

TV.CHANNEL

tv.channel class includes general functions of the channel control to develop TV app.
For example, getting an available channel information and changing a current TV's channel.

Add the following line for tv.channel class into a html file your own :

```
<script type="text/javascript" src="$MANAGER_WIDGET/Common/webapi/1.0/webapis.js"></script>
```

You can declare tv.channel class like this :

```
ex) var tvChannel = webapis.tv.channel;
```

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Methods

ChannelListSuccuessCallback

Description

[callback]Specifies the options for gathering the available Channel list.

Parameters

- onsuccess
 - Function
 - callback to be called when the operation is succeeded

Return

- - returns the available channel list

Emulator Support

Yes

SDK Constraint

None

Example

```
var mode = webapis.tv.channel.NAVIGATOR_MODE_ALL;
var nStart = 0;
var channelSize = 10;
var errorCallback = function () {};
var ChannelListSuccessCallback = function(channelList) {

    for (var i=0; i<channelList.length; i++) {
        console.log ("ptc : " + channelList[i].ptc)
        console.log ("major : " + channelList[i].major)
        console.log ("minor : " + channelList[i].minor)
        console.log ("lcn : " + channelList[i].lcn)
        console.log ("sourceID : " + channelList[i].sourceID)
        console.log ("programNumber : " + channelList[i].programNumber)
        console.log ("transportStreamID : " + channelList[i].transportStreamID)
        console.log ("originalNetworkID : " + channelList[i].originalNetworkID)
        console.log ("serviceName : " + channelList[i].serviceName)
        console.log ("channelName : " + channelList[i].channelName)
    }
};
webapis.tv.channel.getChannelList(ChannelListSuccessCallback, errorCallback, mode, nStart, channelSize);
```

findChannel

Description

This function is used to get the specified channel information.

Parameters	<div>■major</div> <div>- Number</div> <div>- major channel number</div> <div>■minor</div> <div>- Number</div> <div>- minor channel number</div> <div>■successCallback</div> <div>- Function</div> <div>- called when the invocation ends successfully</div> <div>■errorCallback</div> <div>- Function</div> <div>- called when an error occurs</div>
Return	■Void
Emulator Support	Y
SDK Constraint	None

Example

```
function successCB(channels) {
    console.log("getting channels is successful");
}
function errorCB(error) {
    console.log(error.name);
}
try{
    webapis.tv.channel.findChannel(9, 0, successCB, errorCB);
} catch (error) {
    console.log(error.name);
}
```

getChannelList

Description

This function is used to retrieve the list of channels. It takes mode, starting number and the number of channels to be retrieved as parameters apart from the successCallback and errorCallback.

Parameters	<ul style="list-style-type: none"> ■successCallback <ul style="list-style-type: none"> - called when the invocation ends successfully ■errorCallback <ul style="list-style-type: none"> - called when an error occurs ■mode (Optional) <ul style="list-style-type: none"> - unsigned short - channel navigation mode ■nStart (Optional) <ul style="list-style-type: none"> - unsigned long - start index ■number (Optional) <ul style="list-style-type: none"> - unsigned long - number of the channel information
Return	■Void
Emulator Support	Y
SDK Constraint	None

Example

```
function successCB(channels) {
    console.log("getting channels is successful");
}
function errorCB(error) {
    console.log(error.name);
}
try{
    // gets 10 channel list of all channels
    webapis.tv.channel.getChannelList(successCB, errorCB, webapis.tv.channel.NAVIGATOR_MODE_ALL, 0, 10); } catch (error) {
    console.log(error.name);
}
```

getCurrentChannel

Description

This function is used to retrieve the current channel information.

Parameters	none
Return	<ul style="list-style-type: none"> ■ChannelInfo <ul style="list-style-type: none"> - Current channel inforamtion
Emulator Support	Y
SDK Constraint	None

Example

```
var retValue = webapis.tv.channel.getCurrentChannel();
```

getCurrentProgram

Description

This function is used to retrieve the current program information of the tuned channel.

Parameters	none
Return	<ul style="list-style-type: none"> ■ProgramInfo <ul style="list-style-type: none"> - current program information - broadcast over the given channel
Emulator Support	Y
SDK Constraint	None

Example

```
var currentProgram = webapis.tv.channel.getCurrentProgram();
```

getNumOfAvailableTuner

Description

Gets the number of available tuners.

Parameters	none
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Return	■Unsigned long
Emulator Support	Y
SDK Constraint	None
Example	
<pre>try { var tuners = webapis.tv.channel.getNumOfAvailableTuner(); console.log("TV has " + tuners + " tuners"); } catch (error) { console.log(error.name); }</pre>	
getProgramList	
Description	
This function is used to get the program list in the channel tuned. It takes channelInfo, startTime and the number of programs to be retrieved as parameters apart from the successCallback and errorCallback.	
Parameters	<ul style="list-style-type: none"> ■channelInfo <ul style="list-style-type: none"> - ChannelInfo - specifies channel information ■startTime <ul style="list-style-type: none"> - unsigned long - program start time ■successCallback <ul style="list-style-type: none"> - Callback Function - called when the invocation ends successfully ■errorCallback <ul style="list-style-type: none"> - Callback Function - called when an error occurs ■duration (Optional) <ul style="list-style-type: none"> - unsigned long - time duration in which period programs will be searched
Return	■Void
Emulator Support	Y
SDK Constraint	None
Example	
<pre>function successCB(programs) { console.log("getting programs is successful"); } function errorCallback(error) { console.log(error.name); } try { var channel = webapis.tv.channel.getCurrentChannel(); webapis.tv.channel.getProgramList(channel, webapis.tv.info.getEpochTime(), successCB, errorCallback, 3600); } catch (error) { console.log(error.name); }</pre>	

