createl(const FileHandle:Thandle;const Name:string;Protect:Cardinal;const MaximumSize:Int64;const
        SecAttr:PSecurityAttributes);
16672:
        Createl( const FileName : string; const AIndexOption : TJclMappedTextReaderIndex);
16673:
         Create2( Other : TObject);
16674:
          CreateAt(FileMap: TJclCustomFileMapping; Access,Size:Cardinal;ViewOffset:Int64;Address: Pointer)
          CreateError(const anErrCode: Integer/const asReplyMessage: string/ const asErrorMessage: string)
16675:
16676:
          CreateFmt( MciErrNo : McIERROR; const Msg : string; const Args : array of const)
16677:
          CreateFromId(Instance:THandle;ResId:Integer;ResType:PChar)
16678:
         CreateLinked( DBCtrlGrid : TDBCtrlGrid)
16679:
          CREATENEW(AOWNER:TCOMPONENT; Dummy: Integer)
16680:
          CreateRes( Ident : Integer);
          CreateRes( MciErrNo : MCIERROR; Ident : Integer)
16681:
         CreateRes( ResStringRec : PResStringRec);
CreateResHelp( Ident : Integer; AHelpContext : Integer);
16682:
16683:
16684:
          CreateResHelp( ResStringRec : PResStringRec; AHelpContext
                                                                                     : Integer);
          CreateShadow( AOwner : TComponent; ControlSide : TControlSide)
16685:
16686:
         CreateSize( AWidth, AHeight : Integer)
         Open( const Name : string; const InheritHandle : Boolean; const DesiredAccess : Cardinal)
16687:
16688:
16689:
16690: unit uPSI_MathMax;
16691:
         CONSTS
16692:
16693:
           Bernstein: Float = 0.2801694990238691330364364912307; // Bernstein constant
                             = 1.2599210498948731647672106072782; // CubeRoot(2)
= 1.4422495703074083823216383107801; // CubeRoot(3)
16694:
           Cbrt2: Float
16695:
           Cbrt3: Float
                                 = 2.1544346900318837217592935665194; // CubeRoot(10)
16696:
           Cbrt10: Float
                                = 4.6415888336127788924100763509194; // CubeRoot(100)
= 1.4645918875615232630201425272638; // CubeRoot(PI)
16697:
           Cbrt100: Float
           CbrtPi: Float
16698:
                               = 0.9159655941772190150546035149324; // Catalan constant
= 3.1415926535897932384626433832795; // PI
16699:
           Catalan: Float
           PiJ: Float = 3.141592653589793238462643383279
PI: Extended = 3.1415926535897932384626433832795);
16700:
16701:
                               = 1.5707963267948966192313216916398;
16702:
           PiOn2: Float
                                = 1.0471975511965977461542144610932;  // PI / 3

= 0.78539816339744830961566084581988;  // PI / 4

= 1.4142135623730950488016887242097;  // Sqrt(2)

= 1.7320508075688772935274463415059;  // Sqrt(3)
16703:
           PiOn3: Float
16704:
           PiOn4: Float
16705:
           Sgrt.2: Float
16706:
           Sqrt3: Float
                                 = 2.2360679774997896964091736687313; // Sqrt(5)
= 3.1622776601683793319988935444327; // Sqrt(10)
= 1.7724538509055160272981674833411; // Sqrt(PI)
16707:
           Sgrt5: Float
16708:
           Sqrt10: Float
           SgrtPi: Float
16709:
16710:
           Sqrt2Pi: Float
                                 = 2.506628274631000502415765284811;
                                                                                 // Sqrt(2 * PI)
           TwoPi: Float
                                    6.283185307179586476925286766559;
16711:
                                = 9.4247779607693797153879301498385; // 3 * PI
= 0.69314718055994530941723212145818; // Ln(2)
= 2.3025850929940456840179914546844; // Ln(10)
16712:
           ThreePi: Float
16713:
           Ln2: Float
           Ln10: Float
16714:
                                 = 1.1447298858494001741434273513531; // Ln(PI)
           LnPi: Float
16715:
16716:
           Log2J: Float
                                 = 0.30102999566398119521373889472449; // Log10(2)
           Log3: Float
LogPi: Float
16717:
                                 = 0.47712125471966243729502790325512; // Log10(3)
                                 = 0.4971498726941338543512682882909; // Log10(PI)
= 0.43429448190325182765112891891661; // Log10(E)
16718:
           LogE: Float
16719:
                                = 0.434634615032516270511205105177 / DOSTOLE/
= 2.7182818284590452353602874713527; // Natural constant
= 0.91893853320467274178032973640562; // Ln(2*PI)/2
           E: Float
hLn2Pi: Float
16720:
16721:
16722:
           inv2Pi: Float
                                 = 0.15915494309189533576888376337251436203445964574046; // 0.5/Pi
           INVZFI: FIGAL = 0.159154543U9188533576888376337251436203445964574046; //
TwoToPower63: Float = 9223372036854775808.0; // 2^63
GoldenMean: Float = 1.618033988749894848204586834365638; // GoldenMean
EulerMascheroni: Float = 0.5772156649015328606065120900824; // Euler GAMMA
RadCor : Double = 57.29577951308232; {number of degrees in a radian}
16723:
16724:
16725:
16726:
                              = 57.2957/951300252.
: Extended = 0.00001; {delta for difference equations};
: Extended = 0.00001; {epsilon for difference equations};
: Theorer = 100; {max attempts for convergence}
16727:
           StDelta
16728:
           StEpsilon
16729:
           StMaxIterations : Integer = 100;
16730:
16731: procedure SIRegister_StdConvs(CL: TPSPascalCompiler);
16732: begin
16733:
           MetersPerInch = 0.0254; // [1]
           MetersPerFoot = MetersPerInch * 12;
```

```
16735:
                 MetersPerYard = MetersPerFoot * 3;
                 MetersPerMile = MetersPerFoot * 5280;
16736:
16737:
                 MetersPerNauticalMiles = 1852;
                 MetersPerAstronomicalUnit = 1.49598E11; // [4]
MetersPerLightSecond = 2.99792458E8; // [5]
MetersPerLightYear = MetersPerLightSecond * 31556925.9747; // [7]
16738:
16739:
16740:
16741:
                 MetersPerParsec = MetersPerAstronomicalUnit * 206264.806247096; // 60 * 60 * (180 / Pi)
                 MetersPerCubit = 0.4572; // [6][7]
MetersPerFathom = MetersPerFoot * 6;
16742:
16743:
                 MetersPerFurlong = MetersPerYard * 220;
16744:
                 MetersPerHand = MetersPerInch * 4;
MetersPerPace = MetersPerInch * 30;
16745:
16746:
16747:
                 MetersPerRod = MetersPerFoot * 16.5;
                 MetersPerChain = MetersPerRod * 4;
16748:
                 MetersPerLink = MetersPerRou * 4,

MetersPerLink = MetersPerChain / 100;

MetersPerPoint = MetersPerInch * 0.013837; // [7]

MetersPerPica = MetersPerPoint * 12;
16749:
16750:
16751:
16752:
                 SquareMetersPerSquareInch = MetersPerInch * MetersPerInch;
SquareMetersPerSquareFoot = MetersPerFoot * MetersPerFoot;
16753:
16754:
                 SquareMetersPerSquareYard = MetersPerYard * MetersPerYard;
16755:
                 SquareMetersPerSquareMile = MetersPerMile * MetersPerMile;
16756:
16757:
                 SquareMetersPerAcre = SquareMetersPerSquareYard * 4840;
                 SquareMetersPerSquareRod = MetersPerRod * MetersPerRod
16758:
16759:
16760:
                 CubicMetersPerCubicInch = MetersPerInch * MetersPerInch * MetersPerInch;
                 CubicMetersPerCubicFoot = MetersPerFoot * MetersPerFoot * MetersPerFoot;
CubicMetersPerCubicYard = MetersPerFoot * MetersPerFoot * MetersPerYard * MetersPerYa
16761:
16762:
16763:
                 CubicMetersPerCubicMile = MetersPerMile * MetersPerMile * MetersPerMile *
                 CubicMetersPerAcreFoot = SquareMetersPerAcre * MetersPerFoot;
CubicMetersPerAcreInch = SquareMetersPerAcre * MetersPerInch;
CubicMetersPerCord = CubicMetersPerCubicFoot * 128;
16764:
16765:
16766:
                 CubicMetersPerCordFoot = CubicMetersPerCubicFoot * 16;
16767:
16768:
                 CubicMetersPerUSFluidGallon = CubicMetersPerCubicInch * 231; // [2][3][7] CubicMetersPerUSFluidQuart = CubicMetersPerUSFluidGallon / 4; CubicMetersPerUSFluidQuart / 2;
16769:
16770:
16771:
16772:
                 CubicMetersPerUSFluidCup = CubicMetersPerUSFluidPint /
                 CubicMetersPerUSFluidGill = CubicMetersPerUSFluidCup / 2;
CubicMetersPerUSFluidOunce = CubicMetersPerUSFluidCup / 8;
16773:
16774:
16775:
                 CubicMetersPerUSFluidTablespoon = CubicMetersPerUSFluidOunce / 2;
                 CubicMetersPerUSFluidTeaspoon = CubicMetersPerUSFluidOunce / 6;
16776:
16777:
16778:
                 CubicMetersPerUSDryGallon = CubicMetersPerCubicInch * 268.8025; // [7]
                 CubicMetersPerUSDryQuart = CubicMetersPerUSDryGallon / 4;
CubicMetersPerUSDryPint = CubicMetersPerUSDryQuart / 2;
16779:
16780:
                 CubicMetersPerUSDryPeck = CubicMetersPerUSDryGallon *
16781:
                 CubicMetersPerUSDryBucket = CubicMetersPerUSDryPeck * 2;
16783:
                 CubicMetersPerUSDryBushel = CubicMetersPerUSDryBucket * 2;
16784:
16785:
                 CubicMetersPerUKGallon = 0.00454609; // [2][7]
16786:
                 CubicMetersPerUKPottle = CubicMetersPerUKGallon /
                 CubicMetersPerUKQuart = CubicMetersPerUKPottle /
16787:
                 CubicMetersPerUKPint = CubicMetersPerUKQuart / 2;
CubicMetersPerUKGill = CubicMetersPerUKPint / 4;
16788:
16789:
16790:
                 CubicMetersPerUKOunce = CubicMetersPerUKPint / 20;
                 CubicMetersPerUKPeck = CubicMetersPerUKGallon * 2;
16791:
                 CubicMetersPerUKBucket = CubicMetersPerUKPeck * 2;
CubicMetersPerUKBushel = CubicMetersPerUKBucket * 2;
16792:
16793:
16794:
16795:
                 GramsPerPound = 453.59237; // [1][7]
                 GramsPerDrams = GramsPerPound / 256;
GramsPerGrains = GramsPerPound / 7000;
GramsPerTons = GramsPerPound * 2000;
16796:
16797:
16798:
                 GramsPerLongTons = GramsPerPound * 2240;
GramsPerOunces = GramsPerPound / 16;
GramsPerStones = GramsPerPound * 14;
16799:
16800:
16801:
16802:
                 MaxAngle',( 9223372036854775808.0);
16803:
                 MaxTanH', (5678.2617031470719747459655389854);
16804:
                 MaxFactorial', 'LongInt').SetInt( 1754);
16805:
16806:
                 MaxFloatingPoint',(1.189731495357231765085759326628E+4932);
                 MinFloatingPoint', (3.3621031431120935062626778173218E-4932);
16807:
                 MaxTanH',( 354.89135644669199842162284618659);
16808:
                 MaxFactorial', 'LongInt').SetInt( 170);
16809:
                 MaxFloatingPointD',(1.797693134862315907729305190789E+308);
MinFloatingPointD',(2.2250738585072013830902327173324E-308);
16810:
16811:
                 MaxTanH', ( 44.361419555836499802702855773323);
MaxFactorial', 'LongInt').SetInt( 33);
16812:
16813:
                 MaxFloatingPointS',( 3.4028236692093846346337460743177E+38);
MinFloatingPointS',( 1.1754943508222875079687365372222E-38);
16814:
16815:
                 PiExt',( 3.1415926535897932384626433832795);
RatioDegToRad',( PiExt / 180.0);
RatioGradToRad',( PiExt / 200.0);
16816:
16817:
16818:
                 RatioDegToGrad',(200.0 / 180.0);
RatioGradToDeg',(180.0 / 200.0);
Crc16PolynomCCITT','LongWord').SetUInt($1021);
16819:
16820:
16821:
               Crc16PolynomIBM', 'LongWord').SetUInt($8005);
16822:
               Crc16Bits','LongInt').SetInt( 16);
```

```
Crc16Bytes','LongInt').SetInt( 2);
Crc16HighBit','LongWord').SetUInt( $8000);
16824:
16825:
           NotCrc16HighBit', 'LongWord').SetUInt( $7FFF);
Crc32PolynomIEEE', 'LongWord').SetUInt( $04C11DB7);
16827:
           Crc32PolynomCastagnoli','LongWord').SetUInt( $1EDC6F41);
Crc32Koopman','LongWord').SetUInt( $741B8CD7);
16828:
16829:
           Crc32Bits', 'LongInt').SetInt( 32);
Crc32Bytes', 'LongInt').SetInt( 4);
Crc32HighBit', 'LongWord').SetUInt( $80000000);
16830:
16831:
16832:
16833:
           NotCrc32HighBit','LongWord').SetUInt( $7FFFFFFF);
16834:
16835:
                                  = Low(Byte);
16836:
             MaxByte
                                 = High(Byte);
16837:
             MinWord
                                 = Low(Word);
16838:
             MaxWord
                                 = High(Word);
16839:
             MinShortInt
                                 = Low(ShortInt);
             MaxShortInt
                                 = High(ShortInt);
16840:
16841 .
             MinSmallInt
                                 = Low(SmallInt);
                                 = High(SmallInt);
16842:
             MaxSmallInt
16843:
             MinLongWord
                                  = LongWord(Low(LongWord));
16844:
             MaxLongWord
                                  = LongWord(High(LongWord));
16845:
             MinLongInt
                                  = LongInt(Low(LongInt));
16846:
             MaxLongInt
                                 = LongInt(High(LongInt));
16847:
             MinInt64
                                 = Int64(Low(Int64));
                                  = Int64(High(Int64));
16848:
             MaxInt64
             MinInteger
16849:
                                 = Integer(Low(Integer));
16850:
             MaxInteger
                                 = Integer(High(Integer));
16851:
             MinCardinal
                                = Cardinal(Low(Cardinal));
16852:
             MaxCardinal
                                 = Cardinal(High(Cardinal));
             MinNativeUInt = NativeUInt(Low(NativeUInt));
16853:
16854:
             MaxNativeUInt = NativeUInt(High(NativeUInt));
16855:
             MinNativeInt = NativeInt(Low(NativeInt));
16856:
             MaxNativeInt = NativeInt(High(NativeInt));
           Function CosH( const Z : Float) : Float;
Function SinH( const Z : Float) : Float;
16857:
16858:
16859:
           Function TanH( const Z : Float) : Float;
16860:
16861:
16862:
             //******from DMath.Dll Lib of types.inc in source\dmath_dll
16863:
             InvLn2
                         = 1.44269504088896340736; { 1/Ln(2) }
= 0.43429448190325182765; { 1/Ln(10)
16864:
             InvLn10
                                                                        1/Ln(10) }
                                                                     { 2*Pi } 
{ Pi/2 } 
{ Sqrt(Pi) } 
{ Sqrt(2*Pi) } 
{ 1/Sqrt(2*Pi) } 
{ 1/Sqrt(2*Pi) }
             TwoPi
PiDiv2
                            = 6.28318530717958647693;
16865:
                            = 1.57079632679489661923;
16866:
                            = 1.77245385090551602730;
16867:
             SgrtPi
             Sqrt2Pi
16868:
                            = 2.50662827463100050242;
                                                                        Sqrt(2*Pi)
             InvSqrt2Pi = 0.39894228040143267794;
                                                                        1/Sqrt(2*Pi)
16869:
             LnSqrt2Pi = 0.91893853320467274178;
Ln2PiDiv2 = 0.91893853320467274178;
                                                                     { Ln(Sqrt(2*P) 
 { Ln(2*Pi)/2 
 { Sqrt(2) } 
 { Sqrt(2)/2 }
16870:
                                                                        Ln(Sqrt(2*Pi)) }
                                                                        Ln(2*Pi)/2 }
16871:
             Sqrt2 = 1.41421356237309504880;
Sqrt2Div2 = 0.70710678118654752440;
16872:
16873:
             Gold = 1.61803398874989484821;
16874:
                                                                     { Golden Mean = (1 + Sqrt(5))/2 }
            GOLD = 0.38196601125010515179; { 2 - GOLD } MachEp = 2.220446049250313E-16; { 2^(-52) } MaxNum = 1.797693134862315E+308; { 2^1024 } MinNum = 2.225073858507202E-308; { 2^(-1022) } MaxLog = 709.7827128933840;
16875:
16876:
16877:
16878:
16879:
             MinLog = -708.3964185322641;
16880:
16881:
             MaxFac = 170;
             MaxGam = 171.624376956302;
MaxLqm = 2.556348E+305;
16882:
16883:
             SingleCompareDelta = 1.0E-34;
DoubleCompareDelta = 1.0E-280;
16884:
16885:
16886:
             {$IFDEF CLR}
             ExtendedCompareDelta = DoubleCompareDelta;
16887:
16888:
             { $ELSE }
             ExtendedCompareDelta = 1.0E-4400;
16889:
16890:
             { $ENDIF }
             Bytes1KB = 1024;

Bytes1MB = 1024 * Bytes1KB;

Bytes1GB = 1024 * Bytes1MB;
16891:
16892:
16893:
             BytesIdB = 1024 * BytesIMB;
Bytes64KB = 64 * Bytes1KB;
Bytes64MB = 64 * Bytes1MB;
Bytes2GB = 2 * LongWord(Bytes1GB);
clBlack32', $FF000000 ));
clDimGray32', $FF3F3F3F ));
16894:
16895:
16896:
16897:
16898:
16899:
                clGray32', $FF7F7F7F ));
               cleray32', $FF/F7F7F ));
clLightGray32', $FFBFBFBF ));
clWhite32', $FFFFFFFF ));
clMaroon32', $FF7F70000 ));
clGreen32', $FF7F7F00 ));
clOlive32', $FF7F7F00 ));
clNavv32', $FF000077 });
16900:
16901:
16902:
16903:
16904:
               clOlive32', $FF/F7F00 ));
clNavy32', $FF00007F ));
clPurple32', $FF7F007F ));
clTeal32', $FF007F7F ));
clRed32', $FF9000F0 ));
clLime32', $FF00FF00 ));
clYellow32', $FFFFF00 ));
clBlue32', $FF0000FF ));
16905:
16906:
16907:
16908:
16909:
16910:
16911:
                clFuchsia32', $FFFF00FF ));
```

```
16913:
                        clAqua32', $FF00FFFF ));
                        clAliceBlue32', $FFF0F8FF ));
16914:
                        clAntiqueWhite32', $FFFAEBD7 )
clAquamarine32', $FF7FFFD4 ));
                                                                   $FFFAEBD7 ));
16915:
16916:
                        clAzure32', $FFF0FFFF ));
clBeige32', $FFF5F5DC ));
clBisque32', $FFFFE4C4 ));
16917:
16918:
16919:
16920:
                         clBlancheDalmond32', $FFFFEBCD ));
                       clBlancheDalmond32', $FFFFEBCD
clBlueViolet32', $FF8A2BE2 ));
clBrown32', $FF852A2A ));
clBurlyWood32', $FFDEB887 ));
clCadetblue32', $FFF9EA0 ));
clChartReuse32', $FF7FFF00 ));
clChocolate32', $FFF2691E ));
clCoral32', $FFFF7F50 ));
16921:
16922:
16923:
16924:
16925:
16926:
16927:
16928:
                         clCornFlowerBlue32', $FF6495ED ));
                         clCornSilk32', $FFFFF8DC ));
16929:
                        clCrimson32', $FFDC143C ));
clDarkBlue32', $FF00008B ));
clDarkCyan32', $FF008B8B ));
16930:
16931:
16932:
16933:
                         clDarkGoldenRod32', $FFB8860B ));
                        clDarkGray32', $FFA9A9A9 ));
clDarkGreen32', $FF006400 ));
clDarkGrey32', $FFA9A9A9 ));
clDarkKhaki32', $FFBDB76B ));
clDarkMagenta32', $FF8B008B ));
16934:
16935:
16936:
16937:
16938:
16939:
                        clDarkOliveGreen32', $FF556B2F ));
clDarkOrange32', $FFFF8C00 ));
clDarkOrchid32', $FF9932CC ));
16940:
16941:
                         clDarkRed32', $FF8B0000 ));
16942:
                        clDarkSalmon32', $FFE9967A ));
clDarkSeaGreen32', $FF8FBC8F ));
clDarkSlateBlue32', $FF483D8B ));
clDarkSlateGray32', $FF2F4F4F ));
clDarkSlateGrey32', $FF2F4F4F ));
16943:
16944:
16945:
16946:
16947:
16948:
                         clDarkTurquoise32', $FF00CED1 ));
                        clDarkViolet32', $FF9400D3 ));
clDeepPink32', $FFFF1493 ));
16949:
16950:
                        clDeepPink32', $FFFF1493 ));
clDeepSkyBlue32', $FF00BFFF ));
clDodgerBlue32', $FF1E90FF ));
clFireBrick32', $FFB22222 ));
clFloralWhite32', $FFFDCDCDC ));
clGainsBoro32', $FFDCDCDC ));
clGhostWhite32', $FFFFFFFF ));
clCold22', $FFFFFFFF );
16951:
16952:
16953:
16954:
16955:
16956:
                        clGold32', $FFFFD700 ));
clGoldenRod32', $FFDAA520 ));
clGreenYellow32', $FFADFF2F ));
16957:
16958:
16959:
                         clGrey32', $FF808080 ));
16961:
                         clHoneyDew32', $FFF0FFF0 ));
                        clHotPink32', $FFFF69B4 ));
clIndianRed32', $FFCD5C5C ));
16962:
16963:
                        clindianRed32', $FFCD5CSC');
clIndigo32', $FFFB0082');
clIvory32', $FFFFFFF0'));
clKhaki32', $FFF0E68C'));
clLavender32', $FFFE6E6FA');
clLavenderBlush32', $FFFFF0F5');
16964:
16965:
16966:
16967:
16968:
                         clLawnGreen32', $FF7CFC00 ));
16969:
                         clLemonChiffon32', $FFFFFACD ));
16970:
                        clLightBlue32', $FFADD8E6 ));
clLightCoral32', $FFF08080 ));
clLightCyan32', $FFF0FFFF ));
clLightGoldenRodYellow32', $FFFAFAD2 ));
16971:
16972:
16973:
16974:
                        clLightGreen32', $FF90EE90));
clLightGrey32', $FF03D3D3));
clLightPink32', $FFFB6C1));
clLightSalmon32', $FFFFBA07A));
clLightSeagreen32', $FFF0B2AA));
16975:
16976:
16977:
16978:
16979:
                        clLightSkyblue32', $FF87CEFA ));
clLightSlategray32', $FF778899 ));
clLightSlategrey32', $FF778899 ));
clLightSteelblue32', $FF80C4DE ));
16980:
16981:
16982:
16983:
                        clLightYellow32', $FFFFFFE0 ));
clLtGray32', $FFF0C0C0 ));
clMedGray32', $FFA0A0A4 ));
clDkGray32', $FF808080 ));
16984:
16985:
16986:
16987:
                        clboneyGreen32', $FFC0DCC0 ));
clLegacySkyBlue32', $FFA6CAF0 ));
clCream32', $FFFFBF0 ));
clLimeGreen32', $FF32CD32 ));
16988:
16989:
16990:
16991:
                         clLinen32', $FFFAF0E6 ));
16992:
                         clMediumAquamarine32', $FF66CDAA ));
16993:
                        clMediumAquamarine32', $FF66CDAA ));
clMediumBlue32', $FF0000CD ));
clMediumOrchid32', $FF985D3 ));
clMediumPurple32', $FF9370DB ));
clMediumSeaGreen32', $FF3CB371 ));
clMediumSlateBlue32', $FF7868EE ));
clMediumSpringGreen32', $FF00FA9A ));
clMediumTurquoise32', $FF48DlCC ));
clMediumVioletRed32', $FF771585 ));
16994:
16995:
16996:
16997:
16998:
16999:
17000:
17001:
```

