RouteMAP IMS 3.0 Java API Object Model

IMSConnection

int BUILTIN_CONNECTION
int JAVA_CONNECTION
void **copyMap**(String strBaseMapName, String strNewMapName)
void **createMap**(String strMapName, String strTemplateName)
void **createShapefile**(int nShapeType, Recordset records, String strFilename)
void **deleteMap**(String strMapName)
void **deleteShapefile**(String strFilename)
Recordset **getMapsLocales**(String strMapName)
Recordset **getMapsList**()
Recordset **getShapefileList**()
Map **loadMap**(String strMapName)
void **setCharset**(String strCharset)
void **setConnectionType**(int nType)
void **setConnectionURL**(String strURL)
void **setExternalURL**(String strURL)
void **setGroup**(String strGroup)
void **setLocale**(String strLanguage, String strCountry)
void **setProxyParameters**(String strProxyHost, int nProxyPort)
void **setUserName**(String strName)
void **setUserPassword**(String strPassword)

Map

Location **calcLocation**(GeoRectangle rect, String strPRJ)
void **centerAt**(double x, double y)
double **convertDistance**(double nDistance, int nSrcUnits, int nDestUnits)
void **doPan**(int x, int y)
void **doZoomFull**()
void **doZoomIn**(int x, int y)
void **doZoomInRect**(int top, int left, int bottom, int right)
void **doZoomOut**(int x, int y)
void **doZoomOutRect**(int top, int left, int bottom, int right)
Point **fromMapUnits**(double nX, double nY)
String **getCharset**()
CosmeticLayer **getCosmeticLayer**()
String **getCountry**()
Recordset **getDirectionsSegmentImagesURL**(DrivingDirections driveDir, double nInflateImg, int nWidth, int nHeight, int nImageFormat, String strSegList)
GeoRectangle **getExtent**()
FinderList **getFinders**()
int **getImageHeight**()
int **getImageWidth**()
String **getLanguage**()
LayerList **getLayers**()
String **getLegendImageURL**(MapLegend legend)
Location **getLocation**()
String **getMapImageURL**(int nWidth, int nHeight, int nImageFormat)
int **getMeasureUnits**()
Projection **getProjection**()
Routing **getRouting**()
int **getZoomLevel**()
int **getZoomLevelCount**()
String **getZoomLevelName**(int nLevel)
ZoomLevelsInfo **getZoomLevelsInfo**()
IdentifyResult **identify**(int x, int y)
boolean **isScaleLegendVisible**()
void **saveLegendImage**(String strFilename, MapLegend legend)
void **saveMap**()
void **saveMapImage**(String strFilename, int nWidth, int nHeight, int nImageFormat)
void **setExtent**(GeoRectangle extent)
void **setImageSize**(int nWidth, int nHeight)
void **setLocation**(Location loc)
void **setMeasureUnits**(int nUnits)
void **setProjection**(String strWKT)
void **setScaleLegendVisibility**(boolean bVisible)
void **setZoomLevel**(int nLevel)
GeoPoint **toMapUnits**(int nX, int nY)

MapLegend

boolean **getAutoExtend**()
Color ***getBackColor***()
int **getCellSpacing**()
boolean **getDrawOnlyVisibleLayers**()
TextFont **getFont**()
int **getHeight**()
int **getImageFormat**()
int **getLayerIconHeight**()
int **getLayerIconWidth**()
int **getWidth**()
void **setAutoExtend**(boolean bAutoExtend)
void **setBackColor**(Color color)
void **setCellSpacing**(int nCellSpacing)
void **setDrawOnlyVisibleLayers**(boolean bDrawOnlyVisibleLayers)
void **setFont**(TextFont font)
void **setHeight**(int nHeight)
void **setImageFormat**(int nFormat)
void **setLayerIconHeight**(int nHeight)
void **setLayerIconWidth**(int nWidth)
void **setWidth**(int nWidth)

