

API

This guide explains features, functions, and how-to-use information of the APIs required to create the Web application for LG Smart TV.

[Main Features of LG Smart TV SDK 3.0 APIs](#)

This section introduces the key API functions of LG Smart TV SDK V3.0 released in February 2013. **This is also provided in Korean document. You can download it from [\[DISCOVER > Legacy Platform \(NetCast\) > Technical Notes\]](#).**

[Web API Overview](#)

LG Web API provides APIs for developers to create web applications on LG Smart TV. The section shows the LG Web API service blocks.

[NetCast API](#)

This section provides descriptions on NetCast API methods and proprietary events.

[Media Player Plugin and API](#)

This section provides descriptions on Media Player Plugin and API methods and properties.

[Device Info Plugin and API](#)

This section provides descriptions on Device Info Plugin and API methods, properties, and events.

[Voice Recognition Plugin and API](#)

This section provides descriptions on Voice Recognition Plugin and API methods, properties, and events.

[AppToApp Plugin and API](#)

This section provides descriptions on AppToApp Plugin and API methods and events.

[Sound Plugin and API](#)

This section provides descriptions on Sound Plugin and API methods.

[DRM Agent Plugin and API](#)

This section provides descriptions on DRM Agent Plugin and API methods and events.

[Media Device NetCast API](#)

This section provides descriptions on Media Device NetCast API methods.

[Image Viewer Framework API](#)

This section provides descriptions on Image Viewer Framework API methods.

[Media Plugin Video Player Framework API](#)

This section provides descriptions on Media Plugin Video Player Framework API methods.

[HTML5 Video Player Framework API](#)

This section provides descriptions on HTML5 Video Player Framework API methods.

[Web UI Component API](#)

This section provides descriptions on Web UI Component API methods and parameters.

[Annex A Differences in Media Devices](#)

Media products partly support NetCast 3.0. Please see the detailed information below for Media products development.

[Annex B Utilities for Using Web UI Components](#)

This section describes utilities for using LG Web UI components.

Contents

Main Features of LG Smart TV SDK 3.0 APIs	14
New Features of LG Smart TV SDK 3.0 APIs	14
Main Features of LG Smart TV SDK	14
Media	15
Voice Recognition	16
AppToApp	17
Sound	18
UI Component	19
Web API Overview	20
NetCast API	22
Methods/Proprietary Events	22
Methods	23
window.NetCastExit	23
window.NetCastBack.....	23
window.NetCastSetPageLoadingIcon	24
window.NetCastSetDefaultAspectRatio	25
window.NetCastLaunchQMENU	26
window.NetCastLaunchRATIO	27
window.NetCastMouseOff	28
window.NetCastGetMouseOnOff	29
window.NetCastSetAutoMouseOff	29
window.NetCastGetUsedMemorySize	30
window.NetCastSystemKeyboardVisible	30
Proprietary Events	32
mouseon	32
mouseoff	32
outofmemory.....	33
Media Player Plugin and API.....	35
Media Object	35
Properties	36
mode3D	36
preBufferingTime	36
oneshot_url	36
subtitleOn / subtitle	37
drm_type	37
playCount	38
Audio Object.....	38
Media Type Resolving in Media Player Plugin.....	38
Methods/Properties/Events	39
Methods	40
play.....	40
stop.....	41
next.....	41
previous	41
seek	42

mediaPlayInfo	42
setWidevineXXX	44
Properties	46
version	46
type.....	46
data	46
width / height	47
playTime.....	47
playPosition	48
playState	48
error	49
autoStart.....	50
isScannable.....	50
speed	51
bufferingProgress	52
subtitleOn	52
subtitle	53
mode3D	53
audioLanguage.....	54
Events	56
onPlayStateChange	56
onBuffering.....	56
onError.....	57
onDRMRightsError	58

Device Info Plugin and API 59

Device Object	59
Methods/Properties	59
Methods	60
getLocalTime	60
getSystemTime.....	60
pentouchInfo.....	61
setDrmLicenseInfo.....	62
setVMConfigData	63
Properties	64
version	64
manufacturer	64
modelName	64
serialNumber	65
swVersion	65
hwVersion.....	66
SDKVersion.....	66
osdResolution	66
networkType	67
net_macAddress	67
drmClientInfo	68
net_dhcp	68
net_isConnected	69
net_hasIP	69
net_ipAddress	69
net_netmask.....	70
net_gateway	70
net_dns1	70
net_dns2	71
supportMouse	71
supportVoiceRecog.....	72
supportPentouch.....	72
support3D	73
support3DMode	73

preferredSubtitleLanguage	74
preferredAudioLanguage	74
preferredSubtitleStatus	75
tvLanguage2	75
tvCountry2	76
timeZone	76
platform	76
chipset	77

Voice Recognition Plugin and API78

Voice Object.....	80
Properties/Methods/Events	80
Properties	81
initialized	81
isEnabled	81
dictation	81
language	82
Methods	83
startRecognition	83
Events	84
onrecognizevoice	84
onbuttonenable.....	84

AppToApp Plugin and API85

AppToApp Object.....	85
Methods/Events.....	85
Methods	86
sendMessage	86
sendMessageTo	86
Events 88	
onreceivemessage	88

Sound Plugin and API89

Sound Object.....	89
Methods	89
Method	90
play.....	90

DRM Agent Plugin and API91

DRM Agent Object	91
Methods/Events.....	91
Methods	92
sendDRMMessage	92
Events	94
onDRMMessageResult	94
DRM Agent Specific	95

Media Device NetCast API.....98

window.NetCastSetScreenSaver	98
Image Viewer Framework API.....	99
How to Use Image Viewer Framework	99
Markup Interface	100
JS Interface	100
Methods	100
Methods	101
createImgViewer	101
addImage	102
removeImage	102
gotoImage	103
zoom	103
rotate	104
flip	105
startSlideShow	105
stopSlideShow	106
setSlideShowSpeed	107
getSlideShowSpeed	107
setRandomSlideShow	108
getRandomSlideShow	108
next	108
previous	109
first	109
last	110
setDisplayMode	110
getDisplayMode	111
setFrameworkFocus	112
removeFrameworkFocus	112
mouseWheel	113
focusNext	113
focusPrevious	114
focusUp	114
focusDown	115
doSelection	115
Media Plugin Video Player Framework API.....	116
How to Use Media Plugin Video Player Framework	117
Markup Interface	117
JS Interface	117
VideoPlayer Framework Implementation	118
Methods	118
Methods	119
createVideoPlayer	119
play	119
stop	120
rewind	120
fastFoward	121
switchToFullScreenMode	121
optionMedia	122
HTML5 Video Player Framework API	123
How to Use HTML5 Video Player Framework	124

Markup Interface	124
JS Interface	124
HTML5 Video Player Framework Implementation	125
Methods	125
Methods	126
createVideoPlayer	126
play	126
stop	127
rewind	127
fastFoward	128
switchToFullScreenMode	128
optionMedia	129

Web UI Component API..... 130

AnimatedImage	131
Markup Interface	132
animation-hover	132
animation-click	132
JS Interface (Constructor Parameters)	133
animate	133
id	133
selector	133
style	134
src	134
JS Interface (Methods)	135
getAnimation	135
getSrc	135
getStyle	136
setAnimation	136
setSrc	136
setStyle	137
Button	137
Markup Interface	138
icon-position	138
icon-type	138
text-inline	138
text-omit	139
JS Interface (Constructor Parameters)	140
href	140
id	140
iconPosition	141
iconType	141
selector	141
style	141
textOmit	142
textInline	142
type	142
value	142
JS Interface (Methods)	144
getHref	144
getIconPosition	144
getIconType	145
getText	145
getTextInline	146
getTextOmit	146
setHref	146

setIconPosition	147
setIconType	147
setText	147
setTextInline	148
setTextOmit	148
CheckBox	149
Markup Interface	150
text-inline	150
JS Interface (Constructor Parameters)	151
checked	151
id	151
selector	151
style	152
text	152
textInline	152
JS Interface (Methods)	153
getCheck	153
getText	153
getTextInline	154
setCheck	154
setText	154
setTextInline	155
Focus	155
Markup Interface	157
option	157
JS Interface (Constructor Parameters)	158
id	158
option	158
selector	158
JS Interface (Methods)	159
setOption	159
GroupButton	159
Markup Interface	160
box-orient	160
JS Interface (Constructor Parameters)	161
boxOrient	161
id	161
items	161
selector	162
JS Interface (Methods)	163
addItem	163
getBoxOrient	163
getItem	164
removeItem	164
setBoxOrient	164
setItem	165
GroupCheckBox	165
Markup Interface	167
box-orient	167
JS Interface (Constructor Parameters)	168
boxOrient	168
id	168
items	169
legend	169
selector	169
JS Interface (Methods)	170

addItem	170
getBoxOrient.....	170
getItem.....	171
getLegend.....	171
removeItem	171
setBoxOrient.....	172
setItem.....	172
setLegend.....	173
GroupRadio	173
Markup Interface	174
box-orient	174
JS Interface (Constructor Parameters)	175
boxOrient.....	175
legend	175
id.....	176
items	176
selector	176
JS Interface (Methods)	178
addItem	178
getBoxOrient.....	178
getItem.....	179
getLegend.....	179
removeItem	179
setBoxOrient.....	180
setItem.....	180
setLegend.....	181
ImageList	181
Markup Interface	182
JS Interface (Constructor Parameters)	183
id.....	183
image	183
selector	184
style	184
JS Interface (Methods)	185
addImageItem	185
getCurrentIndex	185
moveImageItem	186
removeImageItem	186
ImageTile	186
Markup Interface	188
JS Interface (Constructor Parameters)	189
id.....	189
option	190
selector	190
style	191
tables	191
JS Interface (Methods)	193
getBackground	193
getBorderSpacing.....	193
getMargin	194
getNumToMove	194
setBackground	194
setBorderSpacing.....	195
setMargin.....	195
setNumToMove	196
Label	196
Markup Interface	197

text-inline	197
text-scroll	197
text-scroll-direction	197
JS Interface (Constructor Parameters)	198
id	198
selector	198
style	198
text	199
textInline	199
textScroll	199
textScrollDirection	199
JS Interface (Methods)	201
getText	201
getTextInline	201
getTextScroll	202
getTextScrollDirection	202
setText	202
setTextInline	203
setTextScroll	203
setTextScrollDirection	204
MsgBox	204
Markup Interface	205
option	205
JS Interface (Constructor Parameters)	206
btnType	206
id	206
message	206
messageRes	207
title	207
titleRes	207
JS Interface (Methods)	208
addEventListener	208
close	208
doModal	209
getBtnType	209
getMessage	210
getTitle	210
setBtnType	210
setMessage	211
setMessageRes	211
setTitle	212
setTitleRes	212
Picker	212
Markup Interface	214
index	214
option	214
JS Interface (Constructor Parameters)	216
id	216
selector	216
text	217
textRes	217
type	217
width	218
JS Interface (Methods)	219
addItem	219
addItemWithRes	219
getOption	220
getSelected	220
removeItem	220

setOption	221
setPickerStyle	221
setSelect	222
Progress	222
Markup Interface	223
JS Interface (Constructor Parameters)	224
id.....	224
max.....	224
min	224
style	225
selector	225
value	225
JS Interface (Methods)	227
getMax.....	227
getMin	227
getStep	228
getValue.....	228
resetProgress	228
setMax.....	229
setMin.....	229
setStep	230
setValue	230
startProgress	231
stopProgress	231
Radio	231
Markup Interface	233
text-inline.....	233
JS Interface (Constructor Parameters)	234
checked	234
id.....	234
selector	234
style	235
text	235
textInline.....	235
JS Interface (Methods)	236
getCheck	236
getText.....	236
getTextInline	237
setCheck	237
setText.....	237
setTextInline	238
Rating	238
Markup Interface	239
JS Interface (Constructor Parameters)	240
id.....	240
max.....	240
min	240
selector	241
style	241
value	241
JS Interface (Methods)	242
getMax.....	242
getMin	242
getValue.....	243
setMax.....	243
setMin.....	243
setValue	244

Scroller	244
Markup Interface	246
img-scroll-direction.....	246
JS Interface (Constructor Parameters)	247
id.....	247
imgScrollDirection	247
selector	247
style	248
JS Interface (Methods)	249
addContents	249
getScrollDirection	249
getScrollLock	250
setScrollDirection	250
setScrollLock	250
Slider	251
Markup Interface	252
JS Interface (Constructor Parameters)	253
id.....	253
max.....	253
min	254
style	254
selector	254
value	254
JS Interface (Methods)	256
getMax.....	256
getMin	256
getValue	257
setMax.....	257
setMin.....	257
setValue	258
Tab	258
Markup Interface	260
index	260
JS Interface (Constructor Parameters)	261
id.....	261
selector	261
text	261
JS Interface (Methods)	263
addTab	263
getSelected	263
getTabHeight	264
getTabWidth	264
setSelected	265
setTab	265
setTabHeight	265
setTabWidth	266
TextInput	266
Markup Interface	268
text-inline	268
JS Interface (Constructor Parameters)	269
id.....	269
selector	269
style	269
text	270
textinline	270
type.....	270
JS Interface (Methods)	271

getText.....	271
getTextInline	271
setText.....	272
setTextInline	272
ToggleSwitch.....	272
Markup Interface	274
text-inline	274
JS Interface (Constructor Parameters)	275
id.....	275
on.....	275
off.....	275
selector	276
textinline	276
JS Interface (Methods)	277
getSelected	277
getText.....	277
getTextInline	278
setTextRes.....	278
setSelected	278
setText.....	279
setTextInline	279
TvHelp	280
Markup Interface	281
option	281
JS Interface (Constructor Parameters)	282
id.....	282
items	282
selector	283
style	283
JS Interface (Methods)	284
addItem	284
getLink.....	284
getOption.....	285
getText.....	285
removeItem	286
setItem.....	286
PageEffects.....	286
JS Interface (Constructor Parameters)	288
currentPage.....	288
JS Interface (Methods)	289
execute	289
FadeEffect.....	290
FlipEffect	292
PopEffect	294
SlideEffect.....	296

Annex A Differences in Media Devices298

Annex B Utilities for Using Web UI Components.....299

Converting HTML Components into LG Components.....	299
JavaScript Handler for UI Components	299
Defining the Next Focus	300
Adding attribute in lge-attr	301

Adding parameters in JavaScript constructor.....	302
Calling direction key event.....	303

Main Features of LG Smart TV SDK 3.0 APIs

This document outlines the key API functions of LG Smart TV SDK V3.0 released in February 2013. It was created to help developers, content planners and department officials gain a better understanding of LG Smart TV applications (apps).

This chapter includes the following sections.

- [New Features of LG Smart TV SDK 3.0 APIs](#)
- [Main Features of LG Smart TV SDK](#)

New Features of LG Smart TV SDK 3.0 APIs

APIs provide the Web app programming environment for the LG Smart TV NetCast Platform. In particular, they provide an abundance of media playback functions, device information, DRM management functions and adaptive streaming solutions.

From the previous SDK version, this SDK 3.0 version added and modified a new API on Device Info Plugin and API, NetCast API.

NetCast API

- *window.NetCastSetAutoMouseOff* is added
- *window.NetCastSystemKeyboardVisible* is added

Device Info Plugin and API

- *support3DMode* is added

Main Features of LG Smart TV SDK

NetCast means that the platform is compatible with LG Smart TVs.

Developers can use the APIs provided by the LG Smart TV SDK to drive the NetCast Platform and develop creative and useful apps. This document outlines the following key functions:

- [Media](#)
- [Voice Recognition](#)
- [AppToApp](#)
- [Sound](#)
- [UI Component](#)

Media

The NetCast Platform supports the two following video playback methods in apps:

Video Playback Method	Supported Streaming Protocol	DRM
HTML5 Video Tag	HTTP	(DRM not supported)
Media Object	HTTP, MMSH (for VOD media delivery) HLS, Widevine (for Linear or live broadcasting)	PlayReady, Widevine, Verimatrix

Supported SDK and Emulator

- LG Smart TV SDK V1.5 or newer
- LG Smart TV Emulator 2011: HTML5 video tags are not supported, but media objects are supported.
- LG Smart TV Emulator 2012: Both HTML5 video tags and media objects are supported.

Related Document

See [Media Player Plugin and API](#) for detailed information.

Voice Recognition

The NetCast Platform makes it possible to use the Magic Remote's voice recognition function in Smart TV Web apps. It provides the API for converting voice into text and allows users to use voice recognition to input characters while using their Smart TV, for example, when searching content and inputting their account details.

There are two voice recognition modes:

- Word mode: Keyword-level voice recognition (up to three similar voice recognition results will be displayed).
- Dictation mode: Sentence-level voice recognition (only one recognition result will be displayed).

The voice recognition plugin and API are supported since NetCast 3.0. The supported languages for the voice recognition are listed in the [Voice Recognition Plugin and API](#).

Supported SDK and Emulator

- H12: Korea/North America/Europe/CIS/Australia/Brazil/China
- M12: Korea
- See the [Voice Recognition Plugin and API](#) for information on the supported languages in different regions.

Related Document

See [Voice Recognition Plugin and API](#) for detailed information.

Example of an Application



[Figure] Recognizing keywords using the voice recognition function in the search section of the Social Center

AppToApp

The NetCast Platform allows a Smart TV app and a mobile app (Android and iOS based), which can be called a second screen or companion app, to communicate with each other through the TV.

An LG Smart TV app (host) uses the AppToApp API to communicate with a mobile app. The mobile app (controller) discovers, pairs with, launches, and communicates with the host based on the UDAP (Universal Discovery & Access Protocol) defined by LG.

Developers can offer a wide range of second screen-based experiences to Smart TV users by enabling interworking between Smart TV and mobile devices.

Currently, the AppToApp API specifications, UDAP, and UDAP service profile specifications are available separately. Sample code for mobile apps (controllers) will also be provided for easier implementation.

Supported SDK and Emulator

- LG Smart TV SDK V2.2 or newer
- LG Smart TV Emulator 2011: not supported
- LG Smart TV Emulator 2012: SDK 2.2 or newer

Related Document

See [AppToApp Plugin and API](#) for detailed information.

Example of an Application

The following app was developed using the AppToApp function.

If users share the URL for the Webpage they wish to view on a big screen through the WatchBig! App, the webpage that appears on their mobile phones can be viewed on their Smart TV via its Web browser.

The WatchBig! app will be available to download from LG Smart World (LG Apps TV) soon.



[Figure] LG Electronics Super App Contest Winner: WatchBig!

Sound

The NetCast Platform enables sound effects (a short WAVE file) to be inserted into the background music of a Smart TV video or program.

If the sound effect and background music are played at the same time, the Media Player plugin must be used to play the background music. It is also possible to play the sound effect on its own, without any background music. Several audio plugins can also be used simultaneously.

The WAVE files currently available for sound effects are as follows:

- Sampling rate: 44.1 K
- Audio bps: 16 bit
- Audio channel: mono

Supported SDK and Emulator

- LG Smart TV SDK V2.2 or newer
- LG Smart TV Emulator 2011: not supported
- LG Smart TV Emulator 2012: SDK 2.2 or newer

Related Document

See [Sound Plugin and API](#) for detailed information.

UI Component

The NetCast Platform provides Web UI components, whose look and feel are unique to LG Electronics. Developers can use the LG Web UI Components to develop apps that are compatible with the UI/UX of LG Smart TVs. To use LG Web UI Components, you must install LG Smart TV SDK V2.2.0 or newer. You can generate UI components easily by means of drag and drop using the WYSIWYG Editor in the LG IDE. UI Components will be generated using the standard HTML markup or LG JavaScript interface.

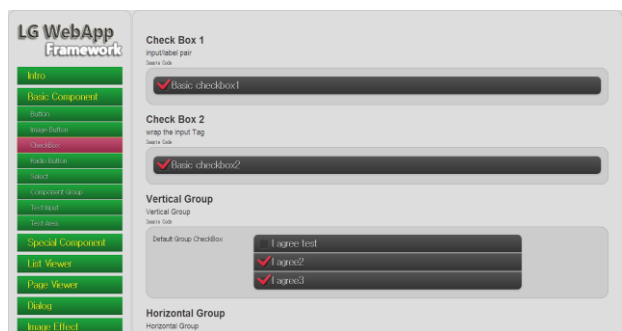
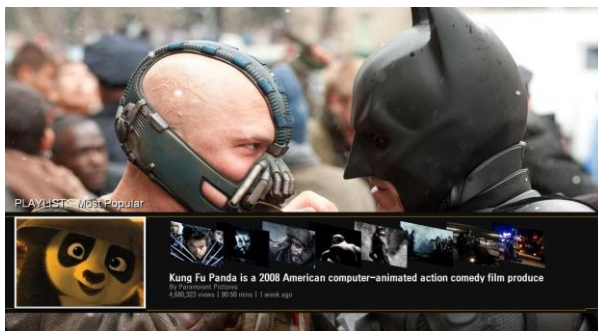
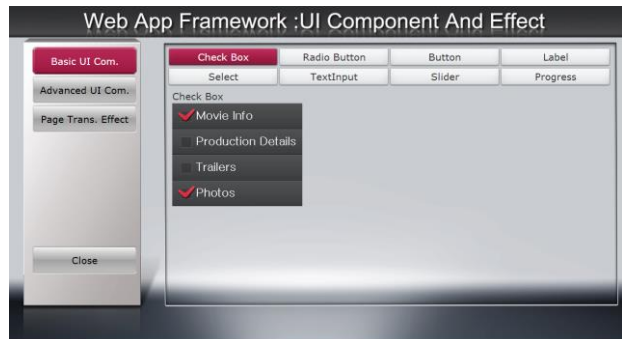
Supported SDK and Emulator

- LG Smart TV SDK V2.2 or newer
- LG Smart TV Emulator 2011: not supported
- LG Smart TV Emulator 2012: SDK V2.2 or newer

Related Document

See [Web UI Component API](#) for detailed information.

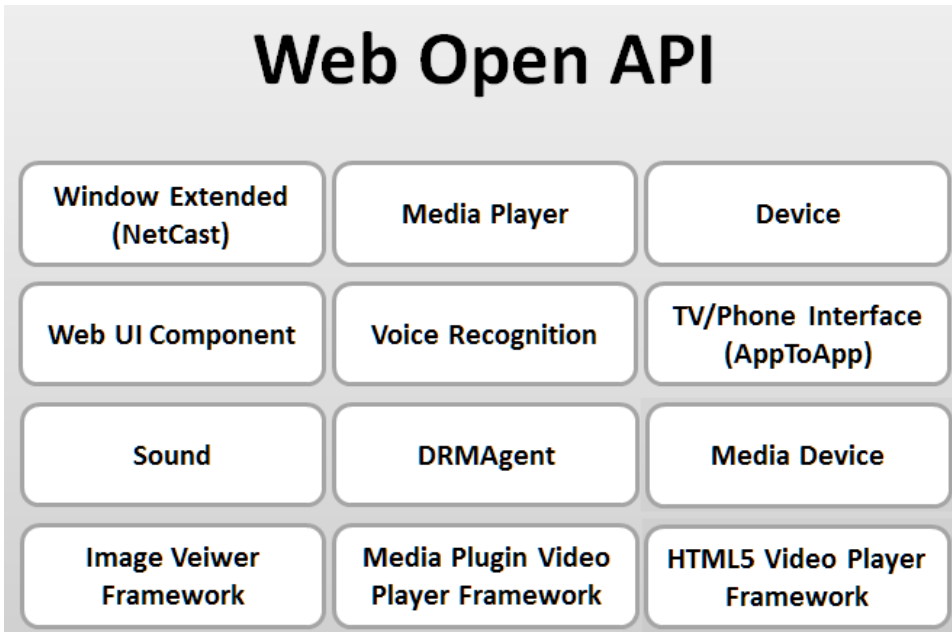
Example of an Application



[Figure] Examples of apps using LG Web UI Components

Web API Overview

LG Web API provides APIs for developers to create web applications on LG Smart TV. The following figure illustrates the LG Web API service blocks.



[Figure] Service Block Diagram of LG Web API

Window Extended (NetCast)

NetCast supports the proprietary browser APIs for developers to use.

Media Player

Media Player Plugin and API contain CE-HTML and CEA-2014 compliant media player plugin.

Device

Device Info Plugin and API are for obtaining device information in the application.

Voice Recognition

Voice Recognition Plugin and API are for using voice recognition function of Magic Remote in the application.

AppToApp

AppToApp Plugin and API are used for interaction between LG Smart TV and external smart device such as Smart phone.

Sound

Sound Plugin and API are used for playing sound effect, a short wav file, while background music is being played using Media Player plugin. (It is possible to use Sound plugin with no background music being played.)

DRMAgent

DRMAgent Plugin and API are used for the generic playout of PlayReady content using the NetCast media object and using the drmAgent object.

Media Device

Media Device Plugin and API are used for PDP TV and Media device, not for LCD/LED TV device.

Image Viewer Framework

Image Viewer Framework API provides the functionalities of a photo gallery and image viewer.

Media Plugin Video Player Framework

Media Plugin Video Player Framework API provides the video player and its functionalities using the media object.

HTML5 Video Player Framework

HTML5 Video Player Framework API provides the video player and its functionalities using the HTML5 Video element.

Web UI Component

LG Smart TV SDK provides LG Web UI Components for developing LG Smart TV web applications. The LG Web UI components are designed to comply with the look and feel of LG Smart TV's UI/UX. LG provides various components including Button, CheckBox, Focus and more. Also, 4 types of page effects are provided.

Note

According to our policy, the following Web Open APIs will not be compatible with the LG Smart TV 2014 platform.

- **AppToApp APIs** (Since LG will provide a new library that has the UDAP function in the next year, UDAP will not be supported in the LG Smart TV 2014 platform. If you want to deploy your app implemented using UDAP on the LG Smart TV 2014 platform, it must be partly reimplemented using new library. For more information, detailed reimplementation guide will be provided later.)

- **SNS APIs (Removed from LG Web Open API on June, 2013.)**

NetCast API

Following sections describe the proprietary browser APIs for LG Smart TV application authors to use.

- [Methods/Proprietary Events](#)

Methods/Proprietary Events

Methods and proprietary events are listed in the following sections.

- [Methods](#)
- [Proprietary Events](#)

Methods

Methods of NetCast API are as follows:

window.NetCastExit

Description

The NetCast Platform provides a proprietary API, 'window.NetCastExit()', to implement the exit function to AV. A JavaScript application can use this API for users to exit or quit the application to AV.

Note

Since LG Smart TV's UX Guideline is changed, we do not recommend to use this API anymore. When an application is closed, you must use the window.NetCastBack() API to go back to the previous menu.

