MehsimIG

Version 0.0.2.0

Simsoft

Chapter 1

Class Index

1.1 Class List

Here are the classes, structs, unions and interfaces with brief descriptions:

Chapter 2

Class Documentation

2.1 simig.ControlConfig Class Reference

Public Member Functions

- synchronized void **delete** ()
- void setNetworkConfig (NetworkConfig networkConfig)
- NetworkConfig getNetworkConfig ()

Protected Member Functions

- **ControlConfig** (long cPtr, boolean cMemoryOwn)
- void **finalize** ()

Static Protected Member Functions

- static long **getCPtr** (ControlConfig obj)

Protected Attributes

- transient boolean **swigCMemOwn**

2.1.1 Detailed Description

This is the configuration for MEHSIM Ig interface. Ig interface is created with this configuration.

2.1.2 Member Function Documentation

2.1.2.1 getNetworkConfig()

```
NetworkConfig simig.ControlConfig.getNetworkConfig ( )
```

Get network config

2.1.2.2 setNetworkConfig()

```
void simig.ControlConfig.setNetworkConfig (
            NetworkConfig networkConfig )
```

Set new network configuration

The documentation for this class was generated from the following file:

- ControlConfig.java

2.2 simig.IApplication Class Reference

Public Member Functions

- synchronized void **delete** ()
- IScene getScene ()
- ICelestialSphere getCelestialSphere ()
- void setIgStatus (IgStatus status)
- IgStatus getIgStatus ()

Static Public Member Functions

- static IApplication createApplication (ControlConfig config, String workingDirectory)
- static void deleteApplication (IApplication application)

Protected Member Functions

- **IApplication** (long cPtr, boolean cMemoryOwn)

Static Protected Member Functions

- static long **getCPtr** (IApplication obj)

Protected Attributes

- transient boolean **swigCMemOwn**

2.2.1 Detailed Description

This is the MEHSIMIG application congroller interface. IG status can be read and set from this application. Application creates IG window and communication system.

2.2.2 Member Function Documentation

2.2.2.1 createApplication()

```
static IApplication simig.IApplication.createApplication (
            ControlConfig config,
            String workingDirectory )  [static]
```

Creates MEHSIMIG interface instance. Working directory for ig dll and resource directory searches. This directory is the files required for SimIG. In software distribution these files is resided in SimIG directory.

2.2.2.2 deleteApplication()

```
static void simig.IApplication.deleteApplication (
            IApplication application )  [static]
```

Delete MEHSIMIG interface instance.

2.2.2.3 getCelestialSphere()

```
ICelestialSphere simig.IApplication.getCelestialSphere ( )
```

Get celestial sphere controller for time and date config.

Returns

celestial object.

2.2.2.4 getIgStatus()

```
IgStatus simig.IApplication.getIgStatus ( )
```

Get IG status - default : operate

2.2.2.5 getScene()

```
IScene simig.IApplication.getScene ( )
```

Get Scene of the application.

2.2.2.6 setIgStatus()

```
void simig.IApplication.setIgStatus (
            IgStatus status )
```

Set IG status.
default : operate

The documentation for this class was generated from the following file:

- IApplication.java

2.3 simig.ICamera Class Reference

Classes

- class **CameraMode**

Public Member Functions

- synchronized void **delete** ()
- void setFov (float fov)
- float getFov ()
- void setNearZ (float nearZ)
- float getNearZ ()
- void setFarZ (float farZ)
- float getFarZ ()
- void setCameraMode (ICamera.CameraMode mode)
- ICamera.CameraMode getCameraMode ()
- void setViewPort (ViewPort viewPort)
- ViewPort getViewPort ()
- void setViewCtrl (float x, float y, float z, float yaw, float pitch, float roll)
- IEntity getEntity ()
- void **setView** (long viewID)

Protected Member Functions

- **ICamera** (long cPtr, boolean cMemoryOwn)
- void **finalize** ()

Static Protected Member Functions

- static long **getCPtr** (ICamera obj)

Protected Attributes

- transient boolean **swigCMemOwn**

2.3.1 Detailed Description

This is the IG camera class. With this class camera options can be changed.

2.3.2 Member Function Documentation

2.3.2.1 getCameraMode()

```
ICamera.CameraMode simig.ICamera.getCameraMode ( )
```

Get gamera mode

2.3.2.2 getEntity()

```
IEntity simig.ICamera.getEntity ( )
```

Every camera has its own entity. Camera can be controlled with this entity.

2.3.2.3 getFarZ()

```
float simig.ICamera.getFarZ ( )
```

Get far plane.

2.3.2.4 getFov()

```
float simig.ICamera.getFov ( )
```

Gets vertical fov value.

2.3.2.5 getNearZ()

```
float simig.ICamera.getNearZ ( )
```

Get near plane.

2.3.2.6 getViewPort()

```
ViewPort simig.ICamera.getViewPort ( )
```

Get viewport

2.3.2.7 setCameraMode()

```
void simig.ICamera.setCameraMode (
            ICamera.CameraMode mode )
```

Set camera mode.

2.3.2.8 setFarZ()

```
void simig.ICamera.setFarZ (
            float farZ )
```

Set far plane.

