

Overview of the changes (detailed view can be found in the second

Comments

Instances of Imaris are no longer started using COM. They are started by command line and accessed through ICE. The reference of the started instances is not acquired directly, but it can be accessed at any time when the application is fully initialized.

Applies to

(Environment)

Java does not support **properties** (access to public member functions does not allow remote calls). Properties have been replaced by Get/Set methods.

Different properties of IApplication, IDataSet, IDataItem, IDataContainer, IVolume, ILightSource, IFrame, ISpots, ISurfaces, IICells, IFilaments, IMeasurementPoints, IClippingPlane, ISurpassCamera, IImageProcessing, IFactory

ICE proxies are not automatically casted to their most defined implementation. An **explicit cast**, using either the factory or an explicit proxy cast, is necessary to access component specific functions.

IApplication: GetSurpassSelection; IDataContainer: GetChild; IDataItem: GetParent

Java does not support multiple return arguments. One structure containing all the return arguments is returned instead. The values can be accessed as public members of the structure. It is also possible to assign all the members to different variables converting the structure to an array of cells (see the example in Imaris 7.3).

IClippingPlane: GetOrientationAxisAngle; IDataItem: GetStatistics; IDataSet: GetChannelColorTable; ICells: GetVesicles; IImageProcessing: DetectFilament, DetectSpots, DetectSpotsWithRegions; IMeasurementPoints: Get; ISpots: Get; ISurfaces: GetSurfacesList; ISurpassCamera: GetOrientationAxisAngle

Java does not automatically convert output arguments of type Java string into Matlab strings. An explicit cast is necessary. The cast is done with the function `char` for simple strings and `cell` for string arrays. On the other hand, input arguments must be of type Matlab string, not Java string.

IApplication: GetCurrentFileName, GetVersion; IDataItem: GetName, GetStatistics; IDataSet: GetChannelDescription, GetChannelName, GetParameter, GetTimePoint, GetUnit

Enum in struct are no longer strings. They are specific components of Java that can be converted into strings.

tViewer, tType, tMode

ICE does not support **default values for arguments** (and declaration of functions with the same name but different arguments is not allowed). All the arguments must be provided explicitly.

IApplication::FileOpen, IApplication::FileSave, IDataContainer::AddChild, IDataSet::Create, IDataSet::SetDataSlice, IDataSet::SetDataVolume, IDataSet::SetDataVolumeAs1DArray, IDataItem::GetColor, SetColor; IDataSet: GetChannelColor, SetChannelColor; ICells: GetCellColor, SetCellColor, GetNucleusColor, SetNucleusColor, GetVesiclesColor, SetVesiclesColor; IFilament: GetColorSpines, SetColorSpines

The color of the components is encoded in a 32-bit integer (one byte for each component: Red, green, blue, alpha) instead of in a list of floats (one float value for each component: Red, green, blue, alpha). Get/SetColor methods are renamed to Get/SetColorRGBA.

ISurfaces: GetNumberOfContourPlanes, GetContourPlanePosition, GetContourPlaneOrientation, SetContourPlaneOrientation, GetContourVertices, SetContourVertices, tPlaneOrientation

Access to **Contour Surfaces** in ISurfaces has been removed without replacement.

IDataBuffer; IDataSet: CreateDataBuffer, SetDataBuffer, SetDataBufferRedraw; IFactory: CreateDataBuffer; IFactory: IApplication properties with prefix mVisible, except mVisible itself

IDataBuffer is obsolete and it has been removed without replacement. Functions addressing to IDataBuffer are also removed.

IFilament

The **visibility of various elements in the graphic user interface** of Imaris can no longer be accessed.

IFilament has been replaced by **IFilaments** to better reflect the data structure of the filaments in Imaris.