Projection

GeoPoint **convertPoint**(String sToPRJ, GeoPoint pt)
GeoPoints **convertPoints**(String sToPRJ, GeoPoints points)
GeoRectangle **convertRect**(String sToPRJ, GeoRectangle rect)
double **fromPrjUnits**(double dValue, int toUnits)
String **getName**()
String **getPRJString**()
boolean **isGeographic**()
boolean **isUnknown**()
GeoPoint **project**(double nLat, double nLong)
GeoPoints **projectPoints**(GeoPoints points)
double **toPrjUnits**(double dValue, int fromUnits)
GeoPoint **unproject**(double x, double y)
GeoPoints **unprojectPoints**(GeoPoints points)

IdentifyResult

int **getLayerNumber**()
Recordset **getRecordset**()

Location

GeoPoint center
int height
double hsz
double scale
double vsz
int width
int zoomlevel
String **getString**()
void **setString**(String strLocation)

ZoomLevelsInfo

boolean **canChangePrj**()
String **getLevelName**(int nLevel)
Projection **getLevelPrj**(int nLevel)
int **getLevelsCount**()
void **setLevelPrj**(int nLevel, String strWKT)

Routing

RoutingProblem **createRoutingProblem**()
String **findRoute**(RoutingProblem problem, boolean bLoadDirections, double nPrec)
DrivingDirections **getDrivingDirections**(String strRouteID)
String **getFullRouteID**(String strShortRouteID)
String **getPDAFileURL**(String strRouteID, String strPDAFilename)
String **getShortRouteID**(String strRouteID)
void **savePDAFile**(String strLocalFilename, String strRouteID, String strPDAFilename)
void **setRoute**(String strRouteID)
void **setRoute**(String strRouteID, RouteSymbol symbol)

RoutingProblem

int QUICKEST
int SHORTEST
void **addStop**(RoutingStop stop)
void **enableRestBreaks**(boolean bEnable)
void **enableTripPlanning**(boolean bEnable)
TimeSpan **getDayDriveEnd**()
TimeSpan **getDayDriveStart**()
TimeSpan **getDriveBetweenRest**()
TimeSpan **getDriveFlexibility**()
double **getHighwayPreference**()
int **getMeasureUnits**()
TimeSpan **getRestDuration**()
RoadGroupsInfo **getRoadGroupsInfo**()
RoutingStop **getStop**(int nStop)
int **getStopsCount**()
Time **getTripStart**()
int **getWeight**()
boolean **isOptimize**()
boolean **isRestBreaksEnabled**()
boolean **isTripPlanningEnabled**()
void **removeAllStops**()
void **removeStopAt**(int nStop)
void **setDayDriveEnd**(TimeSpan time)
void **setDayDriveStart**(TimeSpan time)
void **setDriveBetweenRest**(TimeSpan time)
void **setDriveFlexibility**(TimeSpan time)
void **setHighwayPreference**(double nPreference)
void **setMeasureUnits**(int nUnits)
void **setOptimize**(boolean bOptimize)
void **setRestDuration**(TimeSpan time)
void **setTripStart**(Time tripStart)
void **setWeight**(int nWeight)

RouteSymbol

int ARROWSFILL_COLOR
int ARROWSOUTLINE_COLOR
int DIRSEG_SYMBOL
int FINISH_COLOR
int FINISH_SYMBOL
int FINISHTEXT_COLOR
int FRAME_COLOR
int NUMBERS_COLOR
int ROUTE_COLOR
int START_COLOR
int START_SYMBOL
int STARTTEXT_COLOR
int STOP_COLOR
int STOP_SYMBOL
int STOPTEXT_COLOR
Color **getColor**(int nColorStyle)
Symbol **getSymbol**(int nSymbolType)
void **setColor**(int nColorStyle, Color color)
void **setSymbol**(int nSymbolType, Symbol symbol)

