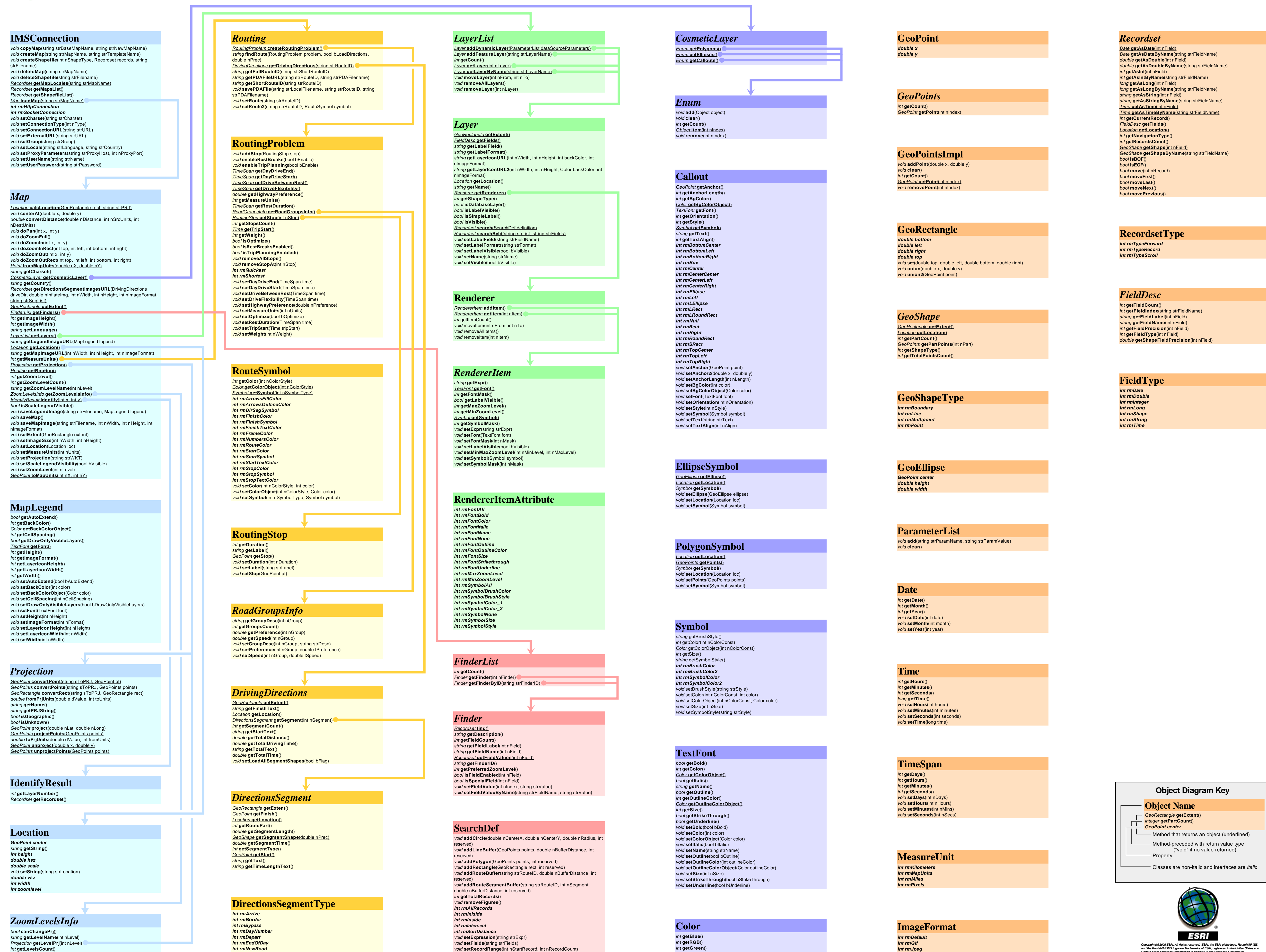




RouteMAP IMS 3.0 .NET API Object Model



```

IMSConnection
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 getMapLocales(string strMapName)
Recordset getMapLayers()
Recordset getShapefileList()
Map loadMap(string strMapName)
int rmHttpConnection
int rmSocketConnection
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 setUserNaming(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 doZoomOut(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 directions, double nMinFailing, int nWidth, int nHeight, int nImageFormat, string strSegList)
GeoRectangle getExtent()
FinderList getFinderList()
int getImageHeight()
int getImageWidth()
string getLanguage()
Layers 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 nX, int nY)
bool 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(bool bVisible)
void setZoomLevel(int nLevel)
GeoPoint toMapUnits(int nX, int nY)