2.3.2.9 setFov()

```
void simig.ICamera.setFov (
            float fov )
```

Sets vertical fov value of the camera.
Horizontal fov is calculated by window aspect ratio.

2.3.2.10 setNearZ()

```
void simig.ICamera.setNearZ (
            float nearZ )
```

Set near plane.

2.3.2.11 setViewCtrl()

```
void simig.ICamera.setViewCtrl (
            float x,
            float y,
            float z,
            float yaw,
            float pitch,
            float roll )
```

Set camera default attach angle. Camera is placed offset to this vaules with its entity.
Default values are 0, so camera and cameras entity looking same direction, and placed in same position
This values are required in multicamera continous blending systems.

2.3.2.12 setViewPort()

```
void simig.ICamera.setViewPort (
            ViewPort viewPort )
```

Set viewport

The documentation for this class was generated from the following file:

- ICamera.java

2.4 simig.ICelestialSphere Class Reference

Classes

- class **State**

Public Member Functions

- synchronized void **delete** ()
- void setSunState (ICelestialSphere.State state)
- void setMoonState (ICelestialSphere.State state)
- void setStarField (ICelestialSphere.State state)
- void setTime (short hour, short minute)
- void setDate (short day, short month, int year)
- void setStarFieldIntensity (float intensity)
- void setTimeZone (char timeZone)

Protected Member Functions

- **ICelestialSphere** (long cPtr, boolean cMemoryOwn)
- void **finalize** ()

Static Protected Member Functions

- static long **getCPtr** (ICelestialSphere obj)

Protected Attributes

- transient boolean **swigCMemOwn**

2.4.1 Detailed Description

This is the celestial sphere control interface.

2.4.2 Member Function Documentation

2.4.2.1 setDate()

```
void simig.ICelestialSphere.setDate (
            short day,
            short month,
            int year )
```

Set date.

2.4.2.2 setMoonState()

```
void simig.ICelestialSphere.setMoonState (
            ICelestialSphere.State state )
```

Enable or disable moon.

2.4.2.3 setStarField()

```
void simig.ICelestialSphere.setStarField (
            ICelestialSphere.State state )
```

Enable or disable stars.

2.4.2.4 setStarFieldIntensity()

```
void simig.ICelestialSphere.setStarFieldIntensity (
            float intensity )
```

Set starfiled intensity.

2.4.2.5 setSunState()

```
void simig.ICelestialSphere.setSunState (
            ICelestialSphere.State state )
```

Enable or disable sun.

2.4.2.6 setTime()

```
void simig.ICelestialSphere.setTime (
            short hour,
            short minute )
```

Set local time.

2.4.2.7 setTimeZone()

```
void simig.ICelestialSphere.setTimeZone (
            char timeZone )
```

Set local time zone.

The documentation for this class was generated from the following file:

- ICelestialSphere.java

2.5 simig.IEntity Class Reference

Classes

- class **AttachState**
- class **EntityState**

Public Member Functions

- synchronized void **delete** ()
- short getId ()
- short getType ()
- void setPositionLLA (double latitude, double longitude, double altitude)
- double getLatitude ()
- double getLongitude ()
- double getAltitude ()
- void setRotation (float yaw, float pitch, float roll)
- float getYaw ()
- float getPitch ()
- float getRoll ()
- void setAttachOffset (double x, double y, double z)
- double getXOffset ()
- double getYOffset ()
- double getZOffset ()
- void setScale (float x, float y, float z)
- float getScaleX ()
- float getScaleY ()
- float getScaleZ ()
- void setState (IEntity.EntityState state)
- IEntity.EntityState getState ()
- void attach (IEntity parent, double x, double y, double z)
- void detach ()
- short getParentId ()
- IEntity.AttachState getAttachState ()

Protected Member Functions

- **IEntity** (long cPtr, boolean cMemoryOwn)

Static Protected Member Functions

- static long **getCPtr** (IEntity obj)

Protected Attributes

- transient boolean **swigCMemOwn**

2.5.1 Detailed Description

This is the entity interface for controlling scene objects. Entity is created with and id and type.
All of the entity ids must be unique.

2.5.2 Member Function Documentation

2.5.2.1 attach()

```
void simig.IEntity.attach (
            IEntity parent,
            double x,
            double y,
            double z )
```

Attach entity to another entity with offset.
Ofset values can be changed after attached.

2.5.2.2 detach()

```
void simig.IEntity.detach ( )
```

Detach entity from its parent.

2.5.2.3 getAltitude()

```
double simig.IEntity.getAltitude ( )
```

Get altitude.

2.5.2.4 getAttachState()

```
IEntity.AttachState simig.IEntity.getAttachState ( )
```

Get attach state.

2.5.2.5 getId()

```
short simig.IEntity.getId ( )
```

Get entity id

2.5.2.6 getLatitude()

```
double simig.IEntity.getLatitude ( )
```

Get latitude.

2.5.2.7 getLongitude()

```
double simig.IEntity.getLongitude ( )
```

Get longitude.

2.5.2.8 getParentId()

```
short simig.IEntity.getParentId ( )
```

Get parent entity id.

