



RouteMAP IMS 2.5 COM API Object Model

IMSConnection

```
void copyMap(String strBaseMapName, String strNewMapName)
void createMap(String strMapName, String strTemplateName)
void createShapefile(integer nShapeType, Recordset records, String strFilename)
void deleteMap(String strMapName)
void deleteShapefile(String strFilename)
Recordset getMapList()
Recordset getShapefileList()
Map loadMap(String strMapName)
void setCharset(String strCharset)
void setConnectionURL(String strURL)
void setExternalURL(String strURL)
void setConnectionType(integer nType)
void setLocale(String strLanguage, String strCountry)
void setGroup(String strGroup)
void setProxyParameters(String strProxyHost, integer nProxyPort)
void setUserNames(String strName)
void setUserPassword(String strPassword)
```

Map

```
void centerAt(double x, double y)
double convertDistance(double nDistance, integer nSrcUnits, integer nDestUnits)
void doPan(integer x, integer y)
void doZoomFull()
void doZoomIn(integer x, integer y)
void doZoomInRect(integer top, integer left, integer bottom, integer right)
void doZoomOut(integer x, integer y)
void doZoomOutRect(integer top, integer left, integer bottom, integer right)
GeoPoint fromMapUnits(double nX, double nY)
String getCharset()
CosmeticLayer get(CosmeticLayer)
String getCountry()
Recordset getDirectionsSegmentImagesURL(DrivingDirections driveDir, double nLatitude, integer nWidth, integer nHeight, integer nImageFormat, String strSegList)
String getLanguage()
GeoRectangle getExtent()
FinderList getFinders()
integer getImageHeight()
integer getImageWidth()
LayerList getLayers()
String getLegendImageURL(MapLegend legend)
String getMapImageURL(integer nWidth, integer nHeight, integer nImageFormat)
integer getMeasureUnits()
Projection getProjection()
Routing getRouting()
integer getZoomLevel()
integer getZoomLevelCount()
String getZoomLevelName(integer nLevel)
IdentifyResult identify(integer x, integer y)
boolean isScaleLegendVisible()
void saveLegendImage(String strFilename, MapLegend legend)
void saveMap()
void saveMapImage(String strFilename, integer nWidth, integer nHeight, integer nImageFormat)
void setExtent(GeoRectangle extent)
void setImageSize(integer nWidth, integer nHeight)
void setMeasureUnits(integer nUnits)
void setScaleLegendVisibility(boolean bVisible)
void setZoomLevel(integer nLevel)
GeoPoint toMapUnits(integer x, integer y)
```

MapLegend

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

Projection

```
String getName()
GeoPoint project(double nLat, double nLong)
GeoPoint unproject(double x, double y)
GeoPoints projectPoints(GeoPoints points)
GeoPoints unprojectPoints(GeoPoints points)
```

IdentifyResult

```
integer getLayerNumber()
Recordset getRecordset()
```

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

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

RouteSymbol

```
integer getColor(integer nColorStyle)
Symbol getSymbol(integer nSymbolType)
void setColor(integer nColorStyle, integer color)
void setSymbol(integer nSymbolType, Symbol symbol)
```

RoutingStop

```
integer getDuration()
String getLabel()
GeoPoint getStop()
void setDuration(integer nDuration)
void setLabel(String strLabel)
void setStop(GeoPoint pt)
```

RoadGroupsInfo

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

DrivingDirections

```
GeoRectangle getExtent()
String getFinishText()
DirectionsSegment getSegment(integer nSegment)
integer getSegmentCount()
String getStartText()
double getTotalDistance()
double getTotalDrivingTime()
String getTotalText()
double getTotalTime()
```

DirectionsSegment

```
GeoRectangle getExtent()
GeoPoint getFinish()
integer getRoutePart()
double getSegmentLength()
GeoShape getSegmentShape(double nPrec)
double getSegmentTime()
integer getSegmentType()
GeoPoint getStart()
String getText()
String getTimeLengthText()
```

LayerList

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

Layer

```
GeoRectangle getExtent()
FieldDesc getFieldDesc()
String getLabelField()
String getLabelFormat()
String getLayerIconURL(integer nWidth, integer nHeight, integer backColor, integer nImageFormat)
String getName()
Renderer getRenderer()
integer getShapeType()
boolean isDatabaseLayer()
boolean isLabelVisible()
boolean isSimpleLabel()
boolean isVisible()
Recordset search(SearchDef definition)
Recordset searchByID(String strIDList, String strFields)
void setLabelField(String strField)
void setLabelFormat(String strFormat)
void setLabelVisible(boolean bVisible)
void setName(String strName)
void setVisible(boolean bVisible)
```

Renderer

```
RendererItem addItem()
RendererItem getItem(integer nItem)
void moveItem(integer nFrom, integer nTo)
void removeAllItems()
void removeItem(integer nItem)
```