Syntax

```
window.NetCastExit();
```

Parameters

None

Return Value

None

Example

```
function processExit()  
{  
    window.NetCastExit();  
}
```

Supported SDK / Emulator Version

SDK Version	Emulator Version
1.5 or higher	LG Smart TV Emulator 2011 : SDK 1.5 or higher LG Smart TV Emulator 2012 : SDK 2.0 or higher LG Smart TV Emulator 2013 : SDK 3.0 or higher

window.NetCastBack

Description

The NetCast Platform provides a proprietary API, 'window.NetCastBack()', to implement the back function to the previous NetCast menu. A JavaScript application can use this API for users to move back to previous NetCast menu.

Syntax

```
window.NetCastBack();
```

Parameters

None

Return Value

None

Example

```
function processBack()
{
    if(window.NetCastBack) {
        window.NetCastBack();
    }
}
```

Supported SDK / Emulator Version

SDK Version	Emulator Version
1.5 or higher	LG Smart TV Emulator 2011 : SDK 1.5 or higher LG Smart TV Emulator 2012 : SDK 2.0 or higher LG Smart TV Emulator 2013 : SDK 3.0 or higher

window.NetCastSetPageLoadingIcon

Description

It is recommended that developers provide a “loading” icon so that users are provided with an indication of the latency of data downloading from a server. Developers can implement this feature using JavaScript, however, it may not be possible do this, as there would not be any JavaScript running while a HTML page is loading. The NetCast Platform supports a proprietary API, 'window.NetCastPageLoadingIcon()', to provide the web application's own page loading animation function. Developers can use this API during HTML page loading.

Note

This function will be applied while the next page is loaded.

The following examples show how application authors can enable and disable the browser's page loading icon.

Syntax

```
window.NetCastSetPageLoadingIcon(control);
```

Parameters

control [in] 'enabled' or 'disabled'

Return Value

None

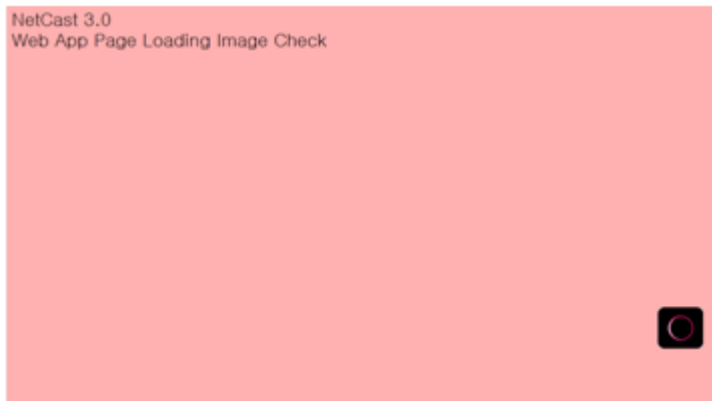
Example

```
function enablePageLoadingIcon() {
    window.NetCastSetPageLoadingIcon('enabled');
}
```

```
function disablePageLoadingIcon() {
    window.NetCastSetPageLoadingIcon('disabled');
}
```




[Figure] Screen shot of web application's page loading icon in NetCast 2.0



[Figure] Screen shot of web application's page loading icon in NetCast 3.0 or higher

Supported SDK / Emulator Version

SDK Version	Emulator Version
1.5 or higher	LG Smart TV Emulator 2011 : SDK 1.5 or higher LG Smart TV Emulator 2012 : SDK 2.0 or higher LG Smart TV Emulator 2013 : SDK 3.0 or higher

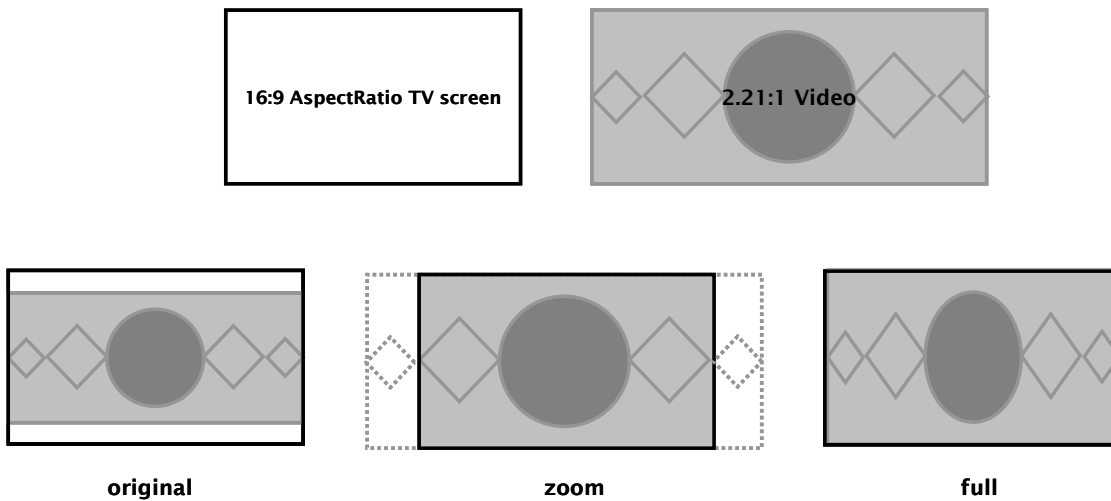
window.NetCastSetDefaultAspectRatio

Description

Developers may want to set the default aspect ratio for users to view full screen video with the correct aspect ratio. The NetCast Platform allows developers to set the default aspect ratio by using the 'window.NetCastSetDefaultAspectRatio()' API. The setting only applies if the video runs in full screen mode, 1280 x 720. This API takes a string type of argument. The list of arguments and their behaviors are listed in the following table and figure.

Note

This API call applies only once for a whole application life cycle. Second and subsequent calls will be ignored by the LG Browser automatically. Therefore, it is recommended to locate the API call at the time of launching the application. If the application is launched again after exiting, the API will be enabled again.



[Figure] Media Data Transmitting Algorithm of Media Playback

Syntax

```
window.NetCastSetDefaultAspectRatio(control);
```

Parameters

control [in] Aspect ratio control mode

[Table] Explanation of aspect ratio control mode

Aspect ratio control mode	Meaning
original	view original video image with original correct aspect ratio (TV screen may not be filled with video image)
zoom	fill the full TV screen with original aspect ratio video (there may be some cropping of the original video image)
full	fill the full TV screen with video (aspect ratio may be distorted, but with no loss of original video image)

Return Value

None

Example

```
function setDefaultAspectRatio()
{
    window.NetCastSetDefaultAspectRatio('original');
}
</script>
<body onload='setDefaultAspectRatio(); return false;'>
    ...
</body>
```

Supported SDK / Emulator Version

SDK Version	Emulator Version
1.5 or higher	LG Smart TV Emulator 2011 : SDK 1.5 or higher LG Smart TV Emulator 2012 : SDK 2.0 or higher LG Smart TV Emulator 2013 : SDK 3.0 or higher

window.NetCastLaunchQMENU

Description

The NetCast Platform provides a 'QMENU' (Quick Menu for Audio and Video Adjustment) for users to setup the aspect ratio for full screen video, picture quality adjustment and audio adjustment. The QMENU can be launched by users when playing video in full screen mode by pressing the 'QMENU' button on the remote control. This only works in full screen video mode.

Note, it is possible for users to operate a LG Smart TV application using the Magic Remote, the pointing device of the NetCast Platform. There is no 'QMENU' button on the Magic Remote, Therefore, it is strongly recommended that the LG Smart TV developer implements a graphical user interface to launch the QMENU over a full screen video.

The NetCast Platform thus provides a proprietary API, 'window.NetCastLaunchQMENU()' to enable this feature. If this API is called then the LG Smart TV will overlay the QMENU on the full screen video. Developers can launch the QMENU over a full screen video using this API.

Syntax

```
window.NetCastLaunchQMENU();
```

Parameters

None

Return Value

None

Example

```
function launchQMENU()  
{  
    if(window.NetCastLaunchQMENU) {  
        window.NetCastLaunchQMENU();  
    }  
}
```

Supported SDK / Emulator Version

SDK Version	Emulator Version
1.5 or higher	LG Smart TV Emulator 2011 : SDK 1.5 or higher LG Smart TV Emulator 2012 : SDK 2.0 or higher LG Smart TV Emulator 2013 : SDK 3.0 or higher

window.NetCastLaunchRATIO

Description

The NetCast Platform provides a 'RATIO' (Aspect Ratio Control) menu for users to setup the aspect ratio of a full screen video. The RATIO menu can be launched by a user while playing a video in a full screen mode by pressing the 'RATIO' button on the remote control. This only works in full screen video mode.

Note, it is possible for users to operate a LG Smart TV application using the Magic Remote, the pointing device of NetCast Platform. There is no 'RATIO' button on the Magic Remote, therefore, it is strongly recommended that the LG Smart TV developer implements a graphical user interface to launch the RATIO menu over a full screen video.

The NetCast Platform thus provides a proprietary API 'window.NetCastLaunchRATIO()' to enable this feature. If this API is called then the LG Smart TV will overlay the RATIO menu on the full screen video. Developers can launch the RATIO over a full screen video using this API.

Syntax

```
window.NetCastLaunchRATIO();
```

Parameters

None

Return Value

None

Example

```
function launchRATIO ()
{
    if(window.NetCastLaunchRATIO) {
        window.NetCastLaunchRATIO ();
    }
}
```

Supported SDK / Emulator Version

SDK Version	Emulator Version
1.5 or higher	LG Smart TV Emulator 2011 : SDK 1.5 or higher LG Smart TV Emulator 2012 : SDK 2.0 or higher LG Smart TV Emulator 2013 : SDK 3.0 or higher

window.NetCastMouseOff

Description

This API can be used by an LG Smart TV developer to deactivate the Magic Remote and its pointer.

Refer to the section 'Input Device' and 'userAgent String' in **Developing > Developing Web App > App Development Guide** section in this Library , and [supportMouse](#), [mouseon](#), [mouseoff](#), and [window.NetCastGetMouseOnOff\(\)](#) for more information about the Magic Remote and its status related event and API.

Developers can deactivate the Magic Remote and its pointer using this API. In the following example, the "time" parameter is the time value after which the deactivation is applied. This parameter is processed to "second" level accuracy. For example, the Magic Remote pointer would disappear 5 seconds after calling "window.NetCastMouseOff(5);".

Note

In NetCast 3.0 or higher, the mouse gets deactivated when the halt of the mouse movement continues for 3 seconds. Therefore, this function is supported only for backward compatibility and it does not do anything.

In other words, window.NetCastMouseOff function is ONLY activated in NetCast 2.0 (the model of 2011).

Syntax

```
window.NetCastMouseOff (time);
```

Parameters

time [in] Time value after which the deactivation is applied (in second)

Return Value

None

Example

```
function mouseOff (time)
{
    if(window.NetCastMouseOff) {
        window.NetCastMouseOff (time);
    }
}
```

Supported SDK / Emulator Version

SDK Version	Emulator Version
1.5 or higher	LG Smart TV Emulator 2011 : SDK 1.5 or higher LG Smart TV Emulator 2012 : SDK 2.2 or higher

SDK Version	Emulator Version
	LG Smart TV Emulator 2013 : SDK 3.0 or higher

window.NetCastGetMouseOnOff

Description

This API can be used by an LG Smart TV developer to get the on or off status of the Magic Remote.

Refer to the section 'Input Device' and 'userAgent String' in **Developing > Developing Web App > App Development Guide** section in this Library , and [supportMouse](#), [mouseon](#), [mouseoff](#), and [window.NetCastGetMouseOnOff\(time\)](#) for more information about the Magic Remote and its status related event and API.

Syntax

```
window.NetCastGetMouseOnOff ();
```

Parameters

None

Return Value

Return value is "on" or "off", the mouse status. (String type)

Example

```
var mouseOnOffStatus;

function getMouseOnOff()
{
    if(window.NetCastGetMouseOnOff) {
        mouseOnOffStatus = window.NetCastGetMouseOnOff ();
    }
}
```

Supported SDK / Emulator Version

SDK Version	Emulator Version
1.5 or higher	LG Smart TV Emulator 2011 : SDK 1.5 or higher LG Smart TV Emulator 2012 : SDK 2.0 or higher LG Smart TV Emulator 2013 : SDK 3.0 or higher

window.NetCastSetAutoMouseOff

Description

This API can be used by an LG Smart TV developer to set the auto mouse off property.

LG Smart TV turns off pointing feature automatically, if a user does not use the pointer of a mouse or Magic Remote for a specific time. However, some apps need to maintain the pointer at the specific place for a specific time. In this case, 'NetCastSetAutoMouseOff' API protects the mouse not to be turned off automatically.

Even when the mouse is set not to be turned off automatically, the pointing feature becomes off when a user presses the key of a common remote control.

Syntax

```
window.NetCastSetAutoMouseOff (control);
```

Parameters

control [in] 'enable' or 'disable'

Return Value

None

Example

```
if(window.NetCastSetAutoMouseOff) {  
    window. NetCastSetAutoMouseOff('disable');  
}
```

Supported SDK / Emulator Version

SDK Version	Emulator Version
3.0 or higher	LG Smart TV Emulator 2011 : Not Supported
	LG Smart TV Emulator 2012 : Not Supported
	LG Smart TV Emulator 2013 : Not Supported

window.NetCastGetUsedMemorySize

Description

This API can be used by an LG Smart TV developer to get the total memory size used by the web application.

Syntax

```
window.NetCastGetUsedMemorySize();
```

Parameters

None

Return Value

Returns the memory size used in the application. (Int type)

Example

```
var usedMemorySize;  
  
function getUsedMemorySize()  
{  
    if(window.NetCastGetUsedMemorySize) {  
        usedMemorySize = window.NetCastGetUsedMemorySize();  
    }  
}
```

Supported SDK / Emulator Version

SDK Version	Emulator Version
1.5 or higher	LG Smart TV Emulator 2011 : Not Supported
	LG Smart TV Emulator 2012 : SDK 2.2 or higher
	LG Smart TV Emulator 2013 : SDK 3.0 or higher

window.NetCastSystemKeyboardVisible

Description

The NetCast Platform provides a proprietary API, 'window.NetCastSystemKeyboardVisible' to use the system keyboard of NetCast Platform.

To use a system keyboard at an application, set the input parameter as TRUE. To use the JavaScript keyboard provided by an application, set the input parameter as FALSE. If an application does not call this API, the JavaScript keyboard provided by an application is assumed.

The NetCast Platform supports the system keyboard since the NetCast 4.0 (2013)

Syntax

```
window.NetCastSystemKeyboardVisible(boolean);
```

Parameters

boolean [in] true or false

Return Value

None

Example

```
window.NetCastSystemKeyboardVisible(true);
```

Supported SDK / Emulator Version

SDK Version	Emulator Version
3.0 or higher	LG Smart TV Emulator 2011 : Not Supported
	LG Smart TV Emulator 2012 : Not Supported
	LG Smart TV Emulator 2013 : Not Supported

Proprietary Events

Proprietary events of NetCast API are as follows:

mouseon

Description

This event is generated when the Magic Remote is activated. Refer to the section 'Input Device' in **Developing > Developing Web App > App Development Guide** section in this Library , and [Device Info API \(Properties\)](#) and [supportMouse](#) for more detailed information about the Magic Remote and input devices.

The following examples illustrate how developers can register the “mouseon” event handler in three ways.

Example

```
// Registering "mouseon" event (in body tag)
<body
  onkeydown='processKeyDown(event) '
  style='margin:0; font-family:TiresiasScreenfont '
  ondragstart='return false'
  onselectstart='return false'
  onmouseon='mouseon_handler() '>
  . . .
</body>
```

```
// Registering "mouseon" event (window property)
<script language='javascript'>
  if(window.onmouseon) {
    window.onmouseon = mouseon_handler;
  }
</script>
```

```
// Registering "mouseon" event (DOM Level 2 event)
<script language='javascript'>
  if(window.onmouseon) {
    window.addEventListener('mouseon', mouseon_handler, true);
  }
</script>
```

See Also

[window.NetCastMouseOff](#)
[window.NetCastGetMouseOnOff](#)

Supported SDK / Emulator Version

SDK Version	Emulator Version
1.5 or higher	LG Smart TV Emulator 2011 : Not Supported LG Smart TV Emulator 2012 : SDK 2.2 or higher LG Smart TV Emulator 2013 : SDK 3.0 or higher

mouseoff

Description

This event is generated when the Magic Remote is deactivated. Refer to the section 'Input Device' and 'userAgent String' in **Developing > Developing Web App > App Development Guide** section in this Library , and [supportMouse](#) for more detailed information about the Magic Remote and input devices.

The following examples illustrate how developers can register the “mouseoff” event handler in three ways.

Example


```
// Registering "mouseout" event (in body tag)
<body
  onkeydown='processKeyDown(event) '
  style='margin:0; font-family:TiresiasScreenfont '
  ondragstart='return false'
  onselectstart='return false'
  onmouseout='mouseout_handler() '>
</body>
```

```
// Registering "mouseout" event (window property)
<script language='javascript'>
  if(window.onmouseout) {
    window.onmouseout = mouseoff_handler;
  }
</script>
```

```
// Registering "mouseout" event (DOM Level 2 event)
<script language='javascript'>
  if(window.onmouseout) {
    window.addEventListener('mouseout', mouseoff_handler, true);
  }
</script>
```

See Also

[window.NetCastMouseOff](#)
[window.NetCastGetMouseOnOff](#)

Supported SDK / Emulator Version

SDK Version	Emulator Version
1.5 or higher	LG Smart TV Emulator 2011 : Not Supported LG Smart TV Emulator 2012 : SDK 2.2 or higher LG Smart TV Emulator 2013 : SDK 3.0 or higher

outofmemory

Description

Web application gets force shut down when the TV system memory goes under 20 MB. The 'outofmemory' event gives the remaining memory size to developer before the web application gets force shut down. This event occurs three times (at about 50 MB (20 MB + 30 MB), 40 MB (20 MB + 20 MB), 30 MB (20 MB + 10 MB)). If you use 'event.available' property, you can get the current available memory size.

The following examples illustrate how developer can register the 'outofmemory' event handler in three ways.

Example

```
// Registering "outofmemory" event (in body tag)
<body
  onkeydown='processKeyDown(event) '
  style='margin:0; font-family:TiresiasScreenfont '
  ondragstart='return false'
  onselectstart='return false'
  onoutofmemory = 'outofmemory_handler() '>
  . . .
</body>
```

```
// Registering "outofmemory" event (window property)
<script language='javascript'>
  if(window.onoutofmemory) {
    window.onoutofmemory = outofmemory_handler;
  }
</script>
```

```
</script>
```

```
// Registering "outofmemory" event (DOM Level 2 event)
<script language='javascript'>
  if(window.onoutofmemory) {
    window.addEventListener(outofmemory, outofmemory_handler, true);
  }
</script>
```

Supported SDK / Emulator Version

SDK Version	Emulator Version
1.5 or higher	LG Smart TV Emulator 2011 : Not Supported LG Smart TV Emulator 2012 : Not Supported LG Smart TV Emulator 2013 : Not Supported

Media Player Plugin and API

The NetCast Platform supports CE-HTML and CEA-2014 compliant media player plugin. The following sub-sections describe the API of CE-HTML compliant media player plugin. The supported API list is a subset of CE-HTML, and it is not the whole set of media player APIs as provided by CE-HTML.

- [Media Object](#)
- [Audio Object](#)
- [Media Type Resolving in Media Player Plugin](#)
- [Methods/Properties/Events](#)

Media Object

An example MIME type for the media object is video/x-ms-wmv for NetCast Platform media player plugin. The media object supports the data URL, width, height, id, preBufferingTime, oneshot_url, subtitle, subtitleOn and drm_type, and playCount properties.

The NetCast Platform supports only one instance of the media object at any one time, so developers must not attempt to use more than one media object simultaneously.

Refer to Annex A Complete List of Supported MIME Types in **Developing > Developing Web App > App Development Guide** section in this Library. See also [Media Type Resolving in Media Player Plugin](#) for the media type resolving rule.

The following sample code is an example of using the wmv media object in HTML.

Note

The frame buffer is not dynamically resizable. Hence, if the maximum resolution of the video is not full HD, you must fix the values of VideoMaxWidth and VideoMaxHeight properties in the media object as below.

```
// Example of media object in HTML
<object type="video/x-ms-wmv"
  data="http://192.168.1.50/example.wmv"
  width="1280"
  height="720"
  VideoMaxWidth="1280"
  VideoMaxHeight="720"
  id="media">
</object>
```

Following section describes the properties of Media Object.

- [Properties](#)

Properties

Properties of Media Object are as follows:

mode3D

Description

The NetCast Platform supports 3D formats such as 2D-to-3D, Side-by-Side, Top-and-Bottom, and Checker Board. It provides mode3D write-only property for developers to set a specific 3D format in 3D mode. The NetCast Platform will automatically display 3D video with defined 3D format if this property is set properly. The default value of this property is off and NetCast Platform displays original 2D video if this property is not defined.

Note that NetCast 3.0 supports 3D rendering for any size of video screen. However, NetCast 2.0 supports it only for full screen mode. You can check if the TV [supports 3D](#) by using support3D in Device API.

[Table] Available values for "mode3D" property

Variable	Meaning
off	Original 2D Format
from_2d_to_3d	2D-to-3D Conversion Format
side_by_side	Side-by-Side Frame Compatible 3D (Left / Right)
side_by_side_rl	Side-by-Side Frame Compatible 3D (Right / Left)
top_bottom	Top-and-Bottom (or Over-Under) Frame Compatible 3D
checker_bd	Checker board Frame Compatible 3D only available for HD format (1080p @ 30Hz)

Example

```
<object type="video/x-ms-wmv"
  data="http://192.168.1.50/3dexample.wmv"
  mode3D="side_by_side"
  width="1280" height="720"
  id="media">
</object>
```

preBufferingTime

Description

Since NetCast 2.0, the preBufferingTime property is supported. Developers can adjust buffering time through preBufferingTime before playback. The unit of this property is an integer number of seconds. In the following example, developer is requesting that the media content starts playing after performing 5 seconds buffering time through calling "preBufferingTime = 5".

Example

```
<object type="video/x-ms-wmv"
  data="http://192.168.1.50/example.wmv"
  preBufferingTime = 5
  width="1280"
  height="720"
  id="media">
</object>
```

oneshot_url

Description

Developers may want to use a one shot URL to help prevent unwarranted content downloading. A “one shot URL” means a URL which is not available again after having been accessed once. The NetCast Platform supports a property, `oneshot_url`, for developers to play content linked to the one shot URL.

Note

To avoid multiple accesses to one shot URL, the NetCast Platform does not perform content type checking by reading the head of content file. Therefore, developers have to describe the exact MIME type. For example, “application/x-netcast-av” should be avoided because it does not describe the exact MIME type. ASX file should be avoided for one shot URL.

Example

```
<object type="video/x-ms-wmv"
  data="http://192.168.1.50/example.wmv"
  oneshot_url=true
  width="1280"
  height="720"
  id="media">
</object>
```

subtitleOn / subtitle

Description

The NetCast Platform supports subtitle decoding. Since NetCast 2.0, SAMI (Synchronized Accessible Media Interchange), CineCanvas and Timed Text subtitle formats are supported. The NetCast Platform supports the subtitle and subtitleOn properties.

The subtitle can be applied only when a full size video is being played.

Note

The NetCast Platform does not support multiplexing multiple subtitle tracks in one file.

Example

```
<object type="video/x-ms-wmv"
  data="http://192.168.1.50/example.wmv"
  subtitleOn=true
  subtitle="http://192.168.1.50/example.smi"
  width="1280"
  height="720"
  id="media">
</object>
```

drm_type

Description

The NetCast Platform supports WM-DRM 10 PD (Not supported in NetCast 3.0), PlayReady (Not supported in NetCast 2.0), Widevine, and Verimatrix (Supported in NetCast 3.0/4.0/4.5) as its DRM solutions. The NetCast Platform supports a property, `drm_type`, for developers to set the DRM type. The default value of this property is “wm-drm” and NetCast Platform will use the WM-DRM solution if this property is not defined.

[Table] Available values for “drm_type” property

Value	Meaning
-------	---------

Value	Meaning
wm-drm	WM-DRM 10 PD or PlayReady (default value)
widevine	Widevine DRM and its adaptive/live streaming
verimatrix	Verimatri DRM

Example

```
<object type="video/x-ms-wmv"
  data="http://192.168.1.50/example.wmv"
  drm_type="widevine"
  width="1280"
  height="720"
  id="media">
</object>
```

playCount

Description

To set play count for media, use “playCount” property. If you set the value to “0”, it means the media will be played in an infinite loop. If you set the value to a number, 1 or over, it means the media will be played “n” times.

Example

```
<object type="video/x-ms-wmv"
  data="http://192.168.1.50/example.wmv"
  playCount=2
  width="1280"
  height="720"
  id="media">
</object>
```

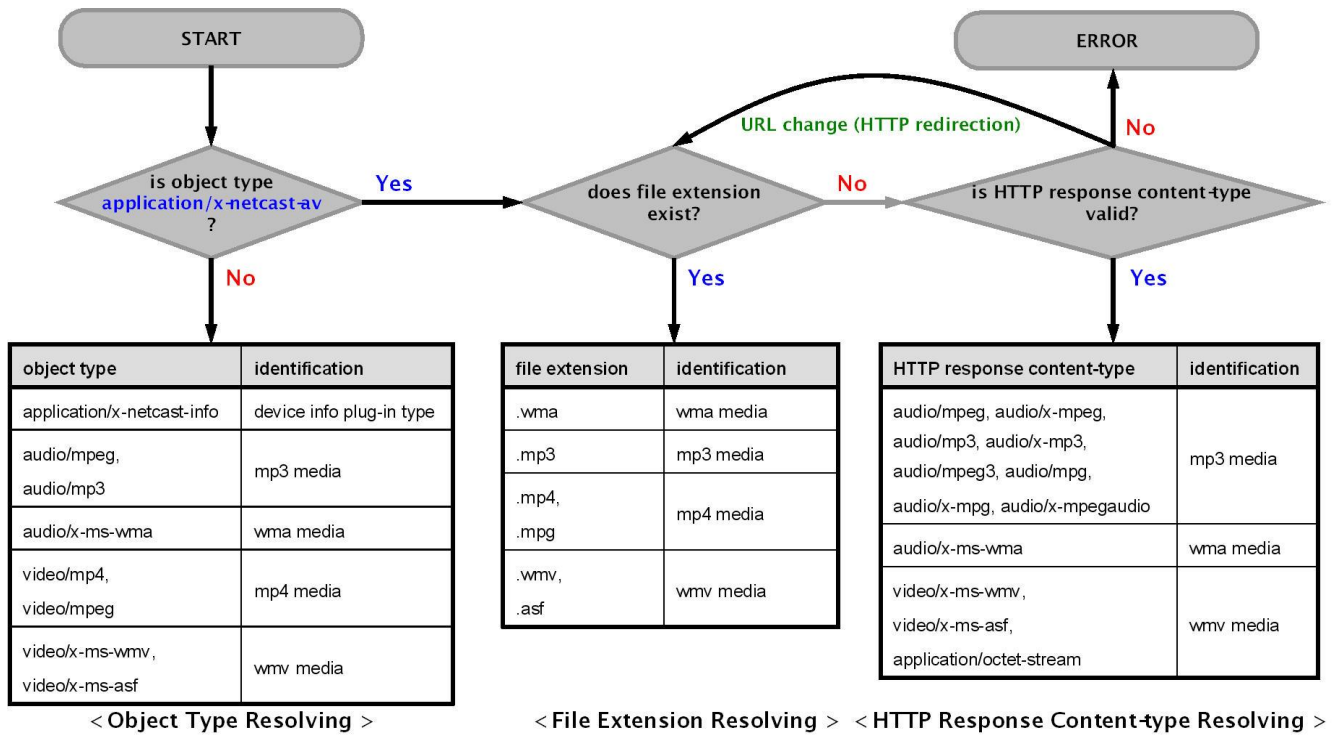
Audio Object

As opposed to a video object, an audio object cannot have width and height. However, the NetCast Platform supports only one media player plugin and media object for both video and audio objects, so developers must specify the width and height for audio object as 0. This kind of example can be used for “radio like” services.

```
// Example of audio object in HTML
<object type="audio/x-ms-wma"
  data="http://192.168.1.50/example.wma"
  width="0"
  height="0"
  id="media">
</object>
```

Media Type Resolving in Media Player Plugin

The following figure describes the decision tree for resolving media types on the NetCast Platform media player plugin. Refer to Annex A Complete List of Supported MIME Types in **Developing > Developing Web App > App Development Guide** section in this Library.