RoutingStop

int **getDuration**()
String **getLabel**()
GeoPoint **getStop**()
void **setDuration**(int nDuration)
void **setLabel**(String strLabel)
void **setStop**(GeoPoint pt)

RoadGroupsInfo

String **getGroupDesc**(int nGroup)
int **getGroupsCount**()
double **getPreference**(int nGroup)
double **getSpeed**(int nGroup)
void **setGroupDesc**(int nGroup, String strDesc)
void **setPreference**(int nGroup, double fPreference)
void **setSpeed**(int nGroup, double fSpeed)

DrivingDirections

GeoRectangle **getExtent**()
String **getFinishText**()
Location **getLocation**()
DirectionsSegment **getSegment**(int nSegment)
int **getSegmentCount**()
String **getStartText**()
double **getTotalDistance**()
double **getTotalDrivingTime**()
String **getTotalText**()
double **getTotalTime**()
void **setLoadAllSegmentShapes**(boolean bFlag)

DirectionsSegment

int ARRIVE
int BORDER
int BYPASS
int DAYNUMBER
int DEPART
int ENDOFDAY
int NEWROAD
int RESTBREAK
GeoRectangle **getExtent**()
GeoPoint **getFinish**()
Location **getLocation**()
int **getRoutePart**()
double **getSegmentLength**()
GeoShape **getSegmentShape**(double nPrec)
double **getSegmentTime**()
int **getSegmentType**()
GeoPoint **getStart**()
String **getText**()
String **getTimeLengthText**()

LayerList

Layer **addDynamicLayer**(ParameterList dataSourceParameters)
Layer **addFeatureLayer**(String strLayerName)
int **getCount**()
Layer **getLayer**(int nLayer)
Layer **getLayerByName**(String strLayerName)
void **moveLayer**(int nFrom, int nTo)
void **removeAllLayers**()
void **removeLayer**(int nLayer)

Layer

GeoRectangle **getExtent**()
FieldDesc **getFields**()
String **getLabelField**()
String **getLabelFormat**()
String **getLayerIconURL**(int nWidth, int nHeight, Color backColor, int nImageFormat)
Location **getLocation**()
String **getName**()
Renderer **getRenderer**()
int **getShapeType**()
boolean **isDatabaseLayer**()
boolean **isLabelVisible**()
boolean **isSimpleLabel**()
boolean **isVisible**()
Recordset **search**(SearchDef definition)
Recordset **searchById**(String strList, String strFields)
void **setLabelField**(String strFieldName)
void **setLabelFormat**(String strFormat)
void **setLabelVisible**(boolean bVisible)
void **setName**(String strName)
void **setVisible**(boolean bVisible)

Renderer

RendererItem **addItem**()
RendererItem **getItem**(int nItem)
int **getItemCount**()
void **moveItem**(int nFrom, int nTo)
void **removeAllItems**()
void **removeItem**(int nItem)

RendererItem

int FONT_ALL
int FONT_BOLD
int FONT_COLOR
int FONT_ITALIC
int FONT_NAME
int FONT_NONE
int FONT_OUTLINE
int FONT_OUTLINECOLOR
int FONT_SIZE
int FONT_STRIKETHROUGH
int FONT_UNDERLINE
int MAX_ZOOM_LEVEL
int MIN_ZOOM_LEVEL
int SYMBOL_ALL
int SYMBOL_BRUSH_COLOR
int SYMBOL_BRUSH_STYLE
int SYMBOL_COLOR1
int SYMBOL_COLOR2
int SYMBOL_NONE
int SYMBOL_SIZE
int SYMBOL_STYLE
String **getExpr**()
TextFont **getFont**()
int **getFontMask**()
boolean **getLabelVisible**()
int **getMaxZoomLevel**()
int **getMinZoomLevel**()
Symbol **getSymbol**()
int **getSymbolMask**()
void **setExpr**(String strExpr)
void **setFont**(TextFont font)
void **setFontMask**(int nMask)
void **setLabelVisible**(boolean bVisible)
void **setMinMaxZoomLevel**(int nMinLevel, int nMaxLevel)
void **setSymbol**(Symbol symbol)
void **setSymbolMask**(int nMask)