2.5.2.9 getPitch()

```
float simig.IEntity.getPitch ( )
```

Get pitch in degree.

2.5.2.10 getRoll()

```
float simig.IEntity.getRoll ( )
```

Get roll in degree

2.5.2.11 getScaleX()

```
float simig.IEntity.getScaleX ( )
```

Get scale x.

2.5.2.12 getScaleY()

```
float simig.IEntity.getScaleY ( )
```

Get scale y.

2.5.2.13 getScaleZ()

```
float simig.IEntity.getScaleZ ( )
```

Get scale z.

2.5.2.14 getState()

```
IEntity.EntityState simig.IEntity.getState ( )
```

Get entity state.

2.5.2.15 getType()

```
short simig.IEntity.getType ( )
```

Get entity type

2.5.2.16 getXOffset()

```
double simig.IEntity.getXOffset ( )
```

Get attach X offset in meters.

2.5.2.17 getYaw()

```
float simig.IEntity.getYaw ( )
```

Get yaw in degree.

2.5.2.18 getYOffset()

```
double simig.IEntity.getYOffset ( )
```

Get attach Y offset in meters.

2.5.2.19 getZOffset()

```
double simig.IEntity.getZOffset ( )
```

Get attach Z offset in meters

2.5.2.20 setAttachOffset()

```
void simig.IEntity.setAttachOffset (
            double x,
            double y,
            double z )
```

Set attach offset of the entity in meters.
If entity is detached these values are ignored.

2.5.2.21 setPositionLLA()

```
void simig.IEntity.setPositionLLA (
            double latitude,
            double longitude,
            double altitude )
```

Set entity position.
If entity is attached these values are ignored. Offset values are used.

2.5.2.22 setRotation()

```
void simig.IEntity.setRotation (
            float yaw,
            float pitch,
            float roll )
```

Set rotation euler by degree.

2.5.2.23 setScale()

```
void simig.IEntity.setScale (
            float x,
            float y,
            float z )
```

Set scale
Default entity scale is 1.0f.

2.5.2.24 setState()

```
void simig.IEntity.setState (
            IEntity.EntityState state )
```

Set entity state.

The documentation for this class was generated from the following file:

- IEntity.java

2.6 simig.IgStatus Class Reference

Public Member Functions

- final int **swigValue** ()
- String **toString** ()

Static Public Member Functions

- static IgStatus **swigToEnum** (int swigValue)

Static Public Attributes

- static final IgStatus **Standby** = new IgStatus("Standby", simIgJNI.IgStatus_Standby_get())
- static final IgStatus **Operate** = new IgStatus("Operate", simIgJNI.IgStatus_Operate_get())
- static final IgStatus **Debug** = new IgStatus("Debug", simIgJNI.IgStatus_Debug_get())

2.6.1 Detailed Description

IG Status enumaration.
Standby - Hides ig window.
Operate - Normal Operation.
Debug - Normal operation with debug menu visible and mouse control available.

The documentation for this class was generated from the following file:

- IgStatus.java

2.7 simig.IScene Class Reference

Public Member Functions

- synchronized void **delete** ()
- IEntity createEntity (int id, int type)
- void deleteEntity (IEntity entity)
- IView createView (int id, WindowConfig config)
- void removeView (int id)
- IWeather getWeather ()

Protected Member Functions

- **IScene** (long cPtr, boolean cMemoryOwn)
- void **finalize** ()

Static Protected Member Functions

- static long **getCPtr** (IScene obj)

Protected Attributes

- transient boolean **swigCMemOwn**

2.7.1 Detailed Description

2.7.2 Member Function Documentation

2.7.2.1 createEntity()

```
IEntity simig.IScene.createEntity (
            int id,
            int type )
```

This creates scene entity. Type variable comes from mehsimTypeList.json list.

2.7.2.2 createView()

```
IView simig.IScene.createView (
            int id,
            WindowConfig config )
```

Create new View with a camera

2.7.2.3 deleteEntity()

```
void simig.IScene.deleteEntity (
            IEntity entity )
```

Removes entity from scene and release resources.

2.7.2.4 getWeather()

```
IWeather simig.IScene.getWeather ( )
```

Get Weather Controller

2.7.2.5 removeView()

```
void simig.IScene.removeView (
            int id )
```

Removes view.

The documentation for this class was generated from the following file:

- IScene.java

2.8 simig.IView Class Reference

Public Member Functions

- synchronized void **delete** ()
- void setPos (int x, int y)
- void setSize (int width, int height)
- short getPosX ()
- short getPosY ()
- short getWidth ()
- short getHeight ()
- short getId ()
- ICamera getCamera ()
- java.math.BigInteger getWindowHandle ()

Protected Member Functions

- **IView** (long cPtr, boolean cMemoryOwn)

Static Protected Member Functions

- static long **getCPtr** (IView obj)

Protected Attributes

- transient boolean **swigCMemOwn**

2.8.1 Detailed Description

IView Interface
Creates IG Window Interface and Attached Camera. View encapsulates window and camera and bind them in one object. Every view contains a camera.
Creating and deleting a view is a fast operation. IG will load static objects depending on the position of the camera, and relase them when camera deleted.
Dynamic objects are not effected from view creation and deletion.