Example in Imaris 7.2

```
vImaris = actxserver('Imaris.Application')
vImaris.mVisible = true;
```

```
vImaris.mVisible = true;
disp(vImaris.mVisible)
```

```
% assuming some Spots are selected in Surpass
vSpots = vImaris.mSurpassSelection;
disp(vSpots.mName)
vNumberOfSpots = numel(vSpots.GetIndicesT);
disp(vNumberOfSpots)
```

```
% assuming some Spots are selected in Surpass
vSpots = vImaris.mSurpassSelection;
[vPositionsXYZ, vRadii, vTimes] = vSpots.Get;
```

```
vName = vImaris.GetCurrentFileName;
disp(vName)
```

```
vImaris.mDataSet.SetChannelName(0, vName);
vNames = vImaris.mSurpassSelection.GetStatistics;
disp(vNames)
```

```
vImaris.mViewer = 'eViewerSlice';
vType = 'eTypeUInt8';
disp(isequal(vType, 'eTypeUInt8')) % true
disp(strcmp(vType, 'eTypeUInt8')) % true
```

```
vImaris.FileOpen('C:/retina.ims');
vSpots = vImaris.mFactory.CreateSpots;
vImaris.GetSurpassScene.AddChild(vSpots);
vDataItem = vImaris.GetSurpassSelection;
vColor = vDataItem.GetColor;
vColorScaled = uint32(vColor * 255);
vColorRGBA = vColorScaled*[1, 256, 256*256; 256*256*256];
vSurfaces = vImaris.mFactory.CreateSurfaces;
disp(vSurfaces.GetContourPlaneOrientation)
```

```
vDataBuffer = vImaris.mDataSet.CreateDataBuffer(25);
disp(vDataBuffer.mSizeZ)
vImaris.mVisibleFull3dToolBar = false;
disp(vImaris.mVisibleMainMenu)
vFilament = vImaris.mFactory.CreateFilament;
vImaris.mSurpassScene.AddChild(vFilament)
```

Example in Imaris 7.3

```
javaaddpath ImarisLib.jar;
! ../../Imaris.exe id101 &
vImarisLib = ImarisLib;
vObjectId = 101;
for vIndex = 1:100 % do several attempts waiting for Imaris to be
registered
    vImaris = vImarisLib.GetApplication(vObjectId);
    if ~isempty(vImaris)
        break
    end
    pause(0.1)
    ...
vImaris.SetVisible(true);
disp(vImaris.GetVisible)
```

```
% assuming some Spots are selected in Surpass
```

```
vDataItem = vImaris.GetSurpassSelection;
disp(char(vDataItem.GetName)) % ok, GetName is a DataItem function
vSpots = vImaris.GetFactory.ToSpots(vDataItem);
vNumberOfSpots = numel(vSpots.GetIndicesT);
disp(vNumberOfSpots)
```

```
% assuming some Spots are selected in Surpass
```

```
vSpotsValues = struct2cell(struct(vSpots.Get));
[vPositionsXYZ, vRadii, vTimes] = vSpotsValues{:};
% that is equivalent to
vSpotsValues = vSpots.Get;
vPositionsXYZ = vSpotsValues.mPositionsXYZ;
vRadii = vSpotsValues.mRadii;
vTimes = vSpotsValues.mTimes;
```

```
vName = char(vImaris.GetCurrentFileName);
disp(vName)
vImaris.GetDataSet.SetChannelName(0, vName);
vNames = cell(vImaris.GetSurpassSelection.GetStatistics.mNames);
disp(vNames)
vImaris.SetViewer(Imaris.tViewer.eViewerSlice);
vType = Imaris.tType.eTypeUInt8;
disp(isequal(vType, 'eTypeUInt8')) % false! (an enum is not the same as
a string)
disp(isequal(vType, Imaris.tType.eTypeUInt8)) % true
vImaris.FileOpen('C:/retina.ims', '');
vSpots = vImaris.GetFactory.CreateSpots;
vImaris.GetSurpassScene.AddChild(vSpots, -1);
vDataItem = vImaris.GetSurpassSelection;
vColorRGBA = vDataItem.GetColorRGBA;
```

(Not available)

(Not available)

```
vFilaments = vImaris.GetFactory.CreateFilaments;
vImaris.GetSurpassScene.AddChild(vFilaments)
```