[Figure] Decision tree for media type resolving in the media player plugin

Methods/Properties/Events

Methods, properties, and events are listed in the following sections.

- [Methods](#)
- [Properties](#)
- [Events](#)

Methods

Methods of Media Player Plugin and API are as follows:

In this version of specification, the NetCast Platform does not support mute/unmute APIs. Users can mute and unmute audio using the mute function in the TV native system.

play

Description

Developers can play media at normal speed using `media.play(speed)` API.

Developers can also implement the trick mode play using `media.play(speed)` API only in mms streaming.

Note

In mms streaming, the speed parameter is transparently transmitted to the server without any conversion. Therefore, developers are responsible for matching the speed parameter between the JavaScript application and the server.

Syntax

```
media.play(speed);
```

Parameters

`speed` [in] The range of allowed values of speed is from -30.0 to 30.0.
1 : Normal play speed. Default value is 1
0 : Pause

Return Value

None

Example

```
// Example of 'play'  
var media = document.getElementById("media");  
media.play(1);
```

```
// Example of 'trick mode play'  
var media = document.getElementById("media");  
media.play(-1.0);
```

```
// Example of 'pause'  
var media = document.getElementById("media");  
media.play(0);
```

See Also

[isScannable](#)
[speed](#)

Supported SDK / Emulator Version

SDK Version	Emulator Version
1.5 or higher	LG Smart TV Emulator 2011 : SDK 1.5 or higher LG Smart TV Emulator 2012 : SDK 2.0 or higher - play(1), play(0) is supported - play(speed) is not supported LG Smart TV Emulator 2013 : SDK 3.0 or higher

stop

Description

Developers can stop media using `media.stop()` API.

Syntax

```
media.stop();
```

Parameters

None

Return Value

None

Example

```
var media = document.getElementById("media");  
media.stop();
```

Supported SDK / Emulator Version

SDK Version	Emulator Version
1.5 or higher	LG Smart TV Emulator 2011 : SDK 1.5 or higher LG Smart TV Emulator 2012 : SDK 2.0 or higher LG Smart TV Emulator 2013 : SDK 3.0 or higher

next

Description

The NetCast Platform supports playlist (ASX), and developers can play the next media by calling `media.next()` API.

Refer to section 'userAgent String' in **Developing > Developing Web App > App Development Guide** section in this Library.

Syntax

```
media.next();
```

Parameters

None

Return Value

None

Example

```
var media = document.getElementById("media");  
media.next();
```

Supported SDK / Emulator Version

SDK Version	Emulator Version
1.5 or higher	LG Smart TV Emulator 2011 : SDK 1.5 or higher LG Smart TV Emulator 2012 : SDK 2.0 or higher LG Smart TV Emulator 2013 : SDK 3.0 or higher

previous

Description

The NetCast Platform supports playlist (ASX), and developers can play previous media by calling `media.previous()` API.

Refer to section 'userAgent String' in **Developing > Developing Web App > App Development Guide** section in this Library.

Syntax

```
media.previous();
```

Parameters

None

Return Value

None

Example

```
var media = document.getElementById("media");  
media.previous();
```

Supported SDK / Emulator Version

SDK Version	Emulator Version
1.5 or higher	LG Smart TV Emulator 2011 : SDK 1.5 or higher LG Smart TV Emulator 2012 : SDK 2.0 or higher LG Smart TV Emulator 2013 : SDK 3.0 or higher

seek

Description

This seek API will be supported for HTTP streaming only if the server supports the HTTP range header and MMS. Developers can set the time position of playback using `media.seek(position)` API, and the position value has millisecond precision.

Syntax

```
media.seek(position);
```

Parameters

`position` [in] Position value. It must have millisecond precision.

Return Value

None

Example

```
var media = document.getElementById("media");  
media.seek(30000);
```

Supported SDK / Emulator Version

SDK Version	Emulator Version
1.5 or higher	LG Smart TV Emulator 2011 : SDK 1.5 or higher LG Smart TV Emulator 2012 : SDK 2.0 or higher LG Smart TV Emulator 2013 : SDK 3.0 or higher

mediaPlayInfo

Description

This API gets media playback related information.

Syntax

```
media.mediaPlayInfo();
```

Parameters

None

Return Value

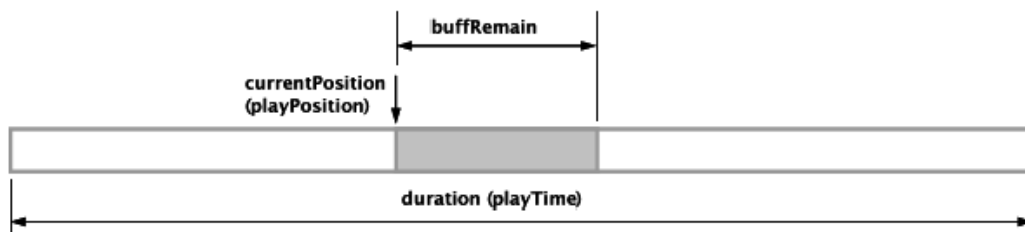
This API returns an object which contains values for duration, current position, remaining amount of buffer, instant bitrate and target bitrate. Property names and meanings are listed in the following table. The duration variable has same meaning and value with the property named as playTime. The currentPosition has same meaning and value as the property named as playPosition.

[Table] Variables of mediaPlayInfo()'s return object

Variable	Meaning	Unit
duration	Duration of media file (same as playTime property).	millisecond
currentPosition	Current play position (same as playPosition property).	millisecond
bufRemain	Remaining amount of buffer (if the buffer reaches the end of stream then the value will be -1)	millisecond
bitrateInstant	Instant stream input bitrate	bit per second
bitrateTarget	Target bitrate for stream playback	bit per second

Developers can use this information for drawing a progress bar and its associated buffering status. Moreover, developers can use bitrateInstant and bitrateTarget for drawing a streaming speed level meter. **The implementation of a streaming speed level meter is strongly required by the NetCast Platform specification, in order that the user can better understand the state of his network connection.**

The following figure graphically illustrates the buffer related variables.



[Figure] Graphical explanation of buffer related variables

The following figure is a reference graphical implementation of the streaming speed level meter.



[Figure] Graphical implementation example of streaming speed level meter

Example

```
// Example of 'get playback time position'
```

```

var playInfo = document.media.mediaPlayInfo();
duration = playInfo.duration;
currentPosition = playInfo.currentPosition;
bufBegin = playInfo.bufBegin;
bufEnd = playInfo.bufEnd;
bufRemain = playInfo.bufRemain;
bitrateInstant = playInfo.bitrateInstant;
bitrateTarget = playInfo.bitrateTarget;

```

See Also

[playTime](#)
[playPosition](#)

Supported SDK / Emulator Version

SDK Version	Emulator Version
1.5 or higher	LG Smart TV Emulator 2011 : SDK 1.5 or higher LG Smart TV Emulator 2012 : Partialy Supported LG Smart TV Emulator 2013 : SDK 3.0 or higher

setWidevineXXX

Description

Since NetCast 2.0, setWidevineXXX APIs for setting Credential Information are provided as shown in the following table. All these values are set at Runtime.

Developers must send the credential information through these APIs. If the value is not set through the API, the default value will be empty (null) or zero (0). All setWidevineXXX API arguments are string types.

Developers should call these APIs before playing media content (i.e. before the play() API is called).

Syntax

```

media.setWidevineDrmURL(DrmServerURL);
media.setWidevineDeviceID(DeviceID);
media.setWidevineStreamID(StreamID);
media.setWidevineClientIP(ClientIP);
media.setWidevineUserData(UserData);
media.setWidevineDrmAckURL(DrmAckServerURL);
media.setWidevineHeartbeatURL(HeartbeatURL);
media.setWidevineHeartbeatPeriod(HeartbeatPeriod);
media.setWidevineDeviceType(DeviceType);

```

Parameters

Credential Information will be set by shown API methods. This table describes each API method's parameter.

[Table] Credential Information Parameter

Parameter	Type	Meaning
DrmServerURL	String	URL for Widevine DRM key server
DeviceID	String	Unique player device ID
StreamID	String	Unique stream ID
ClientIP	String	IP address of client
UserData	String	Additional optional user data
DrmAckServerURL	String	URL for server that receives entitlement confirmations
HeartbeatURL	String	URL to receive client heartbeats

Parameter	Type	Meaning
HeartbeatPeriod	String	Duration between consecutive heartbeats in seconds
DeviceType	String	Device type (default value : 0)

Note

Set Credential Information which is given by Content Provider or Security Service. Some of Credential Information are required and the others are optional. It depends on Content Provider or Security Service.

Return Value

None

Example

```
// Example of 'set Widevine Credential information'
var media = document.getElementById("media");

media.setWidevineStreamID('123');
media.setWidevineDrmURL('https://drmser.cgi');
media.setWidevineDeviceID('abcd');
media.setWidevineUserData('239084');
media.setWidevineDrmAckURL('');
media.setWidevineHeartbeatURL('');
media.setWidevineHeartbeatPeriod('');
media.setWidevineDeviceType('TV');

media.play(1);
```

Supported SDK / Emulator Version

SDK Version	Emulator Version
1.5 or higher	LG Smart TV Emulator 2011 : Not Supported
	LG Smart TV Emulator 2012 : Not Supported
	LG Smart TV Emulator 2013 : Not Supported

Properties

Properties of Media Player Plugin and API are as follows:

version

Description

The NetCast Platform provides a version read-only property in the Media Player plugin object. Developers can get version of Media Player Plugin using this property. It will return the Media Player Plugin version information as a string type.

Syntax

```
media.version;
```

Example

```
var media = document.getElementById("media");  
mediaVersion = media.version;
```

Supported SDK / Emulator Version

SDK Version	Emulator Version
1.5 or higher	LG Smart TV Emulator 2011 : SDK 1.5 or higher LG Smart TV Emulator 2012 : SDK 2.0 or higher LG Smart TV Emulator 2013 : SDK 3.0 or higher

type

Description

The NetCast Platform provides a type read-write property in the Media Player plugin object. Developers can get media type (MIME type) using this property. It will return the MIME type information as a string type.

Syntax

```
media.type;
```

Example

```
var media = document.getElementById("media");  
mimeType = media.type;
```

Supported SDK / Emulator Version

SDK Version	Emulator Version
1.5 or higher	LG Smart TV Emulator 2011 : SDK 1.5 or higher LG Smart TV Emulator 2012 : SDK 2.0 or higher LG Smart TV Emulator 2013 : SDK 3.0 or higher

data

Description

The NetCast Platform provides a data read-write property in the Media Player plugin object. Developers can get media URL information using this property. It will return the media URL information as a string type.

Syntax

```
media.data;
```

Example

```
var media = document.getElementById("media");
```

```
mediaURL = media.data;
```

Supported SDK / Emulator Version

SDK Version	Emulator Version
1.5 or higher	LG Smart TV Emulator 2011 : SDK 1.5 or higher LG Smart TV Emulator 2012 : SDK 2.0 or higher LG Smart TV Emulator 2013 : SDK 3.0 or higher

width / height

Description

The NetCast Platform provides 'width' and 'height' read-write properties in the Media Player plugin object. It will return the width and height information of the media object as string types.

Developers can set the size of video using 'media.width = value; media.height = value;' API.

Developers can also make a full-screen video by specifying the media object size.

Syntax

```
media.width;  
media.height;
```

Example

```
// Example of 'get media size information'  
var media = document.getElementById("media");  
width = media.width;  
height = media.height;
```

```
// Example of 'set size'  
var media = document.getElementById("media");  
media.width = 1280;  
media.height = 720;
```

```
// Example of 'setting video full screen'  
<body style='margin:0'>  
<script language="javascript">  
. . .  
var media = document.getElementById("media");  
media.width = 1280;  
media.height = 720;  
. . .  
</script>  
  
. . .  
</body>
```

Supported SDK / Emulator Version

SDK Version	Emulator Version
1.5 or higher	LG Smart TV Emulator 2011 : SDK 1.5 or higher LG Smart TV Emulator 2012 : SDK 2.0 or higher LG Smart TV Emulator 2013 : SDK 3.0 or higher

playTime

Description

The NetCast Platform provides playtime read-only property in the Media Player plugin object. Developers can get play time using this property. It will return the duration of the currently playing media item as a string type in milliseconds.

Syntax

```
media.playTime;
```

Example

```
var media = document.getElementById("media");  
playTime = media.playTime;
```

Supported SDK / Emulator Version

SDK Version	Emulator Version
1.5 or higher	LG Smart TV Emulator 2011 : SDK 1.5 or higher LG Smart TV Emulator 2012 : SDK 2.0 or higher LG Smart TV Emulator 2013 : SDK 3.0 or higher

playPosition

Description

The NetCast Platform provides playPosition read-only property in the Media Player plugin object. Developers can get play position using this property. It will return the play position of the currently playing media item as a string type in milliseconds.

Syntax

```
media.playPosition;
```

Example

```
var media = document.getElementById("media");  
playPosition = media.playPosition;
```

Supported SDK / Emulator Version

SDK Version	Emulator Version
1.5 or higher	LG Smart TV Emulator 2011 : SDK 1.5 or higher LG Smart TV Emulator 2012 : SDK 2.0 or higher LG Smart TV Emulator 2013 : SDK 3.0 or higher

playState

Description

The NetCast Platform provides playState read-only property in the Media Player plugin object. Developers can get play state using this property. It will return the play state of the currently playing media item as an enumerated number. See the following table for the mapping rule between the resolutions and enumerated return values.

[Table] The enumerated value of play state

Play State	Enumerated Return Value
0	Stopped
1	Playing
2	Paused
3	Connecting

Play State	Enumerated Return Value
4	Buffering
5	Finished
6	Error

Syntax

```
media.playState;
```

Example

```
var media = document.getElementById("media");
playState = media.playState;
```

Supported SDK / Emulator Version

SDK Version	Emulator Version
1.5 or higher	LG Smart TV Emulator 2011 : SDK 1.5 or higher LG Smart TV Emulator 2012 : SDK 2.0 or higher LG Smart TV Emulator 2013 : SDK 3.0 or higher

error

Description

The NetCast Platform provides error read-only property in the Media Player plugin object. Developers can get error code using this property. Developers can get the error code using the API if the Media Player plugin meets an error while the current media file is playing.

[Table] The error code

Error code	Description
0	A/V format not supported
1	Cannot connect to server or connection lost
2	Unidentified error
1000	File is not found
1001	Invalid protocol
1002	DRM failure
1003	Play list is empty
1004	Unrecognized play list
1005	Invalid ASX format
1006	Error in downloading play list
1007	Out of memory
1008	Invalid URL list format
1009	Not playable in play list
1100	Unidentified WM-DRM error
1101	Incorrect license in local license store

Error code	Description
1102	Fail in receiving correct license from server
1103	Stored license is expired

Syntax

```
media.error;
```

Example

```
var media = document.getElementById("media");
errorCode = media.error;
```

See Also

[onError](#)

Supported SDK / Emulator Version

SDK Version	Emulator Version
1.5 or higher	LG Smart TV Emulator 2011 : SDK 1.5 or higher LG Smart TV Emulator 2012 : SDK 2.0 or higher LG Smart TV Emulator 2013 : SDK 3.0 or higher

autoStart

Description

The NetCast Platform provides autoStart read-write property in the Media Player plugin object. Developers can get and set autoStart property. Developers should set the value to false if the media file playback is not to be started automatically.

Syntax

```
media.autoStart;
```

Example

```
var media = document.getElementById("media");
media.autoStart = true; // write
autoStart = media.autoStart; // read
```

```
// Example of 'set autoStart of media'
<object type=" application/x-netcast-av"
  data="http://192.168.1.50/example.wmv"
  width="1280"
  height="720"
  autoStart = "true"
  id="media">
</object> //write
```

Supported SDK / Emulator Version

SDK Version	Emulator Version
1.5 or higher	LG Smart TV Emulator 2011 : SDK 1.5 or higher LG Smart TV Emulator 2012 : SDK 2.0 or higher LG Smart TV Emulator 2013 : SDK 3.0 or higher

isScannable

Description

The NetCast Platform provides `isScannable` read-only property in the Media Player plugin object. Developers can get 'isScannable' property. If the value of this property is true, the current media can be scanned (fastforward or rewind). If a media file has not been opened, the value of this property will be false. The media can be scanned only if media is indexed and delivered via the MMS protocol.

Syntax

```
media.isScannable;
```

Example

```
function processPlayChangeFunction() {
    var media = document.getElementById("media");
    if (media.playState == 1) {
        isScannable = media.isScannable;
        ...
    }
}

function init() {
    var media = document.getElementById("media");
    media.onPlayStateChange = processPlayStateChangeFunction();
    ...
}
```

See Also

[play](#) (Trick mode play)

Supported SDK / Emulator Version

SDK Version	Emulator Version
1.5 or higher	LG Smart TV Emulator 2011 : Not Supported LG Smart TV Emulator 2012 : SDK 2.4 or higher LG Smart TV Emulator 2013 : SDK 3.0 or higher

Note

The 'isScannable' property can be used after the media is played.

speed

Description

The NetCast Platform provides 'speed' read-only property in the Media Player plugin object. Developers can get 'speed' property. The value of this property is the relative playback speed of the media file currently being played. Its value is 0 if the playState is not 1 (playing). The speed can differ from 1 only if the media is indexed and delivered via the MMS protocol.

Syntax

```
media.speed;
```

Example

```
var media = document.getElementById("media");
speed = media.speed;
```

See Also

[isScannable](#)
[playState](#)

Supported SDK / Emulator Version

SDK Version	Emulator Version
1.5 or higher	LG Smart TV Emulator 2011 : SDK 1.5 or higher LG Smart TV Emulator 2012 : SDK 2.0 or higher LG Smart TV Emulator 2013 : SDK 3.0 or higher

bufferingProgress

Description

The NetCast Platform provides 'bufferingProgress' read-only property in the Media Player plugin object. Developers can get 'bufferingProgress' property. The value of this property is the percentage of buffering complete. Each time playback stops and restarts, this property may decrease or increase. It does not vary if playback is paused. This property returns a valid value only after a media file has been opened and decoding starts.

Note

The value of this property is not very accurate. It is just informative. Therefore, application authors should not use the value of this property for logical decisions in an application. For example, an application should not enable and disable a loading message using the value of this property. In this example, it would be better for application authors to use the onBuffering event instead of this property. See [onBuffering](#).

Syntax

```
media.bufferingProgress;
```

Example

```
var media = document.getElementById("media");
bufferingProgress = media.bufferingProgress;
```

See Also

[onBuffering](#)
[mediaPlayInfo](#)

Supported SDK / Emulator Version

SDK Version	Emulator Version
1.5 or higher	LG Smart TV Emulator 2011 : SDK 1.5 or higher LG Smart TV Emulator 2012 : SDK 2.0 or higher LG Smart TV Emulator 2013 : SDK 3.0 or higher

subtitleOn

Description

The NetCast Platform provides 'subtitleOn' read-write property in the Media Player plugin object. Developers can get and set 'subtitleOn' property. The value of this property is the status of subtitle decoder and is a Boolean type. LG Smart TV applications can turn the subtitle decoder on and off by setting this property with "true" or "false" values respectively.

The subtitle must be applied when a full size video is being played.

Syntax

```
media.subtitleOn;
```

Example

```
var media = document.getElementById("media");

//get subtitleOn property
subtitleOn = media.subtitleOn;
```

```
//set subtitleOn property
media.subtitleOn = newSubtitleOn;
```

Supported SDK / Emulator Version

SDK Version	Emulator Version
1.5 or higher	LG Smart TV Emulator 2011 : Not Supported LG Smart TV Emulator 2012 : Not Supported LG Smart TV Emulator 2013 : Not Supported

subtitle

Description

The NetCast Platform provides 'subtitle' read-write property in the Media Player plugin object. Developers can get and set 'subtitle' property. The value of this property is the URL of the subtitle file. The media player retrieves the subtitle file before decoding the media file. LG Smart TV applications set this property every time a new subtitle file is required.

The subtitle must be applied when a full size video is being played.

Note

Characters other than ASCII are recommended to be encoded with UTF-8. (ISO8859-* or UTF-16/32 may not work normally.)

Syntax

```
media.subtitle;
```

Example

```
var media = document.getElementById("media");

//get subtitle property
subtitleURL = media.subtitle;

//set subtitle property
media.subtitle = newSubtitleURL;
```

Supported SDK / Emulator Version

SDK Version	Emulator Version
1.5 or higher	LG Smart TV Emulator 2011 : Not Supported LG Smart TV Emulator 2012 : Not Supported LG Smart TV Emulator 2013 : Not Supported

mode3D

Description

The NetCast Platform provides 'mode3D' read-only property in the Device Information / Media Player plugin object. Developers can get a 3D mode. It will return the current 3D format for 3D mode. Developers should get the value when TVs are presently in 3D mode. See the following table for available values about 3D format.

[Table] Available values for "mode3D" property

Variable	Meaning
off	Original 2D Format
from_2d_to_3d	2D-to-3D Conversion Format

Variable	Meaning
side_by_side	Side-by-Side Frame Compatible 3D (Left / Right)
side_by_side_rl	Side-by-Side Frame Compatible 3D (Right / Left)
top_bottom	Top-and-Bottom (or Over-Under) Frame Compatible 3D
checker_bd	Checker board Frame Compatible 3D only available for HD format (1080p @ 30Hz)

Syntax

```
media.mode3D;
```

Example

```
var media = document.getElementById("media");
triMode= media.mode3D;
```

Supported SDK / Emulator Version

SDK Version	Emulator Version
1.5 or higher	LG Smart TV Emulator 2011 : Not Supported LG Smart TV Emulator 2012 : Not Supported LG Smart TV Emulator 2013 : Not Supported

audioLanguage

Description

The NetCast Platform provides 'audioLanguage' write-only property that is used for selecting audio language when media content has the multi-audio language.

Note

The value of this property shall be exactly matched with the language code of audio track in media container. Matching of the two language codes is developer's own responsibility. NetCast Platform does only search the matched audio track in media container.

Note

When video is paused, this API does not work normally.

Note

After the audio is changed, audio mute may occur for a few seconds due to the synchronization of video and audio.

Syntax

```
media.audioLanguage;
```

Example

```
// Example of 'set audio language information of media'
<object type="video/x-ms-wmv"
  data="http://192.168.1.50/example.wmv"
  width="1280"
  height="720"
  audioLanguage="en"
  id="media">
</object>
```

```
// Example of 'set audio language information of media'  
<script>  
  var media = document.getElementById("media");  
  
  // set audioLanguage property  
  media.audioLanguage = newAudioLanguage  
</script>
```

Supported SDK / Emulator Version

SDK Version	Emulator Version
1.5 or higher	LG Smart TV Emulator 2011 : Not Supported
	LG Smart TV Emulator 2012 : Not Supported
	LG Smart TV Emulator 2013 : Not Supported

Events

Events of Media Player Plugin and API are as follows:

onPlayStateChange

Description

The NetCast Platform provides an onPlayStateChange event in the Media Player plugin object. Developers can receive play state change event. Developer can receive a play state change event when the play state of currently playing media item is changed.

To refer to the values of the playState property, see [playState](#).

Syntax

```
media.onPlayStateChange = processPlayStateChangeFunction;
```

Example

```
<script language='javascript'>
function processPlayStateChangeFunction()
{
    . . .
    // read and process playState property
    . . .
}
</script>

<object type="video/x-ms-wmv"
    data="http://192.168.1.50/example.wmv"
    width="1280"
    height="720"
    id="media">
</object>
<script>
    var media = document.getElementById('media');
    media.onPlayStateChange = processPlayStateChangeFunction;
</script>
```

See Also

[playState](#)

Supported SDK / Emulator Version

SDK Version	Emulator Version
1.5 or higher	LG Smart TV Emulator 2011 : SDK 1.5 or higher LG Smart TV Emulator 2012 : SDK 2.0 or higher LG Smart TV Emulator 2013 : SDK 3.0 or higher

onBuffering

Description

The NetCast Platform provides an onBuffering event in the Media Player plugin object. Developers can receive buffering event. Developers can receive a buffering event when the media player begins and ends buffering. A Boolean type parameter specifies whether data buffering has started or finished. A value of true indicates that the data buffering has started. Buffering also occurs whenever playback stops and then restarts (either from calls to play() and stop()) methods or when network congestion occurs during playing streamed media.

Syntax


```
media.onBuffering = processBufferingFunction;
```

Example

```
<script language='javascript'>
function processBufferingFunction(isStarted)
{
    . . .
    // process buffering
    . . .
}
</script>

<object type="video/x-ms-wmv"
    data="http://192.168.1.50/example.wmv"
    width="1280"
    height="720"
    id="media">
</object>

<script>
    var media = document.getElementById('media');
    media.onBuffering = processReadyStateChangeFunction;
</script>
```

See Also

[bufferingProgress](#)

Supported SDK / Emulator Version

SDK Version	Emulator Version
1.5 or higher	LG Smart TV Emulator 2011 : SDK 1.5 or higher LG Smart TV Emulator 2012 : SDK 2.0 or higher LG Smart TV Emulator 2013 : SDK 3.0 or higher

onError

Description

The NetCast Platform provides an onError event in the Media Player plugin object. Developers can receive error event. Developers can receive an error event when the media player encounters an error while playing.