```
17002:
                    clMidnightBlue32', $FF191970 ));
                   clminingnible32', $FFF191970 ))
clMintCream32', $FFFFFFA ));
clMistyRose32', $FFFFE4B1 ));
clMoccasin32', $FFFFE4B5 ));
clNavajoWhite32', $FFFFDEAD ));
17003:
17004:
17005
17006:
                   clOldLace32', $FFFDF5E6 ));
clOliveDrab32', $FF6B8E23 ));
17007:
17008:
                   clotrebrab22', $FFFBA500 ));
clorangeRed32', $FFFF4500 ));
clorchid32', $FFDA70D6 ));
clPaleGoldenRod32', $FFEEE8AA ));
17009:
17010:
17011:
17012:
                    clPaleGreen32', $FF98FB98 ));
17013:
17014:
                   clPaleTurquoise32', $FFAFEEEE ));
clPaleVioletred32', $FFDB7093 ));
17015:
                   clPanevioletred32 , $FFFDB7093
clPanevioletred32 , $FFFFED5 ));
clPeachPuff32', $FFFFDAB9 ));
17016:
17017:
                   clPeru32', $FFCD853F ));
clPlum32', $FFDDA0DD ));
17018:
17019
                   17020:
17021:
17022:
17023:
                   clsalmon32', $FFFA8072 ));
clsandyBrown32', $FFF4A460 ));
clseaGreen32', $FF2E8B57 ));
clseaShell32', $FFFFF5EE ));
17024:
17025:
17026:
17027:
                   clsienma32', $FFA0522D ));
clsilver32', $FFC0C0CO ));
clskyblue32', $FF87CEEB ));
clslateBlue32', $FF6A5ACD ));
clslateGray32', $FF708090 ));
17028:
17029:
17030:
17031:
17032:
                   clSlateGrey32', $FF708090 ));
clSnow32', $FFFFFAFA ));
17033:
17034:
                   clsnows2 , $FFFFFAFA ///
clSpringgreen32', $FF00FF7F ));
clSteelblue32', $FF4682B4 ));
17035:
17036:
                   clTan32', $FFD2B48C ));
clThistle32', $FFD8BFD8 ));
clTomato32', $FFFF6347 ));
17037:
17038:
17039:
17040:
                    clTurquoise32', $FF40E0D0 ));
                   clViolet32', $FFEE82EE ));
clWheat32', $FFF5DEB3 ));
17041:
17042:
                   clWhitesmoke32', $FFF5F5F5 ));
clYellowgreen32', $FF9ACD32 ));
17043:
17044:
                   clTrWhite32', $7FFFFFFF ));
clTrBlack32', $7F000000 ));
17045:
17046:
                   clTrRed32', $7FFF0000 ));
clTrGreen32', $7F00FF00 ));
clTrBlue32', $7F000FF ));
17047:
17048:
17050:
                 // Fixed point math constants
17051:
                FixedOne = $10000; FixedHalf = $7FFF;
FixedPI = Round(PI * FixedOne);
17052:
17053:
                FixedToFloat = 1/FixedOne;
17054:
17055:
              Special Types
17056:
                type Complex = record
17057:
                   X, Y : Float;
17058:
                end;
17059:
17060:
                type TVector
                                              = array of Float;
                TIntVector = array of Integer;
TCompVector = array of Complex;
17061:
17062:
17063:
                TBoolVector = array of Boolean;
17064:
                TStrVector = array of String;
17065:
                TMatrix
                                    = array of TVector;
                TIntMatrix = array of TIntVector;
17066:
                TCompMatrix = array of TCompVector;
17067:
17068:
                TBoolMatrix = array of TBoolVector;
                TStrMatrix = array of TStrVector;
TStrMatrix = array of TStrVector;
TByteArray = array[0..32767] of byte;!
THexArray = array[0..15] of Char; // = '0123456789ABCDEF';
TBitmapStyle = (bsNormal, bsCentered, bsStretched);
17069:
17070:
17071:
17072:
17073:
                T2StringArray = array of array of string;
                T2IntegerArray = array of array of integer;
AddTypeS('INT_PTR', 'Integer
AddTypeS('LONG_PTR', 'Integer
17074:
17075:
17076:
                AddTypeS('UINT_PTR', 'Cardinal
17077:
                AddTypeS('ULONG_PTR', 'Cardinal'
AddTypeS('DWORD_PTR', 'Cardinal'
AddTypeS('DWORD_PTR', 'ULONG_PTR'
TIntegerDynArray', 'array of Integer
TCardinalDynArray', 'array of Cardinal
17078:
17079:
17080:
17081:
17082:
                TWordDynArray', 'array of Word
               TWordDynArray', 'array of Word
TSmallIntDynArray', 'array of SmallInt
TByteDynArray', 'array of Byte
TShortIntDynArray', 'array of ShortInt
TInt64DynArray', 'array of Int64
TLongWordDynArray', 'array of LongWord
TSingleDynArray', 'array of Single
TDoubleDynArray', 'array of Double
TBooleanDynArray', 'array of Boolean
17083:
17084:
17085:
17086:
17087:
17088:
17089:
17090:
```

```
TStringDynArray', 'array of string
17091:
17092:
          TWideStringDynArray', 'array of WideString
          TDynByteArray = array of Byte;
TDynShortintArray = array of Shortint;
17093:
17094 .
17095:
          TDynSmallintArray = array of Smallint;
          TDynWordArray = array of Word;
TDynIntegerArray = array of Integer
17096:
17097:
          TDynLongintArray = array of Longint;
17098:
17099:
          TDynCardinalArray = array of Cardinal;
17100:
          TDynInt64Array
                             = array of Int64;
17101:
          TDynExtendedArray = array of Extended;
          TDynDoubleArray = array of Double;
TDynSingleArray = array of Single;
17102:
17103:
17104:
          TDynFloatArray
                              = array of Float;
17105:
          TDynPointerArray = array of Pointer;
17106:
          TDynStringArray
                             = array of string;
          TSynSearchOption = (ssoMatchCase, ssoWholeWord, ssoBackwards,
17107:
17108:
            ssoEntireScope, ssoSelectedOnly, ssoReplace, ssoReplaceAll, ssoPrompt);
17109:
          TSvnSearchOptions = set of TSynSearchOption;
17110:
17111:
17112:
17113: //* Project : Base Include RunTime Lib for maXbox *Name: pas_includebox.inc
17114: -----
17115: procedure drawPolygon(vPoints: TXYVector; cFrm: TForm);
17116: procedure drawPlot(vPoints: TXYVector; cFrm: TForm; vcolor: integer);
17117: procedure SaveCanvas(vCanvas: TCanvas; FileName: string);
17118: procedure SaveCanvas2(vCanvas: TCanvas; FileName: string);
17119: function CheckStringSum(vstring: string): integer;
17120: function HexToInt(HexNum: string): LongInt;
17121: function IntToBin(Int: Integer): String;
17122: function BinToInt(Binary: String): Integer;
17123: function HexToBin(HexNum: string): string; external2
17124: function BinToHex(Binary: String): string;
17125: function IntToFloat(i: Integer): double;
17126: function AddThousandSeparator(S: string; myChr: Char): string;
17127: function Max3(const X,Y,Z: Integer): Integer;
17128: procedure Swap(var X,Y: char); // faster without inline
17129: procedure ReverseString(var S: String);
17130: function CharToHexStr(Value: Char): string;
17131: function CharToHoxOt(Value: Char): string;
17132: function Hex2Dec(Value: Str002): Byte;
17133: function HexStrCodeToStr(Value: string): string;
17134: function HexToStr(i: integer; value: string): string;
17135: function UniCodeToStr(Value: string): string;
17136: function CRC16(statement: string): string;
17137: function SearchForSubstrings(aStrList: TStrings; aSearchStr1, aSearchStr2: string): string;
17138: procedure SearchAndReplace(aStrList: TStrings; aSearchStr, aNewStr: string);
17139: procedure ShowInterfaces(myFile: string);
17140: function Fact2(av: integer): extended;
17141: Function BoolToStr(B: Boolean): string;
17142: Function GCD(x, y : LongInt) : LongInt;
17143: function LCM(m,n: longint): longint;
17144: function GetASCII: string;
17145: function GetItemHeight(Font: TFont): Integer;
17146: function myPlaySound(s: pchar; flag,syncflag: integer): boolean;
17147: function myGetWindowsDirectory(lpBuffer: PChar; uSize: longword): longword;
17148: function getHINSTANCE: longword;
17149: function getHMODULE: longword;
17150: function GetASCII: string;
17151: function Byte1s0k(const AByte: string; var VB: Byte): boolean; 17152: function WordIs0k(const AWord: string; var VW: Word): boolean;
17153: function TwentyFourBitValueIsOk(const AValue: string; var VI: Integer): boolean;
17154: function LongIsOk(const ALong: string; var VC: Cardinal): boolean;
17155: function SafeStr(const s: string): string;
17156: function ExtractUrlPath(const FileName: string): string
17157: function ExtractUrlName(const FileName: string): string
17158: function IsInternet: boolean;
17159: function RotateLeft1Bit u32( Value: uint32): uint32;
17160: procedure LinearRegression(const KnownY:array of Double; Const KnownX: array of Double; NData:Int; var
       LF:TStLinEst; ErrorStats : Boolean);
17161: procedure getEnvironmentInfo;
17162: procedure AntiFreeze;
17163: function GetCPUSpeed: Double;
17164: function IsVirtualPcGuest : Boolean;
17165: function IsVmWareGuest : Boolean;
17166: procedure StartSerialDialog;
17167: function IsWoW64: boolean;
17168: function IsWow64String(var s: string): Boolean;
17169: procedure StartThreadDemo;
17170: Function RGB(R,G,B: Byte): TColor;
17171: Function Sendln(amess: string): boolean;
17172: Procedure maXbox;
17173: Function AspectRatio(aWidth, aHeight: Integer): String;
17174: function wget(aURL, afile: string): boolean;
17175: procedure PrintList(Value: TStringList);
17176: procedure PrintImage(aValue: TBitmap; Style: TBitmapStyle);
17177: procedure getEnvironmentInfo;
17178: procedure AntiFreeze;
```

```
17179: function getBitmap(apath: string): TBitmap;
17180: procedure ShowMessageBig(const aText : string);
17181: function YesNoDialog(const ACaption, AMsg: string): boolean;
17182: procedure SetArrayLength2String(arr: T2StringArray; asize1, asize2: integer); 17183: procedure SetArrayLength2Integer(arr: T2IntegerArray; asize1, asize2: integer);
17184: //function myStrToBytes(const Value: String): TBytes;
17185: //function myBytesToStr(const Value: TBytes): String;
17186: function SaveAsExcelFile(AGrid: TStringGrid; ASheetName, AFileName: string; open: boolean): Boolean;
17187: function getBitmap(apath: string): TBitmap;
17188: procedure ShowMessageBig(const aText : string);
17189: Function StrToBytes(const Value: String): TBytes;
17190: Function BytesToStr(const Value: TBytes): String;
17191: function SaveAsExcelFile(AGrid: TStringGrid; ASheetName, AFileName: string; open: boolean): Boolean;
17192: function ReverseDNSLookup(const IPAdrs:String;const DNSServer:String;Timeout,Retries:Int;var
        HostName:String):Bool;
17193: function FindInPaths(const fileName, paths : String) : String;
17194: procedure initHexArray(var hexn: THexArray);
17195: function josephusG(n,k: integer; var graphout: string): integer; 17196: function isPowerof2(num: int64): boolean;
17197: function powerOf2(exponent: integer): int64;
17198: function getBigPI: string;
17199: procedure MakeSound(Frequency{Hz}, Duration{mSec}: Integer; Volume: TVolumeLevel; savefilePath: string);
17200: function GetASCIILine: string;
17201: procedure MakeComplexSound(N:integer{stream # to use}; freqlist:TStrings; Duration{mSec}: Integer; 17202: pinknoise: boolean; shape: integer; Volume: TVolumeLevel);
17203: procedure SetComplexSoundElements(freqedt,Phaseedt,AmpEdt,WaveGrp:integer)
17204: procedure AddComplexSoundObjectToList(newf,newp,newa,news:integer; freqlist: TStrings);
17205: function mapfunc(ax, in_min, in_max, out_min, out_max: integer): integer; 17206: function mapmax(ax, in_min, in_max, out_min, out_max: integer): integer;
17207: function isKeypressed: boolean;
17208: function Keypress: boolean;
17209: procedure StrSplitP(const Delimiter: Char; Input: string; const Strings: TStrings);
17210: function ReadReg(Base: HKEY; KeyName, ValueName: string): string;
17211: function ReadRegistry(Base: HKEY; KeyName, ValueName: string): string;
17212: function GetOSName: string
17213: function GetOSVersion: string;
17214: function GetOSNumber: string;
17215: function getEnvironmentString: string;
17216: procedure StrReplace(var Str: String; Old, New: String);
17217: procedure SendEmail(mFrom, mTo, mSubject, mBody, mAttachment: variant);
17218: function getTeamViewerID: string;
17219: Procedure RecurseDirectory(Dir:String; IncludeSubs:boolean; callback:TFileCallbackProcedure);
17220: Procedure RecurseDirectory2(Dir : String; IncludeSubs : boolean);
17221: procedure WinInet_HttpGet(const Url: string; Stream:TStream);
17222: procedure GetQrCode2(Width, Height: Word; Correct_Level: string; const Data: string; apath: string);
17223: function StartSocketService: Boolean;
17224: procedure StartSocketServiceForm;
17225: function GetFileList(FileList: TStringlist; apath: string): TStringlist;
17226: function GetFileList1(apath: string): TStringlist;
17227: procedure LetFileList(FileList: TStringlist; apath: string);
17228: procedure StartWeb(aurl: string);
17229: function GetTodayFiles(startdir, amask: string): TStringlist;
17230: function PortTCPIsOpen(dwPort: Word; ipAddressStr: String): boolean;
17231: function JavahashCode(val: string): Integer;
17232: procedure PostKeyEx32(key: Word; const shift: TShiftState; specialkey: Boolean); 17233: procedure SaveBytesToFile2(const Data: Sysutils.TBytes; const FileName: string);
17234: Procedure HideWindowForSeconds(secs: integer);
                                                                   {//3 seconds}
17235: Procedure HideWindowForSeconds2(secs: integer; apphandle, aself: TForm); {//3 seconds}
17236: Procedure ConvertToGray(Cnv: TCanvas);
17237: function GetFileDate(aFile:string; aWithTime:Boolean):string;
17238: procedure ShowMemory;
17239: function ShowMemory2: string
17240: function getHostIP: string;
17241: procedure ShowBitmap(bmap: TBitmap);
17242: function GetOsVersionInfo: TOSVersionInfo;
                                                                  //thx to wischnewski
17243:
17244:
17245: // News of 3.9.8 up
17246: Halt-Stop Program in Menu, WebServer2, Stop Event Recompile,
17247: Conversion Routines, Prebuild Forms, more RCData, DebugOutString 17248: CodeSearchEngine to search code patterns in /examples <Ctrl F3>
17249: JvChart - TJvChart Component - 2009 Public
17250: MemoryLeakReport in ini-file (MEMORYREPORT=Y)
17251: PerlRegEx PCRE obj lib included, Perl & Python Syntax Editor, bitbox3 logic example 17252: TAdoQuery.SQL.Add() fixed, ShLwAPI extensions, Indy HTTPHeader Extensions
17253: DMath DLL included incl. Demos
17254: Interface Navigator menu/View/Intf Navigator
17255: Unit Explorer menu/Debug/Units Explorer
17256: EKON 16 Slides ..\maxbox3\docs\utils Excel Export maXcel
                   19 WinCOM with Arduino Tutorial 20 RegEx Coding
17257: Tutorial
17258: Script History to 9 Files WebServer light /Options/Addons/WebServer
17259: Full Text Finder, JVSimLogic Simulator Package
17260: Halt-Stop Program in Menu, WebServer2, Stop Event
17261: Conversion Routines, Prebuild Forms, CodeSearch
17262: Halt-Stop Program in Menu, WebServer2, Stop Event Recompile, 17263: Conversion Routines, Prebuild Forms, more RCData, DebugOutString
17264: CodeSearchEngine to search code patterns in /examples <Ctrl F3> 17265: JvChart - TJvChart Component - 2009 Public, mXGames, JvgXMLSerializer, TJvPaintFX 17266: Compress-Decompress Zip, Services Tutorial22, Synopse framework, PFDLib
```

```
17267: SynEdit API, Macro, Macro Recorder, DLL Spy, Configuration Tutorial
17268: IDE Reflection API, Session Service Shell S3
17269: additional SynEdit API, isKeyPressed Routine, Bookmarks, OpenToolsAPI Catalog (OTAC)
17270: Class TMonitor, Configuration Tutorial maxbox_starter25.pdf, Chess.dll Game
17271: arduino map() function, PMRandom Generator
17272: StBarCode Lib, StreamReaderClass, BarCode Package, Astro Package 17273: more ShellAPI, add 32 more units, Simulated Annealing, GenAlgo
17274: REST Test Lib, Multilang Component, Forth Interpreter
17275: New Macros, Sendmail (instant email), DevCUnits, Tetris Addon
17276: DCOM, MDAC, MIDI, TLS support, Posmarks, Utils Addon
17277: Routines for LaTeX/PS, Utils Addon, Indy Package3, TAR Archive, @Callbacks 17278: Routines for LaTeX/PS, Utils Addon, Indy Package3, TAR Archive, @Callbacks
17279: First LCL of Lazarus, CmdLine API, ToDo List, 36 more Units preCompiled
17280: QRCode Service, add more CFunctions like CDateTime of Synapse
17281: Gamma Functions, IndyPackage4, HotLog Threadable, FormTemplateLibrary FTL
17282: Nonlinear regression, ADO Workbench Addon, Assign fixing, IntfNavigator fixing, Applet
17283: 30 more Units preCompiled, QRCode Indy Service, more CFunctions like CFill or SRand
17284: RestartDialog, RTF, SQL Scanner, RichEdit, 15 more Units
17285: Tool Section, SOAP Tester, Hot Log Logger2, TCPPortScan, 28 more Units
17286: BOLD Package, Indy Package5, maTRIx. MATHEMAX
17287: SPS Utils WDOS, Plc BitBus (PetriNet), 40 more units
17288: emax layers: system-package-component-unit-class-function-block
17289: HighPrecision Timers, Indy Package6, AutoDetect, UltraForms 17290: Reversi, GOL, bugfixing, 8 more units, Tutorial 24 Clean Code 17291: Tutorial 18_3 RGB LED, OpenGL Geometry, maxpix, statictext
17292: OpenGL Game Demo: ..Options/Add Ons/Reversi
17293: IBUtils Refactor, InterBase Package, DotNet Routines (JvExControls)
17294: add 31 units, mX4 Introduction Paper, more Socket&Streams, ShortString Routines 17295: 7% performance gain (hot spot profiling)
17296: PEP -Pascal Education Program , GSM Module, CGI, PHP Runner
17297: add 42 + 22 (64 units), memcached database, autobookmark, Alcinoe PAC, 17298: Orpheus PAC, AsyncFree Library advapi32 samples, FirebirdExp+MySQL units
                     (64 units), memcached database, autobookmark, Alcinoe PAC, IPC Lib
17299: FBX Lib, psAPI, SMS Cell Module, OpenGL, Borland Tools
17300:
17301: add routines in 3.9.7.5
17302: 097: procedure RIRegister_BarCodeScaner_Routines(S: TPSExec);
17303: 996: procedure RIRegister_DBCtrls_Routines(S: TPSExec);
17304: 069: procedure RIRegister_IdStrings_Routines(S: TPSExec);
17305:
       516: procedure RIRegister_JclMultimedia_Routines(S: TPSExec);
17306:
       215: procedure RIRegister_PNGLoader_Routines(S: TPSExec);
17307: 374: procedure RIRegister_SerDlgs_Routines(S: TPSExec);
17308: 777: procedure RIRegister_LinarBitmap_Routines(S: TPSExec);
17309:
17311:
          SelftestPEM;
          SelfTestCFundamentIItils;
17312:
          SelfTestCFileUtils;
17313:
17314:
          SelfTestCDateTime;
17315:
          SelfTestCTimer;
17316:
          SelfTestCRandom;
17317:
          Test with e.g.: Assert(PathHasDriveLetter('A:'), 'PathHasDriveLetter
17318:
                     Assert(WinPathToUnixPath('\c\d.f') = '/c/d.f', 'WinPathToUnixPath
17319:
17320:
          // Note: There's no need for installing a client certificate in the
17321:
         11
                    webbrowser. The server asks the webbrowser to send a certificate but
                    if nothing is installed the software will work because the server
17322:
17323:
                    doesn't check to see if a client certificate was supplied. If you want you can install:
17324:
17325:
                    file: c_cacert.p12
17326:
          11
                    password: c_cakey
17327:
17328:
          TGraphicControl = class(TControl)
17329:
          private
            FCanvas: TCanvas;
17330:
            procedure WMPaint(var Message: TWMPaint); message WM PAINT;
17331:
17332:
          protected
17333:
            procedure Paint; virtual;
17334:
            property Canvas: TCanvas read FCanvas;
17335:
          public
            constructor Create(AOwner: TComponent); override;
17336:
17337:
            destructor Destroy; override;
17338:
17339:
17340:
          TCustomControl = class(TWinControl)
17341:
          private
17342:
            FCanvas: TCanvas;
17343:
            procedure WMPaint(var Message: TWMPaint); message WM_PAINT;
17344:
          protected
17345:
            procedure Paint; virtual;
            procedure PaintWindow(DC: HDC); override;
17346:
17347:
            property Canvas: TCanvas read FCanvas;
17348:
          public
17349:
            constructor Create(AOwner: TComponent); override;
17350:
            destructor Destroy; override;
17351:
17352:
            RegisterPublishedProperties;
            ('ONCHANGE', 'TNotifyEvent', iptrw);
('ONCLICK', 'TNotifyEvent', iptrw);
17353:
17354:
17355:
             ('ONDBLCLICK', 'TNotifyEvent', iptrw);
```