Detailed list of the function replacement

Imaris 7.2

Class	Function	Class	Function
IApplication		IApplication	
	AddImaris5Password		AddImaris5Password
	DataSetPushUndo		DataSetPushUndo
	Execute		Execute
	FileOpen		FileOpen
	FileSave		FileSave
	GetChannelVisibility		GetChannelVisibility
	GetCurrentFileName		GetCurrentFileName
	Quit		Quit
	SaveSnapShot		SaveSnapShot
	SetChannelVisibility		SetChannelVisibility
	SetLicenseString		SetLicenseString
	mDataSet [get]		GetDataSet
	mDataSet [set]		SetDataSet
	mFactory [get]		GetFactory
	mImageProcessing [get]		GetImageProcessing
	mMainWnd [get]		N/A
	mSurpassCamera [get]		GetSurpassCamera
	mSurpassCameraToolBarWnd [get]		N/A
	mSurpassScene [get]		GetSurpassScene
	mSurpassScene [set]		SetSurpassScene
	mSurpassSelection [get]		GetSurpassSelection
	mSurpassSelection [set]		SetSurpassSelection
	mSurpassToolBarWnd [get]		N/A
	mUserControl [get]		N/A
	mUserControl [set]		N/A
	mVersion [get]		GetVersion
	mViewer [get]		GetViewer
	mViewer [set]		SetViewer
	mVisible [get]		GetVisible
	mVisible [set]		SetVisible
	mVisibleChannelVisibility [get]		N/A
	mVisibleChannelVisibility [set]		N/A
	mVisibleColocToolBar [get]		N/A
	mVisibleColocToolBar [set]		N/A
	mVisibleDisplayAdjustment [get]		N/A
	mVisibleDisplayAdjustment [set]		N/A
	mVisibleEasy3dCameraToolBar [get]		N/A
	mVisibleEasy3dCameraToolBar [set]		N/A
	mVisibleEasy3dToolBar [get]		N/A
	mVisibleEasy3dToolBar [set]		N/A
	mVisibleFull3dCameraToolBar [get]		N/A
	mVisibleFull3dCameraToolBar [set]		N/A
	mVisibleFull3dToolBar [get]		N/A
	mVisibleFull3dToolBar [set]		N/A
	mVisibleGalleryCameraToolBar [get]		N/A
	mVisibleGalleryCameraToolBar [set]		N/A
	mVisibleGalleryToolBar [get]		N/A
	mVisibleGalleryToolBar [set]		N/A
	mVisibleIndexT [get]		GetVisibleIndexT
	mVisibleIndexT [set]		SetVisibleIndexT
	mVisibleInfoToolBar [get]		N/A
	mVisibleInfoToolBar [set]		N/A
	mVisibleMainMenu [get]		N/A
	mVisibleMainMenu [set]		N/A
	mVisibleMainToolBar [get]		N/A
	mVisibleMainToolBar [set]		N/A
	mVisibleSectionCameraToolBar [get]		N/A
	mVisibleSectionCameraToolBar [set]		N/A
	mVisibleSectionToolBar [get]		N/A
	mVisibleSectionToolBar [set]		N/A
	mVisibleSliceCameraToolBar [get]		N/A
	mVisibleSliceCameraToolBar [set]		N/A
	mVisibleSliceMeasurementToolBar [get]		N/A