Syntax

```
media.onError = processErrorFunction;
```

Example

```
<script language='javascript'>
function processBufferingFunction(isStarted)
{
    . . .
    // process buffering
    . . .
}
</script>

<object type="video/x-ms-wmv"
    data="http://192.168.1.50/example.wmv"
    width="1280"
    height="720"
    id="media">
```

```

</object>

<script>
  var media = document.getElementById('media');
  media.onError = processReadyStateChangeFunction;
</script>

```

Supported SDK / Emulator Version

SDK Version	Emulator Version
1.5 or higher	LG Smart TV Emulator 2011 : SDK 1.5 or higher
	LG Smart TV Emulator 2012 : SDK 2.0 or higher
	LG Smart TV Emulator 2013 : SDK 3.0 or higher

onDRMRightsError

Description

The script function that is called when a DRM licensing error occurs during playback, recording, or timeshifting of DRM-protected AV content inside the embedded object.

Syntax

```
media.onDRMRightsError = HandleOnDRMRightsError;
```

Parameters

None

Return Value

errorState	[in] Error code detailing the type of error (0 : no license, 1 : invalid license)
contentID	[in] Unique ID of the content in the scope of DRM system that raises the error
DRMSystemID	[in] For PlayReady, the value is "urn:dvb:casystemid:19219".
rightsIssuerURL	[in] Optional element indicating the value of the rightsIssuerURL that can be used to non-silently obtain the rights for the content item currently being played for which this DRM error is generated, in cases whereby the rightsIssuerURL is known. If different URLs are retrieved from the stream and the metadata, then the conflict resolution is implementation-dependent.

Example

```

// handle DRM errors
media.onDRMRightsError = function(errorState, contentID, DRMSystemID, rightsIssuerURL)
{
  if (errorState == 0) {
    console.log('no license');
  }
  else if (errorState == 1) {
    log('invalid license');
  }
  log("HandleOnDRMRightsError errorState:" + errorState + "
    contentID:" + contentID + " DRMSystemID: " + DRMSystemID +
    " rightsIssuerURL: " + rightsIssuerURL);
}

```

Supported SDK / Emulator Version

SDK Version	Emulator Version
2.4 or higher	LG Smart TV Emulator 2011 : Not Supported
	LG Smart TV Emulator 2012 : Not Supported
	LG Smart TV Emulator 2013 : Not Supported

Device Info Plugin and API

The NetCast Platform supports device information plugin. The following sub-sections describe the API of the device information plugin. See also section 'userAgent String' in **Developing > Developing Web App > App Development Guide** section in this Library for supporting feature information.

- [Device Object](#)
- [Methods/Properties](#)

Device Object

An example MIME type of the device information object is application/x-netcast-info for the NetCast Platform device information plugin. The device information object supports a single property called 'id', 'width', and 'height'. Note that 'width' and 'height' must be always set to 0.

The NetCast Platform supports only one instance of the device information object at the same time so developers must not use more than one device information object.

```
// Example of device object in HTML
<object type="application/x-netcast-info"
  id="device"
  width="0"
  height="0">
</object>
```

Methods/Properties

Methods and properties are listed in the following sections.

- [Methods](#)
- [Properties](#)

Methods

Methods of Device Info Plugin and API are as follows:

getLocalTime

Description

The 'getLocalTime' API is a read-only API that gets the time setting of TV.

Syntax

```
device.getLocalTime();
```

Parameters

None

Return Value

This API returns the object that includes local time. It has the following properties.

[Table] Variables of getLocalTime()'s return object

Variable	Meaning	Type
year	year	int
month*	month (1~12)	int
date	date (1~31)	int
hour	hour (0~23)	int
Minute	minute (0~59)	int
second	second (0~59)	int

* It returns the number from 1 to 12, which is different from 'month' of the 'getSystemTime API'.

Example

```
var device = document.getElementById("device");
var sysTime = device.getLocalTime();
var hour = sysTime.hour;
var min = sysTime.minute;
var sec = sysTime.second;
...
```

Supported SDK / Emulator Version

SDK Version	Emulator Version
2.2 or higher	LG Smart TV Emulator 2011 : Not Supported LG Smart TV Emulator 2012 : SDK 2.2 or higher LG Smart TV Emulator 2013 : SDK 3.0 or higher

getSystemTime

Description

The 'getSystemTime' API is a read-only API that gets time setting of Linux system. The time setting value can be configured by TV broadcasting or user.

Syntax

```
device.getSystemTime();
```

Parameters

None

Return Value

This API returns the object that includes system time. It has the following properties.

[Table] Variables of getSystemTime()'s return object

Variable	Meaning	Type
year	year	int
month	month (0~11)	int
date	date (1~31)	int
day	day (0~6)	int
dayOfYear	ordinal date (1~365)	int
hour	hour (0~23)	int
minute	minute (0~59)	int
second	second (0~59)	int
isDST	Indicates if Daylight Saving Time (DST) is effective at current system date/time in the country set by user.	Boolean
time	String consist of "Day MM DD hh:mm:ss YYYY"	string

Example

```
var device = document.getElementById("device");
var sysTime = device.getSystemTime();
var hour = sysTime.hour;
var min = sysTime.minute;
var sec = sysTime.second;
...
```

Supported SDK / Emulator Version

SDK Version	Emulator Version
2.2 or higher	LG Smart TV Emulator 2011 : Not Supported LG Smart TV Emulator 2012 : SDK 2.2 or higher LG Smart TV Emulator 2013 : SDK 3.0 or higher

pentouchInfo

Description

The 'pentouchInfo()' API gets the information of touch pen (power, battery life) in PDP.

Note

This API works exactly only when used in models that PDP pentouch is available.

Syntax

```
device.pentouchInfo (penNumber) ;
```

Parameters

penNumber [in] Pen number of two touch pens (0, 1)

Return Value

This API returns object that includes the information of touch pen. It has the following properties.

[Table] Variables of pentouchInfo()'s return object

Variable	Meaning	Type
powerOn	Power on/off status	Boolean
battery	Battery life (0~100)	int

Example

```
var device = document.getElementById("device");
var penInfo1 = device.pentouchInfo(0);
var isPowerOn1 = penInfo1.powerOn;
var battery1 = penInfo1.battery;
...
```

See Also

[supportPentouch](#)

Supported SDK / Emulator Version

SDK Version	Emulator Version
2.2 or higher	LG Smart TV Emulator 2011 : Not Supported
	LG Smart TV Emulator 2012 : Not Supported
	LG Smart TV Emulator 2013 : Not Supported

setDrmLicenseInfo

Description

The NetCast Platform provides a 'setDrmLicenseInfo()' API in the Device Info plugin object. Developers can set DRM license information. It will return '1' if the call is processed without error or '0' if there is an error in processing the call or license setup is not completed. Therefore, applications should wait until they receive a '1' before proceeding to the next step.

Note

This API is only applicable for the pre-delivery method of WMDRM.

Syntax

```
device.setDrmLicenseInfo(licenseInfo);
```

Parameters

licenseInfo [in] License information

Return Value

Returns '1' if the call is processed without error or '0' if there is an error in processing the call or license setup is not completed.

Example

```
var device = document.getElementById("device");
callSuccess = device.setDrmLicenseInfo("<LICENSERESPONSE><LICENSE version='2.0.0.0'>
```

```
base64 encoded license data </LICENSE></LICENSERESPONSE>");
```

See Also

[drmClientInfo](#)

Supported SDK / Emulator Version

SDK Version	Emulator Version
1.5 or higher	LG Smart TV Emulator 2011 : Not Supported
	LG Smart TV Emulator 2012 : Not Supported
	LG Smart TV Emulator 2013 : Not Supported

setVMConfigData

Description

The NetCast Platform provides a 'setVMConfigData ()' API in the Device Info plugin object. Developers can set Verimatrix DRM certification information. It will return '1' if Verimatrix initialization is successful or '0' if Verimatrix initialization fails. Therefore, applications should wait until they receive a '1' before proceeding to the next step.

Note

This API method should be called before playing the media.

When using this API, the drmType property of Media object type should be set to "vermatrix".

Syntax

```
device.setVMConfigData(serviceType, companyName, drmServerUrl);
```

Parameters

serviceType	[in] Service type must be 1
companyName	[in] Company name
drmServerUrl	[in] DRM Server URL

Return Value

Returns '1' if Verimatrix initialization is successful or '0' if Verimatrix initialization fails.

Example

```
var device = document.getElementById("device");
var result = device.setVMconfigData(1, "CompanyName", 10.1.1.1); //service_type
must be 1
if (result = 1) {
    console.log("Verimatrix Initialization Success!");
} else {
    console.log("Verimatrix Initialization Fail!");
}
```

Properties

Properties of Device Info Plugin and API are as follows:

version

Description

The NetCast Platform provides a 'version' read-only property in the Device Info Plugin object. Developers can get version of Device Info Plugin. It will return the string type of Device Info Plugin version information as a string type.

Syntax

```
device.version;
```

Example

```
var device = document.getElementById("device");  
deviceVersion = device.version;
```

Supported SDK / Emulator Version

SDK Version	Emulator Version
1.5 or higher	LG Smart TV Emulator 2011 : SDK 1.5 or higher LG Smart TV Emulator 2012 : SDK 2.0 or higher LG Smart TV Emulator 2013 : SDK 3.0 or higher

manufacturer

Description

The NetCast Platform provides a 'manufacturer' read-only property in the Device Information plugin object. Developers can get manufacturer ID using this property. It will return "LGE" as a string.

Syntax

```
device.manufacturer;
```

Example

```
var device = document.getElementById("device");  
manufacturerId = device.manufacturer;
```

Supported SDK / Emulator Version

SDK Version	Emulator Version
1.5 or higher	LG Smart TV Emulator 2011 : SDK 1.5 or higher LG Smart TV Emulator 2012 : SDK 2.0 or higher LG Smart TV Emulator 2013 : SDK 3.0 or higher

modelName

Description

The NetCast Platform provides a 'modelName' read-only property in the Device Information plugin object. Developers can get model name using this property. It will return the model name as a string type.

Syntax

```
device.modelName;
```

Example

```
var device = document.getElementById("device");
```



```
modelName = device.modelName;
```

For example, the model name is retrieved in the following format: "55LM6700-NC".

Supported SDK / Emulator Version

SDK Version	Emulator Version
1.5 or higher	LG Smart TV Emulator 2011 : SDK 1.5 or higher LG Smart TV Emulator 2012 : SDK 2.0 or higher LG Smart TV Emulator 2013 : SDK 3.0 or higher

serialNumber

Description

The NetCast Platform provides a 'serialNumber' read-only property in the Device Information plugin object. Developers can get serial number using this property. It will return the serial number of the product as a string type.

Caution

Do not use serialNumber as a unique identifier because the serial number may not be returned with unique value in some cases.

Syntax

```
device.serialNumber;
```

Example

```
var device = document.getElementById("device");  
serialNumber = device.serialNumber;
```

Supported SDK / Emulator Version

SDK Version	Emulator Version
1.5 or higher	LG Smart TV Emulator 2011 : SDK 1.5 or higher LG Smart TV Emulator 2012 : SDK 2.0 or higher LG Smart TV Emulator 2013 : SDK 3.0 or higher

swVersion

Description

The NetCast Platform provides a 'swVersion' read-only property in the Device Information plugin object. Developers can get software version using this property. It will return the software version of the product as a string type.

Syntax

```
device.swVersion;
```

Example

```
var device = document.getElementById("device");  
swVersion = device.swVersion;
```

For example, the software version is retrieved in the following format: "03.21.20".

Supported SDK / Emulator Version

SDK Version	Emulator Version
1.5 or higher	LG Smart TV Emulator 2011 : SDK 1.5 or higher LG Smart TV Emulator 2012 : SDK 2.0 or higher LG Smart TV Emulator 2013 : SDK 3.0 or higher

hwVersion

Description

The NetCast Platform provides a 'hwVersion' read-only property in the Device Information plugin object. Developers can get hardware version using this property. It will return the hardware version of the product as a string type.

Syntax

```
device.hwVersion;
```

Example

```
var device = document.getElementById("device");  
hwVersion = device.hwVersion;
```

Supported SDK / Emulator Version

SDK Version	Emulator Version
1.5 or higher	LG Smart TV Emulator 2011 : SDK 1.5 or higher LG Smart TV Emulator 2012 : SDK 2.0 or higher LG Smart TV Emulator 2013 : SDK 3.0 or higher

SDKVersion

Description

The NetCast Platform provides a 'SDKVersion' read-only property. Developers can get SDK version supported in the current TV. It returns the String type of value (00.00.00).

Syntax

```
device.SDKVersion;
```

Example

```
var device = document.getElementById("device");  
SDKVersion = device.SDKVersion;
```

Supported SDK / Emulator Version

SDK Version	Emulator Version
2.2 or higher	LG Smart TV Emulator 2011 : Not Supported LG Smart TV Emulator 2012 : SDK 2.2 or higher LG Smart TV Emulator 2013 : SDK 3.0 or higher

osdResolution

Description

The NetCast Platform provides a 'osdResolution' read-only property in the Device Information plugin object. Developers can get OSD resolution which LG web engine uses for rendering web content using this property. It will return the OSD resolution as an enumerated number. The following table shows the mapping rules between the resolutions and enumerated return values.

[Table] Mapping table between the resolutions and enumerated return values

OSD resolution	Enumerated return value
640x480	0
720x576	1
1280x720	2

OSD resolution	Enumerated return value
1920x1080	3
1366x768	4

Syntax

```
device.osdResolution;
```

Example

```
var device = document.getElementById("device");
osdResolution = device.osdResolution;
```

Supported SDK / Emulator Version

SDK Version	Emulator Version
1.5 or higher	LG Smart TV Emulator 2011 : SDK 1.5 or higher LG Smart TV Emulator 2012 : SDK 2.0 or higher LG Smart TV Emulator 2013 : SDK 3.0 or higher

networkType

Description

The NetCast Platform provides a 'networkType' read-only property in the Device Information plugin object. Developers can get network type using this property. It will return the network type as an enumerated number. The following table shows the mapping rules between network types and enumerated return values.

[Table] Mapping table between network types and enumerated return values

Network type	Numeric type of return value
Wired network	0
Wireless network	1

Syntax

```
device.networkType;
```

Example

```
var device = document.getElementById("device");
networkType = device.networkType;
```

Supported SDK / Emulator Version

SDK Version	Emulator Version
1.5 or higher	LG Smart TV Emulator 2011 : Not Supported LG Smart TV Emulator 2012 : SDK 2.2 or higher LG Smart TV Emulator 2013 : SDK 3.0 or higher

net_macAddress

Description

The NetCast Platform provides a 'net_macAddress' read-only property in the Device Information plugin object. Developers can get MAC address using this property. It will return MAC address as a string type.

Syntax

```
device.net_macAddress;
```

Example

```
var device = document.getElementById("device");  
macAddress = device.net_macAddress;
```

Supported SDK / Emulator Version

SDK Version	Emulator Version
1.5 or higher	LG Smart TV Emulator 2011 : Not Supported LG Smart TV Emulator 2012 : SDK 2.2 or higher LG Smart TV Emulator 2013 : SDK 3.0 or higher

drmClientInfo

Description

The NetCast Platform provides a 'drmClientInfo' read-only property in the Device Information plugin object. Developers can get DRM client information using this property. It will return the DRM client information as a string type.

Note

This API is only applicable for the pre-delivery method of WMDRM.

Syntax

```
device.drmClientInfo;
```

Example

```
var device = document.getElementById("device");  
drmClientInfo = device.drmClientInfo;
```

See Also

[setDrmLicenseInfo](#)

Supported SDK / Emulator Version

SDK Version	Emulator Version
1.5 or higher	LG Smart TV Emulator 2011 : Not Supported LG Smart TV Emulator 2012 : Not Supported LG Smart TV Emulator 2013 : Not Supported

net_dhcp

Description

The NetCast Platform provides a 'net_dhcp' read-only property in the Device Information plugin object. Developers can get DHCP information using this property. It returns true if the system uses DHCP to access the network.

Syntax

```
device.net_dhcp;
```

Example

```
var device = document.getElementById("device");  
useDHCP = device.net_dhcp;
```

Supported SDK / Emulator Version

SDK Version	Emulator Version
-------------	------------------

SDK Version	Emulator Version
1.5 or higher	LG Smart TV Emulator 2011 : Not Supported LG Smart TV Emulator 2012 : SDK 2.2 or higher LG Smart TV Emulator 2013 : SDK 3.0 or higher

net_isConnected

Description

The NetCast Platform provides a 'net_isConnected' read-only property in the Device Information plugin object. Developers can get network connection information using this property. It returns true when the system is connected to the network. "Connected" means the status when an ethernet cable is conneted and Internet is available.

Syntax

```
device.net_isConnected;
```

Example

```
var device = document.getElementById("device");
isConnected = device.net_isConnected;
```

Supported SDK / Emulator Version

SDK Version	Emulator Version
1.5 or higher	LG Smart TV Emulator 2011 : Not Supported LG Smart TV Emulator 2012 : SDK 2.2 or higher LG Smart TV Emulator 2013 : SDK 3.0 or higher

net_hasIP

Description

The NetCast Platform provides a 'net_hasIP' read-only property in the Device Information plugin object. Developers can get IP information using this property. It returns true if the system has valid IP address. It returns false if the IP address has been set by DHCP.

Syntax

```
device.net_hasIP;
```

Example

```
var device = document.getElementById("device");
hasIP = device.net_hasIP;
```

Supported SDK / Emulator Version

SDK Version	Emulator Version
1.5 or higher	LG Smart TV Emulator 2011 : Not Supported LG Smart TV Emulator 2012 : SDK 2.2 or higher LG Smart TV Emulator 2013 : SDK 3.0 or higher

net_ipAddress

Description

The NetCast Platform provides a 'net_ipAddress' read-only property in the Device Information plugin object. Developers can get IP address using this property. It returns true if the system has valid IP address. It returns the IP address of the system as a string type.

Syntax

```
device.net_ipAddress;
```

Example

```
var device = document.getElementById("device");  
ipAddress = device.net_ipAddress;
```

Supported SDK / Emulator Version

SDK Version	Emulator Version
1.5 or higher	LG Smart TV Emulator 2011 : Not Supported LG Smart TV Emulator 2012 : SDK 2.2 or higher LG Smart TV Emulator 2013 : SDK 3.0 or higher

net_netmask

Description

The NetCast Platform provides a 'net_netmask' read-only property in the Device Information plugin object. Developers can get netmask using this property. It returns the netmask value of the system as a string type.

Syntax

```
device.net_netmask;
```

Example

```
var device = document.getElementById("device");  
netmask = device.net_netmask;
```

Supported SDK / Emulator Version

SDK Version	Emulator Version
1.5 or higher	LG Smart TV Emulator 2011 : Not Supported LG Smart TV Emulator 2012 : SDK 2.2 or higher LG Smart TV Emulator 2013 : SDK 3.0 or higher

net_gateway

Description

The NetCast Platform provides a 'net_gateway' read-only property in the Device Information plugin object. Developers can get gateway address using this property. It returns the gateway address value of the system as a string type.

Syntax

```
device.net_gateway;
```

Example

```
var device = document.getElementById("device");  
gateway = device.net_gateway;
```

Supported SDK / Emulator Version

SDK Version	Emulator Version
1.5 or higher	LG Smart TV Emulator 2011 : Not Supported LG Smart TV Emulator 2012 : SDK 2.2 or higher LG Smart TV Emulator 2013 : SDK 3.0 or higher

net_dns1

Description

The NetCast Platform provides a 'net_dns1' read-only property in the Device Information plugin object. Developers can get DNS1 address using this property. It returns the DNS1 address value of the system as a string type.

Syntax

```
device.net_dns1;
```

Example

```
var device = document.getElementById("device");  
dns1 = device.net_dns1;
```

Supported SDK / Emulator Version

SDK Version	Emulator Version
1.5 or higher	LG Smart TV Emulator 2011 : Not Supported LG Smart TV Emulator 2012 : SDK 2.2 or higher LG Smart TV Emulator 2013 : SDK 3.0 or higher

net_dns2

Description

The NetCast Platform provides a 'net_dns2' read-only property in the Device Information plugin object. Developers can get DNS2 address using this property. It returns the DNS2 address value of the system as a string type.

Syntax

```
device.net_dns2;
```

Example

```
var device = document.getElementById("device");  
dnss = device.net_dns2;
```

Supported SDK / Emulator Version

SDK Version	Emulator Version
1.5 or higher	LG Smart TV Emulator 2011 : Not Supported LG Smart TV Emulator 2012 : SDK 2.2 or higher LG Smart TV Emulator 2013 : SDK 3.0 or higher

supportMouse

Description

Some LG Smart TVs support a pointing remote control unit, called the Magic Remote. Developers can check whether or not supports the Magic Remote in TV by using the 'supportMouse' read-only property in the Device Information plugin object. It returns true if LG Smart TV supports Magic Remote, otherwise, it returns false.

See also section 'Input Device' in **Developing > Developing Web App > App Development Guide** section in this Library for detail information about Magic Remote.

See also section 'userAgent String' for optional feature supporting.

The following example shows how application authors can get 'supportMouse' information.

Syntax

```
device.supportMouse;
```

Example

```
var device = document.getElementById("device");  
if(device.supportMouse) {  
    supportMouse = device.supportMouse;
```

```
}
```

Supported SDK / Emulator Version

SDK Version	Emulator Version
1.5 or higher	LG Smart TV Emulator 2011 : Not Supported LG Smart TV Emulator 2012 : SDK 2.2 or higher LG Smart TV Emulator 2013 : SDK 3.0 or higher

supportVoiceRecog

Description

The 'supportVoiceRecog' API is a read-only API that decides whether this LG Smart TV model supports voice recognition function or not.

Syntax

```
device.supportVoiceRecog;
```

Example

```
var device = document.getElementById("device");  
if(device.supportVoiceRecog) {  
    ...  
}
```

See Also

[Voice Recognition Plugin and API](#)

Supported SDK / Emulator Version

SDK Version	Emulator Version
2.2 or higher	LG Smart TV Emulator 2011 : Not Supported LG Smart TV Emulator 2012 : SDK 2.2 or higher LG Smart TV Emulator 2013 : SDK 3.0 or higher

supportPentouch

Description

Some PDP TV models support two touch pens. The 'supportPentouch' API is a read-only API that gets whether this TV supports touch pen function or not.

Syntax

```
device.supportPentouch;
```

Example

```
var device = document.getElementById("device");  
if(device.supportPentouch) {  
    var penInfo1 = device.pentouchInfo(0);  
    ...  
}
```

See Also

[pentouchInfo](#)

Supported SDK / Emulator Version

SDK Version	Emulator Version
-------------	------------------

SDK Version	Emulator Version
2.2 or higher	LG Smart TV Emulator 2011 : Not Supported LG Smart TV Emulator 2012 : SDK 2.2 or higher LG Smart TV Emulator 2013 : SDK 3.0 or higher

support3D

Description

Some LG Smart TVs support 3D technology. For 3D videos, it is required that developers check whether the TV has a 3D rendering ability. The NetCast Platform provides a 'support3D' read-only property in the Device Information plugin object. It returns true if LG Smart TV supports 3D rendering ability, otherwise, it returns false.

See also section 'userAgent String' in **Developing > Developing Web App > App Development Guide** section in this Library for optional feature support.

Syntax

```
device.support3D;
```

Example

```
var device = document.getElementById("device");
if(device.support3D) {
    // can do something for 3D video
}
```

Supported SDK / Emulator Version

SDK Version	Emulator Version
1.5 or higher	LG Smart TV Emulator 2011 : Not Supported LG Smart TV Emulator 2012 : SDK 2.2 or higher LG Smart TV Emulator 2013 : SDK 3.0 or higher

support3DMode

Description

The NetCast Platform provides 'support3DMode' read-only property in the Device Information plugin object. Developers can check the compatibility of 3D format using this property. It will return 'true' if NetCast Platform supports a 3D format for 3D mode. Otherwise, it returns 'false'.

Syntax

```
device.support3DMode;
```

Parameters

None

Return Value

This API returns the object that includes supported 3d mode. It has the following properties.

[Table] Variables of support3DMode's return object

Variable	Meaning	Type
from_2d_to_3d	forced change mode of 2d to 3d	boolean
side_by_side	side by side left / right mode	boolean
side_by_side_rl	side by side right / left mode	boolean

Variable	Meaning	Type
top_bottom	top_bottom mode	boolean
checker_bd	checker board mode	boolean

Example

```
var device = document.getElementById("device");
var support3DMode = device.support3DMode;
var b2dto3d = support3DMode.from_2d_to_3d;
var bSideBySide = support3DMode.side_by_side;
var bSideBySideRL = support3DMode.side_by_side_rl;
var bTopBottom = support3DMode.top_bottom;
var bCheckerBD = support3DMode.checker_bd;
```

Supported SDK / Emulator Version

SDK Version	Emulator Version
1.5 or higher	LG Smart TV Emulator 2011 : SDK 2.0 or higher LG Smart TV Emulator 2012 : SDK 2.0 or higher LG Smart TV Emulator 2013 : SDK 3.0 or higher

preferredSubtitleLanguage

Description

This read-only property returns the value of subtitle, which has been set through TV setting menu. The return value is based on ISO 639-2 language code.

Note

In some region, the TV setting menu does not have subtitle language setting menu. Therefore, the property may not have the value.

Syntax

```
device.preferredSubtitleLanguage;
```

Example

```
var device = document.getElementById("device");
preferredSubtitleLanguage = device.preferredSubtitleLanguage;
```

Supported SDK / Emulator Version

SDK Version	Emulator Version
1.5 or higher	LG Smart TV Emulator 2011 : Not Supported LG Smart TV Emulator 2012 : SDK 2.0 or higher LG Smart TV Emulator 2013 : SDK 3.0 or higher

preferredAudioLanguage

Description

This read-only property returns the value of audio language, which has been set through TV setting menu by user. The return value is based on ISO 639-2 language code.

Note

In some region, the TV setting menu does not have audio language setting menu. Therefore, the property may not have the value.

Syntax

```
device.preferredAudioLanguage;
```

Example

```
var device = document.getElementById("device");  
preferredAudioLanguage = device.preferredAudioLanguage;
```

Supported SDK / Emulator Version

SDK Version	Emulator Version
1.5 or higher	LG Smart TV Emulator 2011 : Not Supported LG Smart TV Emulator 2012 : SDK 2.0 or higher LG Smart TV Emulator 2013 : SDK 3.0 or higher

preferredSubtitleStatus

Description

This read-only property returns the on/off status of subtitle, which has been set through TV setting menu.

Note

In some region, the TV setting menu does not have subtitle on/off setting menu. Therefore, the property may not have the value.

Syntax

```
device.preferredSubtitleStatus;
```

Example

```
var device = document.getElementById("device");  
isSubtitleOn = device.preferredSubtitleStatus;
```

Supported SDK / Emulator Version

SDK Version	Emulator Version
1.5 or higher	LG Smart TV Emulator 2011 : Not Supported LG Smart TV Emulator 2012 : SDK 2.0 or higher LG Smart TV Emulator 2013 : SDK 3.0 or higher

tvLanguage2

Description

This read-only property returns the value of language, which has been set through TV setting menu by user. The value will be returned in maximum 2 bytes (e.g. en) and is based on ISO 639-1.

