**NAME**

ConnectGW – connect to gateway

**SYNOPSIS**

#include <vs\_basic.h>

int VS\_Basic::ConnectGW();

**DESCRIPTION**

Application using this function discovers Smart Fog gateway and make a connection with it. After ConnectGW is completed successfully, the application can use other API functions to issue commands to the gateway.

**RETURN VALUES**

Upon successful completion, **ConnectGW** returns 0. Otherwise, 1 is returned.

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**NAME**

GetDeviceList – retrieve device list from gateway

**SYNOPSIS**

#include <vs\_basic.h>

int VS\_Basic::GetDeviceList();

**DESCRIPTION**

Application using this function sends a command message to gateway and retrieves device list that is maintained by gateway. The device list is stored inside of application-side Smart Fog library, and it is used on processing other API functions.

**RETURN VALUES**

Upon successful completion, **GetDeviceList** returns 0. Otherwise, 1 is returned.

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**NAME**

setCallbacks – set Smart Fog application callback functions

**SYNOPSIS**

#include <vs\_basic.h>

#include <OCApi.h>

void VS\_Basic::setCallbacks(std::shared\_ptr<VS\_Basic\_Callbacks> callbacks);

**DESCRIPTION**

Application using this function sets callback functions, which is called when commands sent to gateway is completed. The application should specify a set of callback functions(**callbacks**).

**RETURN VALUES**

**setCallbacks** does not return any value.

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**NAME**

GetSensorInfo – retrieve sensor’s present information from gateway

**SYNOPSIS**

#include <vs\_basic.h>

int VS\_Basic::GetSensorInfo(const std::string SUri);

**DESCRIPTION**

Application using this function sends a command message to gateway and retrieves sensor’s present information, of which URI is **SUri**.

**RETURN VALUES**

Upon successful completion, **GetSensorInfo** returns 0. Otherwise, 1 is returned.

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**NAME**

GetSensorData – retrieve sensor data from gateway

**SYNOPSIS**

#include <vs\_basic.h>

int VS\_Basic::GetSensorData(const std::string SUri, const int epoch);

**DESCRIPTION**

Application using this function sends a command message to gateway and retrieves sensor data from sensor device, of which URI is **SUri**. The application can configure **epoch** value which the application has interests in.

**RETURN VALUES**

Upon successful completion, **GetSensorData** returns 0. Otherwise, 1 is returned.

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**NAME**

PutActuatorData – put and set a new status data of actuator through gateway

**SYNOPSIS**

#include <vs\_basic.h>

int VS\_Basic::PutActuatorData(const std::string SUri, const std::string attrName, const std::string attrValue);

**DESCRIPTION**

Application using this function sends a command message to gateway and puts a new status of target actuator device, of which URI is **SUri**. The application can configure attribute to be set, of which name is **attrName** and value is **attrValue**.

**RETURN VALUES**

Upon successful completion, **PutActuatorData** returns 0. Otherwise, 1 is returned.

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**NAME**

SetPolicy – set sensor data acquisition policy about specified target sensor device

**SYNOPSIS**

#include <vs\_basic.h>

int VS\_Basic::SetPolicy(const std::string SUri, int rawDtAcqType, int rawLevel, int netDtAcqType, int netLevel);

**DESCRIPTION**

Application using this function sends a command message to gateway and set sensor data acquisition policy about target sensor device, of which URI is specified as **SUri**. The application can configure acquisition type(**rawDtAcqType**) and level(**rawLevel**) in raw level (sampling). It can also configure acquisition type(**netDtAcqType**) and level(**netLevel**) in network level (network transmission).

**RETURN VALUES**

Upon successful completion, **SetPolicy** returns 0. Otherwise, 1 is returned.

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**NAME**

StartObservingSensorData – start observing sensor data from gateway

**SYNOPSIS**

#include <vs\_basic.h>

int VS\_Basic::StartObservingSensorData(const std::string SUri);

**DESCRIPTION**

Application using this function sends a command message to gateway and start observing sensor data of target sensor device, of which URI is specified as **SUri**. After this function is completed successfully, gateway gives sampling and network transmission service, of which policy is specified by **SetPolicy** function.

**RETURN VALUES**

Upon successful completion, **StartObservingSensorData** returns 0. Otherwise, 1 is returned.

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