```
('ONENTER', 'TNotifyEvent', iptrw);
('ONEXIT', 'TNotifyEvent', iptrw);
('ONKEYDOWN', 'TKeyEvent', iptrw);
('ONKEYPRESS', 'TKeyPressEvent', iptrw);
17356:
17357:
17358:
17359:
17364:
         // To stop the while loop, click on Options/Show Include (boolean switch)!
        Control a loop in a script with a form event:
17365:
         IncludeON;
                      //control the while loop
17366:
17367:
         while maxform1.ShowInclude1.checked do begin //menu event Options/Show Include
17368:
17369: //--
17371: //-
                                       ------
17372:
        using config file maxboxdef.ini
                                              menu/Help/Config File
17373:
17374: //*** Definitions for maXbox mX3 ***
17375: [FORM]
17376: LAST_FILE=E:\maxbox\maxbox3\examples\140_drive_typedemo.txt //history up to 10 files
17377: FONTSIZE=14
17378: EXTENSION=txt
17379: SCREENX=1386
17380: SCREENY=1077
17381: MEMHEIGHT=350
17382: PRINTFONT=Courier New //GUI Settings
17383: LINENUMBERS=Y //line numbers at gutter in editor at left side
17384: EXCEPTIONLOG=Y //store excepts and success in 2 log files see below! - menu Debug/Show Last Exceptions
17385: EXECUTESHELL=Y //prevents execution of ExecuteShell() or ExecuteCommand()
17386: BOOTSCRIPT=Y
                       //enabling load a boot script
17387: MEMORYREPORT=Y //shows memory report on closing maXbox
17388: MACRO=Y
                       //expand macros (see below) in code e.g. #path:E:\maxbox\maxbox3\docs\
17389: NAVIGATOR=N
                       //shows function list at the right side of editor
17390: NAVWIDTH=350
                       //width of the right side interface list <CTRL L>
17391: AUTOBOOKMARK=Y //sets on all functions a bookmark to jump
17392: [WEB]
17393: IPPORT=8080
                      //for internal webserver - menu /Options/Add Ons/WebServer
17394: IPHOST=192
17395: ROOTCERT=filepathY
17396: SCERT=filepathY
17397: RSAKEY=filepathy
17398: VERSIONCHECK=Y
17399:
17400: using Logfile: maxboxlog.log , Exceptionlogfile: maxboxerrorlog.txt
17401:
17402: Also possible to set report memory in script to override ini setting
17403: procedure Set_ReportMemoryLeaksOnShutdown(abo: boolean)
17404:
17405:
17406: After Change the ini {\bf file} you can reload the {\bf file} with ../Help/Config Update
17407:
17408: //-----
17410: //-----
17411: //*** Definitions for maXMail ***
17412: //sendemail, HOST=mail.hover.com, PORT=465 (SSL)
17413: [MAXMAIL]
17414: HOST=getmail.softwareschule.ch
17415: USER=mailusername
17416: PASS=password
17417: PORT=110
17418: SSL=Y
17419: BODY=Y
17420: LAST=5
17421:
17422: ADO Connection String:
17423: Provider=MSDASQL;DSN=mx3base;Uid=sa;Pwd=admin
17424:
17425: OpenSSL Lib: unit ssl openssl lib;
17426: {$IFDEF CIL}
17427: const
         {$IFDEF LINUX}
DLLSSLName = 'libssl.so';
17428:
17429:
         DLLUtilName = 'libcrypto.so';
17430:
17431:
        DLLSSLName = 'ssleay32.dll';
DLLUtilName = 'libeay32.dll';
17432:
17433:
         \{$ENDIF\}
17434:
17435: {$ELSE}
17436: var
        {$IFNDEF MSWINDOWS}
17437:
           { $IFDEF DARWIN }
17438:
           DLLSSLName: string = 'libssl.dylib';
17439:
17440:
           DLLUtilName: string = 'libcrypto.dylib';
17441:
17442:
           DLLSSLName: string = 'libssl.so';
DLLUtilName: string = 'libcrypto.so';
17443:
17444:
```

```
17445:
            {SELSE}
            DLLSSLName: string = 'ssleay32.dll';
DLLSSLName2: string = 'libssl32.dll';
DLLUtilName: string = 'libeay32.dll';
17446:
17448 .
17449:
            { $ENDIF }
17450: { SENDIF }
17451:
17452:
17453:
17454: /
17457:
            asm #name #hostmAPSN2APSN211le, #head, max: APSN21: 04.01.2014 19:05:50
17458:
         E:\maxbox\maxbox3\docs\maxbox_extract_funclist399.txt end
17459:
17460: //Tag Macros
17461 .
            asm #name, #date, #host, #path, #file, #head, #sign #tech #net end
17462:
17463:
17464: //Tag Macros
17464: //Iag Macros
17465: 10188: SearchAndCopy(memol.lines, '#name', getUserNameWin, 11);
17466: 10189: SearchAndCopy(memol.lines, '#date', datetimetoStr(now), 11);
17467: 10190: SearchAndCopy(memol.lines, '#host', getComputernameWin, 11);
17468: 10191: SearchAndCopy(memol.lines, '#path', fpath, 11);
17469: 10192: SearchAndCopy(memol.lines, '#file', fname, 11);
17470: 10199 SearchAndCopy(memol.lines, "#file', fname +' '+SHA1(Act_Filename), 11);
17471: 10193: SearchAndCopy(memol.lines, "#fils', fname +' '+SHA1(Act_Filename), 11);
17472: 10194: SearchAndCopy(memol.lines, "#locs', intToStr(getCodeEnd), 11);
17473: 10195: SearchAndCopy(memol.lines, "#perf', perftime, 11);
17473: 10195: SearchAndCopy(memol.lines, "#sign', Format('%s: %s: %s',
17474:
                   [getUserNameWin, getComputernameWin, datetimetoStr(now)
17475: 10196: SearchAndCopy(memol.lines, '#head',Format('%s: %s: %s %s '
[getUserNameWin, getComputernameWin, datetimetoStr(now), Act_Filename]),11);
SearchAndCopy(memo1.lines, '#tech',Format('perf: %s threads: %d %s %s',
17477:
17478: 10198: SearchAndCopy(memol.lines,
                  [perftime, numprocessthreads, getIPAddress(getComputerNameWin), timetoStr(time), mbversion]), 11);
SearchAndCopy(memol.lines, '#net',Format('DNS: %s; local IPs: %s; local IP: %s',
[getDNS, GetLocalIPs, getIPAddress(getComputerNameWin)]), 10);
17479:
17480: 10298:
17481:
17482:
17483: //#tech!perf: 0:0:29.297 threads: 3 192.168.174.1 19:26:30
17484:
17485: //Replace Macros
           /Replace Macros
SearchAndCopy(memol.lines, '<TIME>', timetoStr(time), 6);
SearchAndCopy(memol.lines, '<DATE>', datetoStr(date), 6);
SearchAndCopy(memol.lines, '<PATH>', fpath, 6);
SearchAndCopy(memol.lines, '<EXEPATH>', EXEPath, 9);
SearchAndCopy(memol.lines, '<FILE>', fname, 6);
SearchAndCopy(memol.lines, '<SOURCE>', ExePath+'Source', 8);
17486:
17487:
17488:
17489:
17490:
17491:
17492:
17493: 10198: SearchAndCopy(memo1.lines, '#tech'perf: threads: 2 192.168.1.53 19:05:50 3.9.9.84
17494:
                   [perftime,numprocessthreads,getIPAddress(getComputerNameWin),timetoStr(time),mbversion]), 11);
17495: //#tech!84perf: threads: 2 192.168.1.53 19:05:50 3.9.9.84
            SearchAndCopy(memol.lines, 'maxbox_extract_funclist399.txt
17496:
17497:
17498: //----
17500: //----
17501:
17502:
               while I < sl.Count do begin
                 if MatchesMask(sl[I], '*/? TODO ([a-z0-9_]*#[1-9]#)*:*') then

if MatchesMask(sl[I], '*/? TODO (?*#?#)*:*') then
17503: //
17504:
                 BreakupToDo(Filename, sl, I, 'TODO', True, True) //:
else if MatchesMask(sl[I], '*/? DONE (?*#?#)*:*') then
17505:
                                                                                        // full info TODO
17506:
                 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
17507:
17508:
17509:
17510:
                 BreakupTODo(Filename, sl, I, 'DONE', False, True) // only priority info DONE else if MatchesMask(sl[I], '*/?*TODO*:*') then
17511:
17512:
                 BreakupToDo(Filename, sl, I, 'TODO', False, False) // custom TODO else if MatchesMask(sl[I], '*/?*DONE*:*') then
17513:
17514:
17515:
                   BreakupToDo(Filename, sl, I, 'DONE', False, False); // custom DONE
17516:
                 Inc(I);
17517:
               end;
17518:
17519:
17520: //--
17522: //-----
                                                                      {$OTAP} Open Tools API Catalog
            file : unit uPSI_fMain.pas;
           // Those functions concern the editor and preprocessor, all of the IDE
17524:
          Example: Call it with maxform1.InfolClick(self)
17525:
17526: Note: Call all Methods with maxForm1., e.g.
                                        maxForm1.ShellStyle1Click(self);
17527:
17528:
17529: procedure SIRegister_fMain(CL: TPSPascalCompiler);
17530: begin
17531:
          Const('BYTECODE','String').SetString('bytecode.txt
17532: Const('PSTEXT','String').SetString('PS Scriptfiles (*.txt)|*.TXT
```

```
17533:
                Const('PSMODEL','String').SetString( 'PS Modelfiles (*.uc)|*.UC
                Const('PSPASCAL','String').SetString( 'PS Pascalfiles (*.pas)|*.PAS
17534:
                              'PSINC', 'String').SetString( 'PS Includes (*.inc)|*.INC
                Const (
                             'DEFFILENAME','String').SetString( 'firstdemo.txt'
'DEFINIFILE','String').SetString( 'maxboxdef.ini
17536:
                Const (
17537:
                Const (
                Const('EXCEPTLOGFILE','String').SetString( 'maxboxerrorlog.txt
17538:
                Const('ALLFUNCTIONSLIST','String').SetString('upsi_allfunctionslist.txt
17539:
17540:
                Const('ALLFUNCTIONSLISTPDF','String').SetString('maxbox_functions_all.pdf
                Const('ALLEFONCTIONSLISTPDF','String').SetString( 'maxcox_runctions_all.pdr
Const('ALLOBJECTSLIST','String').SetString( 'docs\VCL.pdf
Const('ALLESOURCELIST','String').SetString( 'docs\vCL.pdf
17541:
17542:
                Const('ALLUNITLIST', 'String').SetString( 'docs\maxbox3_9.xml');
Const('INCLUDEBOX', 'String').SetString( 'pas_includebox.inc
17543:
17544:
                Const('BOOTSCRIPT','String').SetString('maxbootscript.txt
Const('MBVERSION','String').SetString('3.9.9.92
Const('VERSION','String').SetString('3.9.9.92
Const('MBVER','String').SetString('3.9.9.92
17545:
17546:
17547:
                Const('MBVER','String').SetString( '39)
Const('MBVERI','Integer').SetInt(399);
17548:
17549:
                Const('MBVERIALL','Integer').SetInt(39992);
Const('EXENAME','String').SetString( 'maXbox3.exe
Const('MXSITE','String').SetString( 'http://www.softwareschule.ch/maxbox.htm
17550:
17551:
17552:
                Const ('MXVERSIONFILE', 'String').SetString( 'http://www.softwareschule.ch/maxvfile.txt
Const ('MXINTERNETCHECK', 'String').SetString( 'www.ask.com
Const ('MXMAIL', 'String').SetString( 'max@kleiner.com
17553:
17554:
17555:
                Const('TAB','Char').SetString( #$09);
Const('CODECOMPLETION','String').SetString( 'bds_delphi.dci
17556:
17557:
17558:
                SIRegister_TMaxForm1(CL);
17559: end;
17560:
17561:
                  with FindClass('TForm'), 'TMaxForm1') do begin
                     memo2', 'TMemo', iptrw);
memo1', 'TSynMemo', iptrw);
17562:
17563:
                       CB1SCList', 'TComboBox', iptrw);
mxNavigator', 'TComboBox', iptrw);
17564:
17565:
                       TPHost', 'string', iptrw);
IPPort', 'integer', iptrw);
COMPort', 'integer', iptrw);
17566:
17567:
17568:
                                                                                             //3.9.6.4
                       Splitter1', 'TSplitter', iptrw);
PSScript', 'TPSScript', iptrw);
17569:
                      PSScript', 'TPSScript', iptrw);
PS3DllPlugin', 'TPSDllPlugin', iptrw);
MainMenul', 'TMainMenu', iptrw);
Programl', 'TMenuItem', iptrw);
Compilel', 'TMenuItem', iptrw);
Silesl', 'TMenuItem', iptrw);
Openl', 'TMenuItem', iptrw);
Save2', 'TMenuItem', iptrw);
Save2', 'TMenuItem', iptrw);
Savebeforel', 'TMenuItem', iptrw);
Largefontl', 'TMenuItem', iptrw);
Saytecodel', 'TMenuItem', iptrw);
Saveas3', 'TMenuItem', iptrw);
Saveas1', 'TMenuItem', iptrw);
Slinenumbers1', 'TMenuItem', iptrw);
17570:
17571:
17572:
17573:
17574:
17575:
17576:
17577:
17578:
17579:
17581:
17582:
17583:
17584:
                       Slinenumbers1', 'TMenuItem', iptrw);
                       About1', 'TMenuItem', iptrw);
Search1', 'TMenuItem', iptrw);
17585:
17586:
                       SynPasSyn1', 'TSynPasSyn', iptrw);
memo1', 'TSynMemo', iptrw);
SynEditSearch1', 'TSynEditSearch', iptrw);
17587:
17588:
17589:
                       SynErtrSearch(), 'TSYNEGREECH(), 'TSYNEGREECH(), 'TSYNEGREECH(), 'TMPManifest(), 'ptrw);
XPManifest(), 'TMPManifest(), 'ptrw);
Replace(), 'TMenuItem(), iptrw);
17590:
17591:
17592:
17593:
                       PSImport_Controls1', 'TPSImport_Controls', iptrw);
PSImport_Classes1', 'TPSImport_Classes', iptrw);
17594:
17595 .
                       ShowInclude1', 'TMenuItem', iptrw);
SynEditPrint1', 'TSynEditPrint', iptrw);
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17598:
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dlgFilePrint', 'TFrintDialog', iptrw);
dlgPrintFontl', 'TFontDialog', iptrw);
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IncludeListl', 'TMenuItem', iptrw);
ImageListl', 'TImageList', iptrw);
ImageList2', 'TImageList', iptrw);
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ToolBarl', 'TToolBar', iptrw);
ToolButton2', 'TToolButton', iptrw);
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tbtnFind', 'TroolButton', iptrw);
tbtnCompile', 'TroolButton', iptrw);
tbtnTrans', 'TroolButton', iptrw);
tbtnUseCase', 'TroolButton', iptrw);
toolbtnTutorial', 'TroolButton', iptrw);
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17615:
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17616:
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ToolButton5', 'TroolButton', iptrw);
ToolButton1', 'TroolButton', iptrw);
ToolButton3', 'TroolButton', iptrw);
statusBar1', 'TstatusBar', iptrw);
17617:
17618:
17619:
17620:
```

```
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17625:
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                       loadLastfile1', 'TMenuItem', iptrw);
17627:
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cedebug', 'TPSScriptDebugger', iptrw);
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BreakPointMenu', 'TMenuItem', iptrw);
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StepInto1', 'TMenuItem', iptrw);
StepOut1', 'TMenuItem', iptrw);
17632:
17633:
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Reset1', 'TMenuItem', iptrw);
DebugRun1', 'TMenuItem', iptrw);
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PSImport_StdCtrls1', 'TPSImport_StdCtrls', iptrw);
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PSImport_DateUtils1', 'TPSImport_DateUtils', iptrw);
tutorial4', 'TMenuItem', iptrw);
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ImportfromClipboardl', 'TMenuItem', iptrw);
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17643:
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N5', 'TMenuItem', iptrw);
N6', 'TMenuItem', iptrw);
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17646:
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ShowSpecChars1', 'TMenuItem', iptrw);
OpenDirectory1', 'TMenuItem', iptrw);
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procMess', 'TMenuItem', iptrw);
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ToolButton7', 'TToolButton', iptrw);
EditFont1', 'TMenuItem', iptrw);
UseCase1', 'TMenuItem', iptrw);
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HTMLSyntax1', 'TMenuItem', iptrw);
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PlayMP31', 'TMenuItem', iptrw);
SynTeXSynl', 'TSynTeXSyn', iptrw);
texSyntaxl', 'TMenuItem', iptrw);
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CipherFilel', 'TMenuItem', iptrw);
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Tutorial71', 'TMenuItem', iptrw);
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ShellStyle1', 'TMenuItem', iptrw);
BigScreen1', 'TMenuItem', iptrw);
Tutorial91', 'TMenuItem', iptrw);
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N11', 'TMenuItem', iptrw);
SaveScreenshot', 'TMenuItem', iptrw);
Tutorial101', 'TMenuItem', iptrw);
SQLSyntax1', 'TMenuItem', iptrw);
SynSQLSyn1', 'TSynSQLSyn', iptrw);
Consolel', 'TMenuItem', iptrw);
SynXMLSyn1', 'TSynXMLSyn', iptrw);
XMLSyntax1', 'TMenuItem', iptrw);
ComponentCount1', 'TMenuItem', iptrw);
NewInstancel', 'TMenuItem', iptrw);
17694:
17695:
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Memoryl', 'TMenuItem', iptrw);
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                       JavaSyntax1', 'TMenuItem', iptrw);
SyntaxCheck1', 'TMenuItem', iptrw);
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tbtn6res', 'TToolButton', iptrw);
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Tutorial12SQL1', 'TMenuItem', iptrw);
ResourceExplore1', 'TMenuItem', iptrw);
Info1', 'TMenuItem', iptrw);
N12', 'TMenuItem', iptrw);
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Tutoriall3Ciphering1', 'TMenuItem', iptrw);
17723:
17724:
                         CipherFile2', 'TMenuItem', iptrw);
17725:
                         N13', 'TMenuItem', iptrw);
ModulesCount1', 'TMenuItem', iptrw);
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N4GewinntGamel', 'TMenuItem', iptrw);
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Lessons15Review1', 'TMenuItem', iptrw);
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Breakpoint1', 'TMenuItem', iptrw);
SerialRS2321', 'TMenuItem', iptrw);
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Calculator1', 'TMenuItem', iptrw);
tbtnSerial', 'TToolButton', iptrw);
ToolButton8', 'TToolButton', iptrw);
Tutorial151', 'TMenuItem', iptrw);
N15', 'TMenuItem', iptrw);
N16', 'TMenuItem', iptrw);
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17745:
                        NIG', 'TMenuItem', iptrw);
ControlBarl', 'TControlBar', iptrw);
ToolBar2', 'TToolBar', iptrw);
BtnOpen', 'TToolButton', iptrw);
BtnSave', 'TToolButton', iptrw);
BtnPrint', 'TToolButton', iptrw);
BtnColors', 'TToolButton', iptrw);
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BtnRotateRight', 'TToolButton', iptrw);
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17754:
                         BtnFitToWindowSize', 'TToolButton', iptrw);
BtnZoomMinus', 'TToolButton', iptrw);
BtnZoomPlus', 'TToolButton', iptrw);
17755:
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17757:
                         Panell', 'TPanel', iptrw);
LabelBrettgroesse', 'TLabe
17759:
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                         LabelBrettgroesse', 'TLabel', iptrw),
CBlSCList', 'TComboBox', iptrw);
ImageListNormal', 'TImageList', iptrw);
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EnlargeFont1', 'TMenuItem', iptrw);
EnlargeFont2', 'TMenuItem', iptrw);
ShrinkFont1', 'TMenuItem', iptrw);
ThreadDemo1', 'TMenuItem', iptrw);
HEXView1', 'TMenuItem', iptrw);
HEXView1', 'TMenuItem', iptrw);
17764:
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                        HEXInspect1', 'TMenuItem', iptrw);
SynExporterHTML1', 'TSynExporterHTML', iptrw);
ExporttoHTML1', 'TMenuItem', iptrw);
ClassCount1', 'TMenuItem', iptrw);
HTMLOutput1', 'TMenuItem', iptrw);
HEXEditor2', 'TMenuItem', iptrw);
Minesweeper1', 'TMenuItem', iptrw);
Minesweeper1', 'TMenuItem', iptrw);
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                         N17', 'TMenuItem', iptrw);
PicturePuzzlel', 'TMenuItem', iptrw);
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                         WebScanner1', 'TMenuItem', iptrw);
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mnSplitter2', 'TMenuItem', iptrw);
WebServer1', 'TMenuItem', iptrw);
Theorial TServer1', 'TMenuItem';
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17790:
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Tutorial18Arduino1', 'TMenuItem', iptrw);
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17793:
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DMathLibrary1', 'TMenuItem', iptrw);
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17795:
17796:
17797:
17798:
                         EnlargeFontConsole1', 'TMenuItem', iptrw);
```

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ShrinkFontConsolel', 'TMenuItem', iptrw);
SetInterfaceListl', 'TMenuItem', iptrw);
17800:
17801:
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17802:
17803:
                 intfAdd1 , TMenuItem , iptrw);
intfDeletel', 'TMenuItem', iptrw);
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Defactorl', 'TMenuItem', iptrw);
Tutoriall9COMArduinol', 'TMenuItem', iptrw);
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N18', 'TMenuItem', iptrw);
ManualE1', 'TMenuItem', iptrw);
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                 FullTextFinder1', 'TMenuItem', iptrw);
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FractalDemol', 'TMenuItem', iptrw);
Tutorial21Androidl', 'TMenuItem', iptrw);
Tutorial0Functionl', 'TMenuItem', iptrw);
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17815:
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OpenExamples1', 'TMenuItem', iptrw);
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JavaScriptSyntax1', 'TMenuItem', iptrw);
Halt1', 'TMenuItem', iptrw);
17816:
17817
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17819:
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17821:
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Undo1', 'TMenuItem', iptrw);
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17825:
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17826:
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Renamel', 'TMenuItem', iptrw);
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Preview1', 'TMenuItem', iptrw);
Tutorial22Services1', 'TMenuItem', iptrw);
Tutorial23RealTime1', 'TMenuItem', iptrw);
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MP3Player1', 'TMenuItem', iptrw);
DLLSpy1', 'TMenuItem', iptrw);
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SynURISynl', 'TSynURISyn', iptrw);
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EditReplacel', 'TMenuItem', iptrw);
GotoLinel', 'TMenuItem', iptrw);
17835:
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17840:
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                 ActiveEnhector, 'NenuItem', iptrw),
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SortIIntflist', 'TMenuItem', iptrw);
Redol', 'TMenuItem', iptrw);
Tutorial24CleanCode1', 'TMenuItem', iptrw);
17841:
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17843:
17844:
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17845:
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UnindentSection1', 'TMenuItem', iptrw);
17846:
                 SkyStyle1', 'TMenuItem', iptrw);
N19', 'TMenuItem', iptrw);
CountWords1', 'TMenuItem', iptrw);
17848:
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                 imbookmarkimages', 'TImageList', iptrw);
17851:
                 Bookmark11', 'TMenuItem', iptrw);
N20', 'TMenuItem', iptrw);
17852:
17853:
                Bookmark21', 'TMenuItem', iptrw);
Bookmark31', 'TMenuItem', iptrw);
Bookmark41', 'TMenuItem', iptrw);
SynMultiSyn1', 'TSynMultiSyn', iptrw);
17854:
17855:
17856:
17857:
17858:
                 Procedure IFPS3ClassesPlugin1CompImport( Sender : TObject; x : TPSPascalCompiler)
17859:
                 Procedure IFPS3ClassesPlugin1ExecImport(Sender: TObject; Exec: TPSExec; x:TPSRuntimeClassImporter);
17860:
17861:
                 Procedure PSScriptCompile( Sender :
                                                                         TPSScript)
17862:
                 Procedure Compile1Click( Sender : TObject)
17863:
                 Procedure PSScriptExecute( Sender : TPSScript)
                 Procedure open1Click( Sender : TObject)
Procedure Save2Click( Sender : TObject)
17864:
                 Procedure SavebeforelClick( Sender : TObject)
Procedure LargefontlClick( Sender : TObject)
17866:
17867:
17868:
                 Procedure FormActivate( Sender : TObject)
                 Procedure SBytecodelClick( Sender : TObject)
17869:
                 Procedure FormKeyPress( Sender : TObject; var Key : Char)
17870:
17871:
                 Procedure Saveas3Click( Sender : TObject)
                 Procedure Clear1Click( Sender : TObject)
Procedure Slinenumbers1Click( Sender : TObject)
17872:
17873:
                 Procedure AboutlClick( Sender : TObject)
Procedure SearchlClick( Sender : TObject)
17874:
17875:
                 Procedure FormCreate( Sender : TObject)
17876:
17877:
                 Procedure MemolReplaceText(Sender:TObject;const ASearch,AReplace:String;Line,Column:Integer;
                                                                                            var Action : TSynReplaceAction)
17878:
                 Procedure MemolStatusChange( Sender : TObject; Changes : TSynStatusChanges)
17879:
17880:
                 Procedure WordWrap1Click( Sender : TObject)
                 Procedure SearchNext1Click( Sender : TObject)
17881:
                 Procedure Replace1Click( Sender : TObject)
17882:
                 Function PSScriptNeedFile(Sender:TObject;const OrginFileName:String;var FName,Output:String):Bool;
17883:
                 Procedure ShowIncludelClick(Sender: TObject)
Procedure PrintoutlClick(Sender: TObject)
17884:
17885:
17886:
                 Procedure mnuPrintFont1Click( Sender : TObject)
17887:
                 Procedure Include1Click( Sender : TObject)
17888:
                 Procedure FormDestroy( Sender : TObject)
```