Syntax

```
device.tvLanguage2;
```

Example

```
var device = document.getElementById("device");  
tvLanguage = device.tvLanguage2;
```

Supported SDK / Emulator Version

SDK Version	Emulator Version
1.5 or higher	LG Smart TV Emulator 2011 : SDK 2.0 or higher LG Smart TV Emulator 2012 : SDK 2.0 or higher LG Smart TV Emulator 2013 : SDK 3.0 or higher

tvCountry2

Description

This read-only property returns the value of country, which has been set through TV setting menu by user. The value will be returned in maximum 2 bytes (e.g. en) and is based on ISO 3166.

Syntax

```
device.tvCountry2;
```

Example

```
var device = document.getElementById("device");
tvCountry= device.tvCountry2;
```

Supported SDK / Emulator Version

SDK Version	Emulator Version
1.5 or higher	LG Smart TV Emulator 2011 : SDK 2.0 or higher LG Smart TV Emulator 2012 : SDK 2.0 or higher LG Smart TV Emulator 2013 : SDK 3.0 or higher

timeZone

Description

The 'timeZone' API is a read-only API that gets time zone where the current device is located. (e.g. Korea 9)

Syntax

```
device.timeZone;
```

Return Value

This API returns time zone where the current device is located. (-12 ~ 12)

Example

```
var device = document.getElementById("device");
var timeZone = device.timeZone;
```

Supported SDK / Emulator Version

SDK Version	Emulator Version
2.2 or higher	LG Smart TV Emulator 2011 : Not Supported LG Smart TV Emulator 2012 : Not Supported LG Smart TV Emulator 2013 : Not Supported

platform

Description

The 'platform' API is a read-only API that gets the platform name of the current device.

Syntax

```
device.platform;
```

Return Value

This API returns the platform name in String type such as "NetCast 3.0".

Example

```
var device = document.getElementById("device");  
var platformName = device.platform;
```

Supported SDK / Emulator Version

SDK Version	Emulator Version
2.2 or higher	LG Smart TV Emulator 2011 : Not Supported LG Smart TV Emulator 2012 : SDK 2.2 or higher LG Smart TV Emulator 2013 : SDK 3.0 or higher

chipset

Description

The 'chipset' API is a read-only API that gets if the current device is high-end or middle-end model.

Syntax

```
device.chipset;
```

Return Value

"H12" : high-end
"M12" : middle-end

Example

```
var device = document.getElementById("device");  
var chipset = device.chipset;
```

Supported SDK / Emulator Version

SDK Version	Emulator Version
2.2 or higher	LG Smart TV Emulator 2011 : SDK 2.2 or higher LG Smart TV Emulator 2012 : SDK 2.2 or higher LG Smart TV Emulator 2013 : SDK 3.0 or higher

Voice Recognition Plugin and API

The voice recognition plugin is used to use the voice recognition function of the Magic Remote on web applications. The plugin provides the API for voice recognition (converting voice into text). There are two modes for the voice recognition function: dictation and word mode. The language of the voice recognition function can be set under [OPTION > Language > Voice Search Language].

- Word mode: Keyword level of voice recognition. Maximum voice input time of 8 seconds allowed.
- Dictation mode: Sentence level of voice recognition. Maximum voice input time of 30 seconds allowed.

Based on the UX scenario of NetCast 3.0, word mode displays maximum 3 words for voice recognition result and users can select among them. In dictation mode, only one voice recognition result is provided.

The voice recognition plugin and API are supported since NetCast 3.0. The supported languages for the voice recognition are listed in the below tables.

For each region, the following languages are supported for voice recognition. Users can select the language from the voice recognition setting menu.

[Table] Supported languages for voice recognition per region for H12/M12

Region	Country	Language	Supported languages for voice recognition
North America ^[1]	USA	US English, Spanish	US English, Spanish, Canadian French
	Canada	Canadian French	
Korea ^[1]	Korea	Korean	Korean, US English
CIS	Russia	Russian	Russian, UK English
Latin America	Brazil	Portuguese	Portuguese, US English
Europe	UK	UK English	UK English
	Germany	German	German, UK English
	France	French	French, UK English
	Italy	Italian	Italian, UK English
	Spain	Spanish	Spanish, UK English
	Sweden	Swedish	Swedish, UK English
	Norway	Norwegian	Norwegian, UK English
	Netherlands	Dutch	Dutch, UK English
Asia & Pacific	Australia	Australian English	Australian English, US English
	China	Chinese	Mandarin, UK English

[Table] Supported languages for voice recognition per region for H13/M13

Region	Country	Language	Supported languages for voice recognition
North America ^[1]	USA, Canada	US English	US English, UK English, Mexican Spanish, Canadian French
	Mexico	Mexican Spanish	Mexican Spanish, US English, UK English, Canadian French
Central America	Honduras	Mexican Spanish	Mexican Spanish, US English, UK English, Brazilian Portuguese
	Panama	Mexican Spanish	
Korea ^[1]	Korea	Korean	Korean, US English, UK English
CIS	Russia	Russian	Russian, US English, UK English
Latin America	Brazil	Portuguese	Brazilian Portuguese, US English, UK English, Mexican Spanish
	Colombia	Mexican Spanish	Mexican Spanish, US English, UK English, Brazilian Portuguese
Europe	UK	UK English	German, EU French, Italian, EU Spanish, Swedish, Norwegian, Dutch, UK English, EU Portuguese, Danish, Finnish, Polish, Czech, Greek, Turkish, Russian, US English
	Germany	German	
	France	French	
	Italy	Italian	
	Spain	Spanish	
	Sweden	Swedish	
	Norway	Norwegian	
	Netherlands	Dutch	
	Portugal	Portuguese	
	Denmark	Danish	
	Finland	Finnish	
	Poland	Polish	
	Czech	Czech	
	Greece	Greek	
Turkey	Turkish		
Asia & Pacific	Australia, New Zealand	Australian English	Australian English, US English, UK English, Bahasa Indonesia, Bahasa

Region	Country	Language	Supported languages for voice recognition
	Indonesia	Bahasa Indonesia	Malaysia / Vietnamese
	Malaysia	Bahasa Malaysia	
	Vietnam	Vietnamese	
China	China	Chinese	Mandarin
Taiwan, Hongkong	Taiwan	Taiwanese Mandarin	US English / UK English / Chinese Mandarin / Taiwanese Mandarin / Hong Kong Cantonese
	Hong Kong	Hong Kong Cantonese	
Japan	Japan	Japanese	US English / UK English / Japanese
Israel	Israel	UK English	US English / UK English / EU French / UAE Arabic / Saudi Arabic

The following sections describe the API of the Voice Recognition plugin.

- [Voice Object](#)
- [Properties/Methods/Events](#)

Voice Object

The MIME type of voice recognition object is 'application/x-netcast-voice'. The properties of voice recognition object are 'id', 'dictation', 'width', and 'height'. Note that 'width' and 'height' must be always set to 0. The dictation property can be used when the voice recognition function is in dictation mode. The default is the word mode.

The following sample code is an example of Voice Recognition object in HTML.

```
<object type="application/x-netcast-voice"
  id="voice"
  dictation="on"
  width="0"
  height="0">
</object>
```

Properties/Methods/Events

Methods, properties, and events are listed in the following sections.

- [Properties](#)
- [Methods](#)
- [Events](#)

Properties

Properties of Voice Recognition Plugin and API are as follows:

isInitialized

Description

This property is used to determine whether the voice recognition function is initialized and returns the value as Boolean.

Syntax

```
voice.isInitialized;
```

Example

```
var voice = document.getElementById('voice');  
var isInitialized = voice.isInitialized;
```

Supported SDK / Emulator Version

SDK Version	Emulator Version
2.1 or higher	LG Smart TV Emulator 2011 : Not Supported LG Smart TV Emulator 2012 : SDK 2.2 or higher LG Smart TV Emulator 2013 : SDK 3.0 or higher

isEnabled

Description

This property is used to determine whether the Magic Remote is paired (including its type) and whether the voice recognition function is enabled, and returns the value as Boolean.

Syntax

```
voice.isEnabled;
```

Example

```
var voice = document.getElementById('voice');  
var isEnabled = voice.isEnabled;
```

See Also

[supportVoiceRecog](#)

Supported SDK / Emulator Version

SDK Version	Emulator Version
2.1 or higher	LG Smart TV Emulator 2011 : Not Supported LG Smart TV Emulator 2012 : SDK 2.2 or higher LG Smart TV Emulator 2013 : SDK 3.0 or higher

dictation

Description

This property is used to determine whether the voice recognition function is in dictation mode and returns the value as string (on/off). If the return value is "off", the function is in word mode. These methods can also be used to select the mode.

Syntax

```
voice.dictation;
```

Example

```
var voice = document.getElementById('voice');  
var dictationMode = voice.dictation;  
voice.dictation = "on"; // dictation mode  
voice.dictation = "off"; // word mode
```

Supported SDK / Emulator Version

SDK Version	Emulator Version
2.1 or higher	LG Smart TV Emulator 2011 : Not Supported LG Smart TV Emulator 2012 : SDK 2.2 or higher LG Smart TV Emulator 2013 : SDK 3.0 or higher

language

Description

This property is used to return the language which is set by user from the setting menu.

Syntax

```
voice.language;
```

Example

```
var voice = document.getElementById('voice');  
var voiceRecogLanguage = voice.language;
```

[Table] Language list

Language	Value	Language	Value
German	de	Swedish	sv
English	en	Norwegian	no
Spanish	es	Dutch	nl
French	fr	Russian	ru
Italian	it	Chinese	zh
Korean	ko	Portuguese	pt

Supported SDK / Emulator Version

SDK Version	Emulator Version
2.2 or higher	LG Smart TV Emulator 2011 : Not Supported LG Smart TV Emulator 2012 : SDK 2.4 or higher LG Smart TV Emulator 2013 : SDK 3.0 or higher

Methods

Methods of Voice Recognition Plugin and API are as follows:

startRecognition

Description

This method is used to call native UI of the voice recognition function and receive the result as an event.

Syntax

```
voice.startRecognition();
```

Parameters

None

Return Value

None

Example

```
function startVoiceRecognition()  
{  
    var voice = document.getElementById('voice');  
    voice.startRecognition();  
}
```

Supported SDK / Emulator Version

SDK Version	Emulator Version
2.1 or higher	LG Smart TV Emulator 2011 : Not Supported LG Smart TV Emulator 2012 : SDK 2.2 or higher LG Smart TV Emulator 2013 : SDK 3.0 or higher

Events

Events of Voice Recognition Plugin and API are as follows:

onrecognizevoice

Description

This event is added in order to receive the voice recognition result from the TV.

Syntax

```
voice.onrecognizevoice;
```

Example

```
function initPage()
{
    var voice = document.getElementById('voice');
    voice.onrecognizevoice = function(e) {
        document.write(e);
    };
}
```

Supported SDK / Emulator Version

SDK Version	Emulator Version
2.1 or higher	LG Smart TV Emulator 2011 : Not Supported LG Smart TV Emulator 2012 : SDK 2.2 or higher LG Smart TV Emulator 2013 : SDK 3.0 or higher

onbuttonenable

Description

The event is added in order to enable or disable the voice recognition button. Upon pairing, the event receives the availability of the voice recognition according to the Magic Remote type from the TV. If the Magic Remote with the voice recognition disabled is paired with the TV, false is returned; otherwise, true. The voice recognition button is enabled or disabled based on the value returned by this event.

Syntax

```
voice.onbuttonenable;
```

Example

```
function initPage()
{
    var voice = document.getElementById('voice');
    var button = document.getElementById('button');
    voice.onbuttonenable = function(e) {
        button.disabled = !e;
    };
}
```

Supported SDK / Emulator Version

SDK Version	Emulator Version
2.1 or higher	LG Smart TV Emulator 2011 : Not Supported LG Smart TV Emulator 2012 : SDK 2.2 or higher LG Smart TV Emulator 2013 : SDK 3.0 or higher

AppToApp Plugin and API

AppToApp plugin is used for communication with mobile device (like Android, iOS) in the application.

AppToApp Plugin and API is supported on NetCast 3.0 since LG Smart TV SDK 2.2.

The following sections describe the API of the AppToApp plugin.

- [AppToApp Object](#)
- [Methods/Events](#)

AppToApp Object

The MIME type of apptoapp object is 'application/x-netcast-apptoapp'. Properties of apptoapp object are 'id', 'width', and 'height'. Note that 'width' and 'height' must be always set to 0.

The following sample code is an example of apptoapp object in HTML.

```
<object type="application/x-netcast-apptoapp"
  id="apptoapp"
  width="0"
  height="0">
</object>
```

Methods/Events

Methods and events are listed in the following sections.

- [Methods](#)
- [Events](#)

Methods

Methods of AppToApp Plugin and API are as follows:

sendMessage

Description

The 'sendMessage' API sends the message to all devices (Android, iOS) those are connected to LG Smart TV. For detailed information, refer to the **References > UDAP Specifications** section in this Library.

Syntax

```
apptoapp.sendMessage (type, message);
```

Parameters

type [in] Custom type that indicates the message type (32-bit unsigned integer)
message [in] Message (String type within 512 bytes)

Return Value

None

Example

```
apptoapp.sendMessage(12, "my message");
```

Supported SDK / Emulator Version

SDK Version	Emulator Version
2.2 or higher	LG Smart TV Emulator 2011 : Not Supported LG Smart TV Emulator 2012 : SDK 2.2 or higher LG Smart TV Emulator 2013 : SDK 3.0 or higher

sendMessageTo

Description

The 'sendMessageTo' API sends the message to a specified connected device (Android, iOS). For detailed information, refer to the **References > UDAP Specifications** section in this Library.

Syntax

```
apptoapp.sendMessageTo (address, type, message);
```

Parameters

address [in] Client address (32-bit integer address)
(Available only if the address value has been returned at least once by 'onreceivemessage' API from the connected device.)
type [in] Custom type (32-bit unsigned integer)
message [in] Message (String type within 512 bytes)

Return Value

None

Example

```
apptoapp.sendMessageTo(3232235530, 12, "my message");
```

Supported SDK / Emulator Version

SDK Version	Emulator Version
2.2 or higher	LG Smart TV Emulator 2011 : Not Supported LG Smart TV Emulator 2012 : SDK 2.2 or higher LG Smart TV Emulator 2013 : SDK 3.0 or higher

Events

Events of AppToApp Plugin and API are as follows:

onreceivemessage

Description

This event handles the received message which is sent from the mobile device (Android, iOS).
(For detailed information, refer to the **References > UDAP Specifications** section in this Library.

Syntax

```
apptoapp.onreceivemessage = processCustomMessageFunction;
```

Example

```
<script language='javascript'>
function processCustomMessageFunction(addr, msgType, msg)
{
    var last_client = addr; //message send device id
    if(msgType == 100) {
        // play music or something with msg
    }
    . . .
}
</script>
```

Supported SDK / Emulator Version

SDK Version	Emulator Version
2.2 or higher	LG Smart TV Emulator 2011 : Not Supported LG Smart TV Emulator 2012 : SDK 2.2 or higher LG Smart TV Emulator 2013 : SDK 3.0 or higher

Sound Plugin and API

Sound Plugin and API are used for playing sound effect, a short wav file, while background music is being played using Media Player plugin. (It is possible to use Sound plugin with no background music being played.)

A wav file settings should be as below:

- Sampling rate : 44.1 K
- Audio bps: 16 bit
- Audio channel : mono

Multiple sound plugins can be created at the same time.

The following sections describe the API of the Sound plugin.

- [Sound Object](#)
- [Methods](#)

Sound Object

The MIME type of sound object is 'audio/x-wav'. The properties of sound object are 'id', 'data', 'width', and 'height'. Note that 'width' and 'height' must be always set to 0.

The following sample code is an example of Sound object in HTML.

```
<object type="audio/x-wav"  
  id="sound"  
  data=SOUND_URL  
  width="0"  
  height="0">  
</object>
```

Methods

Method are listed in the following sections.

- [Method](#)

Method

Methods of Sound Plugin and API are as follows:

play

Description

This method is used to play a sound.

Syntax

```
sound.play();
```

Example

```
var sound = document.getElementById('sound');  
sound.play();
```

Supported SDK / Emulator Version

SDK Version	Emulator Version
2.2 or higher	LG Smart TV Emulator 2011 : Not Supported LG Smart TV Emulator 2012 : SDK 2.2 or higher LG Smart TV Emulator 2013 : SDK 3.0 or higher

DRMAgent Plugin and API

DRMAgent plugin is used for the generic playout of PlayReady content using the NetCast media object and using the drmAgent object.

DRMAgent Plugin and API is supported on NetCast 3.0 since LG Smart TV SDK 2.2.

The following sections describe the API of the DRMAgent plugin.

- [DRMAgent Object](#)
- [Methods/Events](#)

DRMAgent Object

The MIME type of DRMAgent object is 'application/oipfDrmAgent'. Property of DRMAgent object is 'id', 'width', and 'height'.

The following sample code is an example of DRMAgent object in HTML.

```
<object type="application/oipfDrmAgent"
  id="drmAgent">
  width="0"
  height="0">
</object>
```

Methods/Events

Methods and events are listed in the following sections.

- [Methods](#)
- [Events](#)

Methods

Methods of DRMAgent Plugin and API are as follows:

sendDRMMMessage

Description

This API is used for sending message to DRM agent, using a message type as defined by the DRM system.

Syntax

```
drmAgent.sendDRMMMessage(msgType, msg, DRMSystemID);
```

Parameters

msgType	[in] A globally unique message type as defined by the DRM system, for example, "application/vnd.ms-playready.initiator+xml" (i.e. MIME-type of PlayReady messages)
msg	[in] The message to be provided to the underlying DRM agent formatted according to the message type as indicated by attribute msgType. Valid format for the msg parameter are message formats described in DRMAgent Specific .
DRMSystemID	[in] For PlayReady, the DRMSystemID value is "urn:dvb:casystemid:19219".

Return Value

A unique ID to identify the message

Example

```
//Smoother Streaming object
<object id="video" type="application/vnd.ms-sstr+xml"></object>

//Play Video
function playVideo()
{
    var video = document.getElementById("video");
    video.data = "http://content.contoso.com/smoothstreamingcontent.ism/manifest";
    video.play(1);
}

// License Pre-acquisition
// send licence request using sendDRMMMessage
function sendLicenceRequest()
{
    var msgType = "application/vnd.ms-playready.initiator+xml";
    var xmlLicenceAcquisition =
        '<?xml version="1.0" encoding="utf-8"?>' +
        '<PlayReadyInitiator'
        xmlns="http://schemas.microsoft.com/DRM/2007/03/protocols/">' +
        '<LicenseAcquisition>' +
        '<Header>' +
        '<WRMHEADER version="4.0.0.0">' +
        '<DATA>' +
        '<LA_URL>http://playready.contoso.com/rightsmanager.asmx</LA_URL>' +
        '<KID>mQxQH65mRkWJpAsdAqEDlQ==</KID>' +
        '<CHECKSUM>fsSmPwHRHgM=</CHECKSUM>' +
        '</DATA>' +
        '</WRMHEADER>' +
        '</Header>' +
        '</LicenseAcquisition>' +
        '</PlayReadyInitiator>';
    var DRMSysID = "urn:dvb:casystemid:19219";
    var oipfDrm = document.getElementById('oipfDrm');
```

```
oipfDrm.onDRMMessageResult = HandleOnDRMMessageResult;  
oipfDrm.onDRMRightsError = HandleOnDRMRightsError;  
oipfDrm.sendDRMMessage(msgType, xmlLicenceAcquisition, DRMSysID);  
}
```

Supported SDK / Emulator Version

SDK Version	Emulator Version
2.2 or higher	LG Smart TV Emulator 2011 : Not Supported
	LG Smart TV Emulator 2012 : Not Supported
	LG Smart TV Emulator 2013 : Not Supported

Events

Events of DRMAgent Plugin and API are as follows:

onDRMMMessageResult

Description

The script function that is called when the underlying DRM agent has a result message to report to the current HTML page as a consequence of a call to `sendDRMMMessage`. The specified script function is called with three arguments `msgID`, `resultMsg`, and `resultCode` which are defined as follows.

Syntax

```
drmAgent.onDRMMMessageResult = HandleOnDRMMMessageResult;
```

Parameters

None

Return Value

`msgID` [in] Identifies the original message which has led to this resulting message.
`resultMsg` [in] DRM system specific result message. Also see Valid Responses of Message Result in [DRMAgent Specific](#).
`resultCode` [in] Result code

Result Code	Description	Semantics
0	Successful	The action(s) requested by <code>SendDRMMMessage()</code> completed successfully
1	Unknown Error	<code>SendDRMMMessage()</code> failed because an unspecified error occurred.
2	Cannot Process Request	<code>SendDRMMMessage()</code> failed because the DRM agent was unable to complete the necessary computations in the time allotted.
3	Unknown MIME Type	<code>SendDRMMMessage()</code> failed, because the specified Mime Type is unknown for the specified DRM system indicated in the MIME type
4	User Consent Needed	<code>SendDRMMMessage()</code> failed because user consent is needed for that action

Example

```
drmAgent.onDRMMMessageResult = function(msgId, resultMsg, resultCode)
{
    if (resultCode == 0){
        var videoPlayer = document.getElementById("VideoPlayer");
        videoPlayer.data =
"http://content.contoso.com/drmed/smoothstreamingcontent.ism/manifest";
        videoPlayer.play(1);
    }
    else{
        console.log("download failed. erreur:" + resultCode);
    }
}
```

Supported SDK / Emulator Version

SDK Version	Emulator Version
-------------	------------------

SDK Version	Emulator Version
2.2 or higher	LG Smart TV Emulator 2011 : Not Supported LG Smart TV Emulator 2012 : Not Supported LG Smart TV Emulator 2013 : Not Supported

DRM Agent Specific

Pre Acquisition

```
<?xml version="1.0" encoding="utf-8"?>
<PlayReadyInitiator xmlns="http://schemas.microsoft.com/DRM/2007/03/protocols/">
  <LicenseAcquisition>
    <Header>
      <WRMHEADER xmlns=http://schemas.microsoft.com/DRM/2007/03/PlayReadyHeader
version="4.0.0.0">
        <DATA>
          <PROTECTINFO>
            <KEYLEN>16</KEYLEN>
            <ALGID>AESCTR</ALGID>
          </PROTECTINFO>
          <LA_URL>http://rm.contoso.com/rightsmanager.asmx</LA_URL>
          <KID>1Fmb2gxg0Cr5bfEnJXgJeA==</KID>
          <CHECKSUM>P7ORpD2IpA==</CHECKSUM>
        </DATA>
      </WRMHEADER>
    </Header>
    <CustomData>AuthZToken XYZ</CustomData>
  </LicenseAcquisition>
</PlayReadyInitiator>
```

Element	Support by Device	Include by Service
Header	Mandatory	Mandatory
CustomData	Mandatory	Optional

Authentication with Custom Data for Post-Acquisition

< License Server URL Overriding for License Post-acquisition >

```
<?xml version="1.0" encoding="utf-8"?>
<PlayReadyInitiator xmlns="http://schemas.microsoft.com/DRM/2007/03/protocols/">
  <LicenseServerUriOverride>
    <LA_URL>http://rm.contoso.com/rightsmanager.asmx</LA_URL>
  </LicenseServerUriOverride>
</PlayReadyInitiator>
```

After this message, all further license post-acquisitions send the license challenge to the specified LA_URL, not to the default LA_URL contained in the WRMHEADER of the content (application persistence).

Note

License pre-acquisitions are not affected by this command.

```
<?xml version="1.0" encoding="utf-8"?>
<PlayReadyInitiator xmlns="http://schemas.microsoft.com/DRM/2007/03/protocols/">
  <LicenseServerUriOverride>
    <LA_URL></LA_URL>
  </LicenseServerUriOverride>
</PlayReadyInitiator>
```

After this message, all further license post acquisitions send the license challenge to the default LA_URL contained in the WRMHEADER of the content (URL overriding cancelled).

< Set Challenge CustomData for License Post-acquisition >

```
<?xml version="1.0" encoding="utf-8"?>
<PlayReadyInitiator xmlns="http://schemas.microsoft.com/DRM/2007/03/protocols/">
  <SetCustomData>
    <CustomData>AuthZToken XYZ</CustomData>
  </SetCustomData>
</PlayReadyInitiator>
```

After this message, all further license post-acquisitions use the specified value, as the CustomData value of the generated license challenges (application persistence).

Note

- License pre-acquisitions are not affected by this command.
 - **Other operations like JoinDomain, LeaveDomain and Metering are not affected by this command.**
-

```
<?xml version="1.0" encoding="utf-8"?>
<PlayReadyInitiator xmlns="http://schemas.microsoft.com/DRM/2007/03/protocols/">
  <SetCustomData>
    <CustomData></CustomData>
  </SetCustomData>
</PlayReadyInitiator>
```

After this message, all further license post-acquisitions will use no CustomData value in the generated license challenges.

Valid Responses of Message Result

< License acquisition successful, with no CustomData in the license response >

```
resultMsg:
  <?xml version="1.0" encoding="utf-8"?>
  <PlayReadyResponse xmlns="http://schemas.microsoft.com/DRM/2007/03/protocols/">
    <DRM_RESULT>0</DRM_RESULT>
  </PlayReadyResponse>
resultCode : 0
```

< License acquisition successful, with some CustomData in the license response >

```
resultMsg:
  <?xml version="1.0" encoding="utf-8"?>
  <PlayReadyResponse xmlns="http://schemas.microsoft.com/DRM/2007/03/protocols/">
    <DRM_RESULT>0</DRM_RESULT>
    <CustomData>CID=abc</CustomData>
  </PlayReadyResponse>
resultCode : 0
```

< License acquisition failed, server could not deliver a license (server internal error, 0x8004C600) >

```
resultMsg:
  <?xml version="1.0" encoding="utf-8"?>
  <PlayReadyResponse xmlns="http://schemas.microsoft.com/DRM/2007/03/protocols/">
    <DRM_RESULT>2147796480</DRM_RESULT>
  </PlayReadyResponse>
resultCode : 1
```

Persistence of License

PlayReady allows services to deliver a device two types of licenses, whether the trigger of the license acquisition is by the application sendDRMMessage API or by the device media player:

- **Persistent** : A persistent license is stored in the device's general non-volatile license store (typically a mspr.hds file stored on a hard disk or in a non-volatile memory).

- **Non Persistent** (also known as transient) : A non persistent license is stored in the device's nonce-store which is volatile and cleaned every time PlayReady DRM sessions are initialized.