```

```

MapLegend
bool getAutoExtend()
int getBackColor()
Color getBackColorObject()
int getCellSpacing()
bool getDrawOnlyVisibleLayers()
TextFont getFont()
int getHeight()
int getImageFormat()
int getImageHeight()
int getImageWidth()
int getWidth()
void setAutoExtend(bool bAutoExtend)
void setBackgroundColor(int color)
void setBackgroundColorObject(Color color)
void setCellSpacing(int nCellSpacing)
void setDrawOnlyVisibleLayers(bool 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()
bool isGeographic()
bool 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
string getStrings()
int height
double hsz
double scale
void setString(string strLocation)
double vsz
int width
int zoomlevel

```

```

ZoomLevelsInfo
bool canChangePrj()
string getLevelName(int nLevel)
Projection getLevelPrj(int nLevel)
int getLevelsCount()
void setLevelPrj(int nLevel, string strWKT)

```

```

Routing
RoutingProblem createRoutingProblem()
string findRoute(RoutingProblem problem, bool bLoadDirections, double nPrec)
DrivingDirections getDrivingDirections(string strRouteID)
string getFullRouteID(string strShortRouteID)
string getPDFURL(string strRouteID, string strPDFFilename)
string getShortRouteID(string strRouteID)
void savePDFFile(string strLocalFilename, string strRouteID, string strPDFFilename)
void setRoute(string strRouteID)
void setRoute(GeoPoint pt, RouteSymbol symbol)

```

```

RoutingProblem
void addStop(RoutingStop stop)
void enableTripsBreaks(bool bEnable)
void enableTripPlanning(bool bEnable)
TimeSpan getDayDriveEnd()
TimeSpan getDayDriveStart()
TimeSpan getDriveBetweenRest()
TimeSpan getDriveFlexibility()
double getHighwayPreference()
int getMeasureUnits()
TimeSpan getResDuration()
RoadGroupsInfo getRoadGroupsInfo()
RoutingStop getStop(int nStop)
int getStopCount()
TimeSpan getTripStart()
int getWeight()
bool isOptimize()
bool isResBreaksEnabled()
bool isTripPlanningEnabled()
void removeAllStops()
void removeStop(A int nStop)
int rmQuickest
int rmShortest
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(bool bOptimize)
void setResDuration(TimeSpan time)
void setStart(Time strStart)
void setWeight(int nWeight)

```

```

RouteSymbol
int getColor(int nColorStyle)
Color getColorObject(int nColorStyle)
Symbol getSymbol(int nSymbolType)
int rmArrowsFillColor
int rmArrowsOutlineColor
int rmDirSegSymbol
int rmFinishColor
int rmFinishSymbol
int rmFinishTextColor
int rmFrameColor
int rmNumberColor
int rmRouteColor
int rmStartColor
int rmStartSymbol
int rmStartTextColor
int rmStopColor
int rmStopSymbol
int rmStopTextColor
void setColor(int nColorStyle, int color)
void setColorObject(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 bPreference)
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(bool bFlag)

```

```

DirectionsSegment
GeoRectangle getExtent()
GeoPoint getFinish()
Location getLocation()
int getRoutePart()
double getSegmentLength()
GeoShape getSegmentShape(double nPrec)
double getSegmentTime()
int getSegmentType()
GeoPoint getStart()
string getText()
string getTimeLengthText()