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17889:
            Procedure FormClose( Sender : TObject; var Action : TCloseAction)
            Procedure UpdateViewlClick( Sender : TObject)
17890:
            Procedure CodeCompletionList1Click( Sender : TObject)
17891:
17892:
            Procedure SaveOutput1Click( Sender : TObject)
17893:
            Procedure ExportClipboard1Click( Sender : TObject)
            Procedure Close1Click( Sender : TObject)
Procedure Manual1Click( Sender : TObject
17894:
17895:
17896:
            Procedure LoadLastFile1Click( Sender : TObject)
17897:
            Procedure MemolChange( Sender : TObject)
17898:
            Procedure Decompile1Click( Sender : TObject)
Procedure StepInto1Click( Sender : TObject)
17899:
            Procedure StepOut1Click( Sender : TObject)
17900:
            Procedure ResetlClick( Sender : TObject)
Procedure cedebugAfterExecute( Sender : TPSScript)
17901:
17902:
17903:
            Procedure cedebugBreakpoint(Sender:TObject; const FileName:String; Position.Row. Col: Cardinal)
17904:
            Procedure cedebugCompile( Sender : TPSScript)
17905:
            Procedure cedebugExecute( Sender : TPSScript)
17906:
            Procedure cedebugIdle( Sender : TObject)
            Procedure cedebugLineInfo( Sender:TObject;const FileName:String; Position, Row, Col : Cardinal)
17907:
17908:
            Procedure MemolSpecialLineColors(Sender: TObject; Line:Int; var Special:Boolean; var FG, BG:TColor);
            Procedure BreakPointMenuClick( Sender : TObject)
17909:
17910:
            Procedure DebugRunlClick( Sender : TObject)
            Procedure tutorial4Click( Sender : TObject)
17911:
17912:
            Procedure ImportfromClipboard1Click( Sender : TObject)
            Procedure ImportfromClipboard2Click( Sender : TObject)
17913:
17914:
            Procedure tutorial1Click( Sender : TObject)
17915:
            Procedure ShowSpecChars1Click( Sender : TObject)
Procedure StatusBarlDblClick( Sender : TObject)
17916:
17917:
            Procedure PSScriptLine( Sender : TObject)
            Procedure OpenDirectorylClick( Sender : TObject)
17918:
17919:
            Procedure procMessClick( Sender : TObject)
            Procedure tbtnUseCaseClick( Sender : TObject)
Procedure EditFontlClick( Sender : TObject)
17920:
17921:
            Procedure tutorial21Click( Sender : TObject)
Procedure tutorial31Click( Sender : TObject)
17922:
17923:
17924:
            Procedure HTMLSyntax1Click( Sender : TObject)
17925:
            Procedure ShowInterfaces1Click( Sender : TObject)
17926:
            Procedure Tutorial5Click( Sender : TObject)
17927:
            Procedure ShowLastException1Click( Sender :
                                                              TObject)
17928:
            Procedure PlayMP31Click( Sender : TObject)
17929:
            Procedure AllFunctionsList1Click( Sender : TObject)
            Procedure texSyntax1Click( Sender : TObject)
Procedure GetEMails1Click( Sender : TObject)
17930:
17931:
            procedure DelphiSitelClick(Sender: TObject)
17932:
17933:
            procedure TerminalStyle1Click(Sender: TObject);
17934:
            procedure ReadOnlv1Click(Sender: TObject);
            procedure ShellStyle1Click(Sender: TObject);
17935:
17936:
            procedure Console1Click(Sender: TObject);
17937:
            procedure BigScreen1Click(Sender: TObject);
17938:
            procedure Tutorial91Click(Sender: TObject);
17939:
            procedure SaveScreenshotClick(Sender: TObject);
            procedure Tutorial101Click(Sender: TObject);
17940:
            procedure SQLSyntax1Click(Sender: TObject);
17941:
17942:
            procedure XMLSyntax1Click(Sender: TObject);
            procedure ComponentCount1Click(Sender: TObject);
17943:
            procedure NewInstancelClick(Sender: TObject);
17944:
17945:
            procedure CSyntax1Click(Sender: TObject);
17946:
            procedure Tutorial6Click(Sender: TObject);
            procedure New1Click(Sender: Tobject);
procedure AllObjectsList1Click(Sender: Tobject);
17947:
17948:
            procedure LoadBytecodelClick(Sender: TObject);
17949:
17950:
            procedure CipherFile1Click(Sender: TObject);
17951:
            procedure NewInstancelClick(Sender: TObject);
17952:
            procedure toolbtnTutorialClick(Sender: TObject);
            procedure MemorylClick(Sender: TObject);
17953:
            procedure JavaSyntax1Click(Sender: TObject);
17954:
17955:
            procedure SyntaxCheck1Click(Sender: TObject);
17956:
            procedure ScriptExplorer1Click(Sender: TObject);
17957:
            procedure FormOutput1Click(Sender: TObject); //V3.6
            procedure GotoEndlClick(Sender: TObject);
procedure AllResourceList1Click(Sender: TObject);
17958:
17959:
17960:
            procedure tbtn6resClick(Sender: TObject);
            procedure InfolClick(Sender: TObject);
procedure Tutorial10Statistics1Click(Sender: TObject);
17961:
17962:
17963:
            procedure Tutorial111Forms1Click(Sender: TObject);
17964:
            procedure Tutorial12SQL1Click(Sender: TObject);
17965:
            procedure ResourceExplore1Click(Sender: TObject);
17966:
            procedure InfolClick(Sender: TObject);
            procedure CryptoBox1Click(Sender: TObject);
17967:
            procedure ModulesCountlClick(Sender: TObject);
procedure N4GewinntGamelClick(Sender: TObject);
17968:
17969:
            procedure PHPSyntax1Click(Sender: TObject);
17970:
17971:
            procedure SerialRS2321Click(Sender: TObject);
17972:
            procedure CSyntax2Click(Sender: TObject);
17973:
            procedure Calculator1Click(Sender: TObject);
17974:
            procedure Tutorial13Ciphering1Click(Sender: TObject);
17975:
            procedure Tutorial14Async1Click(Sender: TObject);
17976:
            procedure PHPSyntax1Click(Sender: TObject);
            procedure BtnZoomPlusClick(Sender: TObject);
```

```
17978:
           procedure BtnZoomMinusClick(Sender: TObject);
17979:
           procedure btnClassReportClick(Sender: TObject);
17980:
           procedure ThreadDemolClick(Sender: TObject);
17981:
           procedure HEXView1Click(Sender: TObject);
17982:
            procedure ExporttoHTML1Click(Sender: TObject);
           procedure MinesweeperlClick(Sender: TObject);
17983:
17984:
           procedure PicturePuzzle1Click(Sender: TObject); //V3.9
17985:
           procedure sbvclhelpClick(Sender: TObject);
           procedure DependencyWalker1Click(Sender: TObject);
17986:
17987:
           procedure CB1SCListDrawItem(Control:TWinControl;Index:Int;aRect:TRect;State:TOwnerDrawState);
17988:
           procedure WebScanner1Click(Sender: TObject);
           procedure mnToolbar1Click(Sender: TObject);
17989:
17990:
           procedure mnStatusbar2Click(Sender: TObject);
           procedure mnConsole2Click(Sender: TObject);
procedure mnCoolbar2Click(Sender: TObject);
17991:
17992:
17993:
           procedure mnSplitter2Click(Sender: TObject);
17994:
           procedure WebServer1Click(Sender: TObject);
17995
            procedure PerlSyntax1Click(Sender: TObject);
17996:
           procedure PythonSyntax1Click(Sender: TObject);
           procedure DMathLibrary1Click(Sender: TObject);
17997:
17998:
           procedure IntfNavigator1Click(Sender: TObject);
17999:
           procedure FullTextFinder1Click(Sender: TObject);
18000:
            function AppName: string;
18001:
            function ScriptName: string;
18002:
           function LastName: string;
18003:
           procedure FractalDemolClick(Sender: TObject);
18004:
           procedure SimuLogBox1Click(Sender: TObject);
           procedure OpenExamples1Click(Sender: TObject);
procedure Halt1Click(Sender: TObject);
18005:
18006:
18007:
           procedure Stop;
18008:
            procedure CodeSearch1Click(Sender: TObject);
18009:
            procedure RubySyntax1Click(Sender: TObject);
18010:
           procedure UndolClick(Sender: TObject);
18011:
           procedure LinuxShellScript1Click(Sender: TObject);
18012:
           procedure WebScannerDirect(urls: string);
            procedure WebScanner(urls: string);
18013:
18014:
           procedure LoadInterfaceList2;
18015:
           procedure DLLSpy1Click(Sender: TObject);
18016:
           procedure MemolDblClick(Sender: TObject);
18017:
           procedure URILinksClicks1Click(Sender: TObject);
18018:
            procedure GotoLinelClick(Sender: TObject);
18019:
           procedure ConfigFile1Click(Sender: TObject);
18020:
           Procedure SortlIntflistClick( Sender : TObject)
            Procedure RedolClick( Sender : TObject)
18021:
18022:
            Procedure Tutorial24CleanCodelClick( Sender : TObject)
           Procedure IndentSelection1Click( Sender : TObject)
18023:
           Procedure UnindentSection1Click( Sender : TObject)
18024:
           Procedure SkyStyle1Click( Sender : TObject)
18026:
            Procedure CountWords1Click( Sender : TObject)
18027:
           Procedure MemolPlaceBookmark( Sender : TObject; var Mark : TSynEditMark)
18028:
           Procedure MemolGutterClick(Sender:TObject;Button:TMouseButton;X,Y,Line:Integer;Mark:TSynEditMark);
18029:
            Procedure Bookmark11Click( Sender : TObject)
            Procedure Bookmark21Click( Sender
18030:
                                                   TObject
18031:
            Procedure Bookmark31Click( Sender :
                                                   TObject)
18032:
            Procedure Bookmark41Click( Sender : TObject)
           Procedure SynMultiSyn1CustomRange(Sender:TSynMultiSyn;Operation:TRangeOperation;var Range:Pointer);
18033:
            'STATMemoryReport', 'boolean', iptrw);
'IPPort', 'integer', iptrw);
18034:
18035:
           'COMPort', 'integer', iptrw);
'lbintflist', 'TListBox', iptrw);
Function GetStatChange : boolean
18036:
18037:
18038:
18039:
            Procedure SetStatChange( vstat : boolean)
18040:
            Function GetActFileName : string
           Procedure SetActFileName( vname : string)
18041:
18042:
           Function GetLastFileName : string
            Procedure SetLastFileName( vname : string
18043:
18044:
            Procedure WebScannerDirect( urls : string)
18045:
           Procedure LoadInterfaceList2
18046:
           Function GetStatExecuteShell : boolean
18047:
            Procedure DoEditorExecuteCommand( EditorCommand : word)
18048:
            function GetActiveLineColor: TColor
18049:
            procedure SetActiveLineColor(acolor: TColor)
18050:
           procedure ScriptListbox1Click(Sender: TObject);
procedure Memo2KeyPress(Sender: TObject; var Key: Char);
18051:
18052:
           procedure EnlargeGutter1Click(Sender: TObject);
18053:
           procedure TetrislClick(Sender: TObject);
18054:
            procedure ToDoList1Click(Sender: TObject);
           procedure ProcessListlClick(Sender: TObject);
procedure MetricReportlClick(Sender: TObject);
18055:
18056:
           procedure ProcessList1Click(Sender: TObject);
18057:
18058:
           procedure TCPSockets1Click(Sender: TObject);
18059:
            procedure ConfigUpdate1Click(Sender: TObject);
18060:
            procedure ADOWorkbench1Click(Sender: TObject);
           procedure SocketServer1Click(Sender: TObject);
18061:
18062:
           procedure FormDemolClick(Sender: TObject);
            procedure Richedit1Click(Sender: TObject);
18063:
18064:
           procedure SimpleBrowser1Click(Sender: TObject);
18065:
            procedure DOSShelllClick(Sender: TObject)
18066:
           procedure SynExport1Click(Sender: TObject);
```

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18067:
            procedure ExporttoRTF1Click(Sender: TObject);
18068:
            procedure FormCloseQuery(Sender: TObject; var CanClose: Boolean);
18069:
            procedure SOAPTester1Click(Sender: TObject);
18070:
            procedure Sniffer1Click(Sender: TObject);
18071:
            procedure AutoDetectSyntax1Click(Sender: TObject);
18072:
            procedure FPlot1Click(Sender: TObject);
            procedure PasStyle1Click(Sender: TObject);
18073:
18074:
            procedure Tutorial183RGBLED1Click(Sender: TObject);
18075:
            procedure ReversilClick(Sender: TObject);
18076:
            procedure ManualmaXbox1Click(Sender: TObject);
18077:
            procedure BlaisePascalMagazine1Click(Sender: TObject);
            procedure AddToDolClick(Sender: TObject);
18078:
18079:
            procedure CreateGUID1Click(Sender: TObject);
            procedure Tutorial27XML1Click(Sender: Tobject);
procedure CreateDLLStublClick(Sender: Tobject);
18080:
18081:
18082:
            procedure Tutorial28DLL1Click(Sender: TObject);');
18083:
            procedure ResetKeyPressed;');
            procedure FileChanges1Click(Sender: TObject);');
procedure OpenGLTry1Click(Sender: TObject);');
18084:
18085:
18086:
            procedure AllUnitList1Click(Sender: TObject);');
18087:
18088:
18089:
18091:
18092:
18093: procedure SIRegister_TCustomSynEdit(CL: TPSPascalCompiler);
18094: begin
18095:
          //with RegClassS(CL.'TCustomControl'. 'TCustomSvnEdit') do
         with FindClass('TCustomControl'), 'TCustomSynEdit') do begin
18097:
            Constructor Create ( AOwner : TComponent)
            SelStart', 'Integer', iptrw);
SelEnd', 'Integer', iptrw); AlwaysShowCaret', 'Boolean', iptrw);
18098:
18099:
18100:
            Procedure UpdateCaret
            Procedure AddKey(Command: TSynEditorCommand;Key1:word;SS1:TShiftState; Key2:word;SS2:TShiftState);
Procedure AddKey(Command: TSynEditorCommand;Key1:word;SS1:TShiftState; Key2: word;SS2:TShiftState);
18102:
18103:
            Procedure BeginUndoBlock
18104:
            Procedure BeginUpdate
18105:
            Function CaretInView : Boolean
18106:
            Function CharIndexToRowCol( Index : integer) : TBufferCoord
18107:
            Procedure Clear
18108:
            Procedure ClearAll
18109:
            Procedure ClearBookMark( BookMark : Integer)
18110:
            Procedure ClearSelection
18111:
            Procedure CommandProcessor( Command : TSynEditorCommand; AChar : char; Data : pointer)
18112:
            Procedure ClearIndo
            Procedure CopyToClipboard
18113:
18114:
            Procedure CutToClipboard
18115:
            Procedure DoCopyToClipboard( const SText : string)
18116:
            Procedure EndUndoBlock
18117:
            Procedure EndUpdate
            Procedure EnsureCursorPosVisible
18118:
18119:
            Procedure EnsureCursorPosVisibleEx( ForceToMiddle : Boolean)
18120:
            Procedure FindMatchingBracket
            Function GetMatchingBracket : TBufferCoord
18121:
            Function GetMatchingBracketEx( const APoint : TBufferCoord) : TBufferCoord
18122:
18123:
            Procedure ExecuteCommand( Command: TSynEditorCommand; AChar: char; Data: pointer)
18124:
            Function GetBookMark( BookMark: integer; var X, Y: integer): boolean
18125:
            Function GetHighlighterAttriAtRowCol( const XY: TBufferCoord; var Token : string; var Attri
            : TSynHighlighterAttributes) : boolean
Function GetHighlighterAttriAtRowColEx( const XY : TBufferCoord; var Token : string;
18126:
18127:
18128:
                       var TokenType, Start : Integer; var Attri:TSynHighlighterAttributes):boolean
18129:
            \textbf{Function} \ \ \texttt{GetPositionOfMouse} ( \ \ \textbf{out} \ \ \texttt{aPos} \ : \ \ \texttt{TBufferCoord}) \ : \ \ \texttt{Boolean}
            Function GetWordAtRowCol( const XY : TBufferCoord) : string Procedure GotoBookMark( BookMark : Integer)
18130:
18131:
            Procedure GotoLineAndCenter( ALine : Integer)
            Function IdentChars : TSynIdentChars
18133:
18134:
            Procedure InvalidateGutter
18135:
            Procedure InvalidateGutterLine( aLine : integer)
            Procedure InvalidateGutterLines( FirstLine, LastLine : integer)
Procedure InvalidateLine( Line : integer)
18136:
18137:
18138:
            Procedure InvalidateLines( FirstLine, LastLine : integer)
18139:
            Procedure InvalidateSelection
            Function IsBookmark( BookMark : integer) : boolean
18140:
            Function IsPointInSelection( const Value : TBufferCoord) : boolean
18141:
18142:
            Procedure LockUndo
18143:
            \textbf{Function} \ \ \texttt{BufferToDisplayPos} ( \ \textbf{const} \ \mathtt{p} \ : \ \mathtt{TBufferCoord}) \ : \ \mathtt{TDisplayCoord}
            Function DisplayToBufferPos( const p : TDisplayCoord) : TBufferCoord Function LineToRow( aLine : integer) : integer
18144:
18145:
            Function RowToLine( aRow : integer) : integer
18146:
18147:
            Function NextWordPos : TBufferCoord
18148:
            Function NextWordPosEx( const XY : TBufferCoord) : TBufferCoord
            Procedure PasteFromClipboard
18149:
            Function WordStart : TBufferCoord
18150:
            Function WordStartEx( const XY : TBufferCoord) : TBufferCoord
18151:
            Function WordEnd: TBufferCoord
Function WordEndEx( const XY: TBufferCoord): TBufferCoord
18152:
18153:
            Function PrevWordPos : TBufferCoord
18154:
18155:
            Function PrevWordPosEx( const XY : TBufferCoord) : TBufferCoord
```