2.8.2 Member Function Documentation

2.8.2.1 getCamera()

```
ICamera simig.IView.getCamera ( )
```

Get Attached Camera

2.8.2.2 getHeight()

```
short simig.IView.getHeight ( )
```

Get Window Height

2.8.2.3 getId()

```
short simig.IView.getId ( )
```

Get Window Specific Id

2.8.2.4 getPosX()

```
short simig.IView.getPosX ( )
```

Get Window X Coordinate

2.8.2.5 getPosY()

```
short simig.IView.getPosY ( )
```

Get Window Y Coordinate

2.8.2.6 getWidth()

```
short simig.IView.getWidth ( )
```

Get Window Width

2.8.2.7 getWindowHandle()

```
java.math.BigInteger simig.IView.getWindowHandle ( )
```

Get Parent Handle

2.8.2.8 setPos()

```
void simig.IView.setPos (
            int x,
            int y )
```

Set Window Position

2.8.2.9 setSize()

```
void simig.IView.setSize (
            int width,
            int height )
```

Set Window Size

The documentation for this class was generated from the following file:

- IView.java

2.9 simig.IWeather Class Reference

Classes

- class **Precipitation**

Public Member Functions

- synchronized void **delete** ()
- void setPrecipitation (IWeather.Precipitation precipitation, float density)
- IWeather.Precipitation getPrecipitationType ()
- float getPrecipitationDensity ()
- void setAirTemperature (float temperature)
- float getAirTemperature ()
- void setHumidity (short humidity)
- short getHumidity ()
- void setCloudAltitude (float altitude)
- float getCloudAltitude ()
- void setCoverage (float coverage)
- float getCoverage ()
- void setThickness (float thickness)
- float getThickness ()
- void setVerticalWindSpeed (float speed)
- float getVerticalWindSpeed ()
- void setHorizontalWindSpeed (float speed)
- float getHorizontalWindSpeed ()
- void setWindDirection (float angle)
- float getWindDirection ()

Protected Member Functions

- **IWeather** (long cPtr, boolean cMemoryOwn)

Static Protected Member Functions

- static long **getCPtr** (IWeather obj)

Protected Attributes

- transient boolean **swigCMemOwn**

2.9.1 Detailed Description

IWeather Interface
Controls on variable types of weather conditions

2.9.2 Member Function Documentation

2.9.2.1 getAirTemperature()

```
float simig.IWeather.getAirTemperature ( )
```

Get Air Temperature
Unit Celcius

2.9.2.2 getCloudAltitude()

```
float simig.IWeather.getCloudAltitude ( )
```

Get Clouds Bottom Altitude
Unit Meter

2.9.2.3 getCoverage()

```
float simig.IWeather.getCoverage ( )
```

Get Cloud Coverage
Percentage of coverage.

2.9.2.4 getHorizontalWindSpeed()

```
float simig.IWeather.getHorizontalWindSpeed ( )
```

Get Horizontal Wind Speed
Unit Knot

2.9.2.5 getHumidity()

```
short simig.IWeather.getHumidity ( )
```

Get Humidity
Level from 0 to 255

2.9.2.6 getPrecipitationDensity()

```
float simig.IWeather.getPrecipitationDensity ( )
```

Get Precipitation Severity
percentage of density

2.9.2.7 getPrecipitationType()

```
IWeather.Precipitation simig.IWeather.getPrecipitationType ( )
```

Get Precipitation Type
CLEAR , RAIN OR SNOW

2.9.2.8 getThickness()

```
float simig.IWeather.getThickness ( )
```

Get Thickness of the cloud from bottom to top.
Unit meter and non-negative

2.9.2.9 getVerticalWindSpeed()

```
float simig.IWeather.getVerticalWindSpeed ( )
```

Get Vertical Wind Speed
Unit Knot

2.9.2.10 getWindDirection()

```
float simig.IWeather.getWindDirection ( )
```

Get Wind Direction
Unit Degree

2.9.2.11 setAirTemperature()

```
void simig.IWeather.setAirTemperature (
            float temperature )
```

Set Air Temperature
Unit Celcius

2.9.2.12 setCloudAltitude()

```
void simig.IWeather.setCloudAltitude (
            float altitude )
```

Set Clouds Bottom Altitude
Unit Meter

2.9.2.13 setCoverage()

```
void simig.IWeather.setCoverage (
            float coverage )
```

Set Cloud Coverage
Percentage of coverage.