ProgramListSuccuessCallback	
Description	
[callback] Specifies the options for gathering the available program list.	
Parameters	<ul style="list-style-type: none"> ■onsuccess <ul style="list-style-type: none"> - Function - callback to be called when the operation is succeeded
Return	<ul style="list-style-type: none"> ■ <ul style="list-style-type: none"> returns the available program list
Emulator Support	Yes
SDK Constraint	None
Example	

```

var errorCallback = function () {};
var ProgramListSuccessCallback = function (programs) {
for (var i=0; i<programs.length; i++){
    console.log ("title : " + programs[i].title)
    console.log ("startTime : " + programs[i].startTime)
    console.log ("duration : " + programs[i].duration)
    console.log ("detailedDescription : " + programs[i].detailedDescription)
    console.log ("language : " + programs[i].language)
    console.log ("rating : " + programs[i].rating)
}
};
var setSourceCB = function(sInfo, windowID){
var currentChannel = webapis.tv.channel.getCurrentChannel(windowID);
var startTime = webapis.tv.info.getEpochTime();
var duration = 3600;
webapis.tv.channel.getProgramList(currentChannel, startTime, ProgramListSuccessCallback, errorCallback, duration);
}
var errorCB = function() {}
webapis.tv.window.setSource({type : webapis.tv.window.SOURCE_MODE_TV, number : webapis._pluginDef.PL_WINDOW_SOURCE_TV}, setSourceCB, errorCB, 0);

```

tune

Description

This function is used to tune to the specified channel.

Parameters	<ul style="list-style-type: none"> ■option <ul style="list-style-type: none"> - TuneOption - option for tuning information ■successCallback <ul style="list-style-type: none"> - called when the invocation ends successfully ■errorCallback <ul style="list-style-type: none"> - called when an error occurs ■windowID (optional) <ul style="list-style-type: none"> - unsigned short - window identifier
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Return	■Void
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Emulator Support	Y
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SDK Constraint	None
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Example

```

function successCB() {
    console.log("tuning is successful");
}
function errorCB(error) {
    console.log(error.name);
}
webapis.tv.channel.tune({
    ptc: 9,
    major: 9,
    minor: 0,
    sourceID : 9,
    programNumber: 9,
    transportStreamID : 90,
    tuneallback: {
        onsuccess: function(programList) { console.log("getting program list is successfully"); },
        onerror: function(channelList) { console.log("getting program list is successfully"); }
    },
    successCB, errorCB, 0);

```

tuneDown

Description

This function is used to tune the previous channel. Upon success successCallback is called and upon failure errorCallback is called.

Parameters	<ul style="list-style-type: none"> ■successCallback <ul style="list-style-type: none"> - called when the invocation ends successfully ■errorCallback <ul style="list-style-type: none"> - called when an error occurs ■tuneMode (Optional) <ul style="list-style-type: none"> - Channel navigation mode <ul style="list-style-type: none"> * TV_CHANNEL_NAVIGATOR_MODE_ALL * TV_CHANNEL_NAVIGATOR_MODE_DIGITAL * TV_CHANNEL_NAVIGATOR_MODE_ANALOG * TV_CHANNEL_NAVIGATOR_MODE_FAVORITE ■windowID (Optional) <ul style="list-style-type: none"> - unsigned short - window identifier
Return	■Void
Emulator Support	Y
SDK Constraint	None

Example

```
function successCB() {
    console.log("tuning is successful");
}
function errorCB(error) {
    console.log(error.name);
}
webapis.tv.channel.tuneDown(successCB, errorCB, webapis.tv.channel.NAVIGATOR_MODE_ALL, 0);
```

tuneUp

Description

This function is used to tune the next channel. Upon success successCallback is called and upon failure errorCallback is called.

Parameters	<ul style="list-style-type: none"> ■successCallback <ul style="list-style-type: none"> - called when the invocation ends successfully ■errorCallback <ul style="list-style-type: none"> - called when an error occurs ■tuneMode (Optional) <ul style="list-style-type: none"> - Channel navigation mode <ul style="list-style-type: none"> * TV_CHANNEL_NAVIGATOR_MODE_ALL * TV_CHANNEL_NAVIGATOR_MODE_DIGITAL * TV_CHANNEL_NAVIGATOR_MODE_ANALOG * TV_CHANNEL_NAVIGATOR_MODE_FAVORITE ■windowID (Optional) <ul style="list-style-type: none"> - unsigned short - window identifier
Return	■Void
Emulator Support	Y
SDK Constraint	None

Example

```
function successCB() {
    console.log("tuning is successful");
}
function errorCB(error) {
    console.log(error.name);
}
webapis.tv.channel.tuneUp(successCB, errorCB, webapis.tv.channel.NAVIGATOR_MODE_ALL, 0);
```