	Pre-acquisition triggered by the application (sendDRMMessage)	Automatic post-acquisition triggered by the media player
Persistent License	License is stored in the device's general purpose permanent license store (mspr.hds) . License persists over application restart, across multiple applications, and over a device restart. Device must be able to store at least 16 licenses. Device should clean up the license store from expired licenses on a regular basis.	
Non-Persistent License	Not supported.	License stored in the device's nonce-store (in ram only) License must have the same persistence scope as the current media player context, to allow playback after license acquisition and until the media player is destroyed (see (*))

Media Device NetCast API

This API is supported only for PDP TV and Media device, not for LCD/LED TV device.

window.NetCastSetScreenSaver

Description

This API is only available in LG media devices.

This API can be used for NetCast application author to control the function of 'Screen Saver' in LG device. The life cycle of 'Screen Saver' operation is same as the application's life cycle. The value will be set as the default value, enable 'Screen Saver', when users exit the application. However, the application author should enable the operation explicitly in their implementation.

The operations have distinctive screen saving animation of their own. The animation starts after a defined time passes. An application cannot be shown after the operation starts, because 'Screen Saver' animation is displayed on the top layer of all OSDs.

For an example of operation, Media device's 'Screen Saver' appears when you leave the player in Stop mode for about five minutes.

If application authors do not want to use the function of 'screen saver' while application is running, application authors can use this API.

Application authors can use this API, window.NetCastSetScreenSaver(), to disable the function of 'screen saver' while application is running.

Syntax

```
window.NetCastSetScreenSaver(control)
```

Parameters

control [in] 'enabled' or 'disabled'

Return Value

None

Example

```
// Enabling the function of Screen Saver
function enableDeviceScreenSaver()
{
    window.NetCastSetScreenSaver('enabled');
}
```

```
// Disabling the function of Screen Saver
function disableDeviceScreenSaver()
{
    window.NetCastSetScreenSaver('disabled');
}
```

Image Viewer Framework API

Image Viewer Framework provides the basic functionalities of a photo gallery and image viewer. This framework can be used to include complete image viewer inside any application. Even the APIs of the framework can be used for functionalities like adding image, removing image, going to a particular image, first, last, previous, next, flip, zoom, rotate, slideshow, random show and full screen. Developer can add their own controls and functionalities according to their preference.

This framework also provides IR Remote key navigation to control elements inside the framework. It will always focus on the currently selected control/button.



[Figure] Main Screen of Image Viewer Framework

The following sections describe the API of the Image Viewer framework.

- [How to Use Image Viewer Framework](#)
- [Markup Interface](#)
- [JS Interface](#)
- [Methods](#)

How to Use Image Viewer Framework

To use this Image Viewer Framework in your application, you must include the framework(api.js) and key codes(keycode.js) in your application (index.html) as below.

```
<script language="javascript" type="text/javascript"
  src="../../lge/framework/ImageViewer/api/api.js">
</script>
<script language="javascript" type="text/javascript"
  src="../../lge/framework/ImageViewer/util/keycode.js">
</script>
```

Note

For sample codes of Image Viewer Framework, refer to [DISCOVER > Legacy Platform \(NetCast\) > Tools & Samples > Web Quick Start Sample App & Framework \(ImageViewer\)](#) in Developer website.

Markup Interface

Create a container div of specified size (width and height) and include the images you want to use inside this div. Developer can set the width and height value as per their requirement and framework will adjust its control size accordingly. We recommend minimum width and height to be 610 x 384 pixels for clarity of controls.

```
<div id="myGallery" class="myGallery" style="width:610px; height:384px">
  <ul>
    <li>
      
    </li>
    <li>
      
    </li>
    <li>
      
    </li>
    <li>
      
    </li>
    <li>
      
    </li>
  </ul>
</div>
```

JS Interface

Create the object of API class and call createImgViewer method. It will add the controls and key navigation based on the parameter values.

```
var app = new lge();
app.createImgViewer($("#myGallery"), true, null);
```

Methods

Methods are listed in the following sections.

- [Methods](#)

Methods

Methods of Image Viewer Framework API are as follows:

createImgViewer

Description

This API is used to create complete image viewer.

It will add all controls and key navigation among controls based on value control parameter. Key navigation with application controls (outside framework) will be handled based on callback parameter value.

Syntax

```
createImgViewer(container, controls, callback);
```

Parameters

container
controls

Container div of application in which image viewer need to be included.
Boolean. If true, it will add controls and key navigation to the framework.
If false, no framework control will be added.

callback

The callback function of the application for resetting the application focus.

Return Value

None

Example

```
var app = new lge();  
app.createImgViewer($("#myGallery", true, null);
```

Note

The application has its own controls, and the framework also has its own controls. When the focus moves from application to the framework, passed callback parameter will be called to clear the focus on application.

If developer wants to add own controls, it needs to pass controls parameter as 'false' and callback parameter as 'null'. In this case developer can use below APIs to add their own controls.



[Figure] Image Viewer without Framework controls

Supported SDK / Emulator Version

SDK Version	Emulator Version
2.2 or higher	LG Smart TV Emulator 2011 : SDK 2.2 or higher LG Smart TV Emulator 2012 : SDK 2.2 or higher LG Smart TV Emulator 2013 : SDK 3.0 or higher

addImage

Description

This API is used to add new image at the end of the existing image list.

Syntax

```
addImage (url) ;
```

Parameters

`url` The full path of url of the new image to be added.

Return Value

None

Example

```
var app = new lge();  
app.addImage("images/television.jpg");
```

Supported SDK / Emulator Version

SDK Version	Emulator Version
2.2 or higher	LG Smart TV Emulator 2011 : SDK 2.2 or higher LG Smart TV Emulator 2012 : SDK 2.2 or higher LG Smart TV Emulator 2013 : SDK 3.0 or higher

removeImage

Description

This API is used to remove the currently shown image from the existing image list and show the next image. It shows previous image if the last image is removed. The one remaining image which is the last in the list cannot be removed and a message will show that the one remaining image cannot be removed from the image list.

Syntax

```
removeImage () ;
```

Parameters

None

Return Value

None

Example

```
var app = new lge();  
app.removeImage();
```


Note

If developer wants to add own controls, it needs to pass controls parameter as 'false' in createImgViewer API. In this case, if developer uses zoom API with 'show' or 'back' parameter, nothing will happen. Developer can use this API with other parameters - in|out|left|right|up|down.



[Figure] Zoom controls of Image Viewer Framework

Supported SDK / Emulator Version

SDK Version	Emulator Version
2.2 or higher	LG Smart TV Emulator 2011 : SDK 2.2 or higher LG Smart TV Emulator 2012 : SDK 2.2 or higher LG Smart TV Emulator 2013 : SDK 3.0 or higher

rotate

Description

This API is used to rotate the current image by 90 degrees clockwise or counterclockwise based on the value of the parameter.

Syntax

```
rotate(str);
```

Parameters

str

The value of the parameter should be **left** | **right**.

Return Value

None

Example

```
var app = new lge();  
app.rotate("left");
```


Supported SDK / Emulator Version

SDK Version	Emulator Version
2.2 or higher	LG Smart TV Emulator 2011 : SDK 2.2 or higher LG Smart TV Emulator 2012 : SDK 2.2 or higher LG Smart TV Emulator 2013 : SDK 3.0 or higher

flip

Description

This API is used to mirror the current image horizontally or vertically based on the value of the parameter.

Syntax

```
flip(str);
```

Parameters

`str` The value of the parameter should be **horizontal** | **vertical**.

Return Value

None

Example

```
var app = new lge();  
app.flip("horizontal");
```

Supported SDK / Emulator Version

SDK Version	Emulator Version
2.2 or higher	LG Smart TV Emulator 2011 : SDK 2.2 or higher LG Smart TV Emulator 2012 : SDK 2.2 or higher LG Smart TV Emulator 2013 : SDK 3.0 or higher

startSlideShow

Description

This API is used to start the slideshow of images on the list. It will also show slideshow controls of image viewer. Default slideshow speed is set to 4 seconds.

Syntax

```
startSlideShow();
```

Parameters

None

Return Value

None

Example

```
var app = new lge();  
app.startSlideShow();
```



[Figure] SlideShow Controls of Image Viewer Framework

Supported SDK / Emulator Version

SDK Version	Emulator Version
2.2 or higher	LG Smart TV Emulator 2011 : SDK 2.2 or higher LG Smart TV Emulator 2012 : SDK 2.2 or higher LG Smart TV Emulator 2013 : SDK 3.0 or higher

stopSlideShow

Description

This API is used to stop the current slideshow and show the main controls of image viewer.

Syntax

```
stopSlideShow();
```

Parameters

None

Return Value

None

Example

```
var app = new lge();
app.stopSlideShow();
```

Supported SDK / Emulator Version

SDK Version	Emulator Version
2.2 or higher	LG Smart TV Emulator 2011 : SDK 2.2 or higher LG Smart TV Emulator 2012 : SDK 2.2 or higher LG Smart TV Emulator 2013 : SDK 3.0 or higher

setSlideShowSpeed

Description

This API is used to set the slideshow speed. It will also update the speed for currently running slideshow. It will set the speed to slow (6 seconds) or medium (4 seconds) or fast (2 seconds) based on the value of the parameter.

Syntax

```
setSlideShowSpeed(str);
```

Parameters

`str` The value of the parameter should be **slow** | **medium** | **fast**.

Return Value

None

Example

```
var app = new lge();  
app.setSlideShowSpeed("slow");
```

Supported SDK / Emulator Version

SDK Version	Emulator Version
2.2 or higher	LG Smart TV Emulator 2011 : SDK 2.2 or higher LG Smart TV Emulator 2012 : SDK 2.2 or higher LG Smart TV Emulator 2013 : SDK 3.0 or higher

getSlideShowSpeed

Description

This API is used to return slideshow speed.

Syntax

```
getSlideShowSpeed(slideShowSpeed);
```

Parameters

None

Return Value

`slideShowSpeed` (string) If 'slow' is returned, the speed of slideshow is 6 seconds.
(string) If 'medium' is returned, the speed of slideshow is 4 seconds.
(string) If 'fast' is returned, the speed of slideshow is 2 seconds.

Example

```
var app = new lge();  
app.getSlideShowSpeed();
```

Supported SDK / Emulator Version

SDK Version	Emulator Version
2.2 or higher	LG Smart TV Emulator 2011 : SDK 2.2 or higher LG Smart TV Emulator 2012 : SDK 2.2 or higher LG Smart TV Emulator 2013 : SDK 3.0 or higher

setRandomSlideShow

Description

This API is used to stop the current slideshow, shuffle image list and start the slideshow in random.

Syntax

```
setRandomSlideShow();
```

Parameters

None

Return Value

None

Example

```
var app = new lge();  
app.setRandomSlideShow();
```

Supported SDK / Emulator Version

SDK Version	Emulator Version
2.2 or higher	LG Smart TV Emulator 2011 : SDK 2.2 or higher LG Smart TV Emulator 2012 : SDK 2.2 or higher LG Smart TV Emulator 2013 : SDK 3.0 or higher

getRandomSlideShow

Description

This API is used to return boolean value based on whether the slideshow is running in random or not.

Syntax

```
getRandomSlideShow();
```

Parameters

None

Return Value

randomSlideShow (boolean) If 'true' is returned, random slideshow is running.
(boolean) If 'false' is returned, random slideshow is stopped.

Example

```
var app = new lge();  
app.getRandomSlideShow();
```

Supported SDK / Emulator Version

SDK Version	Emulator Version
2.2 or higher	LG Smart TV Emulator 2011 : SDK 2.2 or higher LG Smart TV Emulator 2012 : SDK 2.2 or higher LG Smart TV Emulator 2013 : SDK 3.0 or higher

next

Description

This API is used to show the next image of the image list.

Syntax

```
next();
```

Parameters

None

Return Value

None

Example

```
var app = new lge();  
app.next();
```

Supported SDK / Emulator Version

SDK Version	Emulator Version
2.2 or higher	LG Smart TV Emulator 2011 : SDK 2.2 or higher LG Smart TV Emulator 2012 : SDK 2.2 or higher LG Smart TV Emulator 2013 : SDK 3.0 or higher

previous

Description

This API is used to show the previous image of the image list.

Syntax

```
previous();
```

Parameters

None

Return Value

None

Example

```
var app = new lge();  
app.previous();
```

Supported SDK / Emulator Version

SDK Version	Emulator Version
2.2 or higher	LG Smart TV Emulator 2011 : SDK 2.2 or higher LG Smart TV Emulator 2012 : SDK 2.2 or higher LG Smart TV Emulator 2013 : SDK 3.0 or higher

first

Description

This API is used to show the first image of the image list.

Syntax

```
first();
```

Parameters

None

Return Value

None

Example

```
var app = new lge();  
app.first();
```

Supported SDK / Emulator Version

SDK Version	Emulator Version
2.2 or higher	LG Smart TV Emulator 2011 : SDK 2.2 or higher LG Smart TV Emulator 2012 : SDK 2.2 or higher LG Smart TV Emulator 2013 : SDK 3.0 or higher

last

Description

This API is used to show the last image of the image list.

Syntax

```
last();
```

Parameters

None

Return Value

None

Example

```
var app = new lge();  
app.last();
```

Supported SDK / Emulator Version

SDK Version	Emulator Version
2.2 or higher	LG Smart TV Emulator 2011 : SDK 2.2 or higher LG Smart TV Emulator 2012 : SDK 2.2 or higher LG Smart TV Emulator 2013 : SDK 3.0 or higher

setDisplayMode

Description

This API is used to set the display mode to normal or fullscreen.

Syntax

```
setDisplayMode (str);
```

Parameters

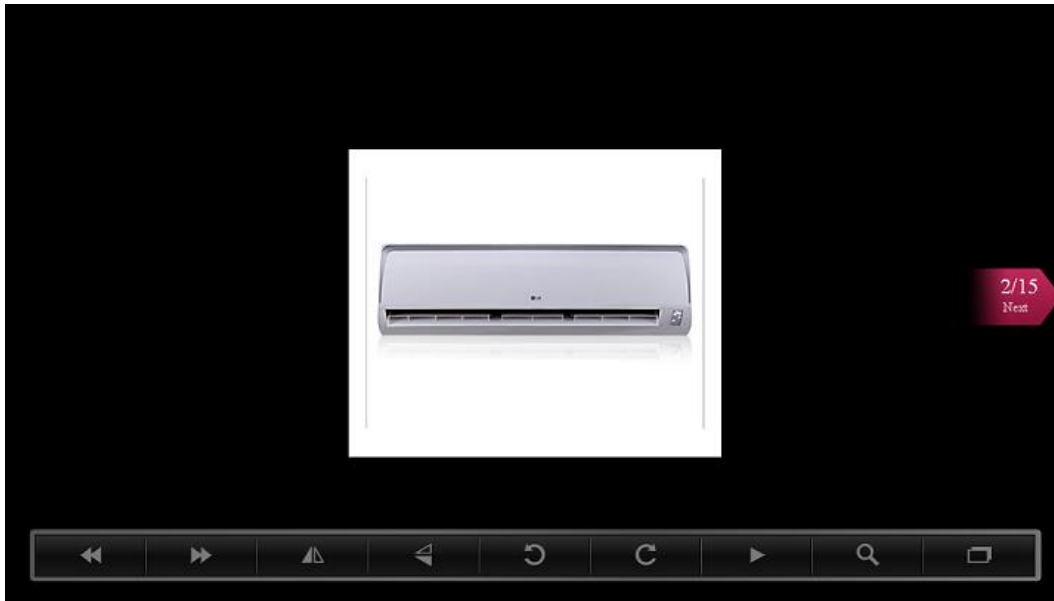
`str` The display mode should be **normal** | **fullscreen** based on its value.

Return Value

None

Example

```
var app = new lge();  
app.setDisplayMode("normal");
```



[Figure] Full Screen display mode of Image Viewer Framework

Supported SDK / Emulator Version

SDK Version	Emulator Version
2.2 or higher	LG Smart TV Emulator 2011 : SDK 2.2 or higher LG Smart TV Emulator 2012 : SDK 2.2 or higher LG Smart TV Emulator 2013 : SDK 3.0 or higher

getDisplayMode

Description

This API is used to return the display mode.

Syntax

```
getDisplayMode();
```

Parameters

None

Return Value

mode (string) It should be **Normal** | **Fullscreen**.

Example

```
var app = new lge();  
app.getDisplayMode();
```

Supported SDK / Emulator Version

SDK Version	Emulator Version
2.2 or higher	LG Smart TV Emulator 2011 : SDK 2.2 or higher LG Smart TV Emulator 2012 : SDK 2.2 or higher LG Smart TV Emulator 2013 : SDK 3.0 or higher

mouseWheel

Description

This API is used to change the index of currently shown image based on the direction of mouse wheel rolled. If wheel of mouse is rolled in forward direction, it will show the next image of the list. If it is rolled in backward direction, then it will show the previous image of the list.

Syntax

```
mouseWheel ();
```

Parameters

None

Return Value

None

Example

```
var app = new lge ();  
app.mouseWheel ();
```

Supported SDK / Emulator Version

SDK Version	Emulator Version
2.2 or higher	LG Smart TV Emulator 2011 : SDK 2.2 or higher LG Smart TV Emulator 2012 : SDK 2.2 or higher LG Smart TV Emulator 2013 : SDK 3.0 or higher

focusNext

Description

This API is used to return boolean value based on whether the current focus is moved to the next image in same row or not.

Syntax

```
focusNext ();
```

Parameters

None

Return Value

returnFocus

(boolean) If 'true' is returned, there is an image on the right of the currently focused image in same row.
(boolean) If 'false' is returned, there is no image on the right of the currently focused image in same row (i.e. last image).

Example

```
var app = new lge ();  
app.focusNext ();
```

Supported SDK / Emulator Version

SDK Version	Emulator Version
2.2 or higher	LG Smart TV Emulator 2011 : SDK 2.2 or higher LG Smart TV Emulator 2012 : SDK 2.2 or higher LG Smart TV Emulator 2013 : SDK 3.0 or higher

focusPrevious

Description

This API is used to return boolean value based on whether the current focus is moved to the previous image in same row or not.

Syntax

```
focusPrevious();
```

Parameters

None

Return Value

`returnFocus` (boolean) If 'true' is returned, there is an image on the left of the currently focused image in same row.
(boolean) If 'false' is returned, there is no image on the left of the currently focused image in same row (i.e. last image).

Example

```
var app = new lge();  
app.focusPrevious();
```

Supported SDK / Emulator Version

SDK Version	Emulator Version
2.2 or higher	LG Smart TV Emulator 2011 : SDK 2.2 or higher LG Smart TV Emulator 2012 : SDK 2.2 or higher LG Smart TV Emulator 2013 : SDK 3.0 or higher

focusUp

Description

This API is used to return boolean value based on whether the current focus is moved to the one step up or not.

Syntax

```
focusUp();
```

Parameters

None

Return Value

`returnFocus` (boolean) If 'true' is returned, there is an image above of the currently focused image.
(boolean) If 'false' is returned, there is no image above of the currently focused image.

Example

```
var app = new lge();  
app.focusUp();
```

Supported SDK / Emulator Version

SDK Version	Emulator Version
2.2 or higher	LG Smart TV Emulator 2011 : SDK 2.2 or higher LG Smart TV Emulator 2012 : SDK 2.2 or higher LG Smart TV Emulator 2013 : SDK 3.0 or higher

focusDown

Description

This API is used to return boolean value based on whether the current focus is moved to the one step down or not.

Syntax

```
focusDown();
```

Parameters

None

Return Value

`returnFocus` (boolean) If 'true' is returned, there is an image below of the currently focused image.
(boolean) If 'false' is returned, there is no image below of the currently focused image.

Example

```
var app = new lge();  
app.focusDown();
```

Supported SDK / Emulator Version

SDK Version	Emulator Version
2.2 or higher	LG Smart TV Emulator 2011 : SDK 2.2 or higher LG Smart TV Emulator 2012 : SDK 2.2 or higher LG Smart TV Emulator 2013 : SDK 3.0 or higher

doSelection

Description

This API is used to dispatch the click event of the corresponding framework element.

Syntax

```
doSelection();
```

Parameters

None

Return Value

None

Example

```
var app = new lge();  
app.doSelection();
```

Supported SDK / Emulator Version

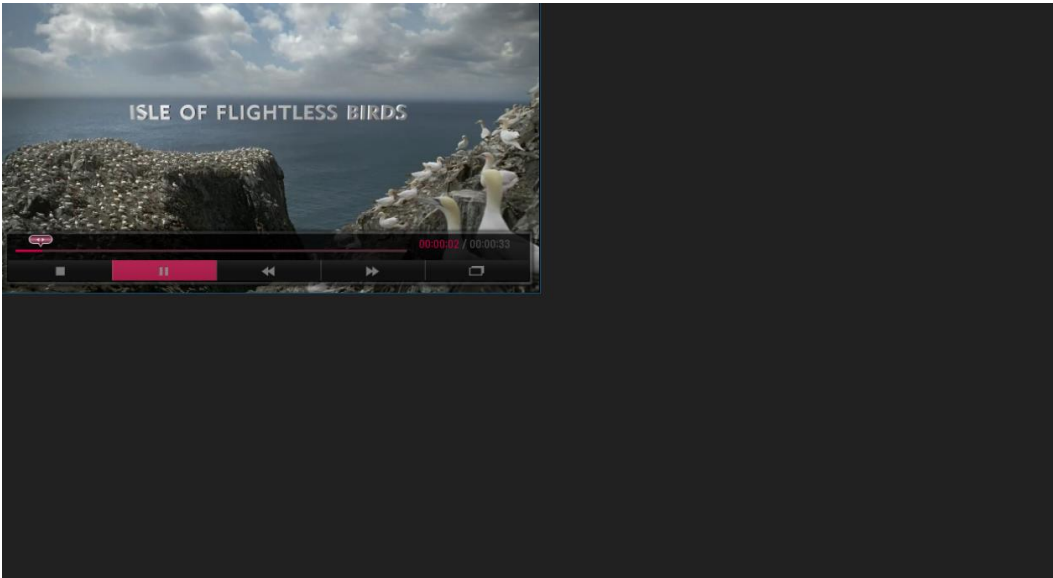
SDK Version	Emulator Version
2.2 or higher	LG Smart TV Emulator 2011 : SDK 2.2 or higher LG Smart TV Emulator 2012 : SDK 2.2 or higher LG Smart TV Emulator 2013 : SDK 3.0 or higher

Media Plugin Video Player Framework API

Media Plugin Video Player Framework API is supported on NetCast 3.0 since LG Smart TV SDK 2.2.

Media Plugin Video Player Framework provides the basic functionalities of the video player. This framework uses the media object to display the video. This framework can be used to include complete Media Plugin Video Player inside any application. Even the APIs of the framework can be used for functionalities like creating video player, stop, play, pause, forward, rewind, toggle full screen and option media. The seek bar or the status bar comes by default. Developer can add their own controls and functionalities according to their preference.

This framework also provides IR Remote key navigation to control elements inside the framework. It will always focus on the currently selected control/button.



[Figure] Demo Screen of Video Player Framework in Normal Screen Mode without option button



[Figure] Demo Screen of Video Player Framework in Full Screen Mode with option button

The following sections describe the API of the Media Plugin Video Framework.

- [How to Use Image Viewer Framework](#)
- [Markup Interface](#)
- [JS Interface](#)
- [Methods](#)

How to Use Media Plugin Video Player Framework

To use this Media Plugin Video Player Framework in your application, you must include the framework(api.js) and key codes(keycode.js) in your application (index.html) as below.

```
<script language="javascript" type="text/javascript"
    src="../../lge/framework/VideoPlayer/api/api.js">
</script>

<script language="javascript" type="text/javascript"
    src="../../lge/framework/VideoPlayer/util/keycode.js">
</script>
```

Note

For sample codes of Media Plugin Video Player Framework, refer to [DISCOVER > Legacy Platform \(NetCast\) > Tools & Samples > Web Quick Start Sample App & Framework \(MediaPluginVideoPlayer\)](#) in LG Developer website.

Markup Interface

Create a container div of specified size (width and height). Developer can set the width and height value as per their requirement. But if the width and height of video player provided by user is less than 320 x 180 pixels, player will automatically reset its size to 320 x 180 pixels (minimum size).

```
<div id="myVideoPlayer" style="width:640px; height:320px">
</div>
```

JS Interface

Create the object of API class and call createVideoPlayer method. It will add the controls and key navigation based on the parameter values.

```
var app = new lge();
app.createVideoPlayer($("#myVideoPlayer"), true, videoPath);
```

VideoPlayer Framework Implementation

1. The size and position of the video player can be set in the HTML page. If the width and height of the video player provided by user is less than 320 x 180 pixels, player will automatically reset its size to 320 x 180 pixels (minimum size).
2. If the size of the video player is specified as 1280 x 720 pixels, the player will display the following buttons.
 - Stop
 - Play/Pause
 - Forward
 - Rewind
 - Options
3. If the size of the video player is specified less than 1280 x 720 pixels, the player will display the following buttons.
 - Stop
 - Play/Pause
 - Forward
 - Rewind
 - Toggle full screen
4. If the video player toggle in full screen (1280 x 720 pixels), the player will display the following buttons.
 - Stop
 - Play/Pause
 - Forward
 - Rewind
 - Toggle full screen
 - Options
5. If any video player size specified is not the 16:9 aspect ratio, the video player will resize its size to 16:9 keeping the width constant.

Methods

Methods are listed in the following sections.

- [Methods](#)

Methods

Methods of Media Plugin Video Player Framework API are as follows:

createVideoPlayer

Description

This API is used to create the video player.

Syntax

```
createVideoPlayer(container, controls, path);
```

Parameters

container	Container div of application in which video player needs to be included.
controls	Boolean. If true, it will add controls and key navigation to the framework. If false, no framework control will be added.
path	The path of the video source.

Return Value

None

Example

```
var app = new lge();  
app.createVideoPlayer($("#myVideoPlayer"), false, videoPath);
```

Note

If developer wants to add own controls, it needs to pass controls parameter as 'false'. In this case, developer can use the below APIs to add their own controls.

Supported SDK / Emulator Version

SDK Version	Emulator Version
2.2 or higher	LG Smart TV Emulator 2011 : SDK 2.2 or higher LG Smart TV Emulator 2012 : SDK 2.2 or higher LG Smart TV Emulator 2013 : SDK 3.0 or higher

play

Description

This API is used to play or pause the video based on the state of the video. If the currently playing video is in pause state, the video is played. And if the currently playing video is in play state, the video is paused.

Syntax

```
play();
```

Parameters

None

Return Value

None

Example

```
var app = new lge();  
app.play();
```

Supported SDK / Emulator Version

SDK Version	Emulator Version
2.2 or higher	LG Smart TV Emulator 2011 : SDK 2.2 or higher LG Smart TV Emulator 2012 : SDK 2.2 or higher LG Smart TV Emulator 2013 : SDK 3.0 or higher

stop

Description

This API is used to stop the currently playing video. All the controls are reset when the video is stopped or finished.