```

```

DirectionsSegmentType
int rmArrive
int rmBorder
int rmBypass
int rmDayNumber
int rmDepart
int rmEndOfDay
int rmNewRoad
int rmRestBreak

```

```

LayerList
Layer addDynamicLayer(ParameterList dataSourceParameters)
Layer addFeatureLayer(string strLayerName)
int getCount()
Layer getLayer(int nLayer)
void moveLayer(int nFrom, int nTo)
void removeAllLayers()
void removeLayer(int nLayer)

```

```

Layer
GeoRectangle getExtent()
FieldDesc getFieldDesc()
string getLabelField()
string getLabelFormat()
string getLayerIconURL(int nWidth, int nHeight, int backColor, int nImageFormat)
string getLayerIconURL2(int nWidth, int nHeight, Color backColor, int nImageFormat)
Location getLocation()
string getName()
Recordset getRecordset()
int getShapeType()
Color getBaseColor()
bool isDatabaseLayer()
bool isLabelVisible()
bool isSimpleLabel()
bool isVisible()
Recordset search(SearchDef definition)
Recordset searchByField(string strField, string strFields)
void setLabelField(string strFieldName)
void setLabelFormat(string strFormat)
void setName(string strName)
void setVisible(bool bVisible)

```

```

Renderer
RendererItem addItem()
RendererItem getItem(int nItem)
void getMeasureUnits(int nUnits)
void moveItem(int nFrom, int nTo)
void removeAllItems()
void removeItem(int nItem)

```

```

RendererItem
string getExpr()
TextFont getFont()
int getFontMask()
bool getLabelVisible()
int getMaxZoomLevel()
int getMinZoomLevel()
Symbol getSymbol()
int getSymbolMask()
void setExpr(string strExpr)
void setFont(TextFont font)
void setFontMask(int nMask)
void setLabelVisible(bool bVisible)
void setMinZoomLevel(int nMinLevel, int nMaxLevel)
void setSymbol(Symbol symbol)
void setSymbolMask(int nMask)

```

```

RendererItemAttribute
int rmFontAll
int rmFontBold
int rmFontColor
int rmFontItalic
int rmFontName
int rmFontNone
int rmFontOutline
int rmFontOutlineColor
int rmFontSize
int rmFontStrikeThrough
int rmFontUnderline
int rmMaxZoomLevel
int rmMinZoomLevel
int rmSymbolAll
int rmSymbolBrushColor
int rmSymbolBrushStyle
int rmSymbolColor_1
int rmSymbolColor_2
int rmSymbolNone
int rmSymbolSize
int rmSymbolStyle

```

```

FinderList
int getCount()
Finder getFinder(int nFinder)
Finder getFinderByID(string strFinderID)

```

```

Finder
Recordset find()
string getDescription()
int getFieldCount()
string getFieldLabel(int nField)
string getFieldNames(int nFields)
Recordset getFieldValues(int nField)
string getFinderID()
int getPreferredZoomLevel()
bool isFieldEnabled(int nField)
bool isSpecialField(int nField)
void setFieldValue(int nIndex, string strValue)
void setFieldValueByName(string strFieldName, string strValue)

```

```

SearchDef
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()
int rmAllRecords
int rmInside
int rmIntersect
int rmSortDistance
int rmSortTime
void setExpression(string strExpr)
void setFields(string strFields)
void setRecordRange(int nStartRecord, int nRecordCount)
void setSearchMethod(int nSearchMethod)

```

```

CosmeticLayer
Enum getPolygons()
Enum getEllipses()
Enum getCallouts()

```

```

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

```

```

Callout
GeoPoint getAnchor()
int getAnchorLength()
int getFillColor()
Color getBaseColor()
TextFont getFont()
int getOrientation()
int getStyle()
Symbol getSymbol()
string getText()
int getTextAlign()
int rmBottomCenter
int rmBottomLeft
int rmBottomRight
int rmBox
int rmCenter
int rmCenterCenter
int rmCenterLeft
int rmCenterRight
int rmEllipse
int rmRect
int rmRoundRect
int rmRRect
int rmRRect
int rmRoundRect
int rmRRect
int rmTopCenter
int rmTopLeft
int rmTopRight
void setAnchor(GeoPoint point)
void setAnchor2(double x, double y)
void setAnchorLength(int nLength)
void setFillColor(int color)
void setBaseColor(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)