FinderList

int **getCount**()
Finder **getFinder**(int nFinder)
Finder **getFinderById**(String strFinderID)

Finder

Recordset **find**()
String **getDescription**()
Recordset **getFieldValues**(int nField)
String **getFinderID**()
int **getPreferredZoomLevel**()
boolean **isFieldEnabled**(int nField)
boolean **isSpecialField**(int nField)
void **setFieldValue**(int nIndex, String strValue)
void **setFieldValueByName**(String strFieldName, String strValue)

SearchDef

int ALL_RECORDS
int INSIDE
int INTERSECT
int SORT_DISTANCE
void **addCircle**(double nCenterX, double nCenterY, double nRadius, int reserved)
void **addLineBuffer**(GeoPoints points, double nBufferDistance, int reserved)
void **addPolygon**(GeoPoints points, int reserved)
void **addRectangle**(GeoRectangle rect, int reserved)
void **addRouteBuffer**(String strRouteID, double nBufferDistance, int reserved)
void **addRouteSegmentBuffer**(String strRouteID, int nSegment, double nBufferDistance, int reserved)
int **getTotalRecords**()
void **removeFigures**()
void **setExpression**(String strExpr)
void **setFields**(String strFields)
void **setRecordRange**(int nStartRecord, int nRecordCount)
void **setSearchMethod**(int nSearchMethod)

CosmeticLayer

Enum **getCallouts**()
Enum **getEllipses**()
Enum **getPolygons**()

Enum

void **add**(Object object)
void **clear**()
int **getCount**()
Object **item**(int nIndex)
void **remove**(int nIndex)

Callout

int BOTTOM_CENTER
int BOTTOM_LEFT
int BOTTOM_RIGHT
int BOX
int CENTER
int CENTER_CENTER
int CENTER_LEFT
int CENTER_RIGHT
int ELLIPSE
int LEFT
int LELLIPSE
int LRECT
int LROUNDRECT
int NULL
int RECT
int RIGHT
int ROUNDRECT
int SRECT
int TOP_CENTER
int TOP_LEFT
int TOP_RIGHT
GeoPoint **getAnchor**()
int **getAnchorLength**()
Color **getBgColor**()
TextFont **getFont**()
int **getOrientation**()
int **getStyle**()
Symbol **getSymbol**()
String **getText**()
int **getTextAlign**()
void **setAnchor**(double x, double y)
void **setAnchor**(GeoPoint point)
void **setAnchorLength**(int nLength)
void **setBgColor**(Color color)
void **setFont**(TextFont font)
void **setOrientation**(int nOrientation)
void **setStyle**(int nStyle)
void **setSymbol**(Symbol symbol)
void **setText**(String strText)
void **setTextAlign**(int nAlign)

EllipseSymbol

GeoEllipse **getEllipse**()
Location **getLocation**()
Symbol **getSymbol**()
void **setEllipse**(GeoEllipse ellipse)
void **setLocation**(Location loc)
void **setSymbol**(Symbol symbol)

PolygonSymbol

Location **getLocation**()
GeoPoints **getPoints**()
Symbol **getSymbol**()
void **setLocation**(Location loc)
void **setPoints**(GeoPoints points)
void **setSymbol**(Symbol symbol)

Symbol

int BRUSH_COLOR
int BRUSH_COLOR2
int SYMBOL_COLOR
int SYMBOL_COLOR2
String **getBrushStyle**()
Color **getColor**(int nColorConst)
int **getSize**()
String **getSymbolStyle**()
void **setBrushStyle**(String strStyle)
void **setColor**(int nColorConst, Color color)
void **setSize**(int nSize)
void **setSymbolStyle**(String strStyle)