Syntax

```
stop();
```

Parameters

None

Return Value

None

Example

```
var app = new lge();  
app.stop();
```

Supported SDK / Emulator Version

SDK Version	Emulator Version
2.2 or higher	LG Smart TV Emulator 2011 : SDK 2.2 or higher LG Smart TV Emulator 2012 : SDK 2.2 or higher LG Smart TV Emulator 2013 : SDK 3.0 or higher

rewind

Description

This API is used to seek the video backward by 10 seconds. If the video is in pause state, state is changed to play.

Syntax

```
rewind();
```

Parameters

None

Return Value

None

Example

```
var app = new lge();  
app.rewind();
```

Supported SDK / Emulator Version

SDK Version	Emulator Version
2.2 or higher	LG Smart TV Emulator 2011 : SDK 2.2 or higher LG Smart TV Emulator 2012 : SDK 2.2 or higher

SDK Version	Emulator Version
	LG Smart TV Emulator 2013 : SDK 3.0 or higher

fastFoward

Description

This API is used to seek the video forward by 10 seconds. If the seek time is not more than duration of the video, the video is seeked. If the video is in pause state, state is changed to play.

Syntax

```
fastFoward();
```

Parameters

None

Return Value

None

Example

```
var app = new lge();
app.fastFoward();
```

Supported SDK / Emulator Version

SDK Version	Emulator Version
2.2 or higher	LG Smart TV Emulator 2011 : SDK 2.2 or higher LG Smart TV Emulator 2012 : SDK 2.2 or higher LG Smart TV Emulator 2013 : SDK 3.0 or higher

switchToFullScreenMode

Description

This API is used to switch from normal screen mode to full screen mode or vice versa. Full screen mode will set the size to 1280 x 720 pixels.

Syntax

```
switchToFullScreenMode();
```

Parameters

None

Return Value

None

Example

```
var app = new lge();
app.switchToFullScreenMode();
```

Supported SDK / Emulator Version

SDK Version	Emulator Version
2.2 or higher	LG Smart TV Emulator 2011 : SDK 2.2 or higher LG Smart TV Emulator 2012 : SDK 2.2 or higher LG Smart TV Emulator 2013 : SDK 3.0 or higher

optionMedia

Description

This API is used to open the quick menu on full screen. MENU(quick menu) can be launched by the user when the video is playing in full screen mode.

Syntax

```
optionMedia();
```

Parameters

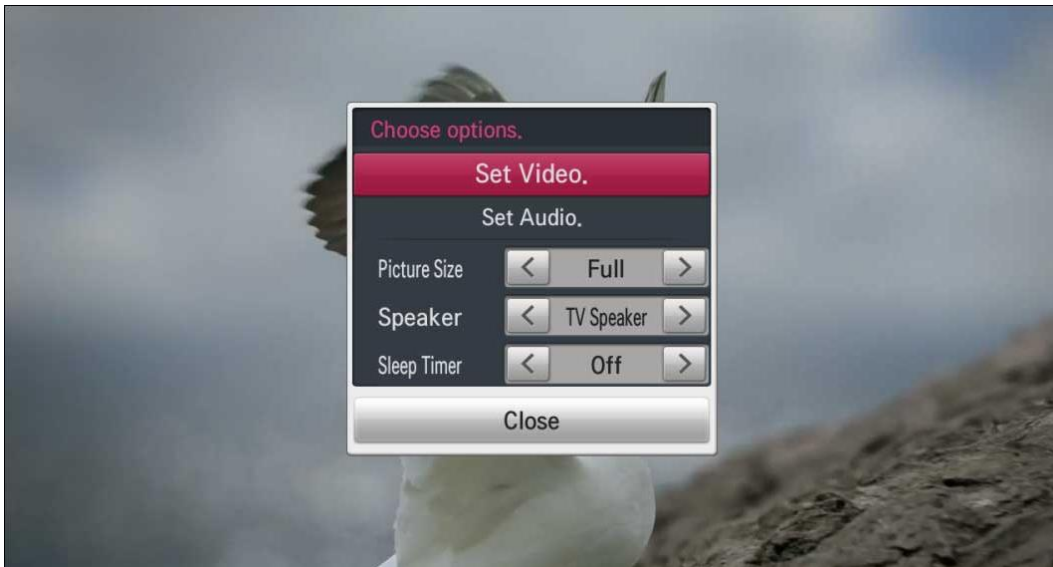
None

Return Value

None

Example

```
var app = new lge();  
app.optionMedia();
```



[Figure] Demo Screen of Video Player showing media options

Supported SDK / Emulator Version

SDK Version	Emulator Version
2.2 or higher	LG Smart TV Emulator 2011 : SDK 2.2 or higher LG Smart TV Emulator 2012 : SDK 2.2 or higher LG Smart TV Emulator 2013 : SDK 3.0 or higher

HTML5 Video Player Framework API

HTML5 Video Player Framework API is supported on NetCast 3.0 since LG Smart TV SDK 2.2

HTML5 Video Player Framework provides the basic functionalities of the video player. This framework uses the HTML5 Video element to display the video. This framework can be used to include complete HTML5 Video Player inside any application. Even the APIs of the framework can be used for functionalities like creating Video Player, stop, play, pause, forward, rewind, toggle full screen and option media. The seek bar or the status bar comes by default. Developer can add their own controls and functionalities according to their preference.

This framework also provides IR Remote key navigation to control elements inside the framework. It will always focus the currently selected control/button.



[Figure] Demo Screen of HTML5 Video Player Framework in Normal Screen Mode without option button



[Figure] Demo Screen of HTML5 Video Player Framework in Full Screen Mode with option button

The following sections describe the API of the HTML5 Video Player framework.

- [How to Use HTML5 Video Player Framework](#)
- [Markup Interface](#)
- [JS Interface](#)
- [Methods](#)

How to Use HTML5 Video Player Framework

To use this HTML5 Video Player Framework in your application, you must include the framework(api.js) and key codes(keycode.js) in your application (index.html) as below.

```
<script language="javascript" type="text/javascript"
    src="../../lge/framework/VideoPlayer/api/api.js">
</script>

<script language="javascript" type="text/javascript"
    src="../../lge/framework/VideoPlayer/util/keycode.js">
</script>
```

Note

For sample codes of HTML5 Video Player Framework, refer to [DISCOVER > Legacy Platform \(NetCast\) > Tools & Samples > Web Quick Start Sample App & Framework \(HTML5VideoPlayer\)](#) in LG Developer website.

Markup Interface

Create a container div of specified size (width and height). If the width and height of video player provided by user is less than 320 x180 pixels, player will automatically reset its size to 320 x 180 pixels (minimum size).

```
<div id="myVideoPlayer" style="width:640px; height:320px">
</div>
```

JS Interface

Create the object of API class and call createVideoPlayer method. It will add the controls and key navigation based on the parameter values.

```
var app = new lge();
app.createVideoPlayer($("#myVideoPlayer"), true, videoPath);
```

HTML5 Video Player Framework Implementation

1. The size and position of the video player can be set in the HTML page. If the width and height of the video player provided by user is less than 320 x 180 pixels, player will automatically reset its size to 320 x 180 pixels (minimum size).
2. If the size of the video player is specified as 1280 x 720 pixels, the player will display the following buttons.
 - Stop
 - Play/Pause
 - Forward
 - Rewind
 - Options
3. If the size of the video player is specified less than 1280 x 720 pixels, the player will display the following buttons.
 - Stop
 - Play/Pause
 - Forward
 - Rewind
 - Toggle full screen
4. If the video player toggle in full screen (1280 x 720 pixels), the player will display the following buttons.
 - Stop
 - Play/Pause
 - Forward
 - Rewind
 - Toggle full screen
 - Options
5. If any video player size specified is not the 16:9 aspect ratio, the video player will resize its size to 16:9 keeping the width constant.

Methods

Methods are listed in the following sections.

- [Methods](#)

Methods

Methods of HTML5 Video Player Framework API are as follows:

createVideoPlayer

Description

This API is used to create the video player.

Syntax

```
createVideoPlayer(container, controls, path);
```

Parameters

container	Container div of application in which video player needs to be included.
controls	Boolean. If true, it will add controls and key navigation to the framework. If false, no framework control will be added.
path	The path of the video source.

Return Value

None

Example

```
var app = new lge();  
app.createVideoPlayer($("#myVideoPlayer"), false, videoPath);
```

Note

If developer wants to add own controls, it needs to pass controls parameter as 'false'. In this case, developer can use the below APIs to add their own controls.

Supported SDK / Emulator Version

SDK Version	Emulator Version
2.2 or higher	LG Smart TV Emulator 2011 : Not Supported LG Smart TV Emulator 2012 : SDK 2.2 or higher LG Smart TV Emulator 2013 : SDK 3.0 or higher

play

Description

This API is used to play or pause the video based on the state of the video. If the currently playing video is in pause state, the video is played. And if the currently playing video is in play state, the video is paused.

Syntax

```
play();
```

Parameters

None

Return Value

None

Example

```
var app = new lge();  
app.play();
```

Supported SDK / Emulator Version

SDK Version	Emulator Version
2.2 or higher	LG Smart TV Emulator 2011 : Not Supported LG Smart TV Emulator 2012 : SDK 2.2 or higher LG Smart TV Emulator 2013 : SDK 3.0 or higher

stop

Description

This API is used to stop the currently playing video. All the controls are reset when the video is stopped or finished.

Syntax

```
stop();
```

Parameters

None

Return Value

None

Example

```
var app = new lge();  
app.stop();
```

Supported SDK / Emulator Version

SDK Version	Emulator Version
2.2 or higher	LG Smart TV Emulator 2011 : Not Supported LG Smart TV Emulator 2012 : SDK 2.2 or higher LG Smart TV Emulator 2013 : SDK 3.0 or higher

rewind

Description

This API is used to seek the video backward by 10 seconds. If the video is in pause state, state is changed to play.

Syntax

```
rewind();
```

Parameters

None

Return Value

None

Example

```
var app = new lge();  
app.rewind();
```

Supported SDK / Emulator Version

SDK Version	Emulator Version
2.2 or higher	LG Smart TV Emulator 2011 : Not Supported LG Smart TV Emulator 2012 : SDK 2.2 or higher LG Smart TV Emulator 2013 : SDK 3.0 or higher

fastFoward

Description

This API is used to seek the video forward by 10 seconds. If the seek time is not more than duration of the video, the video is seeked. If the video is in pause state, state is changed to play.

Syntax

```
fastFoward();
```

Parameters

None

Return Value

None

Example

```
var app = new lge();
app.fastFoward();
```

Supported SDK / Emulator Version

SDK Version	Emulator Version
2.2 or higher	LG Smart TV Emulator 2011 : Not Supported LG Smart TV Emulator 2012 : SDK 2.2 or higher LG Smart TV Emulator 2013 : SDK 3.0 or higher

switchToFullScreenMode

Description

This API is used to switch from normal screen mode to full screen mode or vice versa. Full screen mode will set the size to 1280 x 720 pixels.

Syntax

```
switchToFullScreenMode();
```

Parameters

None

Return Value

None

Example

```
var app = new lge();
app.switchToFullScreenMode();
```

Supported SDK / Emulator Version

SDK Version	Emulator Version
2.2 or higher	LG Smart TV Emulator 2011 : Not Supported LG Smart TV Emulator 2012 : SDK 2.2 or higher

SDK Version	Emulator Version
	LG Smart TV Emulator 2013 : SDK 3.0 or higher

optionMedia

Description

This API is used to open the quick menu on full screen. MENU(quick menu) can be launched by the user when the video is playing in full screen mode.

Syntax

```
optionMedia();
```

Parameters

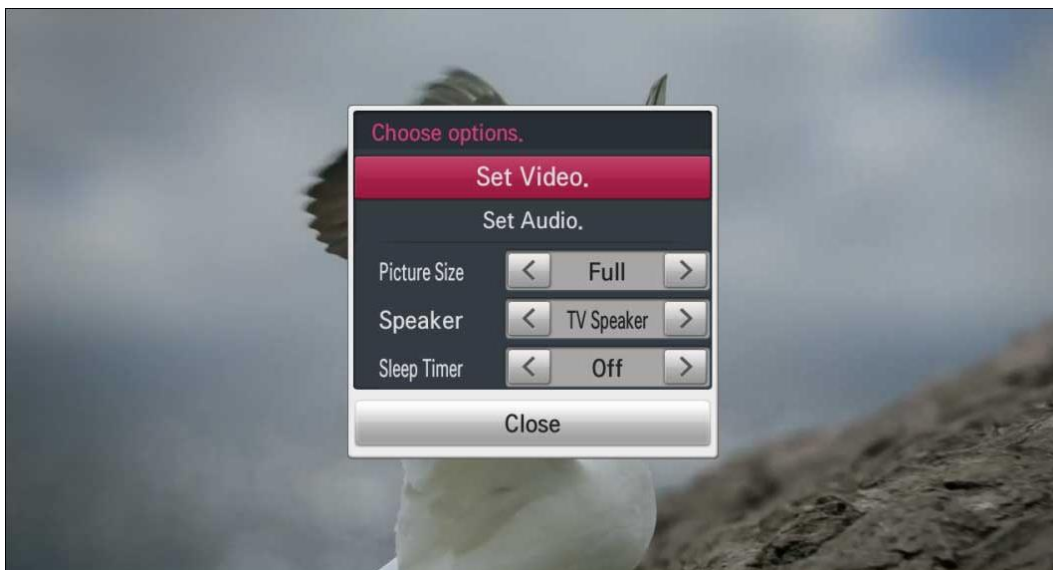
None

Return Value

None

Example

```
var app = new lge();
app.optionMedia();
```



[Figure] Demo Screen of HTML5 Video Player showing media options

Supported SDK / Emulator Version

SDK Version	Emulator Version
2.2 or higher	LG Smart TV Emulator 2011 : Not Supported LG Smart TV Emulator 2012 : SDK 2.2 or higher LG Smart TV Emulator 2013 : SDK 3.0 or higher

Web UI Component API

This document introduces LG Web UI Component and describes attributes, APIs, and examples of each component to LG Smart TV web applications developers. Also, supported page effects are described.

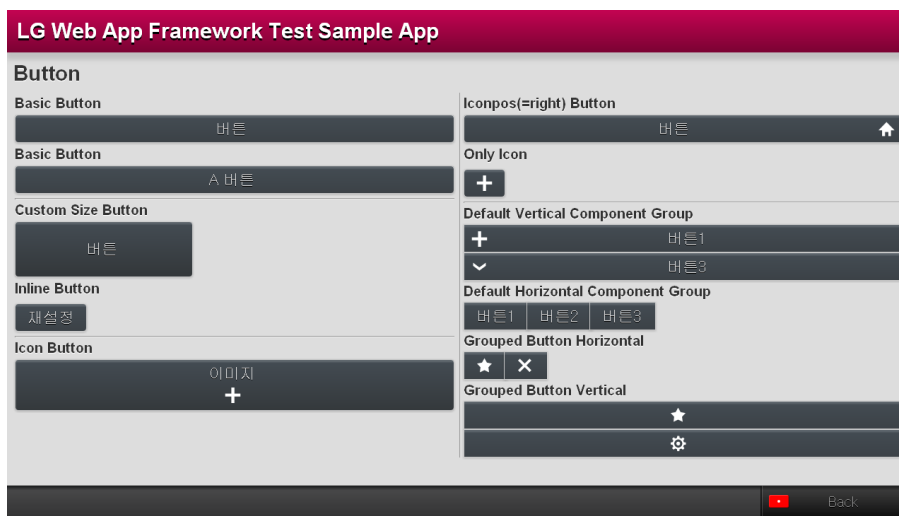
Caution

Web UI Component API requires LG Smart TV SDK 2.2 or higher.

What is LG Web UI Component?

LG Smart TV SDK provides LG Web UI Components for developing LG Smart TV web applications. The LG Web UI components are designed to comply with the look and feel of LG Smart TV's UI/UX. LG provides various components including Button, CheckBox, Focus and more. Also, 4 types of page effects are provided.

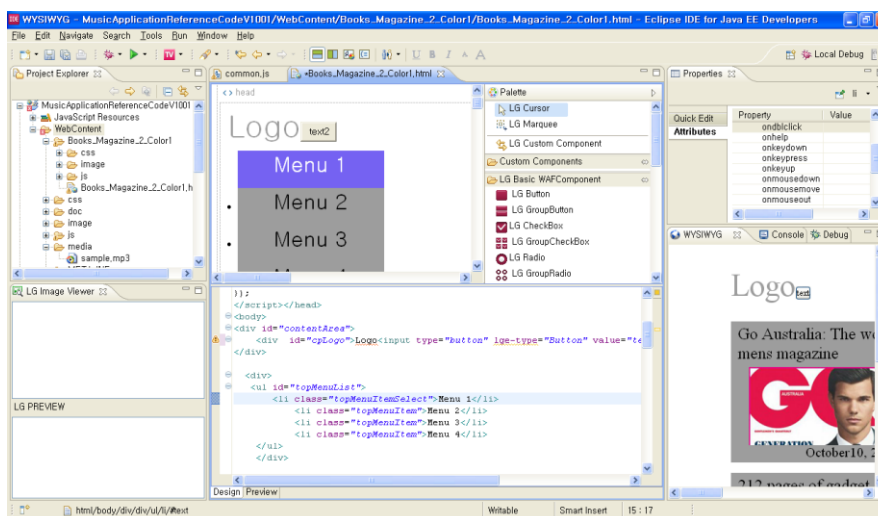
The UI components can be made using standard HTML markup or LG JavaScript Interface described in this document.



[Figure] Demo Screen of LG Web API Components

How to Use LG Web UI Components

To use the LG Web UI Components in your web application, you must use the WYSIWYG Editor of LG IDE provided with LG Smart TV SDK. Using the WYSIWYG Editor, you can easily use LG UI components in your web project. For detailed information of how to use it, refer to the **Developing > Using SDK** section in this Library.



[Figure] LG WYSIWYG Editor

The following sections describe the API of the UI component plugin.

- [AnimatedImage](#)
- [Button](#)
- [CheckBox](#)
- [Focus](#)
- [GroupButton](#)
- [GroupCheckBox](#)
- [GroupRadio](#)
- [ImageList](#)
- [ImageTile](#)
- [Label](#)
- [MsgBox](#)
- [Picker](#)
- [Progress](#)
- [Radio](#)
- [Rating](#)
- [Scroller](#)
- [Slider](#)
- [Tab](#)
- [TextInput](#)
- [ToggleSwitch](#)
- [TvHelp](#)
- [PageEffects](#)

AnimatedImage

The AnimatedImage component is image reaction which occurs when user clicks or moves the mouse onto it.



[Figure] AnimatedImage Component

Markup Interface, JS Interface (Constructor Parameters), and JS Interface (Methods) are listed in the following sections.

- [Markup Interface](#)
- [JS Interface \(Constructor Parameters\)](#)
- [JS Interface \(Methods\)](#)

Inheritance Hierarchy

Object >> Component >> Container >> Animatelmg

Markup Interface

Example

```

```

Attributes Summary

Attribute	Description
lge-attr	Attributes of the LGE component

lge-attr	Description
animation-hover	Type of the animation when mouse is over
animation-click	Type of the animation when click

animation-hover

Description

Type of animation occurs when mouse is over.
There are four types of animation. (Bounce | Drop | Pop | Rotate)
The first letter should be upper case.

Example

```

```

animation-click

Description

Type of animation occurs when mouse is clicked.
There are four types of animation. (Bounce | Drop | Pop | Rotate)
That the first letter should be upper case.

Example

```

```

JS Interface (Constructor Parameters)

Example

```
var ail = LGE.UI.AnimatedImage({
  src:"./image.png",
  animate:{event:'hover',action:'Bounce'},
  style:"width:200px;height:200px;",
  selector: ("td2")
});
```

Parameter	Description
animate	Type of event and action
id	Element ID of the component in document
selector	The element that becomes parent of the component
style	CSS Style of the component
src	Image URL of the component

animate

Description

Type of event and action

There are two parameters.

- event : Event type of the component. There are two event types. (hover | click)
- action : Action type of the component. There are four actions. (Bounce | Rotate | Drop | Pop)

Example

```
var ail = LGE.UI.AnimatedImage({
  src:"./image.png",
  animate:{event:'hover',action:'Bounce'},
  style:"width:200px;height:200px;",
  selector: ("td2")
});
```

id

Description

Element ID of the component in document.

Example

```
var ail = LGE.UI.AnimatedImage({
  id: "animateimg1",
  src:"./image.png",
  animate:{event:'hover',action:'Bounce'},
  style:"width:200px;height:200px;",
  selector: ("td2")
});
```

selector

Description

The element that becomes parent of the component
Default is body.

Example

```
var ail = LGE.UI.AnimatedImage({
  src: "./image.png",
  animate: {event: 'hover', action: 'Bounce'},
  style: "width:200px;height:200px;",
  selector: ("td2")
});
```

style

Description

CSS style of the component

Example

```
var ail = LGE.UI.AnimatedImage({
  src: "./image.png",
  animate: {event: 'hover', action: 'Bounce'},
  style: "width:200px;height:200px;",
  selector: ("td2")
});
```

SRC

Description

Path of the image

Example

```
var ail = LGE.UI.AnimatedImage({
  src: "./image.png",
  animate: {event: 'hover', action: 'Bounce'},
  style: "width:200px;height:200px;",
  selector: ("td2")
});
```

JS Interface (Methods)

Method	Description
getAnimation	Gets the animation Object of the AnimatedImage.
getSrc	Gets the image src of the AnimatedImage.
getStyle	Gets CSS Style of the AnimatedImage.
setAnimation	Sets the animation Object of the AnimatedImage.
setSrc	Sets the image url of the AnimatedImage.
setStyle	Sets CSS Style of the AnimatedImage.

getAnimation

Description

Gets the animation Object of the AnimatedImage.

Parameters

None

Return Value

object (Object) The animation Object of AnimatedImage. {event, action}

Example

```
var object = animateImg.getAnimation();
```

Supported SDK / Emulator Version

SDK Version	Emulator Version
2.2 or higher	LG Smart TV Emulator 2011 : Not Supported LG Smart TV Emulator 2012 : SDK 2.2 or higher LG Smart TV Emulator 2013 : SDK 3.0 or higher

getSrc

Description

Gets the image src of the AnimatedImage.

Parameters

None

Return Value

src (String) The image src of the AnimatedImage

Example

```
var src = animateImg.getSrc();
```

Supported SDK / Emulator Version

SDK Version	Emulator Version
2.2 or higher	LG Smart TV Emulator 2011 : Not Supported LG Smart TV Emulator 2012 : SDK 2.2 or higher LG Smart TV Emulator 2013 : SDK 3.0 or higher

getStyle

Description

Gets CSS Style of the AnimatedImage.

Parameters

None

Return Value

style (String) CSS style of the AnimatedImage

Example

```
var style = animateImg.getStyle();
```

Supported SDK / Emulator Version

SDK Version	Emulator Version
2.2 or higher	LG Smart TV Emulator 2011 : Not Supported LG Smart TV Emulator 2012 : SDK 2.2 or higher LG Smart TV Emulator 2013 : SDK 3.0 or higher

setAnimation

Description

Sets the animation Object of the AnimatedImage.

Parameters

event (String) The event type of the AnimatedImage (hover | click)
action (String) The action type of the AnimatedImage (Bounce| Rotate | Pop | Drop)

Return Value

None

Example

```
animateImge.setAnimation("click", "Bounce");
```

Supported SDK / Emulator Version

SDK Version	Emulator Version
2.2 or higher	LG Smart TV Emulator 2011 : Not Supported LG Smart TV Emulator 2012 : SDK 2.2 or higher LG Smart TV Emulator 2013 : SDK 3.0 or higher

setSrc

Description

Sets the image url of the AnimatedImage.

Parameters

src (String) The image url of the AnimatedImage

Return Value

None

Example

```
animateImage.setSrc("./image2.jpg");
```

Supported SDK / Emulator Version

SDK Version	Emulator Version
2.2 or higher	LG Smart TV Emulator 2011 : Not Supported LG Smart TV Emulator 2012 : SDK 2.2 or higher LG Smart TV Emulator 2013 : SDK 3.0 or higher

setStyle

Description

Sets CSS Style of the AnimatedImage.

Parameters

`style` (String) CSS style of the AnimatedImage

Return Value

None

Example

```
animateImage.setStyle("width:100px;height:100px;");
```

Supported SDK / Emulator Version

SDK Version	Emulator Version
2.2 or higher	LG Smart TV Emulator 2011 : Not Supported LG Smart TV Emulator 2012 : SDK 2.2 or higher LG Smart TV Emulator 2013 : SDK 3.0 or higher

Button

The Button component can have text and icon.



[Figure] Button Component

Inheritance Hierarchy

Object >> Component >> Container >> Button

Markup Interface, JS Interface (Constructor Parameters), and JS Interface (Methods) are listed in the following sections.

- [Markup Interface](#)
- [JS Interface \(Constructor Parameters\)](#)
- [JS Interface \(Methods\)](#)

Markup Interface

Example

```
<input lge-type='Button' type='button' value='text' />
```

```
<input lge-type='Button' type='submit' value='text2' />
```

```
<input lge-type='Button' type='reset' value='text3' />
```

```
<input lge-type='Button' type='image' value='text4' />
```

```
<a href='http://www.lge.com/' lge-type="Button"/>Button</a>
```

Attributes Summary

Attribute	Description
lge-attr	Attributes of the LGE component

lge-attr	Description
icon-position	Specifies the location of the icon in the button.
icon-type	Adds an icon to a button.
text-inline	More compact component that is only as wide as the text inside.
text-omit	Specifies whether text should be shown in the button or not.

icon-position

Description

Specifies the location of the icon. (Left | Right | Top | Bottom)

Example

```
<input lge-type='button' lge-attr='icon-position:Left,icon-type:Plus' value='text' />
```

icon-type

Description

Adds an icon to the button by adding a 'icon-type' attribute on the button specifying the icon to display . (Home | Delete | Plus | Arrowu | Arrowd | Arrow | Arrowl | Star | Refresh | Back | Search | Setting)

Example

```
<input lge-type='button' lge-attr='icon-type:Plus' value='text' />
```

text-inline

Description

More compact component that is only as wide as the text inside.
Default value is false. (true | false)

Example

```
<input lge-type='button' lge-attr='text-inline:true' value='text' />
```

text-omit

Description

Specifies whether text should be shown in the button or not
Default value is false. (true | false)

Example

```
<input lge-type='button' lge-attr='text-omit:true' />
```

JS Interface (Constructor Parameters)

Example

```
var button = LGE.UI.Button({
  selector: ("td2"),
  type: 'input',
  value: 'text',
});
```

```
var abutton = LGE.UI.Button({
  selector: ("td2"),
  type: 'a',
  href: 'http://www.lge.com/',
  value: 'Button',
});
```

Parameter	Description
href	Hyperlink address (Only type="a")
id	Element ID of the component in document
iconPosition	Position of the icon in the button
iconType	Type of the icon to display in the button
selector	The element that becomes parent of the component
style	CSS Style of the component
textOmit	Text in the button is shown or not
textInline	More compact component that is only as wide as the text inside
type	The type of the Button.
value	Text in the button (Only type="button")

href

Description

Hyperlink Address of Button component. It is only for "A" tag.