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Function PixelsToRowColumn( aX, aY : integer) : TDisplayCoord
18156:
18157:
                  Function PixelsToNearestRowColumn( aX, aY : integer) : TDisplayCoord
                  Procedure Redo
18159 .
                  Procedure RegisterCommandHandler(const AHandlerProc:THookedCommandEvent;AHandlerData:pointer));
                  Function RowColumnToPixels( const RowCol : TDisplayCoord) : TPoint
Function RowColToCharIndex( RowCol : TBufferCoord) : integer
18160:
18161:
18162:
                  Function SearchReplace( const ASearch, AReplace:string; AOptions:TSynSearchOptions): integer
18163:
                  Procedure SelectAll
                  Procedure SetBookMark( BookMark : Integer; X : Integer; Y : Integer)
18164:
18165:
                  Procedure SetCaretAndSelection( const ptCaret, ptBefore, ptAfter : TBufferCoord)
18166:
                  Procedure SetDefaultKeystrokes
18167:
                  Procedure SetSelWord
18168:
                  Procedure SetWordBlock( Value : TBufferCoord)
18169:
                  Procedure Undo
18170:
                  Procedure UnlockUndo
18171:
                  Procedure UnregisterCommandHandler( AHandlerProc : ThookedCommandEvent)
                  Procedure AddKeyUpHandler( aHandler : TKeyEvent)
18172:
18173 .
                  Procedure RemoveKeyUpHandler( aHandler : TKeyEvent)
                  Procedure AddKeyDownHandler( aHandler: TKeyEvent)
18174:
18175:
                  Procedure RemoveKeyDownHandler( aHandler : TKeyEvent)
                  Procedure AddKeyPressHandler( aHandler: TKeyPressEvent)
18176:
18177:
                  Procedure RemoveKeyPressHandler( aHandler : TKeyPressEvent)
18178:
                  Procedure AddFocusControl( aControl : TWinControl)
                 Procedure Addresson: (acontrol: wincontrol)
Procedure RemoveFocusControl(aControl: TwinControl)
Procedure AddMouseDownHandler(aHandler: TMouseEvent)
18179:
18180:
18181:
                  Procedure RemoveMouseDownHandler( aHandler : TMouseEvent)
18182:
                  Procedure AddMouseUpHandler( aHandler : TMouseEvent)
                  Procedure RemoveMouseUpHandler( aHandler : TMouseEvent)
Procedure AddMouseCursorHandler( aHandler : TMouseCursorEvent)
18183:
18184:
                  Procedure RemoveMouseCursorHandler( aHandler : TMouseCursorEvent)
18185:
18186:
                  Procedure SetLinesPointer( ASynEdit : TCustomSynEdit)
18187:
                  Procedure RemoveLinesPointer
                  Procedure HookTextBuffer( aBuffer: TSynEditStringList; aUndo, aRedo: TSynEditUndoList)
18188:
18189:
                  Procedure UnHookTextBuffer
                 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);
ActiveLineColor', 'TColor', iptrw);
Dignlary', 'Integer', iptry';
                                       'TBufferCoord', iptrw);
18191:
18192:
18193:
18194:
18195:
18196:
18197:
18198:
                 DisplayX', 'Integer', iptr);
DisplayY', 'Integer', iptr);
DisplayY', 'Integer', iptr);
DisplayXY', 'TDisplayCoord', iptr);
DisplayLineCount', 'integer', iptr);
CharsInWindow', 'Integer', iptr);
18199:
18200:
18201:
18202:
                  CharWidth', 'integer', iptr);
Font', 'TFont', iptrw);
GutterWidth', 'Integer', iptr);
18204:
18205:
18206:
                 GutterWidth', 'Integer', iptr);
Highlighter', 'TSynCustomHighlight
LeftChar', 'Integer', iptrw);
LineHeight', 'integer', iptr);
LinesInWindow', 'Integer', iptr);
LineText', 'string', iptrw);
Lines', 'TStrings', iptrw);
Marks', 'TSynEditMarkList', iptr);
18207:
                                        'TSynCustomHighlighter', iptrw);
18208:
18209:
18210:
18211:
18212:
18213:
                 MaxScrollWidth', 'integer', iptrw);
Modified', 'Boolean', iptrw);
PaintLock', 'Integer', iptr);
ReadOnly', 'Boolean', iptrw);
18214:
18215:
18216:
18217:
18218:
                  SearchEngine', 'TSynEditSearchCustom', iptrw);
                  SelAvail', 'Boolean', iptr); SelLength', 'integer', iptrw);
SelTabBlock', 'Boolean', iptr);
SelTabLine', 'Boolean', iptr);
18219:
18220:
18222:
                  SelText', 'string', iptrw);
                  StateFlags', 'TSynStateFlags', iptr);
18223:
18224:
                  Text', 'string', iptrw);
TopLine', 'Integer', iptrw);
18225:
                  WordAtCursor', 'string', iptr);
WordAtMouse', 'string', iptr);
18226:
                  WordAtMouse', 'string', iptr);
UndoList', 'TSynEditUndoList', iptr);
RedoList', 'TSynEditUndoList', iptr);
18227:
18228:
18229:
                  OnProcessCommand', 'TProcessCommandEvent', iptrw);
BookMarkOptions', 'TSynBookMarkOpt', iptrw);
18230:
18231:
18232:
                  BorderStyle', 'TSynBorderStyle', iptrw);
                  ExtraLineSpacing', 'integer', iptrw);
Gutter', 'TSynGutter', iptrw);
18233:
18234:
                  Gutter', 'IsynGutter', iptrw);
HideSelection', 'boolean', iptrw);
InsertCaret', 'TSynEditCaretType', iptrw);
InsertMode', 'boolean', iptrw);
IsScrolling', 'Boolean', iptr);
Keystrokes', 'TSynEditKeyStrokes', iptrw);
18236:
18237:
18238:
                 IsScrolling', 'Boolean', iptr);
Keystrokes', 'TSynEditKeyStrokes', iptrw);
MaxUndo', 'Integer', iptrw);
Options', 'TSynEditorOptions', iptrw);
OverwriteCaret', 'TSynEditCaretType', iptrw);
RightEdge', 'Integer', iptrw); RightEdgeColor', 'TColor', iptrw);
ScrollHintColor', 'TColor', iptrw);
18239:
18240:
18241:
18242:
18243:
```

```
18245:
             ScrollHintFormat', 'TScrollHintFormat', iptrw);
18246:
             ScrollBars', 'TScrollStyle', iptrw);
             SelectedColor', 'TSynSelectedColor', iptrw);
SelectionMode', 'TSynSelectionMode', iptrw);
18248 .
             ActiveSelectionMode', 'TSynSelectionMode', iptrw);
TabWidth', 'integer', iptrw); WantReturns', 'boolean', iptrw);
WantTabs', 'boolean', iptrw); WordWrap', 'boolean', iptrw);
18249:
18250:
18251:
             WordWrapGlyph', 'TSynGlyph', iptrw);
OnChange', 'TNotifyEvent', iptrw);
18252:
18253:
             OnClearBookmark', 'TPlaceMarkEvent', iptrw);
18254:
             OnCommandProcessed',
                                       'TProcessCommandEvent', iptrw);
18255:
             OnContextHelp', 'TContextHelpEvent', iptrw);
18256:
             OnContextnerp , rothlextnerpEvent , iptrw);
OnDropFiles', 'TDropFilesEvent', iptrw);
OnGutterClick', 'TGutterClickEvent', iptrw);
OnGutterGetText', 'TGutterGetTextEvent', iptrw);
OnGutterPaint', 'TGutterPaintEvent', iptrw);
OnMouseCursor', 'TMouseCursorEvent', iptrw);
18257:
18258:
18259:
18260:
18261:
             OnPaint', 'TPaintEvent', iptrw);
OnPlaceBookmark', 'TPlaceMarkEvent', iptrw);
OnProcessUserCommand', 'TProcessCommandEvent', iptrw);
18262
18263:
18264:
18265:
             OnReplaceText', 'TReplaceTextEvent', iptrw);
18266:
             OnSpecialLineColors', 'TSpecialLineColorsEvent', iptrw);
             OnStatusChange', 'TStatusChangeEvent', iptrw);
OnPaintTransient', 'TPaintTransient', iptrw);
18267:
18268:
18269:
             OnScroll', 'TScrollEvent', iptrw);
18270:
            end;
18271:
          end;
18272:
         Procedure RegisterPlaceableHighlighter(highlighter : TSynCustomHighlighterClass)
18273:
         Function GetPlaceableHighlighters : TSynHighlighterList
         Function EditorCommandToDescrString( Cmd : TSynEditorCommand) : string
18274:
18275:
         \textbf{Function} \  \, \texttt{EditorCommandToCodeString(Cmd:TSynEditorCommand):string} \\
18276:
         Procedure GetEditorCommandValues( Proc : TGetStrProc)
         Procedure GetEditorCommandExtended( Proc : TGetStrProc)
18277:
         Function IdentToEditorCommand( const Ident: string; var Cmd: longint): boolean
Function EditorCommandToIdent( Cmd: longint; var Ident: string): boolean
18278:
18279:
         Function ConvertCodeStringToExtended( AString : String) : String Function ConvertExtendedToCodeString( AString : String) : String
18280:
18281:
18282:
         Function ConvertExtendedToCommand( AString : String) : TSynEditorCommand
         Function ConvertCodeStringToCommand( AString : String) : TSynEditorCommand
Function IndexToEditorCommand( const AIndex : Integer) : Integer
18283:
18284:
18285:
18286:
          TSvnEditorOption =
18287:
             eoAltSetsColumnMode,
                                               //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
18288:
             eoAutoIndent,
18289:
                                               // preceding line
             eoAutoSizeMaxScrollWidth.
18290:
                                               //Automatically resizes the MaxScrollWidth property when inserting text
             eoDisableScrollArrows,
18291:
                                               //Disables the scroll bar arrow buttons when you can't scroll in that
                                               //direction any more
18293:
             eoDragDropEditing,
                                               //Allows to select a block of text and drag it within document to another
18294:
                                                // location
18295:
             eoDropFiles.
                                               //Allows the editor accept OLE file drops
18296:
             eoEnhanceHomeKey,
                                               //enhances home key positioning, similar to visual studio
//enhances End key positioning, similar to JDeveloper
             eoEnhanceEndKey,
18297:
18298:
             eoGroupUndo,
                                               //When undoing/redoing actions, handle all continous changes the same kind
18299:
                                                // in one call
18300:
                                               //instead undoing/redoing each command separately
18301:
             eoHalfPageScroll,
                                               //When scrolling with page-up and page-down commands, only scroll a half
                                               //page at a time
18302:
18303:
             eoHideShowScrollbars,
                                                //if enabled, then scrollbars will only show if necessary
             If you have ScrollPastEOL, then it the horizontal bar will always be there (it uses MaxLength instead) eoKeepCaretX, //When moving through lines w/o cursor Past EOL, keeps X position of cursor
18304:
18305:
18306:
             eoNoCaret,
                                               //Makes it so the caret is never visible
18307:
             eoNoSelection.
                                               //Disables selecting text
             eoRightMouseMovesCursor,
18308:
                                               //When clicking with right mouse for popup menu, moves cursor to location
             eoScrollByOneLess,
                                               //Forces scrolling to be one less
//The scroll hint follows the mouse when scrolling vertically
18309:
18310:
             eoScrollHintFollows,
18311:
             eoScrollPastEof,
                                               //Allows the cursor to go past the end of file marker
18312:
             eoScrollPastEol.
                                               //Allows cursor to go past last character into white space at end of a line
18313:
             eoShowScrollHint.
                                               //Shows a hint of the visible line numbers when scrolling vertically
                                               //Shows the special Characters
             eoShowSpecialChars.
18314:
18315:
             eoSmartTabDelete,
                                               //similar to Smart Tabs, but when you delete characters
             eoSmartTabs,
18316:
                                               //When tabbing, cursor will go to non-white space character of previous line
             eoSpecialLineDefaultFq.
18317:
                                               //disables the foreground text color override using OnSpecialLineColor event //If active <Tab>and<Shift><Tab> act block indent,unindent when text select
18318:
             eoTabIndent.
                                               //Converts a tab character to a specified number of space characters
18319:
             eoTabsToSpaces,
18320:
             eoTrimTrailingSpaces
                                               //Spaces at the end of lines will be trimmed and not saved
18321:
              18322:
             Double click to select a word and count words with highlightning.
18323:
             Triple click to select a line.
18325:
             CTRL+SHIFT+click to extend a selection.
18326:
             Drag with the ALT key down to select columns of text !!!
18327:
             Drag and drop is supported.
18328:
             Type CTRL+Z to undo and SHIFT+CTRL+Z to redo.
             Type CTRL+A to select all.
18329:
             Type CTRL+N to set a new line.
18330:
             Type CTRL+T to delete a line or token. //Tokenizer
Type CTRL+C to copy to clipboard. Type CTRL+V to paste from clipboard.
Type CTRL+Shift+T to add ToDo in line and list.
18331:
18332:
```

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18334:
              Type CTRL+Shift+[0..9] to set bookmarks.
                                                                      //Bookmark
              Type CTRL[0..9] to jump or get to bookmarks.
18335:
              Type Home to position cursor at beginning of current line and End to position it at end of line.
18337:
              Type CTRL+Home to position cursor at start of doc and CTRL+End to position it at end of document.
18338:
              Page Up and Page Down work as expected.
              CTRL+Page Up sends cursor to top of viewed portion and CTRL+Page Down sends it to bottom. using http://pp4s.co.uk/main/tu-form2-help-demo-laz.html
18339:
18340:
18341:
18342:
             Short Key Positions Ctrl<A-Z>:
18343: def
             <A> Select All
18344:
             <B> Count Words
             <C> Copy
18346:
18347:
             <D> Internet Start
18348:
            <E> Script List
18349:
             <F> Find
18350:
             <G> Goto
18351 .
             <H> Mark Line
             <I> Interface List
18352:
             <J> Code Completion
18353:
18354:
             <K> Console
18355:
             <L> Interface List Box
18356:
             <M> Font Larger
             <N> New Line
18357:
18358:
             <0> Open File
18359:
             <P> Font Smaller +
18360:
             <Q> Quit
18361:
            <R> Replace
18362:
             <S> Save!
18363:
             <T> Delete Line
18364:
             <U>> Use Case Editor
18365:
             <V> Paste
            <W> URI Links
18366:
18367:
            <X> Reserved for coding use internal
             <Y> Delete Line
18369:
            <7> IIndo
18370:
18371: ref
18372:
            F1 Help
18373:
             F2 Syntax Check
18374:
            F3 Search Next
18375:
            F4 New Instance
18376:
            F5 Line Mark /Breakpoint
18377:
            F6 Goto End
18378:
             F7 Debug Step Into
            F8 Debug Step {\tt Out}
18379:
18380:
             F9 Compile
             F10 Menu
18381:
18382:
             F11 Word Count Highlight
18383:
             F12 Reserved for coding use internal
18384:
          def ReservedWords: array[0..82] of string =
          def ReservedWords: array[0..82] of string =
    ('and', 'array', 'as', 'asm', 'at', 'begin', 'case', 'class', 'const',
    'constructor', 'default', 'destructor', 'dispinterface', 'div', 'do',
    'downto', 'else', 'end', 'except', 'exports', 'file', 'finalization',
    'finally', 'for', 'function', 'goto', 'if', 'implementation', 'in',
    'inherited', 'initialization', 'inline', 'interface', 'is', 'label',
    'library', 'message', 'mod', 'nil', 'not', 'object', 'of', 'on', 'or',
    'out', 'packed', 'procedure', 'program', 'property', 'raise', 'read',
    'record', 'repeat', 'resourcestring', 'set', 'shl', 'shr', 'string',
    'stored', 'then', 'threadvar', 'to', 'try', 'type', 'unit', 'until',
    'uses', 'var', 'while', 'with', 'write', 'xor', 'private', 'protected',
    'public', 'published', 'def', 'ref', 'using', 'typedef', 'memol', 'memo2', 'doc', 'maxforml';
    AllowedChars: array[0..5] of string = ('(',',')', '[', ']', ', 't,tl,t2,t3: boolean;
18385:
18387:
18388:
18389:
18390:
18391:
18392:
18393:
18394:
18395:
18396:
18397:
18398:
18401: //----
18402:
18403: Amount of Functions: 11963
18404: Amount of Procedures: 7474
18405: Amount of Constructors: 1231
18406: Totals of Calls: 20668
18407: SHA1: Win 3.9.9.92 61ECB8AF3FA0C72B6AA6DE8DA4A65E1C30F0EE6C
18408:
18410: Doc Short Manual with 50 Tips!
18412: - Install: just save your maxboxdef.ini before and then extract the zip file!
18413: - Toolbar: Click on the red maxbox Sign (right on top) opens your work directory or jump to <Help>
18414: - Menu: With <F2> you check syntax with <F8> you debug and <F9> you compile!
18415: - Menu: With <Crtl><F3> you can search for code on examples
18416: - Menu: Open in menu Output a new instance <F4> of the box to compare or prepare your scripts
18417: - Menu: Set Interface Naviagator in menu /View/Intf Navigator
18418: - Menu: Switch or toogle between the last 2 scripts in menu File/LoadLast (History is set to 9 files)
18419:
18420: - Inifile: Set memory report in ini: MEMORYREPORT=Y :report on memory leaks on shutdown by dialog 18421: - Inifile: Refresh (reload) the inifile after edit with ../Help/Config Update
18422: - Context Menu: You can printout your scripts as a pdf-file or html-export
```

```
18423: - Context: You do have a context menu with the right mouse click
18424:
              Menu: With the UseCase Editor you can convert graphic formats too.
18426: -
              Menu: On menu Options you find Addons as compiled scripts
18427:
              IDE: You don't need a mouse to handle maxbox, use shortcuts
18428:
              Menu: Check Options/ProcessMessages! if something is wrong or you can't see graphics in a time
18429:
              IDE: Dragndrop your scripts in box or the model in use case editor (Cut,Copy,Paste always available)
18430:
               Editor: You can get templates as code completion with <ctrl j> in editor like classp or iinterface
18431:
                          or ttimer (you type classp and then CTRL J),or you type tstringlist and <Ctrl><J>
18432:
18433:
              Menu: In menu output (console) you can set output menu in edit mode by unchecking <read only output>
               Editor: After the end. you can write or copy notes or descriptions concerning the app or code
18435:
              Code: If you code a loop till key-pressed use function: isKeyPressed;
18436:
              Code: Macro set the macros #name, #date, #host, #path, #file, #head #sign, Tutorial maxbox_starter25.pdf
18437:
              Code: change Syntax in autoboot macro 'maxbootscript.txt
18438:
              Editor: - <F11> Click on Word in Editor search amount of words with highlighting, Dbl Click on Bookmarks
                          to delete and Click and mark to drag a bookmark
18439:
18440: -
              Menu: To start handling from CD-ROM (read only mode) uncheck in Menu /Options/Save before Compile
18441: -
              IDE: A file info with system and script information you find in menu Program/Information
18442:
              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
18443:
18444:
               IDE: Use a boot loader script 'maxbootscript.txt' (as auto start) to change box each time you start it.
18445:
              IDE: With escape or <Ctrl> Q you can also leave the box or stop a script in menu program - stop 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
18446:
18448: -
18449: - Editor: With <Ctrl W> you set active URL links in your code to test availability in Context Menu
18450:
18451:
               IDE with menu /Options/ADO SQL Workbench you can manage your Database
               Context Menu: You can write your docus with RichEdit RTF printout /Editor Form Options/Richedit
18453:
              \texttt{Menu:} \ \textbf{Set Interface} \ \texttt{Naviagator} \ \texttt{also} \ \textbf{with} \quad \texttt{toogle} \ \texttt{<Ctrl} \ \texttt{L}\texttt{>} \ \textbf{or} \ \texttt{/View/Intf} \ \texttt{Navigator} \ \texttt{Naviagator} \ \texttt{or} \ \texttt
18454:
               Toolbar: In menu /View switch Off Toolbar and Coolbar to get more coding space
18455:
              Code: Put some resources in your code /Help/Resource Explorer like bitbtn, forms, dialogs;
              Code Editor: Compile with <F9> but also Alt C in case <F9> isnt available; IDE set bookmarks with <Ctrl Shift> (0..9) and jump with <Ctrl> (0..9)
18456:
18458: - IDE menu /Help/Tools/ write with RTF Editor or open a DOS Shell or browse
18459:
18460:
              Add on write your Requirements in RTF Docu with <CTRL ALT R> in context menu
18461:
              Add on when no browser is available start /Options/Add ons/Easy Browser
18462:
              Add on SOAP Tester with SOP POST File
18463:
              Add on IP Protocol Sniffer with List View
18464:
              Add on OpenGL mX Robot Demo for android
18465:
18466:
              Menu: Help/Tools as a Tool Section with DOS Opener
18467:
              Menu Editor: export the code as RTF File
18468:
              {\tt Menu: Help/Tools/Syn} \ \textbf{Export} \ {\tt your \ code} \ \textbf{as} \ {\tt available} \ \textbf{in} \ {\tt HTML} \ \textbf{or} \ {\tt RTF}
18469:
              Menu: Help/Tools/ with <Alt H-S-D> you start the DOS Shell
               Context: Auto Detect of Syntax depending on file extension
18471:
               Code: some Windows API function start with w in the name like wGetAtomName();
18472:
              IDE Close - {\tt if} you cant close the box {\tt then} reset it <Ctrl F2> {\tt in} menu /Debug
18473:
            - IDE File Check with menu .. View/File Changes/...
18474:
               18475:
18476:
              Function GetProcessMemoryInfo(Process: THandle; var MemoryCounters: TProcessMemoryCounters;
                    cb: DWORD): BOOL; //stdcall;;
External 'GetProcessMemoryInfo@psapi.dll stdcall';
18477:
18478:
18479:
18480:
              Function OpenProcess(dwDesiredAccess:DWORD; bInheritHandle:BOOL; dwProcessId: DWORD):THandle;
                    External
18481:
                                     'OpenProcess@kernel32.dll stdcall';
18482:
18483: PCT Precompile Technology , mX4 ScriptStudio
18484: Indy, JCL, Jedi, VCL, Systools, TurboPower, Fundamentals, ExtendedRTL, Synedit
18485: DMath, devC, Graphics32, ExtPascal, mX4, LCL, CLX, FCL, CPort and more
18486: emax layers: system-package-component-unit-class-function-block
18487: new keywords def ref using maXCalcF
18488: UML: use case act class state seq pac comp dep - lib lab
18489: FBX Lib, psAPI, SMS Cell Module, OpenGL, Borland Tools
18490: Tutorials, 30 Units add, VCL constructors, controls plus, unit list 18491: 2 Tutorials, 36 Units add, Synapse V40, LDAP, OpenSSL, AVScan 18492: 1 Report, 15 Units add, DBCtrls, Stream+, IRadio, Wininet
18493: https://unibe-ch.academia.edu/MaxKleiner
18494: www.slideshare.net/maxkleiner1
18495: http://www.scribd.com/max_kleiner
18496:
18497:
18499: unit List asm internal end
18501: 01 unit RIRegister_StrUtils_Routines(exec);
                                                                                          //Delphi
18502: 02 unit SIRegister_IdStrings
                                                                                           //Indy Sockets
18503: 03 unit RIRegister_niSTRING_Routines(Exec);
                                                                                           //from RegEx
18504: 04 unit uPSI fMain Functions;
                                                                                           //maXbox Open Tools API
18505: 05 unit IFSI WinFormlpuzzle;
                                                                                           //maXbox
18506: 06 unit RIRegister_LinarBitmap_Routines(Exec); //ImageFileLibBCB
18507: 07 unit RegisterDateTimeLibrary_R(exec);
                                                                                           //Delphi
18508: 08 unit RIRegister_MathMax_Routines(exec);
                                                                                           //Jedi & Delphi
18509: 09 unit RIRegister_IdGlobal_Routines(exec);
                                                                                           //Indv Sockets
18510: 10 unit RIRegister_SysUtils_Routines(Exec);
                                                                                           //Delphi
18511: 11 unit uPSI_IdTCPConnection;
                                                                                           //Indy some functions
```

```
18512: 12 unit uPSCompiler.pas;
                                                            //PS kernel functions
//DB Common_Routines and Types
18513: 13 unit uPSI_DBCommon;
18514: 14 unit uPSI_Printers.pas
                                                            //Delphi VCL
18515: 15 unit uPSI_MPlayer.pas
                                                            //Delphi VCL
18516: 16 unit uPSC comobj;
                                                            //COM Functions
18517: 17 unit uPSI Clipbrd;
                                                            //Delphi VCL
18518: 18 unit Filectrl in IFSI_SysUtils_max;
                                                            //VCL Runtime
18519: 19 unit uPSI_SqlExpr;
                                                            //DBX3
                                                            //ADODB
18520: 20 unit uPSI_ADODB;
18521: 21 unit uPSI StrHlpr;
                                                            //String Helper Routines
18522: 22 unit uPSI_DateUtils;
                                                            //Expansion to DateTimeLib
//Expansion to Sys/File Utils
18523: 23 unit uPSI_FileUtils;
18524: 24 unit JUtils / gsUtils;
18525: 25 unit JvFunctions_max;
                                                            //Jedi / Metabase
//Jedi Functions
18526: 26 unit HTTPParser;
                                                            //Delphi VCL
18527: 27 unit HTTPUtil;
                                                            //Delphi VCL
18528: 28 unit uPSI_XMLUtil;
                                                            //Delphi VCL
18529: 29 unit uPSI_SOAPHTTPClient;
                                                            //Delphi VCL SOAP WebService V3.5
18530: 30 unit uPSI Contnrs;
                                                            //Delphi RTL Container of Classes
18531: 31 unit uPSI_MaskUtils;
                                                            //RTL Edit and Mask functions
18532: 32 unit uPSI_MyBigInt;
                                                            //big integer class with Math
18533: 33 unit uPSI_ConvUtils;
                                                            //Delphi VCL Conversions engine
18534: 34 unit Types_Variants;
18535: 35 unit uPSI_IdHashSHA1;
                                                            //Delphi\Win32\rt1\sys
                                                            //Indy Crypto Lib
//Indy Crypto;
18536: 36 unit uPSI_IdHashMessageDigest
18537: 37 unit uPSI_IdASN1Util;
                                                            //Indy ASN1Utility Routines;
18538: 38 unit uPSI_IdLogFile;
                                                            //Indy Logger from LogBase
//Indy Ping ICMP
//Indy Crypto &OpenSSL;
18539: 39 unit uPSI_IdIcmpClient;
18540: 40 unit uPSI_IdHashMessageDigest_max
18541: 41 unit uPSI_FileCtrl;
                                                            //Delphi RTL
18542: 42 unit uPSI_Outline;
                                                            //Delphi VCL
                                                            //Delphi RTL
//Delphi VCL
18543: 43 unit uPSI_ScktComp;
18544: 44 unit uPSI Calendar;
18545: 45 unit uPSI_VListView
                                                            //VListView;
18546: 46 unit uPSI_DBGrids;
                                                            //Delphi VCL
18547: 47 unit uPSI DBCtrls;
                                                            //Delphi VCL
18548: 48 unit ide_debugoutput;
                                                            //maXbox
                                                            //Delphi VCL
18549: 49 unit uPSI_ComCtrls;
18550: 50 unit uPSC_stdctrls+;
                                                            //Delphi VCL
18551: 51 unit uPSI_Dialogs;
                                                            //Delphi VCL
18552: 52 unit uPSI StdConvs;
                                                            //Delphi RTL
18553: 53 unit uPSI DBClient;
                                                            //Delphi RTL
18554: 54 unit uPSI_DBPlatform;
                                                            //Delphi RTL
18555: 55 unit uPSI_Provider;
                                                            //Delphi RTL
18556: 56 unit uPSI_FMTBcd;
                                                            //Delphi RTL
18557: 57 unit upst DBCGrids;
                                                            //Delphi VCL
18558: 58 unit uPSI_CDSUtil;
                                                            //MIDAS
18559: 59 unit uPSI_VarHlpr;
                                                            //Delphi RTL
18560: 60 unit uPSI_ExtDlgs;
                                                            //Delphi VCL
18561: 61 unit sdpStopwatch;
                                                            //maXbox
18562: 62 unit uPSI JclStatistics;
                                                            //JCL
18563: 63 unit uPSI_JclLogic;
                                                            //JCL
18564: 64 unit uPSI_JclMiscel;
                                                            //JCL
18565: 65 unit uPSI_JclMath_max;
                                                            //JCL RTL
18566: 66 unit uPSI_uTPLb_StreamUtils;
18567: 67 unit uPSI_MathUtils;
                                                            //LockBox 3
                                                            //BCB
18568: 68 unit uPSI_JclMultimedia;
                                                            //JCL
18569: 69 unit uPSI_WideStrUtils;
                                                            //Delphi API/RTL
18570: 70 unit uPSI_GraphUtil;
                                                            //Delphi RTL
18571: 71 unit uPSI_TypeTrans;
                                                            //Delphi RTL
18572: 72 unit uPSI_HTTPApp;
                                                            //Delphi VCL
18573: 73 unit uPSI_DBWeb;
                                                            //Delphi VCL
18574: 74 unit uPSI_DBBdeWeb;
                                                            //Delphi VCL
18575: 75 unit uPSI DBXpressWeb;
                                                            //Delphi VCL
18576: 76 unit uPSI_ShadowWnd;
                                                            //Delphi VCL
18577: 77 unit uPSI_ToolWin;
                                                            //Delphi VCL
18578: 78 unit uPSI_Tabs;
                                                            //Delphi VCL
18579: 79 unit uPSI_JclGraphUtils;
                                                            //JCL
18580: 80 unit uPSI_JclCounter;
                                                            //JCL
18581: 81 unit uPSI_JclSysInfo;
                                                            //JCL
18582: 82 unit uPSI_JclSecurity;
                                                            //JCL
18583: 83 unit uPSI_JclFileUtils;
                                                            //JCL
                                                            //Indy
18584: 84 unit uPSI IdUserAccounts;
18585: 85 unit uPSI IdAuthentication;
                                                            //Tndv
18586: 86 unit uPSI_uTPLb_AES;
                                                            //LockBox 3
18587: 87 unit uPSI_IdHashSHA1;
                                                            //LockBox 3
18588: 88 unit uTPLb BlockCipher;
                                                            //LockBox 3
18589: 89 unit uPSI_ValEdit.pas;
18590: 90 unit uPSI_JvVCLUtils;
                                                            //Delphi VCL
                                                            //JCL
18591: 91 unit uPSI_JvDBUtil;
                                                            //JCL
18592: 92 unit uPSI_JvDBUtils;
                                                            //JCL
18593: 93 unit uPSI_JvAppUtils;
                                                            //JCL
18594: 94 unit uPSI_JvCtrlUtils;
                                                            //JCL
18595: 95 unit uPSI_JvFormToHtml;
                                                            //JCL
18596: 96 unit uPSI_JvParsing;
                                                            //JCL
18597: 97 unit uPSI_SerDlgs;
                                                             //Toolbox
18598: 98 unit uPSI_Serial;
18599: 99 unit uPSI_JvComponent;
                                                            //Toolbox
                                                            //JCL
18600: 100 unit uPSI_JvCalc;
                                                            //JCL
```