```

```

GeoRectangle
double bottom
double left
double right
double top
void set(double top, double left, double bottom, double right)
void union2(GeoPoint point)

```

```

GeoShape
GeoRectangle getExtent()
Location getLocation()
GeoPoints getPartPoints(int nPart)
int getShapeType()
int getTotalPointsCount()

```

```

GeoShapeType
int rmBoundary
int rmLine
int rmMultiPoint
int rmPoint

```

```

GeoEllipse
GeoPoint center
double height
double width

```

```

ParameterList
void add(string strParamName, string strParamValue)
void clear()

```

```

Date
int getDate()
int getMonth()
int getYear()
void setDate(int date)
void setMonth(int month)
void setYear(int year)

```

```

Time
int getHours()
int getMinutes()
int getSeconds()
long getTime()
void setHours(int hours)
void setMinutes(int minutes)
void setSeconds(int seconds)
void setTime(long time)

```

```

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 rmKilometers
int rmMapUnits
int rmMiles
int rmPixels

```

```

GeoPoint
double x
double y

```

```

GeoPoints
int getCount()
GeoPoint getPoint(int nIndex)

```

```

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 union2(GeoPoint point)

```

```

GeoShape
GeoRectangle getExtent()
Location getLocation()
GeoPoints getPartPoints(int nPart)
int getShapeType()
int getTotalPointsCount()

```

```

GeoShapeType
int rmBoundary
int rmLine
int rmMultiPoint
int rmPoint

```

```

GeoEllipse
GeoPoint center
double height
double width

```

```

ParameterList
void add(string strParamName, string strParamValue)
void clear()

```

```

Date
int getDate()
int getMonth()
int getYear()
void setDate(int date)
void setMonth(int month)
void setYear(int year)

```

```

Time
int getHours()
int getMinutes()
int getSeconds()
long getTime()
void setHours(int hours)
void setMinutes(int minutes)
void setSeconds(int seconds)
void setTime(long time)

```

```

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 rmKilometers
int rmMapUnits
int rmMiles
int rmPixels

```

```

ImageFormat
int rmDefault
int rmGif
int rmJpeg
int rmPng

```

```

Recordset
Date getDate(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 getTime(int nField)
Time getAsTimeByName(string strFieldName)
int getCurrentRecord()
FieldDesc getFieldDesc()
Location getLocation()
int getNavigationType()
int getRecordsCount()
GeoShape getShape(int nField)
GeoShape getShapeByName(string strFieldName)
bool isEOF()
bool move(int nRecord)
bool moveFirst()
bool moveLast()
bool moveNext()
bool movePrevious()

```

```

GeoPoints
int getCount()
GeoPoint getPoint(int nIndex)

```

```

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 union2(GeoPoint point)

```

```

FieldDesc
int getFieldCount()
int getFieldIndex(string strFieldName)
string getFieldLabel(int nField)
string getFieldName(int nField)
int getFieldPrecision(int nField)
int getFieldTypes(int nField)
double getShapeFieldPrecision(int nField)

```

```

FieldType
int rmDate
int rmDouble
int rmInteger
int rmLine
int rmShape
int rmString
int rmTime

```

```

GeoEllipse
GeoPoint center
double height
double width

```

```

ParameterList
void add(string strParamName, string strParamValue)
void clear()

```

```

Date
int getDate()
int getMonth()
int getYear()
void setDate(int date)
void setMonth(int month)
void setYear(int year)

```

```

Time
int getHours()
int getMinutes()
int getSeconds()
long getTime()
void setHours(int hours)
void setMinutes(int minutes)
void setSeconds(int seconds)
void setTime(long time)

```

```

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 rmKilometers
int rmMapUnits
int rmMiles
int rmPixels

```

```

ImageFormat
int rmDefault
int rmGif
int rmJpeg
int rmPng

```