2.9.2.14 setHorizontalWindSpeed()

```
void simig.IWeather.setHorizontalWindSpeed (
            float speed )
```

Set Horizontal Wind Speed
Unit Knot

2.9.2.15 setHumidity()

```
void simig.IWeather.setHumidity (
            short humidity )
```

Set Humidity
Level from 0 to 255

2.9.2.16 setPrecipitation()

```
void simig.IWeather.setPrecipitation (
            IWeather.Precipitation precipitation,
            float density )
```

Set precipitation type CLEAR , RAIN OR SNOW
and percentage of density

2.9.2.17 setThickness()

```
void simig.IWeather.setThickness (
            float thickness )
```

Set Thickness of the cloud from bottom to top.
Unit meter and non-negative

2.9.2.18 setVerticalWindSpeed()

```
void simig.IWeather.setVerticalWindSpeed (
            float speed )
```

Set Vertical Wind Speed
Unit Knot

2.9.2.19 setWindDirection()

```
void simig.IWeather.setWindDirection (
            float angle )
```

Set Wind Direction
Unit Degree

The documentation for this class was generated from the following file:

- IWeather.java

2.10 simig.NetworkConfig Class Reference

Public Member Functions

- synchronized void **delete** ()
- void setSendingIp (String ip)
- void setBindingIp (String ip)
- void setRemotePcIp (String ip)
- void setSendPort (short port)
- void setReceivePort (short port)
- String getSendingIp ()
- String getBindingIp ()
- short getSendPort ()
- short getReceivePort ()
- String getRemotePcIg ()

Protected Member Functions

- **NetworkConfig** (long cPtr, boolean cMemoryOwn)
- void **finalize** ()

Static Protected Member Functions

- static long **getCPtr** (NetworkConfig obj)

Protected Attributes

- transient boolean **swigCMemOwn**

2.10.1 Detailed Description

This is the network configuration interface.
Default values are enaugh to run the system.

2.10.2 Member Function Documentation

2.10.2.1 getBindingIp()

```
String simig.NetworkConfig.getBindingIp ( )
```

Get binding ip.

2.10.2.2 getReceivePort()

```
short simig.NetworkConfig.getReceivePort ( )
```

Get recieve port (Control sending - IG recieving).

2.10.2.3 getRemotePcIg()

```
String simig.NetworkConfig.getRemotePcIg ( )
```

Get remote pc ip.

2.10.2.4 getSendingIp()

```
String simig.NetworkConfig.getSendingIp ( )
```

Get communication ip.

2.10.2.5 getSendPort()

```
short simig.NetworkConfig.getSendPort ( )
```

Get sending port (Control sending - IG recieving).

2.10.2.6 setBindingIp()

```
void simig.NetworkConfig.setBindingIp (
            String ip )
```

Set binding ip. When there are multiple network interfaces connected to different networks, this value selecteds desired adapter.
Default 127.0.0.1.

2.10.2.7 setReceivePort()

```
void simig.NetworkConfig.setReceivePort (
            short port )
```

Set recieve port (IG sending - Control recieving).
Default 1501.

2.10.2.8 setRemotePcIp()

```
void simig.NetworkConfig.setRemotePcIp (
            String ip )
```

Set remote ip. If this value is set control interface tries to start IG on remote pc.
Default value couses local IG startup.
Default "".

2.10.2.9 setSendingIp()

```
void simig.NetworkConfig.setSendingIp (
            String ip )
```

Set sending ip.
Default 127.0.0.1.

2.10.2.10 setSendPort()

```
void simig.NetworkConfig.setSendPort (
            short port )
```

Set sending port (Control sending - IG recieving).
Default 1500.

The documentation for this class was generated from the following file:

- NetworkConfig.java

2.11 simig.simIg Class Reference

The documentation for this class was generated from the following file:

- simIg.java

2.12 simig.simIgJNI Class Reference

Static Public Member Functions

- static final native long **new_WindowConfig** ()
- static final native void **WindowConfig_setPosition** (long jarg1, WindowConfig jarg1_, int jarg2, int jarg3)
- static final native void **WindowConfig_setSize** (long jarg1, WindowConfig jarg1_, int jarg2, int jarg3)
- static final native void **WindowConfig_setName** (long jarg1, WindowConfig jarg1_, String jarg2)
- static final native void **WindowConfig_setMode** (long jarg1, WindowConfig jarg1_, int jarg2)
- static final native void **WindowConfig_setWindowHandle** (long jarg1, WindowConfig jarg1_, java.math.↩ BigInteger jarg2)
- static final native int **WindowConfig_getPosX** (long jarg1, WindowConfig jarg1_)
- static final native int **WindowConfig_getPosY** (long jarg1, WindowConfig jarg1_)
- static final native int **WindowConfig_getWidth** (long jarg1, WindowConfig jarg1_)
- static final native int **WindowConfig_getHeight** (long jarg1, WindowConfig jarg1_)
- static final native String **WindowConfig_getName** (long jarg1, WindowConfig jarg1_)
- static final native int **WindowConfig_getMode** (long jarg1, WindowConfig jarg1_)
- static final native java.math.BigInteger **WindowConfig_getWindowHandle** (long jarg1, WindowConfig jarg1_)
- static final native void **delete_WindowConfig** (long jarg1)
- static final native long **new_NetworkConfig** ()
- static final native void **NetworkConfig_setSendingIp** (long jarg1, NetworkConfig jarg1_, String jarg2)
- static final native void **NetworkConfig_setBindingIp** (long jarg1, NetworkConfig jarg1_, String jarg2)
- static final native void **NetworkConfig_setRemotePcIp** (long jarg1, NetworkConfig jarg1_, String jarg2)
- static final native void **NetworkConfig_setSendPort** (long jarg1, NetworkConfig jarg1_, short jarg2)
- static final native void **NetworkConfig_setReceivePort** (long jarg1, NetworkConfig jarg1_, short jarg2)
- static final native String **NetworkConfig_getSendingIp** (long jarg1, NetworkConfig jarg1_)
- static final native String **NetworkConfig_getBindingIp** (long jarg1, NetworkConfig jarg1_)
- static final native short **NetworkConfig_getSendPort** (long jarg1, NetworkConfig jarg1_)
- static final native short **NetworkConfig_getReceivePort** (long jarg1, NetworkConfig jarg1_)
- static final native String **NetworkConfig_getRemotePcIg** (long jarg1, NetworkConfig jarg1_)
- static final native void **delete_NetworkConfig** (long jarg1)
- static final native void **ControlConfig_setNetworkConfig** (long jarg1, ControlConfig jarg1_, long jarg2, NetworkConfig jarg2_)
- static final native long **ControlConfig_getNetworkConfig** (long jarg1, ControlConfig jarg1_)
- static final native long **new_ControlConfig** ()
- static final native void **delete_ControlConfig** (long jarg1)
- static final native int **IgStatus_Standby_get** ()
- static final native int **IgStatus_Operate_get** ()
- static final native int **IgStatus_Debug_get** ()
- static final native long **IApplication_getScene** (long jarg1, IApplication jarg1_)
- static final native long **IApplication_getCelestialSphere** (long jarg1, IApplication jarg1_)
- static final native void **IApplication_setIgStatus** (long jarg1, IApplication jarg1_, int jarg2)
- static final native int **IApplication_getIgStatus** (long jarg1, IApplication jarg1_)
- static final native long **IApplication_createApplication** (long jarg1, ControlConfig jarg1_, String jarg2)
- static final native void **IApplication_deleteApplication** (long jarg1, IApplication jarg1_)
- static final native void **delete_IScene** (long jarg1)
- static final native long **IScene_createEntity** (long jarg1, IScene jarg1_, int jarg2, int jarg3)
- static final native void **IScene_deleteEntity** (long jarg1, IScene jarg1_, long jarg2, IEntity jarg2_)
- static final native long **IScene_createView** (long jarg1, IScene jarg1_, int jarg2, long jarg3, WindowConfig jarg3_)
- static final native void **IScene_removeView** (long jarg1, IScene jarg1_, int jarg2)
- static final native long **IScene_getWeather** (long jarg1, IScene jarg1_)
- static final native void **ViewPort_top_set** (long jarg1, ViewPort jarg1_, int jarg2)

- static final native int **ViewPort_top_get** (long jarg1, ViewPort jarg1_)
- static final native void **ViewPort_right_set** (long jarg1, ViewPort jarg1_, int jarg2)
- static final native int **ViewPort_right_get** (long jarg1, ViewPort jarg1_)
- static final native void **ViewPort_bottom_set** (long jarg1, ViewPort jarg1_, int jarg2)
- static final native int **ViewPort_bottom_get** (long jarg1, ViewPort jarg1_)
- static final native void **ViewPort_left_set** (long jarg1, ViewPort jarg1_, int jarg2)
- static final native int **ViewPort_left_get** (long jarg1, ViewPort jarg1_)
- static final native long **new_ViewPort** ()
- static final native void **delete_ViewPort** (long jarg1)
- static final native void **delete_ICamera** (long jarg1)
- static final native void **ICamera_setFov** (long jarg1, ICamera jarg1_, float jarg2)
- static final native float **ICamera_getFov** (long jarg1, ICamera jarg1_)
- static final native void **ICamera_setNearZ** (long jarg1, ICamera jarg1_, float jarg2)
- static final native float **ICamera_getNearZ** (long jarg1, ICamera jarg1_)
- static final native void **ICamera_setFarZ** (long jarg1, ICamera jarg1_, float jarg2)
- static final native float **ICamera_getFarZ** (long jarg1, ICamera jarg1_)
- static final native void **ICamera_setCameraMode** (long jarg1, ICamera jarg1_, int jarg2)
- static final native int **ICamera_getCameraMode** (long jarg1, ICamera jarg1_)
- static final native void **ICamera_setViewPort** (long jarg1, ICamera jarg1_, long jarg2, ViewPort jarg2_)
- static final native long **ICamera_getViewPort** (long jarg1, ICamera jarg1_)
- static final native void **ICamera_setViewCtrl** (long jarg1, ICamera jarg1_, float jarg2, float jarg3, float jarg4, float jarg5, float jarg6, float jarg7)
- static final native long **ICamera_getEntity** (long jarg1, ICamera jarg1_)
- static final native void **ICamera_setView** (long jarg1, ICamera jarg1_, long jarg2)
- static final native int **IEntity_EntityState_Standby_get** ()
- static final native int **IEntity_EntityState_Active_get** ()
- static final native short **IEntity_getId** (long jarg1, IEntity jarg1_)
- static final native short **IEntity_getType** (long jarg1, IEntity jarg1_)
- static final native void **IEntity_setPositionLLA** (long jarg1, IEntity jarg1_, double jarg2, double jarg3, double jarg4)
- static final native double **IEntity_getLatitude** (long jarg1, IEntity jarg1_)
- static final native double **IEntity_getLongitude** (long jarg1, IEntity jarg1_)
- static final native double **IEntity_getAltitude** (long jarg1, IEntity jarg1_)
- static final native void **IEntity_setRotation** (long jarg1, IEntity jarg1_, float jarg2, float jarg3, float jarg4)
- static final native float **IEntity_getYaw** (long jarg1, IEntity jarg1_)
- static final native float **IEntity_getPitch** (long jarg1, IEntity jarg1_)
- static final native float **IEntity_getRoll** (long jarg1, IEntity jarg1_)
- static final native void **IEntity_setAttachOffset** (long jarg1, IEntity jarg1_, double jarg2, double jarg3, double jarg4)
- static final native double **IEntity_getXOffset** (long jarg1, IEntity jarg1_)
- static final native double **IEntity_getYOffset** (long jarg1, IEntity jarg1_)
- static final native double **IEntity_getZOffset** (long jarg1, IEntity jarg1_)
- static final native void **IEntity_setScale** (long jarg1, IEntity jarg1_, float jarg2, float jarg3, float jarg4)
- static final native float **IEntity_getScaleX** (long jarg1, IEntity jarg1_)
- static final native float **IEntity_getScaleY** (long jarg1, IEntity jarg1_)
- static final native float **IEntity_getScaleZ** (long jarg1, IEntity jarg1_)
- static final native void **IEntity_setState** (long jarg1, IEntity jarg1_, int jarg2)
- static final native int **IEntity_getState** (long jarg1, IEntity jarg1_)
- static final native void **IEntity_attach** (long jarg1, IEntity jarg1_, long jarg2, IEntity jarg2_, double jarg3, double jarg4, double jarg5)
- static final native void **IEntity_detach** (long jarg1, IEntity jarg1_)
- static final native short **IEntity_getParentId** (long jarg1, IEntity jarg1_)
- static final native int **IEntity_getAttachState** (long jarg1, IEntity jarg1_)
- static final native void **delete_ICelestialSphere** (long jarg1)
- static final native void **ICelestialSphere_setSunState** (long jarg1, ICelestialSphere jarg1_, int jarg2)