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18601: 101 unit uPSI_JvBdeUtils;
                                                         //JCTi
18602: 102 unit uPSI_JvDateUtil;
                                                         //JCL
18603: 103 unit uPSI_JvGenetic;
                                                         //JCL
18604: 104 unit uPSI_JclBase;
                                                         //JCL
18605: 105 unit uPSI JvUtils;
                                                         //JCL
18606: 106 unit uPSI JvStrUtil;
                                                         //JCL
18607:
       107 unit uPSI_JvStrUtils;
                                                         //JCL
18608: 108 unit uPSI_JvFileUtil;
                                                         //JCL
18609: 109 unit uPSI_JvMemoryInfos;
                                                         //JCL
18610: 110 unit uPSI JvComputerInfo;
                                                         //JTCT.
18611: 111 unit uPSI_JvgCommClasses;
                                                         //JCL
18612: 112 unit uPSI_JvgLogics;
                                                         //JCL
18613: 113 unit uPSI_JvLED;
                                                         //JCL
18614: 114 unit uPSI_JvTurtle;
                                                         //JCL
      115 unit uPSI_SortThds; unit uPSI_ThSort;
18615:
                                                         //maXbox
18616: 116 unit uPSI_JvgUtils;
                                                         //JCL
18617: 117 unit uPSI_JvExprParser;
18618: 118 unit uPSI_HexDump;
                                                         //Borland
18619: 119 unit uPSI_DBLogDlg;
                                                         //VCL
18620:
       120 unit uPSI_SqlTimSt;
                                                         //RTL
18621: 121 unit uPSI_JvHtmlParser;
                                                         //JCL
18622: 122 unit uPSI_JvgXMLSerializer;
                                                         //JCL
18623: 123 unit uPSI_JvJCLUtils;
                                                         //JCL
18624: 124 unit uPSI_JvStrings;
                                                         //JCTi
       125 unit uPSI_uTPLb_IntegerUtils;
                                                         //TurboPower
18626: 126 unit uPSI_uTPLb_HugeCardinal;
                                                         //TurboPower
18627: 127 unit uPSI_uTPLb_HugeCardinalUtils;
                                                         //TurboPower
18628: 128 unit uPSI_SynRegExpr;
18629: 129 unit uPSI_StUtils;
                                                         //SynEdit
                                                         //SysTools4
18630: 130 unit uPSI_StToHTML;
                                                         //SysTools4
18631: 131 unit uPSI_StStrms;
                                                         //SysTools4
18632: 132 unit uPSI_StFIN;
                                                         //SysTools4
18633: 133 unit uPSI StAstroP;
                                                         //SvsTools4
18634: 134 unit uPSI_StStat;
                                                         //SysTools4
       135 unit uPSI_StNetCon;
                                                         //SysTools4
18636: 136 unit uPSI StDecMth;
                                                         //SysTools4
18637: 137 unit uPSI StOStr;
                                                         //SysTools4
18638: 138 unit uPSI StPtrns;
                                                         //SvsTools4
18639:
       139 unit uPSI_StNetMsg;
                                                         //SysTools4
18640:
       140 unit uPSI_StMath;
                                                         //SysTools4
18641: 141 unit uPSI StExpEng;
                                                         //SysTools4
18642: 142 unit uPSI_StCRC;
                                                         //SvsTools4
18643: 143 unit uPSI_StExport,
                                                         //SvsTools4
18644: 144 unit uPSI_StExpLog,
                                                         //SysTools4
18645: 145 unit uPSI_ActnList;
                                                         //Delphi VCL
18646: 146 unit uPSI_jpeg;
18647: 147 unit uPSI_StRandom;
                                                         //Borland
                                                         //SvsTools4
18648: 148 unit uPSI_StDict;
                                                         //SysTools4
18649: 149 unit uPSI_StBCD;
                                                         //SysTools4
18650: 150 unit uPSI StTxtDat;
                                                         //SysTools4
18651:
       151 unit uPSI StRegEx;
                                                         //SysTools4
18652:
       152 unit uPSI_IMouse;
                                                         //VCL
18653: 153 unit uPSI_SyncObjs;
                                                         //VCL
18654: 154 unit uPSI_AsyncCalls;
                                                         //Hausladen
18655:
       155 unit uPSI ParallelJobs;
                                                         //Saraiva
18656:
       156 unit uPSI_Variants;
                                                         //VCL
       157 unit uPSI_VarCmplx;
                                                         //VCL Wolfram
18658: 158 unit uPSI_DTDSchema;
                                                         //VCL
18659: 159 unit uPSI_ShLwApi;
                                                         //Brakel
18660:
       160 unit uPST TBUtils;
                                                         //VCT
18661: 161 unit uPSI_CheckLst;
                                                         //VCL
18662: 162 unit uPSI_JvSimpleXml;
                                                         //JCL
18663: 163 unit uPSI_JclSimpleXml;
                                                         //JCL
18664: 164 unit uPSI JvXmlDatabase;
                                                         //JCL
18665:
       165 unit uPSI_JvMaxPixel;
                                                         //JCL
       166 unit uPSI_JvItemsSearchs;
                                                         //JCL
                                                         //SysTools4
18667: 167 unit uPSI_StExpEng2;
18668: 168 unit uPSI_StGenLog;
                                                         //SysTools4
18669: 169 unit uPSI JvLogFile;
                                                         //Jc1
18670:
       170 unit uPSI_CPort;
                                                         //ComPort Lib v4.11
18671: 171 unit uPSI_CPortCtl;
                                                         //ComPort
18672: 172 unit uPSI_CPortEsc;
                                                         //ComPort
18673: 173 unit BarCodeScaner;
                                                         //ComPort
18674: 174 unit uPST JvGraph;
                                                         //JCL
18675:
       175 unit uPSI_JvComCtrls;
                                                         //JCL
18676: 176 unit uPSI_GUITesting;
                                                         //D Unit
18677:
       177 unit uPSI_JvFindFiles;
                                                         //JCL
18678: 178 unit uPSI_StSystem;
                                                         //SysTools4
18679: 179 unit uPSI_JvKeyboardStates;
                                                         //JCL
18680: 180 unit uPSI_JvMail;
                                                         //JCL
18681: 181 unit uPSI_JclConsole;
                                                         //JCL
18682: 182 unit uPSI_JclLANMan;
                                                         //JCL
18683: 183 unit uPSI_IdCustomHTTPServer;
                                                         //Tndv
18684: 184 unit IdHTTPServer
                                                         //Indy
18685: 185 unit uPSI_IdTCPServer;
                                                         //Indy
18686: 186 unit uPSI_IdSocketHandle;
                                                         //Indy
18687: 187 unit uPSI_IdIOHandlerSocket;
                                                         //Indv
18688: 188 unit IdIOHandler;
                                                         //Tndv
                                                         //Bloodshed
18689: 189 unit uPSI_cutils;
```

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18690: 190 unit uPSI_BoldUtils;
                                                           //boldsoft
18691: 191 unit uPSI_IdSimpleServer;
                                                           //Indy
18692: 192 unit uPSI_IdSSLOpenSSL;
                                                           //Indv
18693: 193 unit uPSI_IdMultipartFormData;
                                                           //Indy
18694: 194 unit uPSI_SynURIOpener;
                                                           //SynEdit
18695: 195 unit uPSI PerlRegEx;
                                                           //PCRE
18696:
       196 unit uPSI_IdHeaderList;
                                                           //Indy
18697:
       197 unit uPSI_StFirst;
                                                           //SysTools4
18698: 198 unit uPSI_JvCtrls;
                                                           //JCL
18699: 199 unit uPSI_IdTrivialFTPBase;
18700: 200 unit uPSI_IdTrivialFTP;
                                                           //Indv
                                                           //Tndv
18701: 201 unit uPSI_IdUDPBase;
                                                           //Indy
18702: 202 unit uPSI_IdUDPClient;
                                                           //Indy
                                                           //for DMath.DLL
18703: 203 unit uPSI_utypes;
18704:
       204 unit uPSI ShellAPI;
                                                           //Borland
18705: 205 unit uPSI_IdRemoteCMDClient;
                                                           //Indy
18706: 206 unit uPSI_IdRemoteCMDServer;
18707: 207 unit IdRexecServer;
                                                           //Indv
18708: 208 unit IdRexec; (unit uPSI_IdRexec;)
18709: 209 unit IdUDPServer;
                                                           //Tndv
                                                           //Indv
18710: 210 unit IdTimeUDPServer;
                                                           //Indy
18711: 211 unit IdTimeServer;
                                                           //Indy
18712: 212 unit IdTimeUDP; (unit uPSI_IdUDPServer;)
                                                           //Indv
18713: 213 unit uPSI_IdIPWatch;
18714: 214 unit uPSI_IdIrcServer;
                                                           //Tndv
                                                           //Indy
18715: 215 unit uPSI_IdMessageCollection;
                                                           //Indy
18716: 216 unit uPSI_cPEM;
                                                           //Fundamentals 4
18717: 217 unit uPSI_cFundamentUtils;
                                                           //Fundamentals 4
18718: 218 unit uPSI_uwinplot;
                                                           //DMath
18719: 219 unit uPSI_xrtl_util_CPUUtils;
                                                           //ExtentedRTL
18720: 220 unit uPSI_GR32_System;
                                                           //Graphics32
18721: 221 unit uPSI_cFileUtils;
                                                           //Fundamentals 4
18722: 222 unit uPSI_cDateTime; (timemachine)
                                                           //Fundamentals 4
18723: 223 unit uPSI_cTimers; (high precision timer)
                                                           //Fundamentals 4
       224 unit uPSI_cRandom;
                                                           //Fundamentals 4
18725: 225 unit uPSI_ueval;
                                                           //DMath
18726: 226 unit uPSI_xrtl_net_URIUtils;
                                                           //ExtendedRTL
                                                           //ExtendedRTL
18727: 227 unit xrtl net URIUtils;
18728: 228 unit uPSI_ufft; (FFT)
                                                           //DMath
18729: 229 unit uPSI_DBXChannel;
                                                           //Delphi
18730: 230 unit uPSI_DBXIndyChannel;
                                                           //Delphi Indy
18731: 231 unit uPSI_xrtl_util_COMCat;
18732: 232 unit uPSI_xrtl_util_StrUtils;
                                                           //ExtendedRTL
                                                           //ExtendedRTL
18733: 233 unit uPSI_xrtl_util_VariantUtils;
                                                           //ExtendedRTL
18734: 234 unit uPSI_xrtl_util_FileUtils;
                                                           //ExtendedRTL
18735: 235 unit xrtl_util_Compat;
18736: 236 unit uPSI_OleAuto;
                                                           //ExtendedRTL
                                                           //Borland
18737: 237 unit uPSI_xrtl_util_COMUtils;
                                                           //ExtendedRTL
18738: 238 unit uPSI_CmAdmCtl;
                                                           //Borland
18739: 239 unit uPSI_ValEdit2;
                                                           //VCL
18740: 240 unit uPSI_GR32; //Graphics32
                                                           //Graphics32
18741: 241 unit uPSI_GR32_Image;
18742: 242 unit uPSI_xrtl_util_TimeUtils;
                                                           //Graphics32
                                                           //ExtendedRTL
18743: 243 unit uPSI_xrtl_util_TimeZone;
                                                           //ExtendedRTL
18744: 244 unit uPSI_xrtl_util_TimeStamp;
18745: 245 unit uPSI_xrtl_util_Map;
                                                           //ExtendedRTT.
                                                           //ExtendedRTL
                                                           //ExtendedRTL
18746: 246 unit uPSI_xrtl_util_Set;
18747: 247 unit uPSI_CPortMonitor;
                                                           //ComPort
18748: 248 unit uPSI_StIniStm;
                                                           //SysTools4
18749: 249 unit uPSI_GR32_ExtImage;
18750: 250 unit uPSI_GR32_OrdinalMaps;
                                                           //Graphics32
                                                           //Graphics32
18751: 251 unit uPSI_GR32_Rasterizers;
                                                           //Graphics32
18752: 252 unit uPSI_xrtl_util_Exception;
                                                           //ExtendedRTL
18753: 253 unit uPSI xrtl util Value;
                                                           //ExtendedRTL
18754: 254 unit uPSI_xrtl_util_Compare;
                                                           //ExtendedRTL
18755: 255 unit uPSI_FlatSB;
                                                           //VCL
18756: 256 unit uPSI_JvAnalogClock;
                                                           //JCL
18757: 257 unit uPSI_JvAlarms;
                                                           //JCL
18758: 258 unit uPSI JvSQLS;
                                                           //JCL
18759: 259 unit uPSI_JvDBSecur;
                                                           //JCL
18760: 260 unit uPSI_JvDBQBE;
                                                           //JCL
18761: 261 unit uPSI_JvStarfield;
                                                           //JCL
                                                           //JCL
18762: 262 unit uPSI_JVCLMiscal;
18763: 263 unit uPSI JvProfiler32;
                                                           //JCL
18764: 264 unit uPSI_JvDirectories,
                                                           //JCL
18765: 265 unit uPSI_JclSchedule,
                                                           //JCL
18766: 266 unit uPSI_JclSvcCtrl,
                                                           //JCL
18767: 267 unit uPSI_JvSoundControl,
                                                           //JCL
18768: 268 unit uPSI_JvBDESQLScript,
                                                           //JCL
18769: 269 unit uPSI_JvgDigits,
                                                           //JCL>
18770: 270 unit uPSI_ImgList;
                                                           //TCustomImageList
18771: 271 unit uPSI JclMIDI;
                                                           //JCL>
18772: 272 unit uPSI_JclWinMidi;
                                                           //JCT.>
       273 unit uPSI_JclNTFS;
                                                           //JCL>
18774: 274 unit uPSI_JclAppInst;
                                                           //JCL>
18775: 275 unit uPSI_JvRle;
                                                           //JCL>
18776: 276 unit uPSI_JvRas32;
                                                           //JCL>
18777: 277 unit uPSI_JvImageDrawThread,
                                                           //JCT.>
18778: 278 unit uPSI_JvImageWindow,
                                                           //JCL>
```