	mVisibleSliceMeasurementToolBar [set] mVisibleSliceToolBar [get] mVisibleSliceToolBar [set] mVisibleStatusBar [get] mVisibleStatusBar [set] mVisibleSurpassCameraToolBar [get] mVisibleSurpassCameraToolBar [set] mVisibleSurpassKeyFrameToolBar [get] mVisibleSurpassKeyFrameToolBar [set] mVisibleSurpassToolBar [get] mVisibleSurpassToolBar [set] mVisibleTimeToolBar [get] mVisibleTimeToolBar [set]	N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A
ICells		IICells
	AddCell AddNucleus AddVesicle GetCell GetCellColor GetCenterOfMass GetIndicesT GetNucleiCenterOfMass GetNucleus GetNucleusColor GetNucleusTrackEdges N/A GetNumberOfCells GetNumberOfNuclei N/A N/A GetSelectedIndices GetSelectedNucleusIndices GetSelectedVesiclesIndices GetTimePoint GetTrackEdges N/A GetVesicles GetVesiclesColor GetVesiclesTrackEdges N/A N/A RemoveCell RemoveNucleus RemoveVesicle SetCell SetCellColor SetNucleus SetNucleusColor SetNucleusTrackEdges SetSelectedIndices SetSelectedNucleusIndices SetSelectedVesiclesIndices SetTimePoint SetTrackEdges SetVesicles SetVesiclesColor SetVesiclesTrackEdges	AddCell AddNucleus AddVesicle GetCell GetCellColorRGBA GetCenterOfMass GetIndicesT GetNucleiCenterOfMass GetNucleus GetNucleusColorRGBA GetNucleusTrackEdges GetNucleusTrackIds GetNumberOfCells GetNumberOfNuclei GetNumberOfVesicleTypes GetSelectedIds GetSelectedIndices GetSelectedNucleusIndices GetSelectedVesiclesIndices GetTimePoint GetTrackEdges GetTrackIds GetVesicles GetVesiclesColorRGBA GetVesiclesTrackEdges GetVesiclesTrackIds GetVesicleTypes RemoveCell RemoveNucleus RemoveVesicle SetCell SetCellColorRGBA SetNucleus SetNucleusColorRGBA SetNucleusTrackEdges SetSelectedIndices SetSelectedNucleusIndices SetSelectedVesiclesIndices SetTimePoint SetTrackEdges SetVesicles SetVesiclesColorRGBA SetVesiclesTrackEdges
IClippingPlane		IClippingPlane
	GetOrientationAxisAngle GetOrientationQuaternion GetPosition SetOrientationAxisAngle SetOrientationQuaternion SetPosition	GetOrientationAxisAngle GetOrientationQuaternion GetPosition SetOrientationAxisAngle SetOrientationQuaternion SetPosition
IDataBuffer	Create mFileName [get]	N/A N/A

	mSize [get]	N/A
IDataContainer	AddChild GetChild GetNumberOfChildren RemoveChild	IDataContainer AddChild GetChild GetNumberOfChildren RemoveChild
IDataItem	AddStatistics GetColor GetParent GetStatistics N/A SetColor mName [get] mName [set] mVisible [get] mVisible [set]	IDataItem AddStatistics GetColorRGBA GetParent GetStatistics RemoveStatistics SetColorRGBA GetName SetName GetVisible SetVisible
IDataSet	Clone Create CreateDataBuffer Crop GetChannelColor GetChannelColorABGR GetChannelColorTable GetChannelDescription N/A GetChannelName GetChannelRange GetData GetDataSlice GetDataSubSlice GetDataSubVolume GetDataSubVolumeAs1DArray GetDataVolume GetDataVolumeAs1DArray GetParameter GetTimePoint N/A Redraw Resize SetChannelColor SetChannelColorABGR SetChannelColorTable SetChannelDescription N/A SetChannelName SetChannelRange SetData SetDataBuffer	IDataSet Clone Create N/A Crop GetChannelColorRGBA N/A GetChannelColorTable GetChannelDescription GetChannelGamma GetChannelName GetChannelRangeMax GetChannelRangeMin GetDataBytes GetDataFloats GetDataShorts GetDataSliceBytes GetDataSliceFloats GetDataSliceShorts GetDataSubSliceBytes GetDataSubSliceFloats GetDataSubSliceShorts GetDataSubVolumeBytes GetDataSubVolumeFloats GetDataSubVolumeShorts GetDataSubVolumeAs1DArrayBytes GetDataSubVolumeAs1DArrayFloats GetDataSubVolumeAs1DArrayShorts GetDataVolumeBytes GetDataVolumeFloats GetDataVolumeShorts GetDataVolumeAs1DArrayBytes GetDataVolumeAs1DArrayFloats GetDataVolumeAs1DArrayShorts GetParameter GetTimePoint GetTimePointsDelta N/A Resize SetColorChannelRGBA N/A SetChannelColorTable SetChannelDescription SetChannelGamma SetChannelName SetChannelRange SetDataBytes SetDataFloats SetDataShorts N/A