- static final native void **ICelestialSphere_setMoonState** (long jarg1, ICelestialSphere jarg1_, int jarg2)
- static final native void **ICelestialSphere_setStarField** (long jarg1, ICelestialSphere jarg1_, int jarg2)
- static final native void **ICelestialSphere_setTime** (long jarg1, ICelestialSphere jarg1_, short jarg2, short jarg3)
- static final native void **ICelestialSphere_setDate** (long jarg1, ICelestialSphere jarg1_, short jarg2, short jarg3, int jarg4)
- static final native void **ICelestialSphere_setStarFieldIntensity** (long jarg1, ICelestialSphere jarg1_, float jarg2)
- static final native void **ICelestialSphere_setTimeZone** (long jarg1, ICelestialSphere jarg1_, char jarg2)
- static final native void **IView_setPos** (long jarg1, IView jarg1_, int jarg2, int jarg3)
- static final native void **IView_setSize** (long jarg1, IView jarg1_, int jarg2, int jarg3)
- static final native short **IView_getPosX** (long jarg1, IView jarg1_)
- static final native short **IView_getPosY** (long jarg1, IView jarg1_)
- static final native short **IView_getWidth** (long jarg1, IView jarg1_)
- static final native short **IView_getHeight** (long jarg1, IView jarg1_)
- static final native short **IView_getId** (long jarg1, IView jarg1_)
- static final native long **IView_getCamera** (long jarg1, IView jarg1_)
- static final native java.math.BigInteger **IView_getWindowHandle** (long jarg1, IView jarg1_)
- static final native void **IWeather_setPrecipitation** (long jarg1, IWeather jarg1_, int jarg2, float jarg3)
- static final native int **IWeather_getPrecipitationType** (long jarg1, IWeather jarg1_)
- static final native float **IWeather_getPrecipitationDensity** (long jarg1, IWeather jarg1_)
- static final native void **IWeather_setAirTemperature** (long jarg1, IWeather jarg1_, float jarg2)
- static final native float **IWeather_getAirTemperature** (long jarg1, IWeather jarg1_)
- static final native void **IWeather_setHumidity** (long jarg1, IWeather jarg1_, short jarg2)
- static final native short **IWeather_getHumidity** (long jarg1, IWeather jarg1_)
- static final native void **IWeather_setCloudAltitude** (long jarg1, IWeather jarg1_, float jarg2)
- static final native float **IWeather_getCloudAltitude** (long jarg1, IWeather jarg1_)
- static final native void **IWeather_setCoverage** (long jarg1, IWeather jarg1_, float jarg2)
- static final native float **IWeather_getCoverage** (long jarg1, IWeather jarg1_)
- static final native void **IWeather_setThickness** (long jarg1, IWeather jarg1_, float jarg2)
- static final native float **IWeather_getThickness** (long jarg1, IWeather jarg1_)
- static final native void **IWeather_setVerticalWindSpeed** (long jarg1, IWeather jarg1_, float jarg2)
- static final native float **IWeather_getVerticalWindSpeed** (long jarg1, IWeather jarg1_)
- static final native void **IWeather_setHorizontalWindSpeed** (long jarg1, IWeather jarg1_, float jarg2)
- static final native float **IWeather_getHorizontalWindSpeed** (long jarg1, IWeather jarg1_)
- static final native void **IWeather_setWindDirection** (long jarg1, IWeather jarg1_, float jarg2)
- static final native float **IWeather_getWindDirection** (long jarg1, IWeather jarg1_)