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18779: 279 unit uPSI JvTransparentForm;
                                                        //JCT.>
18780: 280 unit uPSI_JvWinDialogs;
                                                        //JCL>
18781: 281 unit uPSI_JvSimLogic,
                                                        //JCL>
18782: 282 unit uPSI_JvSimIndicator,
                                                        //JCL>
18783: 283 unit uPSI JvSimPID,
                                                        //JCL>
18784: 284 unit uPSI_JvSimPIDLinker,
                                                        //JCT.>
18785: 285 unit uPSI_IdRFCReply;
                                                        //Indy
18786: 286 unit uPSI_IdIdent;
18787: 287 unit uPSI_IdIdentServer;
                                                        //Indy
18788: 288 unit uPSI JvPatchFile;
                                                        //JCL
18789: 289 unit uPSI_StNetPfm;
                                                        //SvsTools4
18790: 290 unit uPSI_StNet;
                                                        //SysTools4
18791: 291 unit uPSI_JclPeImage;
                                                        //JCL
18792: 292 unit uPSI_JclPrint;
                                                        //JCL
18793: 293 unit uPSI JclMime;
                                                        //JTCT.
18794: 294 unit uPSI_JvRichEdit;
                                                        //JCL
18795: 295 unit uPSI_JvDBRichEd;
                                                        //JCL
18796: 296 unit uPSI_JvDice;
                                                        //JCL
18797: 297 unit uPSI_JvFloatEdit;
                                                        //JCL 3.9.8
18798: 298 unit uPSI_JvDirFrm;
                                                        //JCL
18799: 299 unit uPSI_JvDualList;
                                                        //JCL
                                                        ////JCL
18800: 300 unit uPSI_JvSwitch;
18801: 301 unit uPSI_JvTimerLst;
                                                        ////JCL
18802: 302 unit uPSI_JvMemTable;
                                                        //JCL
18803: 303 unit uPSI_JvObjStr;
                                                        //JCL
18804: 304 unit uPSI_StLArr;
                                                        //SysTools4
18805: 305 unit uPSI_StWmDCpy;
                                                        //SysTools4
18806: 306 unit uPSI StText;
                                                        //SysTools4
18807: 307 unit uPSI_StNTLog;
                                                        //SvsTools4
18808: 308 unit uPSI_xrtl_math_Integer;
                                                        //ExtendedRTL
18809: 309 unit uPSI_JvImagPrvw;
18810: 310 unit uPSI_JvFormPatch;
                                                        //JCL
18811: 311 unit uPSI JvPicClip;
                                                        //JCL
18812: 312 unit uPSI_JvDataConv;
                                                        //JCL
       313 unit uPSI_JvCpuUsage;
                                                        //JCL
18814: 314 unit uPSI_JclUnitConv_mX2;
                                                        //JCL
18815: 315 unit JvDualListForm;
                                                        //JCL
18816: 316 unit uPSI_JvCpuUsage2;
                                                        //JCL
18817:
       317 unit uPSI_JvParserForm;
                                                        //JCL
18818: 318 unit uPSI_JvJanTreeView;
                                                        //JCL
18819: 319 unit uPSI_JvTransLED;
                                                        //JCL
18820: 320 unit uPSI_JvPlaylist;
                                                        //JTCT.
18821: 321 unit uPSI_JvFormAutoSize;
                                                        //JCL
18822: 322 unit uPSI_JvYearGridEditForm;
                                                        //JCL
18823: 323 unit uPSI_JvMarkupCommon;
                                                        //JCL
18824: 324 unit uPSI_JvChart;
                                                        //JCL
18825: 325 unit uPSI_JvXPCore;
                                                        //JCL
18826: 326 unit uPSI_JvXPCoreUtils;
                                                        //JCL
18827: 327 unit uPSI_StatsClasses;
                                                        //mX4
18828: 328 unit uPSI ExtCtrls2;
                                                        //VCI
18829: 329 unit uPSI JvUrlGrabbers;
                                                        //JCTi
18830:
       330 unit uPSI_JvXmlTree;
                                                        //JCL
18831: 331 unit uPSI_JvWavePlayer;
18832: 332 unit uPSI_JvUnicodeCanvas;
                                                        //JCL
18833:
       333 unit uPSI_JvTFUtils;
                                                        //JCL
       334 unit uPSI_IdServerIOHandler;
18834:
                                                        //Tndv
       335 unit uPSI_IdServerIOHandlerSocket;
                                                        //Indy
18836: 336 unit uPSI_IdMessageCoder;
                                                        //Indy
18837: 337 unit uPSI_IdMessageCoderMIME;
                                                        //Indy
18838: 338 unit uPST IdMIMETypes;
                                                        //Tndv
18839:
       339 unit uPSI_JvConverter;
                                                        //JCL
18840: 340 unit uPSI_JvCsvParse;
                                                        //JCL
18841: 341 unit uPSI_umath; unit uPSI_ugamma;
                                                        //DMath
18842: 342 unit uPSI ExcelExport; (Nat:TJsExcelExport) //JCL
18843: 343 unit uPSI_JvDBGridExport;
                                                        //JCL
18844: 344 unit uPSI_JvgExport;
                                                        //JCL
18845: 345 unit uPSI_JvSerialMaker;
                                                        //JCL
18846: 346 unit uPSI_JvWin32;
                                                        //JCL
18847: 347 unit uPSI JvPaintFX;
                                                        //JCTi
18848: 348 unit uPSI_JvOracleDataSet; (beta)
                                                        //JCL
18849: 349 unit uPSI_JvValidators; (preview)
                                                        //JCL
18850: 350 unit uPSI_JvNTEventLog;
                                                        //JCL
18851: 351 unit uPSI_ShellZipTool;
                                                        //mX4
18852: 352 unit uPSI JvJoystick;
                                                        //JCT
18853:
       353 unit uPSI_JvMailSlots;
                                                        //JCL
18854: 354 unit uPSI_JclComplex;
                                                        //JCL
18855: 355 unit uPSI SynPdf;
                                                        //Synopse
18856: 356 unit uPSI_Registry;
                                                        //VCL
18857: 357 unit uPSI_TlHelp32;
                                                        //VCL
18858: 358 unit uPSI_JclRegistry;
                                                        //JCL
18859: 359 unit uPSI_JvAirBrush;
                                                        //JCL
18860: 360 unit uPSI_mORMotReport;
                                                        //Synopse
18861: 361 unit uPSI JclLocales;
                                                        //JCL
18862: 362 unit uPSI_SynEdit;
                                                        //SynEdit
18863: 363 unit uPSI_SynEditTypes;
                                                        //SynEdit
18864: 364 unit uPSI_SynMacroRecorder;
                                                        //SynEdit
18865: 365 unit uPSI_LongIntList;
                                                        //SvnEdit
18866: 366 unit uPSI_devcutils;
                                                        //DevC
18867: 367 unit uPSI_SynEditMiscClasses;
                                                        //SynEdit
```

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18868: 368 unit uPSI_SynEditRegexSearch;
18869: 369 unit uPSI_SynEditHighlighter;
                                                          //SynEdit
                                                          //SynEdit
18870: 370 unit uPSI_SynHighlighterPas;
                                                          //SynEdit
18871: 371 unit uPSI_JvSearchFiles;
18872: 372 unit uPSI_SynHighlighterAny;
                                                          //Lazarus
18873: 373 unit uPSI_SynEditKeyCmds;
                                                          //SynEdit
18874:
       374 unit uPSI_SynEditMiscProcs,
                                                          //SynEdit
18875:
       375 unit uPSI_SynEditKbdHandler
                                                          //SynEdit
18876: 376 unit uPSI_JvAppInst,
                                                          //JCL
18877: 377 unit uPSI_JvAppEvent;
                                                          //JCL
18878: 378 unit uPSI_JvAppCommand;
                                                          //JCL
18879: 379 unit uPSI_JvAnimTitle;
                                                          //JCL
18880: 380 unit uPSI_JvAnimatedImage;
                                                          //JCL
18881: 381 unit uPSI_SynEditExport;
                                                          //SynEdit
18882: 382 unit uPSI SynExportHTML;
                                                          //SynEdit
18883: 383 unit uPSI_SynExportRTF;
                                                          //SynEdit
18884: 384 unit uPSI_SynEditSearch;
                                                          //SynEdit
                                                          //maXbox;
18885: 385 unit uPSI_fMain_back
18886: 386 unit uPSI_JvZoom;
                                                          //JCL
18887: 387 unit uPSI_PMrand;
                                                          //PM
18888: 388 unit uPSI_JvSticker;
                                                          //JCL
                                                          //mX4
18889: 389 unit uPSI_XmlVerySimple;
18890: 390 unit uPSI_Services;
                                                          //ExtPascal
18891: 391 unit uPSI_ExtPascalUtils;
                                                          //ExtPascal
18892: 392 unit uPSI_SocketsDelphi;
                                                          //ExtPascal
18893: 393 unit uPSI_StBarC;
                                                          //SysTools
18894: 394 unit uPSI_StDbBarC;
                                                          //SysTools
18895: 395 unit uPSI_StBarPN;
18896: 396 unit uPSI_StDbPNBC;
                                                          //SvsTools
                                                          //SvsTools
18897: 397 unit uPSI_StDb2DBC;
                                                          //SysTools
18898: 398 unit uPSI_StMoney;
                                                          //SysTools
18899: 399 unit uPSI_JvForth;
                                                          //JCL
18900: 400 unit uPSI_RestRequest;
                                                          //mX4
18901: 401 unit uPSI_HttpRESTConnectionIndy;
                                                          //mX4
18902: 402 unit uPSI_JvXmlDatabase; //update
18903: 403 unit uPSI StAstro;
                                                          //SysTools
18904: 404 unit uPSI StSort;
                                                          //SysTools
18905: 405 unit uPSI_StDate;
                                                          //SvsTools
18906: 406 unit uPSI_StDateSt;
                                                          //SysTools
18907: 407 unit uPSI_StBase;
                                                          //SysTools
18908: 408 unit uPSI_StVInfo;
                                                          //SysTools
18909: 409 unit uPSI_JvBrowseFolder;
                                                          //JTCT
                                                          //JCL
18910: 410 unit uPSI_JvBoxProcs;
18911: 411 unit uPSI_urandom; (unit uranuvag;)
                                                          //DMath
                                                          //DMath
18912: 412 unit uPSI_usimann; (unit ugenalg;)
18913: 413 unit uPSI_JvHighlighter;
                                                          //JCL
18914: 414 unit uPSI_Diff;
                                                          //mX4
18915: 415 unit uPSI_SpringWinAPI;
                                                          //DSpring
18916: 416 unit uPSI_StBits;
                                                          //SysTools
18917: 417 unit uPSI TomDBQue;
                                                          //mX4
18918: 418 unit uPSI MultilangTranslator;
                                                          //mX4
18919: 419 unit uPSI_HyperLabel;
                                                          //mX4
18920: 420 unit uPSI_Starter;
18921: 421 unit uPSI_FileAssocs;
                                                          //devC
18922: 422 unit uPSI_devFileMonitorX;
                                                          //devC
18923: 423 unit uPSI_devrun;
                                                          //devC
18924: 424 unit uPSI_devExec;
                                                          //devC
18925: 425 unit uPSI_oysUtils;
                                                          //devC
18926: 426 unit uPSI_DosCommand;
                                                          //devC
18927: 427 unit uPSI_CppTokenizer;
                                                          //devC
18928: 428 unit uPSI_JvHLParser;
                                                          //devC
18929: 429 unit uPSI_JclMapi;
                                                          //JCL
18930: 430 unit uPSI_JclShell;
18931: 431 unit uPSI_JclCOM;
                                                          //JCL
18932: 432 unit uPSI_GR32_Math;
                                                          //Graphics32
18933: 433 unit uPSI_GR32_LowLevel;
                                                          //Graphics32
18934: 434 unit uPSI_SimpleHl;
                                                          //mX4
18935: 435 unit uPSI_GR32_Filters,
                                                          //Graphics32
18936: 436 unit uPSI_GR32 VectorMaps;
                                                          //Graphics32
18937: 437 unit uPSI_cXMLFunctions;
                                                          //Fundamentals 4
18938: 438 unit uPSI_JvTimer;
                                                          //JCL
18939: 439 unit uPSI_cHTTPUtils;
                                                          //Fundamentals 4
18940: 440 unit uPSI_cTLSUtils;
                                                          //Fundamentals 4
18941: 441 unit uPST JclGraphics;
                                                          //JCL
18942: 442 unit uPSI_JclSynch;
                                                          //JCL
18943: 443 unit uPSI_IdTelnet;
                                                          //Indy
                                                          //Indy
18944: 444 unit uPSI_IdTelnetServer,
18945: 445 unit uPSI_IdEcho,
18946: 446 unit uPSI_IdEchoServer,
                                                          //Indy
                                                          //Indy
18947: 447 unit uPSI_IdEchoUDP,
                                                          //Indv
18948: 448 unit uPSI_IdEchoUDPServer,
18949: 449 unit uPSI_IdSocks,
                                                          //Indv
18950: 450 unit uPSI_IdAntiFreezeBase;
                                                          //Tndv
18951: 451 unit uPSI_IdHostnameServer;
                                                          //Indy
18952: 452 unit uPSI_IdTunnelCommon,
18953: 453 unit uPSI_IdTunnelMaster,
                                                          //Indy
18954: 454 unit uPSI_IdTunnelSlave,
18955: 455 unit uPSI_IdRSH,
18956: 456 unit uPSI_IdRSHServer,
                                                          //Indv
                                                          //Tndv
                                                          //Indy
```

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18957: 457 unit uPSI_Spring_Cryptography_Utils; 18958: 458 unit uPSI_MapReader,
                                                            //Spring4Delphi
                                                            //devC
18959: 459 unit uPSI_LibTar,
18960: 460 unit uPSI_IdStack;
                                                            //Indy
18961: 461 unit uPSI_IdBlockCipherIntercept;
                                                            //Indy
18962: 462 unit uPSI_IdChargenServer;
                                                            //Tndv
18963: 463 unit uPSI_IdFTPServer,
                                                            //Indy
18964: 464 unit uPSI_IdException,
18965: 465 unit uPSI_utexplot;
                                                            //DMath
18966: 466 unit uPSI uwinstr;
                                                            //DMath
18967: 467 unit uPSI_VarRecUtils;
                                                            //devC
18968: 468 unit uPSI_JvStringListToHtml,
                                                            //JCL
18969: 469 unit uPSI_JvStringHolder,
                                                            //JCL
18970: 470 unit uPSI_IdCoder;
18971: 471 unit uPSI_SynHighlighterDfm;
                                                            //Indy
                                                            //Synedit
18972: 472 unit uHighlighterProcs; in 471
                                                            //Synedit
18973: 473 unit uPSI_LazFileUtils,
18974: 474 unit uPSI_IDECmdLine;
                                                            //LCL
18975: 475 unit uPSI_lazMasks;
                                                            //LCL
18976: 476 unit uPSI_ip_misc;
                                                            //mX4
18977: 477 unit uPSI_Barcode;
                                                            //LCL
                                                            //LCL
18978: 478 unit uPSI_SimpleXML;
18979: 479 unit uPSI_JclIniFiles;
18980: 480 unit uPSI_D2XXUnit; {$X-}
                                                            //JCL
                                                            //FTDT
18981: 481 unit uPSI_JclDateTime;
                                                            //JCL
18982: 482 unit uPSI_JclEDI;
                                                            //JCL
18983: 483 unit uPSI_JclMiscel2;
                                                            //JCL
18984: 484 unit uPSI_JclValidation;
18985: 485 unit uPSI_JclAnsiStrings; {-PString}
                                                            //JCL
                                                            //JCL
18986: 486 unit uPSI_SynEditMiscProcs2;
                                                            //Synedit
18987: 487 unit uPSI_JclStreams;
18988: 488 unit uPSI_QRCode;
                                                            //mX4
18989: 489 unit uPSI_BlockSocket;
                                                            //ExtPascal
18990: 490 unit uPSI_Masks,Utils
                                                            //VCL
18991: 491 unit uPSI_synautil;
                                                            //Synapse!
18992: 492 unit uPSI_JclMath_Class;
                                                            //JCL RTL
18993: 493 unit ugamdist; //Gamma function
18994: 494 unit uibeta, ucorrel; //IBeta
                                                            //DMath
                                                            //DMath
18995: 495 unit uPSI_SRMgr;
                                                            //mX4
18996: 496 unit uPSI_HotLog;
                                                            //mX4
18997: 497 unit uPSI_DebugBox;
                                                            //mX4
18998: 498 unit uPSI_ustrings;
                                                            //DMath
18999: 499 unit uPSI_uregtest;
                                                            //DMath
19000: 500 unit uPSI_usimplex;
                                                            //DMath
                                                            //DMath
19001: 501 unit uPSI_uhyper;
19002: 502 unit uPSI_IdHL7;
                                                            //Tndv
19003: 503 unit uPSI_IdIPMCastBase,
                                                            //Indv
19004: 504 unit uPSI_IdIPMCastServer;
                                                            //Indy
19005: 505 unit uPSI_IdIPMCastClient;
                                                            //Indy
19006: 506 unit uPSI_unlfit; //nlregression 19007: 507 unit uPSI_IdRawHeaders;
                                                            //DMath
                                                            //Tndv
19008: 508 unit uPSI_IdRawClient;
                                                            //Indv
19009: 509 unit uPSI_IdRawFunctions;
19010: 510 unit uPSI_IdTCPStream;
                                                            //Indy
19011: 511 unit uPSI_IdSNPP;
19012: 512 unit uPSI_St2DBarC;
                                                            //Indv
                                                            //SysTools
19013: 513 unit uPSI_ImageWin; //FTL
                                                            //VCL
19014: 514 unit uPSI_CustomDrawTreeView; //FTL
                                                            //VCL
19015: 515 unit uPSI_GraphWin; //FTL 19016: 516 unit uPSI_actionMain; //FTL
                                                            //VCL
                                                            //VCT
19017: 517 unit uPSI_StSpawn;
                                                            //SysTools
19018: 518 unit uPSI_CtlPanel;
19019: 519 unit uPSI_IdLPR;
19020: 520 unit uPSI SockRequestInterpreter;
                                                            //Tndv
19021: 521 unit uPSI_ulambert;
                                                            //DMath
19022: 522 unit uPSI_ucholesk;
                                                            //DMath
19023: 523 unit uPSI_SimpleDS;
                                                            //VCL
19024: 524 unit uPSI_DBXSqlScanner;
                                                            //VCL
19025: 525 unit uPSI DBXMetaDataUtil;
                                                            //VCL
19026: 526 unit uPSI_Chart;
                                                            //TEE
19027: 527 unit uPSI_TeeProcs;
                                                            //TEE
19028: 528 unit mXBDEUtils;
                                                            //mX4
19029: 529 unit uPSI_MDIEdit;
                                                            //VCL
19030:
       530 unit uPST CopyPrsr;
                                                            //VCL
       531 unit uPSI_SockApp;
                                                            //VCL
19032: 532 unit uPSI_AppEvnts;
                                                            //VCL
19033: 533 unit uPSI ExtActns;
                                                            //VCL
19034: 534 unit uPSI_TeEngine;
                                                            //TEE
19035: 535 unit uPSI_CoolMain; //browser
                                                            //VCL
19036: 536 unit uPSI_StCRC;
                                                            //SysTools
19037: 537 unit uPSI_StDecMth2;
                                                            //SysTools
19038: 538 unit uPSI_frmExportMain;
                                                            //Synedit
19039: 539 unit uPSI_SynDBEdit;
                                                            //Synedit
19040: 540 unit uPSI_SynEditWildcardSearch;
                                                            //Synedit
19041: 541 unit uPSI_BoldComUtils;
                                                            //BOLD
                                                            //BOLD
19042: 542 unit uPSI_BoldIsoDateTime;
19043: 543 unit uPSI BoldGUIDUtils; //inCOMUtils
                                                            //BOLD
19044: 544 unit uPSI_BoldXMLRequests;
                                                            //BOLD
19045: 545 unit uPSI_BoldStringList;
                                                            //BOLD
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19046: 546 unit uPSI BoldFileHandler;
                                                          //BOLD
19047: 547 unit uPSI_BoldContainers;
                                                          //BOLD
19048: 548 unit uPSI_BoldQueryUserDlg;
19049: 549 unit uPSI_BoldWinINet;
                                                          //BOLD
19050: 550 unit uPSI BoldQueue;
                                                          //BOLD
19051: 551 unit uPSI_JvPcx;
                                                          //JCL
       552 unit uPSI_IdWhois;
19052:
                                                          //Indy
       553 unit uPSI_IdWhoIsServer;
19053:
19054: 554 unit uPSI_IdGopher;
                                                          //Indy
19055: 555 unit uPSI_IdDateTimeStamp;
                                                          //Indv
19056: 556 unit uPSI_IdDayTimeServer;
                                                          //Tndv
19057: 557 unit uPSI_IdDayTimeUDP;
                                                          //Indy
19058: 558 unit uPSI_IdDayTimeUDPServer;
                                                          //Indy
19059: 559 unit uPSI_IdDICTServer;
                                                          //Indy
19060: 560 unit uPSI_IdDiscardServer;
                                                          //Tndv
19061: 561 unit uPSI_IdDiscardUDPServer;
                                                          //Indy
19062: 562 unit uPSI_IdMappedFTP;
                                                          //Indy
19063: 563 unit uPSI_IdMappedPortTCP;
                                                          //Indy
19064: 564 unit uPSI_IdGopherServer;
19065: 565 unit uPSI_IdQotdServer;
                                                          //Indy
                                                          //Indv
19066: 566 unit uPSI_JvRgbToHtml;
                                                          //JCL
19067: 567 unit uPSI_JvRemLog,
                                                          //JCL
19068: 568 unit uPSI_JvSysComp;
                                                          //JCL
19069: 569 unit uPSI JvTMTL;
                                                          //JCL
       570 unit uPSI_JvWinampAPI;
                                                          //JCL
19071: 571 unit uPSI_MSysUtils;
                                                          //mX4
19072: 572 unit uPSI_ESBMaths;
                                                          //ESB
19073: 573 unit uPSI_ESBMaths2;
                                                          //ESB
19074: 574 unit uPSI_uLkJSON;
                                                          //Tik
19075: 575 unit uPSI_ZURL; //Zeos
                                                          //Zeos
19076: 576 unit uPSI_ZSysUtils;
                                                          //Zeos
19077: 577 unit unaUtils internals
                                                          //UNA
19078: 578 unit uPSI ZMatchPattern;
                                                          //Zeos
19079: 579 unit uPSI_ZClasses;
                                                          //Zeos
19080: 580 unit uPSI_ZCollections;
                                                          //Zeos
19081: 581 unit uPSI_ZEncoding;
                                                          //Zeos
19082: 582 unit uPSI_IdRawBase;
                                                          //Tndv
19083: 583 unit uPSI_IdNTLM;
                                                          //Indv
19084:
       584 unit uPSI_IdNNTP;
                                                          //Indy
19085: 585 unit uPSI_usniffer; //PortScanForm
19086: 586 unit uPSI_IdCoderMIME;
                                                          //Indy
19087: 587 unit uPSI_IdCoderUUE;
19088: 588 unit uPSI_IdCoderXXE;
                                                          //Tndv
                                                          //Indy
19089: 589 unit uPSI_IdCoder3to4;
                                                          //Indy
19090: 590 unit uPSI_IdCookie;
                                                          //Indy
19091: 591 unit uPST IdCookieManager;
                                                          //Tndv
19092: 592 unit uPSI_WDosSocketUtils;
                                                          //WDos
19093: 593 unit uPSI_WDosPlcUtils;
                                                          //WDos
19094: 594 unit uPSI_WDosPorts;
                                                          //WDos
19095: 595 unit uPSI_WDosResolvers;
                                                          //WDos
19096: 596 unit uPSI WDosTimers;
                                                          //WDos
19097:
       597 unit uPSI_WDosPlcs;
                                                          //WDos
19098: 598 unit uPSI_WDosPneumatics;
19099: 599 unit uPSI_IdFingerServer;
                                                          //Indy
19100: 600 unit uPSI_IdDNSResolver;
19101: 601 unit uPSI_IdHTTPWebBrokerBridge;
                                                          //Indv
                                                          //Tndv
19102: 602 unit uPSI_IdIntercept;
                                                          //Indv
19103: 603 unit uPSI_IdIPMCastBase;
19104: 604 unit uPSI_IdLogBase;
                                                          //Indy
19105: 605 unit uPSI_IdIOHandlerStream;
                                                          //Tndv
19106: 606 unit uPSI_IdMappedPortUDP;
                                                          //Indy
19107: 607 unit uPSI_IdQOTDUDPServer;
                                                          //Indy
19108: 608 unit uPSI_IdQOTDUDP;
19109: 609 unit uPSI IdSysLog;
                                                          //Indy
19110: 610 unit uPSI_IdSysLogServer;
                                                          //Indv
19111: 611 unit uPSI_IdSysLogMessage;
                                                          //Indy
19112: 612 unit uPSI_IdTimeServer;
                                                          //Indv
19113: 613 unit uPSI_IdTimeUDP;
                                                          //Indy
19114: 614 unit uPSI_IdTimeUDPServer;
                                                          //Tndv
19115: 615 unit uPSI_IdUserAccounts;
                                                          //Indy
19116: 616 unit uPSI_TextUtils;
                                                          //mX4
19117: 617 unit uPSI_MandelbrotEngine;
                                                          //mX4
19118: 618 unit uPSI_delphi_arduino_Unit1;
                                                          //mX4
19119: 619 unit uPST DTDSchema2;
                                                          //mX4
19120: 620 unit uPSI_fplotMain;
                                                          //DMath
19121: 621 unit uPSI_FindFileIter;
19122: 622 unit uPSI_PppState; (JclStrHashMap)
19123: 623 unit uPSI_PppParser;
                                                          //PPP
                                                          //PPP
19124: 624 unit uPSI_PppLexer;
                                                          //PPP
19125: 625 unit uPSI_PCharUtils;
                                                          //PPP
19126: 626 unit uPSI_uJSON;
                                                          //WU
19127: 627 unit uPSI_JclStrHashMap;
                                                          //JCL
19128: 628 unit uPSI JclHookExcept;
                                                          //JCL
19129: 629 unit uPSI_EncdDecd;
                                                          //VCL
19130: 630 unit uPSI_SockAppReg
                                                          //VCL
19131: 631 unit uPSI_PJFileHandle;
                                                          //PJ
19132: 632 unit uPSI PJEnvVars;
                                                          //PJ
19133: 633 unit uPSI_PJPipe;
                                                          //PJ
19134: 634 unit uPSI_PJPipeFilters;
                                                          //PJ
```

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19135: 635 unit uPSI PJConsoleApp;
                                                         //PJT
19136: 636 unit uPSI_UConsoleAppEx;
                                                         //PJ
19137: 637 unit uPSI_DbxSocketChannelNative,
                                                         //VCL
19138: 638 unit uPSI_DbxDataGenerator,
                                                         //VCL
19139: 639 unit uPSI DBXClient;
                                                         //VCL
19140: 640 unit uPSI_IdLogEvent;
                                                         //Tndv
19141: 641 unit uPSI_Reversi;
                                                         //mX4
19142: 642 unit uPSI_Geometry;
                                                         //mX4
19143: 643 unit uPSI_IdSMTPServer;
                                                         //Indy
19144: 644 unit uPSI_Textures;
19145: 645 unit uPSI_IBX;
                                                         //mX4
                                                         //VCL
19146: 646 unit uPSI_IWDBCommon;
                                                         //VCL
19147: 647 unit uPSI_SortGrid;
                                                         //mX4
19148: 648 unit uPSI_IB;
                                                         //VCL
19149: 649 unit uPST TBScript;
                                                         //VCT
19150: 650 unit uPSI_JvCSVBaseControls;
                                                         //JCL
19151: 651 unit uPSI_Jvg3DColors;
                                                         //JCL
19152: 652 unit uPSI_JvHLEditor; //beat
19153: 653 unit uPSI_JvShellHook;
                                                         //JCL
                                                         //JCTi
19154: 654 unit uPSI_DBCommon2
                                                         //VCL
19155: 655 unit uPSI_JvSHFileOperation;
                                                         //JCL
19156: 656 unit uPSI_uFilexport;
                                                         //mX4
19157: 657 unit uPSI_JvDialogs;
                                                         //JCL
19158: 658 unit uPSI JvDBTreeView;
                                                         //JCL
19159: 659 unit uPSI_JvDBUltimGrid;
                                                         //JCL
19160: 660 unit uPSI_JvDBQueryParamsForm;
                                                         //JCL
19161: 661 unit uPSI_JvExControls;
                                                         //JCL
19162: 662 unit uPSI_JvBDEMemTable;
                                                         //JTCT.
19163: 663 unit uPSI_JvCommStatus;
                                                         //JCL
19164: 664 unit uPSI_JvMailSlots2;
                                                         //JCL
19165: 665 unit uPSI_JvgWinMask;
19166: 666 unit uPSI_StEclpse;
                                                         //SysTools
19167: 667 unit uPSI_StMime;
                                                         //SvsTools
19168: 668 unit uPSI_StList;
                                                         //SysTools
19169: 669 unit uPSI_StMerge;
                                                         //SysTools
19170: 670 unit uPSI StStrS;
                                                         //SysTools
19171: 671 unit uPSI StTree,
                                                         //SysTools
19172: 672 unit uPSI_StVArr;
                                                         //SvsTools
19173:
       673 unit uPSI_StRegIni;
                                                         //SysTools
19174: 674 unit uPSI_urkf
                                                         //DMath
19175: 675 unit uPSI_usvd;
                                                         //DMath
19176: 676 unit uPSI DepWalkUtils;
                                                         //JTCT
19177: 677 unit uPSI_OptionsFrm;
                                                         //JCL
19178: 678 unit yuvconverts;
                                                         //mX4
                                                         //JCL
19179: 679 uPSI_JvPropAutoSave;
19180: 680 uPSI_AclAPI;
                                                         //alcinoe
19181: 681 uPSI_AviCap;
                                                         //alcinoe
19182: 682 uPSI_ALAVLBinaryTree;
                                                         //alcinoe
19183: 683 uPSI_ALFcnMisc;
                                                         //alcinoe
19184: 684 uPSI_ALStringList;
                                                         //alcinoe
19185: 685 uPSI ALOuickSortList;
                                                         //alcinoe
19186: 686 uPSI_ALStaticText;
                                                         //alcinoe
19187: 687 uPSI_ALJSONDoc;
19188: 688 uPSI_ALGSMComm;
                                                         //alcinoe
19189: 689 uPSI ALWindows;
                                                         //alcinoe
19190: 690 uPSI_ALMultiPartFormDataParser;
                                                         //alcinoe
19191: 691 uPSI_ALHttpCommon;
                                                         //alcinoe
19192: 692 uPSI_ALWebSpider,
                                                         //alcinoe
19193: 693 uPSI_ALHttpClient;
                                                         //alcinoe
19194: 694 uPST ALFCHHTML;
                                                         //alcinoe
19195: 695 uPSI_ALFTPClient;
                                                         //alcinoe
19196: 696 uPSI_ALInternetMessageCommon;
                                                         //alcinoe
19197: 697 uPSI_ALWininetHttpClient;
                                                         //alcinoe
19198: 698 uPSI ALWinInetFTPClient;
                                                         //alcinoe
19199: 699 uPSI_ALWinHttpWrapper;
                                                         //alcinoe
19200: 700 uPSI_ALWinHttpClient;
                                                         //alcinoe
19201: 701 uPSI_ALFcnWinSock;
                                                         //alcinoe
19202: 702 uPSI_ALFcnSQL;
19203: 703 uPSI_ALFcnCGI;
                                                         //alcinoe
19204: 704 uPSI_ALFcnExecute;
                                                         //alcinoe
19205: 705 uPSI_ALFcnFile;
                                                         //alcinoe
19206: 706 uPSI_ALFcnMime;
                                                         //alcinoe
19207: 707 uPSI_ALPhpRunner;
                                                         //alcinoe
19208: 708 uPST ALGraphic;
                                                         //alcinoe
19209:
       709 uPSI_ALIniFiles;
                                                         //alcinoe
19210: 710 uPSI_ALMemCachedClient;
                                                         //alcinoe
19211: 711 unit uPSI MyGrids;
                                                         //mX4
19212: 712 uPSI_ALMultiPartMixedParser
                                                         //alcinoe
       713 uPSI_ALSMTPClient
19213:
                                                         //alcinoe
19214: 714 uPSI_ALNNTPClient;
                                                         //alcinoe
19215: 715 uPSI_ALHintBalloon;
                                                         //alcinoe
19216: 716 unit uPSI_ALXmlDoc;
                                                         //alcinoe
19217: 717 unit uPSI IPCThrd;
                                                         //VCL
19218: 718 unit uPSI_MonForm;
                                                         //VCL
19219: 719 unit uPSI_TeCanvas;
                                                         //Orpheus
19220: 720 unit uPSI_Ovcmisc;
                                                         //Orpheus
19221: 721 unit uPSI ovcfiler;
                                                         //Orpheus
19222: 722 unit uPSI_ovcstate;
                                                         //Orpheus
19223: 723 unit uPSI_ovccoco;
                                                         //Orpheus
```