SetDataBufferRedraw	N/A
SetDataSlice	SetDataSliceBytes SetDataSliceFloats SetDataSliceShorts SetDataSubSliceBytes SetDataSubSliceFloats SetDataSubSliceShorts SetDataSubVolumeBytes SetDataSubVolumeFloats SetDataSubVolumeShorts SetDataSubVolumeAs1DArrayBytes SetDataSubVolumeAs1DArrayFloats SetDataSubVolumeAs1DArrayShorts SetDataVolumeBytes SetDataVolumeFloats SetDataVolumeShorts SetDataVolumeAs1DArrayBytes SetDataVolumeAs1DArrayFloats SetDataVolumeAs1DArrayShorts
SetDataSubVolume	SetParameter SetTimePoint N/A mExtendMaxX [get] mExtendMaxX [set] mExtendMaxY [get] mExtendMaxY [set] mExtendMaxZ [get] mExtendMaxZ [set] mExtendMinX [get] mExtendMinX [set] mExtendMinY [get] mExtendMinY [set] mExtendMinZ [get] mExtendMinZ [set] mModified [get] mModified [set] mSizeC [get] mSizeC [set] mSizeT [get] mSizeT [set] mSizeX [get] mSizeX [set] mSizeY [get] mSizeY [set] mSizeZ [get] mSizeZ [set] mType [get] mType [set] mUnit [get] mUnit [set]
SetDataVolume	SetParameter SetTimePoint SetTimePointsDelta GetExtendMaxX SetExtendMaxX GetExtendMaxY SetExtendMaxY GetExtendMaxZ SetExtendMaxZ GetExtendMinX SetExtendMinX GetExtendMinY SetExtendMinY GetExtendMinZ SetExtendMinZ GetModified SetModified GetSizeC SetSizeC GetSizeT SetSizeT GetSizeX SetSizeX GetSizeY SetSizeY GetSizeZ SetSizeZ GetType SetType GetUnit SetUnit
IFactory	IFactory
CreateApplication CreateCells CreateClippingPlane CreateDataBuffer CreateDataContainer CreateDataSet CreateFactory CreateFilament CreateFrame CreateLightSource CreateMeasurementPoints CreateSpots CreateSurfaces N/A CreateVolume IsApplication	CreateApplication CreateCells CreateClippingPlane CreateDataContainer CreateDataSet CreateFactory CreateFilaments CreateFrame CreateImageProcessing CreateLightSource CreateMeasurementPoints CreateSpots CreateSurfaces CreateSurpassCamera CreateVolume IsApplication