The documentation for this class was generated from the following file:

- simIgJNI.java

2.13 simig.ViewPort Class Reference

Public Member Functions

- synchronized void **delete** ()
- void setTop (int value)
- int getTop ()
- void setRight (int value)
- int getRight ()
- void setBottom (int value)
- int getBottom ()
- void setLeft (int value)
- int getLeft ()

Protected Member Functions

- **ViewPort** (long cPtr, boolean cMemoryOwn)
- void **finalize** ()

Static Protected Member Functions

- static long **getCPtr** (ViewPort obj)

Protected Attributes

- transient boolean **swigCMemOwn**

2.13.1 Detailed Description

Camera viewport values.
Viewport is the ractangle where this camera is drawing.
Default value is covering whole window. In multicamera setup this value can be set to show cameras picture in picture mode.

2.13.2 Member Function Documentation

2.13.2.1 getBottom()

```
int simig.ViewPort.getBottom ( )
```

Bottom of the viewport.

2.13.2.2 getLeft()

```
int simig.ViewPort.getLeft ( )
```

Left of the viewport.

2.13.2.3 getRight()

```
int simig.ViewPort.getRight ( )
```

Right of the viewport.

2.13.2.4 getTop()

```
int simig.ViewPort.getTop ( )
```

Top of the viewport.

2.13.2.5 setBottom()

```
void simig.ViewPort.setBottom (
            int value )
```

Bottom of the viewport.

2.13.2.6 setLeft()

```
void simig.ViewPort.setLeft (
            int value )
```

Left of the viewport.

2.13.2.7 setRight()

```
void simig.ViewPort.setRight (
            int value )
```

Right of the viewport.

2.13.2.8 setTop()

```
void simig.ViewPort.setTop (
            int value )
```

Top of the viewport.

The documentation for this class was generated from the following file:

- ViewPort.java

2.14 simig.WindowConfig Class Reference

Classes

- class **WindowMode**

Public Member Functions

- synchronized void **delete** ()
- void setPosition (int x, int y)
- void setSize (int width, int height)
- void setName (String name)
- void setMode (WindowConfig.WindowMode mode)
- void setWindowHandle (java.math.BigInteger hwnd)
- int getPosX ()
- int getPosY ()
- int getWidth ()
- int getHeight ()
- String getName ()
- WindowConfig.WindowMode getMode ()
- java.math.BigInteger getWindowHandle ()

Protected Member Functions

- **WindowConfig** (long cPtr, boolean cMemoryOwn)
- void **finalize** ()

Static Protected Member Functions

- static long **getCPtr** (WindowConfig obj)

Protected Attributes

- transient boolean **swigCMemOwn**

2.14.1 Detailed Description

IG window configuration class. Ig creates a window based on the configuration of this class.
There is two different window sceneraios. One is IG running in another window, IG running its own window.
If IG creates its own window it can be resized or minimized but not closed. IG window will close only when IG interface is destroyed.

2.14.2 Member Function Documentation

2.14.2.1 getHeight()

```
int simig.WindowConfig.getHeight ( )
```

Get window height.

2.14.2.2 getMode()

```
WindowConfig.WindowMode simig.WindowConfig.getMode ( )
```

Get window mode.

2.14.2.3 getName()

```
String simig.WindowConfig.getName ( )
```

Get window name.

2.14.2.4 getPosX()

```
int simig.WindowConfig.getPosX ( )
```

Get window pos x.

2.14.2.5 getPosY()

```
int simig.WindowConfig.getPosY ( )
```

Get window pos y.

2.14.2.6 getWidth()

```
int simig.WindowConfig.getWidth ( )
```

Get window width.

2.14.2.7 getWindowHandle()

```
java.math.BigInteger simig.WindowConfig.getWindowHandle ( )
```

Get native window handle.

2.14.2.8 setMode()

```
void simig.WindowConfig.setMode (
            WindowConfig.WindowMode mode )
```

Set window mode

2.14.2.9 setName()

```
void simig.WindowConfig.setName (
            String name )
```

Set window name it will be shown on the window border

2.14.2.10 setPosition()

```
void simig.WindowConfig.setPosition (
            int x,
            int y )
```

Set initial window position

2.14.2.11 setSize()

```
void simig.WindowConfig.setSize (
            int width,
            int height )
```

Set initial window size

2.14.2.12 setWindowHandle()

```
void simig.WindowConfig.setWindowHandle (
            java.math.BigInteger hwnd )
```

Set parent window handle
If this variable is set IG will use this window as parent and draw inside of it
Default value is 0, ig will create its own window.

The documentation for this class was generated from the following file:

- WindowConfig.java

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