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19224: 724 unit uPSI_ovcrvexp;
19225: 725 unit uPSI_ovcFormatSettings;
                                                           //Orpheus
                                                           //Orpheus
19226: 726 unit uPSI_OvcUtils;
                                                           //Orpheus
19227: 727 unit uPSI_ovcstore;
                                                           //Orpheus
19228: 728 unit uPSI ovcstr;
                                                           //Orpheus
19229: 729 unit uPSI_ovcmru;
                                                           //Orpheus
19230:
       730 unit uPSI_ovccmd;
                                                           //Orpheus
       731 unit uPSI_ovctimer;
19231:
                                                           //Orpheus
                                                           //Orpheus
19232: 732 unit uPSI_ovcintl;
       733 uPSI_AfCircularBuffer;
19233:
                                                           //AsyncFree
19234: 734 uPSI_AfUtils;
                                                           //AsvncFree
19235: 735 uPSI_AfSafeSync;
                                                           //AsyncFree
19236: 736 uPSI_AfComPortCore;
                                                           //AsyncFree
19237: 737 uPSI_AfComPort;
                                                           //AsyncFree
19238:
       738 uPST AfPortControls;
                                                           //AsvncFree
19239: 739 uPSI_AfDataDispatcher;
                                                           //AsyncFree
19240: 740 uPSI_AfViewers;
                                                             'AsyncFree
19241: 741 uPSI_AfDataTerminal;
                                                           //AsyncFree
19242: 742 uPSI_SimplePortMain;
19243: 743 unit uPSI_ovcclock;
                                                           //AsyncFree
                                                           //Orpheus
19244: 744 unit uPSI_o32intlst;
                                                           //Orpheus
19245: 745 unit uPSI_o32ledlabel;
                                                           //Orpheus
19246: 746 unit uPSI_AlMySqlClient;
19247: 747 unit uPSI_ALFBXClient;
                                                           //alcinoe
                                                           //alcinoe
19248: 748 unit uPSI_ALFcnSQL;
                                                           //alcinoe
19249: 749 unit uPSI_AsyncTimer;
19250: 750 unit uPSI_ApplicationFileIO;
                                                           //mX4
19251:
       751 unit uPSI PsAPI;
                                                           //VCLA
19252: 752 uPSI_ovcuser;
                                                           //Orpheus
19253: 753 uPSI_ovcurl;
                                                           //Orpheus
19254: 754 uPSI_ovcvlb;
                                                           //Orpheus
                                                            //Orpheus
19255: 755 uPSI_ovccolor;
19256: 756 uPSI ALFBXLib.
                                                           //alcinoe
19257: 757 uPSI_ovcmeter;
                                                           //Orpheus
19258: 758 uPSI_ovcpeakm;
                                                           //Orpheus
19259: 759 uPSI_032BGSty;
                                                           //Orpheus
19260: 760 uPSI_ovcBidi;
                                                           //Orpheus
19261: 761 uPSI_ovctcary;
                                                           //Orpheus
19262: 762 uPSI_DXPUtils;
                                                           //mX4
19263: 763 uPSI_ALMultiPartBaseParser;
                                                           //alcinoe
19264: 764 uPSI ALMultiPartAlternativeParser;
                                                           //alcinoe
       765 uPSI_ALPOP3Client;
19265:
                                                           //alcinoe
19266: 766 uPSI_SmallUtils;
                                                           //mX4
19267: 767 uPSI_MakeApp;
                                                           //mX4
19268: 768 uPSI_O32MouseMon;
                                                           //Orpheus
19269: 769 uPSI_OvcCache;
                                                           //Orpheus
19270: 770 uPSI_ovccalc;
                                                           //Orpheus
19271: 771 uPSI_Joystick
                                                           //OpenGL
19272: 772 uPSI_ScreenSaver;
                                                           //OpenGL
19273: 773 uPSI XCollection,
                                                           //OpenGL
19274: 774 uPSI_Polynomials,
                                                           //OpenGL
19275:
       775 uPSI_PersistentClasses, //9.86
                                                           //OpenGL
19276: 776 uPSI_VectorLists;
                                                           //OpenGL
19277: 777 uPSI_XOpenGL,
                                                           //OpenGL
19278: 778 uPSI_MeshUtils;
                                                           //OpenGL
19279: 779 unit uPSI_JclSysUtils;
                                                           //JCL
19280: 780 unit uPSI_JclBorlandTools;
                                                           //JCL
19281: 781 unit JclFileUtils_max;
                                                           //JCL
19282: 782 uPSI_AfDataControls,
19283: 783 uPSI GLSilhouette;
                                                           //AsyncFree
                                                           //OpenGL
                                                           //JCL
19284: 784 uPSI_JclSysUtils_class;
19285: 785 uPSI_JclFileUtils_class;
                                                           //JCL
19286: 786 uPSI_FileUtil;
                                                           //JCL
19287: 787 uPSI changefind;
                                                           //mX4
19288: 788 uPSI_cmdIntf;
                                                           //mX4
19289: 789 uPSI_fservice;
                                                           //mX4
19290: 790 uPSI_Keyboard;
                                                           //OpenGL
19291: 791 uPSI_VRMLParser,
                                                           //OpenGL
19292: 792 uPSI_GLFileVRML,
                                                           //OpenGL
19293: 793 uPSI_Octree;
                                                           //OpenGL
19294: 794 uPSI_GLPolyhedron,
                                                           //OpenGL
19295: 795 uPSI_GLCrossPlatform;
                                                           //OpenGL
19296: 796 uPSI_GLParticles;
                                                           //OpenGL
       797 uPSI GLNavigator;
19297:
                                                           //OpenGL
19298: 798 uPSI_GLStarRecord;
                                                           //OpenGL
19299: 799 uPSI_GLTextureCombiners;
                                                           //OpenGL
19300: 800 uPSI GLCanvas;
                                                           //OpenGL
19301: 801 uPSI_GeometryBB;
19302: 802 uPSI_GeometryCoordinates;
                                                           //OpenGL
                                                           //OpenGL
19303: 803 uPSI_VectorGeometry;
                                                           //OpenGL
19304: 804 uPSI_BumpMapping;
                                                           //OpenGL
19305: 805 uPSI TGA;
                                                           //OpenGL
19306: 806 uPSI_GLVectorFileObjects;
19307: 807 uPSI_IMM;
                                                           //OpenGL
                                                           //VCL
19308: 808 uPSI_CategoryButtons;
                                                           //VCL
19309: 809 uPSI_ButtonGroup;
                                                           //VCL
19310: 810 uPST DbExcept;
                                                           //VCT
19311: 811 uPSI_AxCtrls;
                                                           //VCL
19312: 812 uPSI_GL_actorUnit1;
                                                           //OpenGL
```

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19313: 813 uPSI_StdVCL;
19314: 814 unit CurvesAndSurfaces;
                                                        //VCL
                                                        //OpenGL
19315: 815 uPSI_DataAwareMain;
                                                        //AsyncFree
19316: 816 uPSI_TabNotBk;
                                                        //VCL
19317: 817 uPSI udwsfiler;
                                                        //mX4
19318: 818 uPSI_synaip;
19319: 819 uPSI_synacode;
                                                        //Synapse!
                                                        //Synapse
19320: 820 uPSI_synachar;
                                                        //Svnapse
19321: 821 uPSI_synamisc;
                                                        //Synapse
19322: 822 uPSI_synaser;
                                                        //Synapse
19323: 823 uPSI_synaicnv;
                                                        //Synapse
19324: 824 uPSI_tlntsend;
                                                        //Synapse
19325: 825 uPSI_pingsend;
                                                        //Synapse
19326: 826 uPSI blcksock;
                                                        //Synapse
19327: 827 uPSI asnlutil;
                                                        //Synapse
19328: 828 uPSI_dnssend;
                                                        //Synapse
19329: 829 uPSI_clamsend;
                                                          'Synapse
19330: 830 uPSI_ldapsend;
                                                        //Synapse
19331: 831 uPSI_mimemess;
                                                        //Synapse
19332: 832 uPSI_slogsend;
                                                        //Synapse
19333: 833 uPSI_mimepart;
                                                        //Synapse
19334: 834 uPSI_mimeinln;
                                                        //Synapse
19335: 835 uPSI_ftpsend,
                                                        //Synapse
19336: 836 uPSI_ftptsend;
                                                        //Synapse
19337: 837 uPSI_httpsend;
                                                        //Svnapse
19338: 838 uPSI_sntpsend;
                                                        //Synapse
19339: 839 uPSI_smtpsend;
                                                        //Synapse
19340: 840 uPSI_snmpsend;
19341: 841 uPSI_imapsend;
                                                        //Synapse
                                                        //Synapse
19342: 842 uPSI_pop3send;
                                                        //Synapse
19343: 843 uPSI_nntpsend;
                                                        //Synapse
19344: 844 uPSI_ssl_cryptlib;
                                                        //Synapse
19345: 845 uPSI_ssl_openssl;
                                                        //Synapse
19346: 846 uPSI_synhttp_daemon;
                                                        //Synapse
19347: 847 uPSI_NetWork;
19348: 848 uPSI_PingThread;
                                                        //Synapse
19349: 849 uPSI_JvThreadTimer;
                                                        //JCL
19350: 850 unit uPSI_wwSystem;
                                                        //InfoPower
19351: 851 unit uPSI_IdComponent;
                                                        //Indy
19352: 852 unit uPSI_IdIOHandlerThrottle;
                                                        //Indy
19353: 853 unit uPSI_Themes;
                                                        //VCL
19354: 854 unit uPSI_StdStyleActnCtrls;
                                                        //VCT
19355: 855 unit uPSI_UDDIHelper;
                                                        //VCL
19356: 856 unit uPSI_IdIMAP4Server;
                                                        //Indy
19357: 857 uPSI_VariantSymbolTable,
                                                        //VCL //3.9.9.92
19358: 858 uPSI_udf_glob,
                                                        //mX4
19359: 859 uPSI_TabGrid,
                                                        //VCL
19360: 860 uPSI_JsDBTreeView,
                                                        //mX4
19361: 861 uPSI_JsSendMail
                                                        //mX4
19362: 862 uPSI dbTvRecordList,
                                                        //mX4
19363: 863 uPSI TreeVwEx.
                                                        //mX4
19364: 864 uPSI_ECDataLink,
                                                        //mX4
19365: 865 uPSI_dbTree,
                                                        //mX4
19366: 866 uPSI_dbTreeCBox,
                                                        //mX4
19367: 867 unit uPSI_Debug; //TfrmDebug
19368: 868 uPSI_TimeFncs;
                                                        //mX4
                                                        //mX4
19369: 869 uPSI_FileIntf,
                                                        //VCL
19370: 870 uPSI_SockTransport,
                                                        //RTL
19371: 871 unit uPSI_WinInet;
                                                        //RTL
19372:
19373:
19374:
19378:
19379: 26 FTL For Form Building out of the Script, eg. 399_form_templates.txt
19380:
19381: 045 unit uPSI_VListView
                                                        TFormListView:
19382: 263 unit uPSI_JvProfiler32;
                                                        TProfReport
19383: 270 unit uPSI_ImgList;
                                                        TCustomImageList
19384: 278 unit uPSI_JvImageWindow;
                                                        TJvImageWindow
19385: 317 unit uPSI_JvParserForm;
                                                        TJVHTMLParserForm
19386: 497 unit uPSI DebugBox;
                                                        TDebugBox
19387:
       513 unit uPSI_ImageWin;
                                                        TImageForm, TImageForm2
19388: 514 unit uPSI_CustomDrawTreeView;
                                                        TCustomDrawForm
19389: 515 unit uPSI_GraphWin;
                                                        TGraphWinForm
19390: 516 unit uPSI_actionMain;
19391: 518 unit uPSI_CtlPanel;
                                                        TActionForm
                                                        TAppletApplication
       529 unit uPSI_MDIEdit;
19392:
                                                        TEditForm
19393: 535 unit uPSI_CoolMain; {browser}
                                                        TWebMainForm
19394: 538 unit uPSI_frmExportMain;
                                                        TSynexportForm
19395: 585 unit uPSI_usniffer; {//PortScanForm}
19396: 600 unit uPSI_ThreadForm;
                                                        TSniffForm
                                                        TThreadSortForm;
19397: 618 unit uPSI_delphi_arduino_Unit1;
                                                        TLEDForm
19398: 620 unit uPSI_fplotMain;
                                                        TfplotForm1
19399: 660 unit uPSI_JvDBQueryParamsForm;
                                                        TJvOueryParamsDialog
19400: 677 unit uPSI_OptionsFrm;
                                                        TfrmOptions;
19401: 718 unit uPSI_MonForm;
                                                        TMonitorForm
```

```
19402: 742 unit uPSI_SimplePortMain;
                                                      TPortForm1
19403: 770 unit uPSI_ovccalc;
                                                      TOvcCalculator
                                                                      //widget
                                                      TDbEngineErrorDlg
19404: 810 unit uPSI_DbExcept;
                                                      TglActorForm1 //OpenGL Robot
TTCPHttpDaemon, TTCPHttpThrd, TPingThread
19405: 812 unit uPSI_GL_actorUnit1;
19406: 846 unit uPSI_synhttp_daemon;
19407: 867 unit uPSI Debug;
                                                      TfrmDebug
19408:
19409:
19410: ex.:with TEditForm.create(self) do begin
19411:
            caption:= 'Template Form Tester'
FormStyle:= fsStayOnTop;
19412:
             with editor do begin
19413:
19414:
              Lines.LoadFromFile(Exepath+'\docs\Readme_rus_mX2.rtf
19415:
               SelStart:= 0;
              Modified:= False;
19416:
19417:
             end;
19418:
           end;
19419:
        with TWebMainForm.create(self) do begin
19420:
          URLs.Text:= 'http://www.kleiner.ch'
URLsClick(self); Show;
19421:
19422:
19423:
         with TSynexportForm.create(self) do begin
19424:
           Caption:= 'Synexport HTML RTF tester'
19425:
           Show;
19426:
         end;
19427:
         with TThreadSortForm.create(self) do begin
19428:
           showmodal; free;
19429:
        end;
19430:
19431:
        with TCustomDrawForm.create(self) do begin
19432:
              width:=820; height:=820;
19433:
              image1.height:= 600; //add properties
              image1.picture.bitmap:= image2.picture.bitmap;
19434:
              //SelectionBackground1Click(self) CustomDraw1Click(self);
19435:
              Background1.click;
19436:
19437:
             bitmap1.click;
19438:
              Tile1.click;
             Showmodal;
19439:
19440:
             Free;
19441:
            end;
19442:
         with TfplotForm1.Create(self) do begin
19443:
19444:
           BtnPlotClick(self);
            Showmodal; Free;
19445:
19446:
          end;
19447:
19448:
       with TOvcCalculator.create(self) do begin
19449:
          parent:= aForm;
19450:
           setbounds(550,510,200,150);
19451:
19452:
          displaystr:= 'maXcalc';
19453:
        end;
19454:
19455:
19456:
19460:
           {\tt Tutorial~00~Function-Coding~(Blix~the~Programmer)}
19461:
           Tutorial 01 Procedural-Coding
           Tutorial 02 00-Programming
19462:
19463:
           Tutorial 03 Modular Coding
19464:
           Tutorial 04 UML Use Case Coding
           Tutorial 05 Internet Coding
19465:
19466:
           Tutorial 06 Network Coding
           Tutorial 07 Game Graphics Coding
19467:
19468:
           Tutorial 08 Operating System Coding
19469:
           Tutorial 09 Database Coding
19470:
           Tutorial 10 Statistic Coding
           Tutorial 11 Forms Coding
19471:
19472:
           Tutorial 12 SQL DB Coding
19473:
           Tutorial 13 Crypto Coding
19474:
           Tutorial 14 Parallel Coding
19475:
           Tutorial 15 Serial RS232 Coding
           Tutorial 16 Event Driven Coding
19476:
19477:
           Tutorial 17 Web Server Coding
19478:
           Tutorial 18 Arduino System Coding
           Tutorial 18_3 RGB LED System Coding
19479:
           Tutorial 19 WinCOM /Arduino Coding
19480:
           Tutorial 20 Regular Expressions RegEx
19481:
19482:
           Tutorial 21 Android Coding (coming 2013)
           Tutorial 22 Services Programming
19483:
           Tutorial 23 Real Time Systems
19484:
19485:
           Tutorial 24 Clean Code
19486:
           Tutorial 25 maXbox Configuration I+II
19487:
           Tutorial 26 Socket Programming with TCP
           Tutorial 27 XML & TreeView
19488:
          Tutorial 28 DLL Coding (available)
Tutorial 29 UML Scripting (coming 2014)
19489:
19490:
```

```
19491:
               Tutorial 30 Web of Things (coming 2014)
               Tutorial 31 Closures (coming 2014)
19492:
19493:
               Tutorial 32 SQL Firebird (coming 2014)
19494:
19495:
19496: ref Docu for all Type Class and Const in maXbox_types.pdf
19497: using Docu for this file is maxbox_functions_all.pdf
19498: PEP - Pascal Education Program Lib Lab
19499:
19500: http://stackoverflow.com/tags/pascalscript/hot
19501: http://www.jrsoftware.org/ishelp/index.php?topic=scriptfunctions
19502: http://sourceforge.net/projects/maXbox #locs:15162
19503: http://sourceforge.net/apps/mediawiki/maXbox
19504: http://www.blaisepascal.eu/
19505: https://github.com/maxkleiner/maXbox3.git
19506: http://www.heise.de/download/maxbox-1176464.html
19507: http://www.softpedia.com/get/Programming/Other-Programming-Files/maXbox.shtml
19508:\ \texttt{https://www.facebook.com/pages/Programming-maXbox/166844836691703}
19509:
19510:
            ---- bigbitbox code_cleared_checked----
```