	IsCells	IsCells
	IsClippingPlane	IsClippingPlane
	IsDataBuffer	IsDataContainer
	IsDataContainer	IsDataSet
	IsDataSet	IsFactory
	IsFactory	IsFilaments
	IsFilament	IsFrame
	IsFrame	IsImageProcessing
	IsLightSource	IsLightSource
	IsMeasurementPoints	IsMeasurementPoints
	IsSpots	IsSpots
	IsSurfaces	IsSurfaces
	N/A	IsSurpassCamera
	IsVolume	IsVolume
	ToApplication	ToApplication
	ToCells	ToCells
	ToClippingPlane	ToClippingPlane
	ToDataBuffer	ToDataContainer
	ToDataContainer	ToDataSet
	ToDataSet	ToFactory
	ToFactory	ToFilaments
	ToFilament	ToFrame
	ToFrame	ToImageProcessing
	ToLightSource	ToLightSource
	ToMeasurementPoints	ToMeasurementPoints
	ToSpots	ToSpots
	ToSurfaces	ToSurfaces
	N/A	ToSurpassCamera
	ToVolume	ToVolume
IFilament		IFilaments
	Get	GetFilamentsList
	GetColorSpines	GetNumberOfFilaments
	GetEdgeIds	GetColorSpinesRGBA
	GetEdges	GetEdgesSegmentId
	GetPositionsXYZ	GetEdges
	GetRadii	GetPositionsXYZ
	GetRootVertexIndex	GetRadii
	GetTypes	GetBeginningVertexIndex
	N/A	GetTypes
	N/A	GetFilamentTrackEdges
	N/A	GetFilamentTrackIds
	GetVertexTrackEdges	GetSelectedIds
	GetVertexTrackIds	GetVertexTrackEdges
		GetVertexTrackIds
	Set	AddFilament
	N/A	AddFilamentsList
	N/A	RemoveAllFilaments
	SetColorSpines	RemoveFilament
	SetRootVertexIndex	SetColorSpinesRGBA
	SetTypes	SetBeginningVertexIndex
	N/A	N/A
	SetVertexTrackEdges	SetFilamentTrackEdges
	mIndexT [get]	SetVertexTrackEdges
	mIndexT [set]	GetTimeIndex
	mSelectedPositionIndex [get]	N/A
	mSelectedPositionIndex [set]	GetSelectedPositionIndex
	mSelectedPositionIndices [get]	SetSelectedPositionIndex
	mSelectedPositionIndices [set]	GetSelectedPositionIndices
		SetSelectedPositionIndices
IFrame		IFrame
	mBox [get]	GetBox
	mBox [set]	SetBox
	mBoxShading [get]	GetBoxShading
	mBoxShading [set]	SetBoxShading
	mCoordinateAxes [get]	GetCoordinateAxes
	mCoordinateAxes [set]	SetCoordinateAxes
	mFixToDataSet [get]	GetFixToDataSet

mFixToDataSet [set]	SetFixToDataSet
mGrid [get]	GetGrid
mGrid [set]	SetGrid
mGridSpacing [get]	GetGridSpacing
mGridSpacing [set]	SetGridSpacing
mTickMarks [get]	GetTickMarks
mTickMarks [set]	SetTickMarks
mTimeColorBar [get]	GetTimeColorBar
mTimeColorBar [set]	SetTimeColorBar
IImageProcessing	IImageProcessing
AnisotropicDiffusionFilterChannel	AnisotropicDiffusionFilterChannel
AnisotropicDiffusionFilterDataSet	AnisotropicDiffusionFilterDataSet
BaselineSubtractChannel	BaselineSubtractChannel
BaselineSubtractDataSet	BaselineSubtractDataSet
CalculateTracks	N/A
ContrastStretchChannel	ContrastStretchChannel
ContrastStretchDataSet	ContrastStretchDataSet
DetectFilament	DetectFilament
DetectIsoSurface	N/A
DetectSpots	DetectSpots
DetectSpots2	DetectSpots2
DetectSpotsRegionGrowing	DetectSpotsRegionGrowing
DetectSpotsWithRegions	DetectSpotsWithRegions
DetectSurfaces	DetectSurfaces
DetectSurfacesRegionGrowing	DetectSurfacesRegionGrowing
DistanceTransformChannel	DistanceTransformChannel
DistanceTransformDataSet	DistanceTransformDataSet
EqualizeHistogramChannel	EqualizeHistogramChannel
EqualizeHistogramDataSet	EqualizeHistogramDataSet
FastMarchingArrivalTimeChannel	FastMarchingArrivalTimeChannel
FastMarchingArrivalTimeDataSet	FastMarchingArrivalTimeDataSet
Flip3DChannel	Flip3DChannel
Flip3DDataset	Flip3DDataset
GammaCorrectChannel	GammaCorrectChannel
GammaCorrectDataSet	GammaCorrectDataSet
GaussFilterChannel	GaussFilterChannel
GaussFilterDataSet	GaussFilterDataSet
GaussianDerivativeChannel	GaussianDerivativeChannel
GaussianDerivativeDataSet	GaussianDerivativeDataSet
InvertChannel	InvertChannel
InvertDataSet	InvertDataSet
MedianFilterChannel	MedianFilterChannel
MedianFilterDataSet	MedianFilterDataSet
NormalizeLayersChannel	NormalizeLayersChannel
NormalizeLayersDataSet	NormalizeLayersDataSet
Shift3DChannel	Shift3DChannel
Shift3DDataset	Shift3DDataset
ShortestPath	ShortestPath
SubtractBackgroundChannel	SubtractBackgroundChannel
SubtractBackgroundDataSet	SubtractBackgroundDataSet
ThresholdBothChannel	ThresholdBothChannel
ThresholdBothDataSet	ThresholdBothDataSet
ThresholdChannel	ThresholdChannel
ThresholdDataSet	ThresholdDataSet
ThresholdUpperChannel	ThresholdUpperChannel
ThresholdUpperDataSet	ThresholdUpperDataSet
TrackSpotsAutoregressiveMotion	TrackSpotsAutoregressiveMotion
TrackSpotsAutoregressiveMotionExpert	TrackSpotsAutoregressiveMotionExpert
TrackSpotsBrownianMotion	TrackSpotsBrownianMotion
TrackSpotsConnectedComponents	TrackSpotsConnectedComponents
TrackSurfacesAutoregressiveMotion	TrackSurfacesAutoregressiveMotion
TrackSurfacesAutoregressiveMotionExpert	TrackSurfacesAutoregressiveMotionExpert
TrackSurfacesBrownianMotion	TrackSurfacesBrownianMotion
TrackSurfacesConnectedComponents	TrackSurfacesConnectedComponents
ILightSource	ILightSource
IMeasurementPoints	IMeasurementPoints
Get	Get