RendererItem

```
String getExpr()
TextFont getFont()
integer getFontMask()
boolean getLabelVisible()
integer getMaxZoomLevel()
integer getMinZoomLevel()
Symbol getSymbol()
integer getSymbolMask()
void setExpr(String strExpr)
void setFont(TextFont font)
void setFontMask(integer nMask)
void setLabelVisible(boolean bVisible)
void setMinMaxZoomLevel(integer nMinLevel, integer nMaxLevel)
void setSymbol(Symbol symbol)
void setSymbolMask(integer nMask)
```

FinderList

```
integer getCount()
Finder getFinder(integer nFinder)
Finder getFinderByID(String strFinderID)
```

Finder

```
Recordset find()
String getDescription()
String getFinderID()
integer getPreferredZoomLevel()
boolean isFieldEnabled(integer nField)
boolean isSpecialField(integer nField)
void setFieldValue(integer nIndex, String strValue)
integer getFieldCount()
integer getFieldIndex(String strFieldName)
String getFieldLabel(integer nField)
String getFieldName(integer nField)
void setFieldValueByName(String strFieldName, String strValue)
Recordset getFieldValues(integer nField)
```

SearchDef

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

CosmeticLayer

```
Enum getCallouts()
Enum getEllipses()
Enum getPolygons()
```

Enum

```
void add(Object object)
void clear()
integer getCount()
Object getItem(integer nIndex)
void remove(integer nIndex)
```

Callout

```
GeoPoint getAnchor()
integer getAnchorLength()
integer getBgColor()
integer getOrientation()
TextFont getFont()
integer getStyle()
Symbol getSymbol()
String getText()
integer getTextAlign()
void setAnchor(double x, double y)
void setAnchor(GeoPoint point)
void setAnchorLength(integer nLength)
void setBgColor(integer color)
void setFont(TextFont font)
void setOrientation(integer nOrientation)
void setStyle(integer nStyle)
void setSymbol(Symbol symbol)
void setText(String strText)
void setTextAlign(integer nAlign)
```

EllipseSymbol

```
GeoEllipse getEllipse()
Symbol getSymbol()
void setEllipse(GeoEllipse ellipse)
void setSymbol(Symbol symbol)
```

PolygonSymbol

```
GeoPoints getPoints()
Symbol getSymbol()
void setPoints(GeoPoints points)
void setSymbol(Symbol symbol)
```

Symbol

```
String getBrushStyle()
integer getColor(integer nColorConst)
integer getSize()
String getSymbolStyle()
void setBrushStyle(String strStyle)
void setColor(integer nColorConst, integer color)
void setSize(integer nSize)
void setSymbolStyle(String strStyle)
```

TextFont

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

Utils

```
integer createColor(integer red, integer green, integer blue)
```

GeoPoint

```
double x
double y
```

GeoPoints

```
void addPoint(double x, double y)
void clear()
integer getCount()
GeoPoint getPoint(integer nIndex)
void getPoint(integer nIndex, GeoPoint point)
void removePoint(integer nIndex)
```

GeoRectangle

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

GeoShape

```
GeoRectangle getExtent()
integer getPartCount()
GeoPoints getPartPoints(integer nPart)
integer getShapeType()
integer getTotalPointsCount()
```

GeoEllipse

```
GeoPoint center
double height
double width
```

ParameterList

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

Date

```
integer getDate()
integer getMonth()
integer getYear()
void setDate(integer date)
void setMonth(integer month)
void setYear(integer year)
```

Time

```
integer getDate()
integer getHours()
integer getMinutes()
integer getMonth()
integer getSeconds()
integer getYear()
void setDate(integer date)
void setHours(integer hours)
void setMinutes(integer minutes)
void setMonth(integer month)
void setSeconds(integer seconds)
void setYear(integer year)
```

TimeSpan

```
integer getDays()
integer getHours()
integer getMinutes()
integer getSeconds()
void setDays(integer nDays)
void setHours(integer nHours)
void setMinutes(integer nMins)
void setSeconds(integer nSecs)
```

FieldDesc

```
integer getFieldCount()
integer getFieldIndex(String strFieldName)
String getFieldLabel(integer nField)
String getFieldName(integer nField)
integer getFieldPrecision(integer nField)
integer getFieldTypes(integer nField)
double getShapeFieldPrecision(integer nField)
```

Recordset

```
Date getDate(integer nIndex)
Date getAsDateByName(String strFieldName)
double getAsDouble(integer nIndex)
double getAsDoubleByName(String strFieldName)
integer getAsInt(integer nIndex)
integer getAsIntByName(String strFieldName)
long getAsLong(integer nIndex)
long getAsLongByName(String strFieldName)
String getAsString(integer nIndex)
String getAsStringByName(String strFieldName)
Time getAsTime(integer nIndex)
Time getAsTimeByName(String strFieldName)
integer getCurrentRecord()
FieldDesc getFieldDesc()
integer getNavigationType()
integer getRecordsCount()
GeoShape getShape(integer nField)
GeoShape getShapeByName(String strFieldName)
boolean isEOF()
boolean isEOF()
boolean move(integer nRecord)
boolean moveFirst()
boolean moveLast()
boolean moveNext()
boolean movePrevious()
```

Object Diagram Key

Object Name