TextFont

boolean **getBold**()
Color **getColor**()
boolean **getItalic**()
String **getName**()
boolean **getOutline**()
Color **getOutlineColor**()
int **getSize**()
boolean **getStrikeThrough**()
boolean **getUnderline**()
void **setBold**(boolean bBold)
void **setColor**(Color color)
void **setItalic**(boolean bItalic)
void **setName**(String strName)
void **setOutline**(boolean bOutline)
void **setOutlineColor**(Color outlineColor)
void **setSize**(int nSize)
void **setStrikeThrough**(boolean bStrikeThrough)
void **setUnderline**(boolean bUnderline)

GeoPoint

double x
double y

GeoPoints

int **getCount**()
GeoPoint **getPoint**(int nIndex)
void **getPoint**(int nIndex, GeoPoint point)

GeoPointsImpl

void **addPoint**(double x, double y)
void **clear**()
int **getCount**()
GeoPoint **getPoint**(int nIndex)
void **removePoint**(int nIndex)

GeoRectangle

double bottom
double left
double right
double top
void **set**(double top, double left, double bottom, double right)
void **union**(double x, double y)
void **union**(GeoPoint point)

GeoShape

int BOUNDARY
int LINE
int MULTIPOINT
int POINT
GeoRectangle **getExtent**()
Location **getLocation**()
int **getPartCount**()
GeoPoints **getPartPoints**(int nPart)
int **getShapeType**()
int **getTotalPointsCount**()

GeoEllipse

GeoPoint center
double height
double width

ParameterList

void **add**(String strParamName, String strParamValue)
void **clear**()

TimeSpan

int **getDays**()
int **getHours**()
int **getMinutes**()
int **getSeconds**()
void **setDays**(int nDays)
void **setHours**(int nHours)
void **setMinutes**(int nMins)
void **setSeconds**(int nSecs)

MeasureUnit

int KILOMETERS
int MAPUNITS
int MILES
int PIXELS

ImageFormat

int DEFAULT
int GIF
int JPEG
int PNG

FieldType

int DATE
int DOUBLE
int INTEGER
int LONG
int SHAPE
int STRING
int TIME

FieldDesc

int **getFieldCount**()
int **getFieldIndex**(String strFieldName)
String **getFieldLabel**(int nField)
String **getFieldName**(int nField)
int **getFieldPrecision**(int nField)
int **getFieldType**(int nField)
double **getShapeFieldPrecision**(int nField)

Recordset

int TYPE_FORWARD
int TYPE_RECORD
int TYPE_SCROLL
Date **getAsDate**(int nField)
Date **getAsDateByName**(String strFieldName)
double **getAsDouble**(int nField)
double **getAsDoubleByName**(String strFieldName)
int **getAsInt**(int nField)
int **getAsIntByName**(String strFieldName)
long **getAsLong**(int nField)
long **getAsLongByName**(String strFieldName)
String **getAsString**(int nField)
String **getAsStringByName**(String strFieldName)
Time **getAsTime**(int nField)
Time **getAsTimeByName**(String strFieldName)
int **getCurrentRecord**()
FieldDesc **getFields**()
Location **getLocation**()
int **getNavigationType**()
int **getRecordsCount**()
GeoShape **getShape**(int nField)
GeoShape **getShapeByName**(String strFieldName)
boolean **isBOF**()
boolean **isEOF**()
boolean **move**(int nRecord)
boolean **moveFirst**()
boolean **moveLast**()
boolean **moveNext**()
boolean **movePrevious**()

Object Diagram Key

Object Name
GeoRectangle **getExtent**()
integer **getPartCount**()
GeoPoint center
Method that returns an object (underlined)
Method-preceded with return value type ("void" if no value returned)
Property
Classes are non-italic and interfaces are *italic*

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