	GetIndicesT GetNames GetPositionsXYZ Set		GetIndicesT GetNames GetPositionsXYZ Set
ISpots	Get GetIndicesT GetPositionsXYZ GetRadii GetSelectedIndices GetTimePoint GetTrackEdges GetTrackIds Set SetSelectedIndices SetTimePoint SetTrackEdges	ISpots	Get GetIndicesT GetPositionsXYZ GetRadii GetSelectedIds GetSelectedIndices GetTimePoint GetTrackEdges GetTrackIds Set SetSelectedIndices SetTimePoint SetTrackEdges
ISurfaces	AddSurface AddSurfacesList GetCenterOfMass GetContourPlaneOrientation GetContourPlanePosition GetContourVertices GetMask GetNormals GetNumberOfContourPlanes GetNumberOfSurfaces N/A GetSelectedIndices GetSingleMask GetSurfacesList GetTimeIndex GetTimePoint GetTrackEdges GetTrackIds GetTriangles GetVertices RemoveAllSurfaces RemoveSurface SetContourPlaneOrientation SetContourVertices SetSelectedIndices SetTimePoint SetTrackEdges	ISurfaces	AddSurface AddSurfacesList GetCenterOfMass N/A N/A N/A GetMask GetNormals N/A GetNumberOfSurfaces GetSelectedIds GetSelectedIndices GetSingleMask GetSurfacesList GetTimeIndex GetTimePoint GetTrackEdges GetTrackIds GetTriangles GetVertices RemoveAllSurfaces RemoveSurface N/A N/A SetSelectedIndices SetTimePoint SetTrackEdges
ISurpassCamera	Fit GetOrientationAxisAngle GetOrientationQuaternion GetPosition SetOrientationAxisAngle SetOrientationQuaternion SetPosition mFocus [get] mFocus [set] mHeight [get] mHeight [set] mOrthographic [get] mOrthographic [set] mPerspective [get] mPerspective [set]	ISurpassCamera	Fit GetOrientationAxisAngle GetOrientationQuaternion GetPosition SetOrientationAxisAngle SetOrientationQuaternion SetPosition GetFocus SetFocus GetHeight SetHeight GetOrthographic SetOrthographic GetPerspective SetPerspective
IVolume	mMode [get] mMode [set] mThreshold [get] mThreshold [set]	IVolume	GetMode SetMode GetThreshold SetThreshold