Example

```
var abutton = LGE.UI.Button({
  selector: ("td2"),
  type: 'a',
  href: 'http://www.lge.com/',
  value: 'Button',
});
```

id

Description

Element ID of the component in document.

Example

```
var button = LGE.UI.Button({
  type: 'input',
  value: 'text',
  selector: ("td2"),
```

```
id:"button1",
});
```

iconPosition

Description

Specifies the location of the icon. (Left | Right | Top | Bottom)

Example

```
var button = LGE.UI.Button({
  type:'input',
  value:'text',
  selector:("td2"),
  iconType:'Home',
  iconPosition:'Left'
});
```

iconType

Description

An icon can be added to a button by adding a data-icon attribute on the button specifying the icon to display . (Home | Delete | Plus | Arrowu | Arrowd | Arrowr | Arrowl | Star | Refresh | Back | Search | Setting)

Example

```
var button = LGE.UI.Button({
  type:'input',
  value:'text',
  selector:("td2"),
  iconType:'Home',
  iconPosition:'Left'
});
```

selector

Description

The element that becomes parent of the component
Default is body.

Example

```
var button = LGE.UI.Button({
  type:'input',
  value:'text',
  selector:("td2"),
  textInline:'true'
});
```

style

Description

CSS style of the component

Example

```
var button = LGE.UI.Button({
  type:'input',
  value:'text',
```

```
selector: ("td2"),
style: 'width:200px',
textInline: 'true'
});
```

textOmit

Description

Specifies whether text should be shown in the button.
Default value is false. (true | false)

Example

```
var button = LGE.UI.Button({
  type: 'input',
  selector: ("td2"),
  iconType: 'Home',
  iconPosition: 'Left',
  textOmit: 'true'
});
```

textInline

Description

More compact component that is only as wide as the text inside.
Default value is false. (true | false)

Example

```
var button = LGE.UI.Button({
  type: 'input',
  value: 'text',
  selector: ("td2"),
  textInline: 'true'
});
```

type

Description

The tag type of the Button component
Default value is input. (a | input)

Example

```
var button = LGE.UI.Button({
  type: 'input',
  value: 'text',
  selector: ("td2"),
  textInline: 'true'
});
```

value

Description

Text of the component

Example

```
var button = LGE.UI.Button({
  selector: ("td2"),
  type: 'input',
  value: 'text',
});
```

JS Interface (Methods)

Method	Description
getHref	Gets the URL of the Button (only A tag)
getIconPosition	Gets the icon position of the Button
getIconType	Gets the icon type of the Button
getText	Gets the text of the Button
getTextInline	Gets the text-inline of the Button
getTextOmit	Gets the text-omit of the Button
setHref	Sets the url link of the Button (only A tag)
setIconPosition	Sets the icon position of the Button
setIconType	Sets the icon type of the Button
setText	Sets the text of the Button
setTextInline	Sets the text-inline of the Button
setTextOmit	Sets the text-omit of the Button

getHref

Description

Gets the URL of the Button. (only <A> tag)

Parameters

None

Return Value

url (String) The url link of Button

Example

```
var url = button.getHref();
```

Supported SDK / Emulator Version

SDK Version	Emulator Version
2.2 or higher	LG Smart TV Emulator 2011 : Not Supported LG Smart TV Emulator 2012 : SDK 2.2 or higher LG Smart TV Emulator 2013 : SDK 3.0 or higher

getIconPosition

Description

Gets the icon position of the Button. (Left | Right | Top | Bottom)

Parameters

None

Return Value

iconPosition (String) The position type of Button

Example

```
var iconPosition = button.getIconPosition();
```

Supported SDK / Emulator Version

SDK Version	Emulator Version
2.2 or higher	LG Smart TV Emulator 2011 : Not Supported LG Smart TV Emulator 2012 : SDK 2.2 or higher LG Smart TV Emulator 2013 : SDK 3.0 or higher

getIconType

Description

Gets the icon type of the Button. Here is icon type of the Button.
(Home | Delete | Plus | Arrowu | Arrowd | Arrowr | Arrowl | Star | Refresh | Back | Search | Setting)

Parameters

None

Return Value

iconType (String) The icon type of Button

Example

```
var iconType = button.getIconType();
```

Supported SDK / Emulator Version

SDK Version	Emulator Version
2.2 or higher	LG Smart TV Emulator 2011 : Not Supported LG Smart TV Emulator 2012 : SDK 2.2 or higher LG Smart TV Emulator 2013 : SDK 3.0 or higher

getText

Description

Gets the text of the Button component.

Parameters

None

Return Value

text (String) The text of the Button component

Example

```
var text = button.getText();
```

Supported SDK / Emulator Version

SDK Version	Emulator Version
2.2 or higher	LG Smart TV Emulator 2011 : Not Supported LG Smart TV Emulator 2012 : SDK 2.2 or higher LG Smart TV Emulator 2013 : SDK 3.0 or higher

getTextInline

Description

Gets the text-inline of the Button.

Parameters

None

Return Value

book (Boolean) The text-inline of the Button

Example

```
var textinline = button.getTextInline();
```

Supported SDK / Emulator Version

SDK Version	Emulator Version
2.2 or higher	LG Smart TV Emulator 2011 : Not Supported LG Smart TV Emulator 2012 : SDK 2.2 or higher LG Smart TV Emulator 2013 : SDK 3.0 or higher

getTextOmit

Description

Gets the text-omit of the Button.

Parameters

None

Return Value

bool (Boolean) The text-omit of the Button

Example

```
var textomit = button.getTextOmit();
```

Supported SDK / Emulator Version

SDK Version	Emulator Version
2.2 or higher	LG Smart TV Emulator 2011 : Not Supported LG Smart TV Emulator 2012 : SDK 2.2 or higher LG Smart TV Emulator 2013 : SDK 3.0 or higher

setHref

Description

Sets the URL of the Button. (only A tag)

Parameters

url (String) The url link of Button

Return Value

None

Example

```
button.setHref("http://www.lge.com");
```

Supported SDK / Emulator Version

SDK Version	Emulator Version
2.2 or higher	LG Smart TV Emulator 2011 : Not Supported LG Smart TV Emulator 2012 : SDK 2.2 or higher LG Smart TV Emulator 2013 : SDK 3.0 or higher

setIconPosition

Description

Sets the icon position of the Button. (Left | Right | Top | Bottom)

Parameters

`iconPosition` (String) The icon position of Button

Return Value

None

Example

```
button.setIconPosition("Top");
```

Supported SDK / Emulator Version

SDK Version	Emulator Version
2.2 or higher	LG Smart TV Emulator 2011 : Not Supported LG Smart TV Emulator 2012 : SDK 2.2 or higher LG Smart TV Emulator 2013 : SDK 3.0 or higher

setIconType

Description

Sets the icon type of the Button.

(Home | Delete | Plus | Arrowu | Arrowd | Arrowr | Arrowl | Star | Refresh | Back | Search | Setting)

Parameters

None

Return Value

`iconType` (String) The icon type of Button

Example

```
button.setIconType("Home");
```

Supported SDK / Emulator Version

SDK Version	Emulator Version
2.2 or higher	LG Smart TV Emulator 2011 : Not Supported LG Smart TV Emulator 2012 : SDK 2.2 or higher LG Smart TV Emulator 2013 : SDK 3.0 or higher

setText

Description

Sets the text of the Button component.

Parameters

`text` (String) The text of the Button component

Return Value

None

Example

```
button.setText("Hello world");
```

Supported SDK / Emulator Version

SDK Version	Emulator Version
2.2 or higher	LG Smart TV Emulator 2011 : Not Supported LG Smart TV Emulator 2012 : SDK 2.2 or higher LG Smart TV Emulator 2013 : SDK 3.0 or higher

setTextInline

Description

Sets the text-inline of the Button.

Parameters

`bool` (Boolean) The text-inline of the Button

Return Value

None

Example

```
button.setTextInline(true);
```

Supported SDK / Emulator Version

SDK Version	Emulator Version
2.2 or higher	LG Smart TV Emulator 2011 : Not Supported LG Smart TV Emulator 2012 : SDK 2.2 or higher LG Smart TV Emulator 2013 : SDK 3.0 or higher

setTextOmit

Description

Set the text-omit of the Button.

Parameters

`bool` (Boolean) The text-omit of the Button

Return Value

None

Example

```
button.setTextOmit(true);
```

Supported SDK / Emulator Version

SDK Version	Emulator Version
2.2 or higher	LG Smart TV Emulator 2011 : Not Supported LG Smart TV Emulator 2012 : SDK 2.2 or higher LG Smart TV Emulator 2013 : SDK 3.0 or higher

CheckBox

The CheckBox component is an element that permits the user to make multiple selections.



[Figure] CheckBox Component

Inheritance Hierarchy

Object >> Component >> Container >> ItemListComponent >> CheckBoxRadioList >> CheckBox

Markup Interface, JS Interface (Constructor Parameters), and JS Interface (Methods) are listed in the following sections.

- [Markup Interface](#)
- [JS Interface \(Constructor Parameters\)](#)
- [JS Interface \(Methods\)](#)

Markup Interface

Example

```
<input type="checkbox" lge-type="CheckBox" checked value="Checkbox" />
```

Attributes Summary

Attribute	Description
lge-attr	Attributes of the LGE component

lge-attr	Description
text-inline	More compact component that is only as wide as the text inside

text-inline

Description

More compact component that is only as wide as the text inside.
Default value is false. (true | false)

Example

```
<input type="checkbox" lge-type="CheckBox" checked lge-attr='text-inline:true'  
value='text' />
```

JS Interface (Constructor Parameters)

Example

```
var Checkbox1 = LGE.UI.CheckBox({
  selector: ("td2"),
  checked: 'true',
  id: 'checkbox1',
  text: 'Basic checkbox1',
});
```

Parameter	Description
checked	Specifies whether the component should be checked or not
id	Element ID of the component in document
selector	The element ID that becomes parent of the component
style	CSS Style of the component
text	Text in the component
textInline	More compact component that is only as wide as the text inside

checked

Description

Specifies whether the component should be checked or not.
Default value is false. (true | false)

Example

```
var Checkbox1 = LGE.UI.CheckBox({
  selector: ("id1"),
  checked: 'true',
  id: 'checkbox1',
  text: 'Basic checkbox1',
});
```

id

Description

Element ID of the component in document.

Example

```
var Checkbox1 = LGE.UI.CheckBox({
  selector: ("id1"),
  checked: 'true',
  id: 'checkbox1',
  text: 'Basic checkbox1',
});
```

selector

Description

The element that becomes parent of the component
Default is body.

Example

```
var Checkbox1 = LGE.UI.CheckBox({
  selector: ("id1"),
  checked: 'true',
  id: 'checkbox1',
  text: 'Basic checkbox1',
});
```

style

Description

CSS style of the component

Example

```
var Checkbox1 = LGE.UI.CheckBox({
  selector: ("id1"),
  checked: 'true',
  id: 'checkbox1',
  text: 'Basic checkbox1',
  style: 'width:200px',
});
```

text

Description

Text of the component

Example

```
var Checkbox1 = LGE.UI.CheckBox({
  selector: ("id1"),
  checked: 'true',
  id: 'checkbox1',
  text: 'Basic checkbox1',
});
```

textInline

Description

More compact component that is only as wide as the text inside.
Default value is false. (true | false)

Example

```
var Checkbox1 = LGE.UI.CheckBox({
  selector: ("id1"),
  id: 'checkbox1',
  text: 'Basic checkbox1',
  textInline: 'true'
});
```


JS Interface (Methods)

Method	Description
getCheck	Gets check state of the CheckBox.
getText	Gets the text of the CheckBox.
getTextInline	Gets the text-inline of the CheckBox.
setCheck	Sets check state of the CheckBox.
setText	Sets the text of the CheckBox.
setTextInline	Sets the text-inline of the CheckBox.

getCheck

Description

Gets check state of the CheckBox.

Parameters

None

Return Value

bool (Boolean) The check state of the CheckBox

Example

```
var checked = checkbox.getCheck();
```

Supported SDK / Emulator Version

SDK Version	Emulator Version
2.2 or higher	LG Smart TV Emulator 2011 : Not Supported LG Smart TV Emulator 2012 : SDK 2.2 or higher LG Smart TV Emulator 2013 : SDK 3.0 or higher

getText

Description

Gets the text of the CheckBox.

Parameters

None

Return Value

text (String) The text of the Button component

Example

```
var text = checkbox.getText();
```

Supported SDK / Emulator Version

SDK Version	Emulator Version
2.2 or higher	LG Smart TV Emulator 2011 : Not Supported LG Smart TV Emulator 2012 : SDK 2.2 or higher LG Smart TV Emulator 2013 : SDK 3.0 or higher

getTextInline

Description

Gets the text-inline of the CheckBox.

Parameters

None

Return Value

book (Boolean) The text-inline of the CheckBox

Example

```
var textinline = checkbox.getTextInline();
```

Supported SDK / Emulator Version

SDK Version	Emulator Version
2.2 or higher	LG Smart TV Emulator 2011 : Not Supported LG Smart TV Emulator 2012 : SDK 2.2 or higher LG Smart TV Emulator 2013 : SDK 3.0 or higher

setCheck

Description

Sets check state of the CheckBox.

Parameters

bool (Boolean) The text-omit of the CheckBox

Return Value

None

Example

```
checkbox.setCheck(true);
```

Supported SDK / Emulator Version

SDK Version	Emulator Version
2.2 or higher	LG Smart TV Emulator 2011 : Not Supported LG Smart TV Emulator 2012 : SDK 2.2 or higher LG Smart TV Emulator 2013 : SDK 3.0 or higher

setText

Description

Sets the text of the CheckBox.

Parameters

text (String) The text of CheckBox

Return Value

None

Example

```
checkbox.setText("checkbox text");
```

Supported SDK / Emulator Version

SDK Version	Emulator Version
2.2 or higher	LG Smart TV Emulator 2011 : Not Supported LG Smart TV Emulator 2012 : SDK 2.2 or higher LG Smart TV Emulator 2013 : SDK 3.0 or higher

setTextInline

Description

Sets the text-inline of the CheckBox.

Parameters

`bool` (Boolean) The text-inline of the CheckBox

Return Value

None

Example

```
checkbox.setTextInline(true);
```

Supported SDK / Emulator Version

SDK Version	Emulator Version
2.2 or higher	LG Smart TV Emulator 2011 : Not Supported LG Smart TV Emulator 2012 : SDK 2.2 or higher LG Smart TV Emulator 2013 : SDK 3.0 or higher

Focus

Focus component is a container that can have any element developer want. This component has focus so that user can focus this component by using direction key.



[Figure] Focus Component

Inheritance Hierarchy

Object >> Component >> Container >> Focus

Markup Interface, JS Interface (Constructor Parameters), and JS Interface (Methods) are listed in the following sections.

- [Markup Interface](#)
- [JS Interface \(Constructor Parameters\)](#)
- [JS Interface \(Methods\)](#)

Markup Interface

Example

```
<div lge-type="Focus">  
...  
</div>
```

Attributes Summary

Attribute	Description
lge-attr	Attributes of the LGE component

lge-attr	Description
option	The option for not drawing focus border

option

Description

Focus component has a focus border. For not drawing focus border, use option:"NoFocus".

Example

```
<div lge-type="Focus" lge-attr="option:'NoFocus';">  
...  
</div>
```

JS Interface (Constructor Parameters)

Example

```
var focus1 = LGE.UI.Focus({
  selector: ("id1"),
  id: "focus1",
});
```

Parameter	Description
id	Element ID of the component in document
option	The option for not drawing focus border
selector	The element ID that becomes parent of the component

id

Description

Element ID of the component in document.

Example

```
var focus1 = LGE.UI.Focus({
  selector: ("id1"),
  id: "focus1",
});
```

option

Description

Focus component has a focus border. For not drawing focus border, use option:"NoFocus".

Example

```
var focus1= LGE.UI.Focus({
  selector: ("id1"),
  id: "focus1",
  option: "NoFocus",
});
```

selector

Description

The element that becomes parent of the component
Default is body.

Example

```
var focus1 = LGE.UI.Focus({
  selector: ("id1"),
  id: "focus1",
});
```

JS Interface (Methods)

Method	Description
setOption	Sets the option of Focus.

setOption

Description

Sets the option of Focus. Focus component has a border. For not drawing border, use option = "noFocus".

Parameters

None

Return Value

option (String) The option of Focus (Focus | NoFocus)

Example

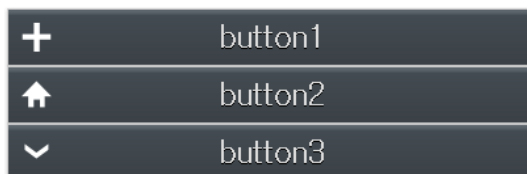
```
focus.setOption("NoFocus");
```

Supported SDK / Emulator Version

SDK Version	Emulator Version
2.2 or higher	LG Smart TV Emulator 2011 : Not Supported LG Smart TV Emulator 2012 : SDK 2.2 or higher LG Smart TV Emulator 2013 : SDK 3.0 or higher

GroupButton

The GroupButton component makes a group of buttons.



[Figure] GroupButton Component

Inheritance Hierarchy

Object >> Component >> Container >> GroupButton

Markup Interface, JS Interface (Constructor Parameters), and JS Interface (Methods) are listed in the following sections.

- [Markup Interface](#)
- [JS Interface \(Constructor Parameters\)](#)
- [JS Interface \(Methods\)](#)

Markup Interface

Example

```
<div lge-type='GroupButton' lge-attr='box-orient:Vertical'>
  <input type="button" value="Button1" lge-attr="icon-type:plus"/>
<input type="button" value="Button2" lge-attr="icon-type:home"/>
  <input type="button" value="Button3" lge-attr="icon-type:arrowd;"/>
</div>
```

Attributes Summary

Attribute	Description
lge-attr	Attributes of the LGE component

lge-attr	Description
box-orient	Aligns the parts of component vertically or horizontally.

box-orient

Description

Aligns the parts of GroupButton vertically or horizontally.
Default value is Vertical. (Vertical | Horizontal)

Example

```
<div lge-type='GroupButton' lge-attr='box-orient:Horizontal'>
<input type="button" value="Button1" lge-attr="icon-type:Plus"/>
  <input type="button" value="Button2" lge-attr="icon-type:Arrowd;"/>
</div>
```


JS Interface (Constructor Parameters)

Example

```
var gbtn1 = LGE.UI.GroupButton({
  selector: ("id1"),
  items: [
    {type:'input', value:'btn1', iconType:'Home'},
    {type:'input', value:'btn2', iconType:'Plus'},
  ]
});
```

Parameter	Description
boxOrient	Aligns the parts of GroupButton vertically or horizontally.
id	Element ID of the component in document
items	A list of buttons
selector	The element ID that becomes parent of the component

boxOrient

Description

Aligns the parts of GroupButton vertically or horizontally.
Default value is Vertical. (Vertical | Horizontal)

Example

```
var gbtn1 = LGE.UI.GroupButton({
  selector: ("id1"),
  boxOrient: 'Horizontal',
  items: [
    {type:'input', value:'btn1', iconType:'Home'},
    {type:'input', value:'btn2', iconType:'Plus'},
  ]
});
```

id

Description

Element ID of the component in document.

Example

```
var gbtn1 = LGE.UI.GroupButton({
  selector: ("id1"),
  boxOrient: 'Horizontal',
  id: 'groupbutton',
  items: [
    {type:'input', value:'btn1', iconType:'Home'},
    {type:'input', value:'btn2', iconType:'Plus'},
  ]
});
```

items

Description

A list of Buttons. It is array and has buttons.

Example

```
var gbtn1 = LGE.UI.GroupButton({
  selector: ("id1"),
  boxOrient: 'Horizontal',
  items: [
    {type: 'input', value: 'btn1', iconType: 'Home'},
    {type: 'input', value: 'btn2', iconType: 'Plus'},
  ]
});
```

selector

Description

The element that becomes parent of the component
Default is body.

Example

```
var gbtn1 = LGE.UI.GroupButton({
  selector: ("id1"),
  boxOrient: 'Horizontal',
  items: [
    {type: 'input', value: 'btn1', iconType: 'Home'},
    {type: 'input', value: 'btn2', iconType: 'Plus'},
  ]
});
```

JS Interface (Methods)

Method	Description
addItem	Adds item to the GroupButton.
getBoxOrient	Gets the order direction of the GroupButton.
getItem	Gets the item object of the GroupButton.
removeItem	Removes item of the GroupButton.
setBoxOrient	Sets the order direction of the GroupButton.
setItem	Sets the item object of the GroupButton.

addItem

Description

Adds item to the GroupButton.

Parameters

`option` (Object) The options of CheckBox.
For more information of this parameter, see JavaScript Constructor Parameter in Button component.

Return Value

None

Example

```
groupButton.addItem({  
  type: 'input',  
  value: 'text',  
  iconType: 'Home',  
  iconPosition: 'Left',  
});
```

Supported SDK / Emulator Version

SDK Version	Emulator Version
2.2 or higher	LG Smart TV Emulator 2011 : Not Supported LG Smart TV Emulator 2012 : SDK 2.2 or higher LG Smart TV Emulator 2013 : SDK 3.0 or higher

getBoxOrient

Description

Gets the order direction of the GroupButton.

Parameters

None

Return Value

`BoxOrient` (String) The order direction of the GroupButton

Example

```
alert( groupButton.getBoxOrient() ); // "Vertical" or "Horizontal"
```

Supported SDK / Emulator Version

SDK Version	Emulator Version
2.2 or higher	LG Smart TV Emulator 2011 : Not Supported LG Smart TV Emulator 2012 : SDK 2.2 or higher LG Smart TV Emulator 2013 : SDK 3.0 or higher

getItem

Description

Gets the item object of the GroupButton.

Parameters

Return Value

Item (Object) The item object of GroupButton. The item object has only getXXX method. For more information of this object, see JavaScript API in Button component.

Example

```
var iconPosition = groupButton.getItem(0).getIconPosition();
```

Supported SDK / Emulator Version

SDK Version	Emulator Version
2.2 or higher	LG Smart TV Emulator 2011 : Not Supported LG Smart TV Emulator 2012 : SDK 2.2 or higher LG Smart TV Emulator 2013 : SDK 3.0 or higher

removeItem

Description

Removes item of the GroupButton.

Parameters

Index (Number) The index of the Button

Return Value

None

Example

```
groupButton.removeItem(1);
```

Supported SDK / Emulator Version

SDK Version	Emulator Version
2.2 or higher	LG Smart TV Emulator 2011 : Not Supported LG Smart TV Emulator 2012 : SDK 2.2 or higher LG Smart TV Emulator 2013 : SDK 3.0 or higher

setBoxOrient

Description

Sets the order direction of the GroupButton.

Parameters

BoxOrient (String) The order direction of the GroupButton (Vertical | Horizontal)

Return Value

None

Example

```
groupButton.setBoxOrient("Vertical");
```

Supported SDK / Emulator Version

SDK Version	Emulator Version
2.2 or higher	LG Smart TV Emulator 2011 : Not Supported LG Smart TV Emulator 2012 : SDK 2.2 or higher LG Smart TV Emulator 2013 : SDK 3.0 or higher

setItem

Description

Sets the item object of the GroupButton.

Parameters

Index (Number) The index of the Button

Return Value

Item (Object) The item object of GroupButton. The item object has only setXXX method. For more information of this object, see JavaScript API in Button component.

Example

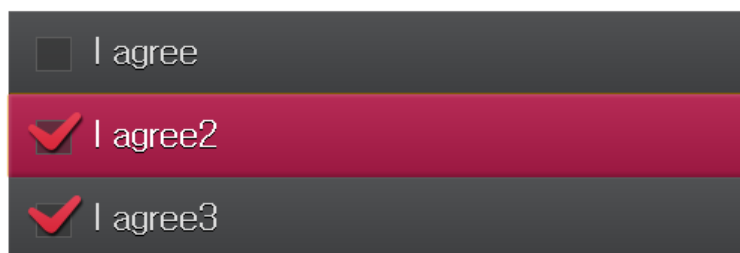
```
groupButton.setItem(0).setIconPosition("Horizontal");
```

Supported SDK / Emulator Version

SDK Version	Emulator Version
2.2 or higher	LG Smart TV Emulator 2011 : Not Supported LG Smart TV Emulator 2012 : SDK 2.2 or higher LG Smart TV Emulator 2013 : SDK 3.0 or higher

GroupCheckBox

The GroupCheckBox component makes a group of CheckBoxes.



[Figure] GroupCheckBox Component

Inheritance Hierarchy

Object >> Component >> Container >> GroupCheckBoxRadioList >> GroupCheckBox

Markup Interface, JS Interface (Constructor Parameters), and JS Interface (Methods) are listed in the following sections.

- [Markup Interface](#)
- [JS Interface \(Constructor Parameters\)](#)
- [JS Interface \(Methods\)](#)

Markup Interface

Example

```
<div lge-type="GroupCheckBox">
<fieldset>
  <legend>Default Group CheckBox</legend>
  <label><input type="checkbox" lge-type="CheckBox" />I agree</label>
  <label><input type="checkbox" lge-type="CheckBox" />I agree2</label>
  <label><input type="checkbox" lge-type="CheckBox" />I agree3</label>
</fieldset>
</div>
```

Attributes Summary

Attribute	Description
lge-attr	Attributes of the LGE component

lge-attr	Description
box-orient	Aligns the parts of component vertically or horizontally.

box-orient

Description

Aligns the parts of GroupButton vertically or horizontally.
Default value is Vertical. (Vertical | Horizontal)

Example

```
<div lge-type="GroupCheckBox" lge-attr="box-orient:'Vertical';">
<fieldset>
  <legend>Default Group CheckBox</legend>
  <label><input type="checkbox" lge-type="CheckBox" />I agree</label>
  <label><input type="checkbox" lge-type="CheckBox" />I agree2</label>
  <label><input type="checkbox" lge-type="CheckBox" />I agree3</label>
</fieldset>
</div>
```

JS Interface (Constructor Parameters)

Example

```
var Checkbox2 = LGE.UI.GroupCheckBox({
  selector: ("td2"),
  legend: 'Default Group CheckBox',
  items: [
    {tabRight: 'check1', checked: 'checked', id: '1', text: 'I agree'},
    {id: '2', text: 'I agree2'},
    {id: '3', text: 'I agree3'},
  ],
});
```

Parameter	Description
boxOrient	Aligns the parts of component vertically or horizontally.
id	Element ID of the component in document
items	A list of checkboxes
legend	Text of legend tag in the component
selector	The element that becomes parent of the component

boxOrient

Description

Aligns the parts of CheckBoxes vertically or horizontally.
Default value is Vertical. (Vertical | Horizontal)

Example

```
var Checkbox2 = LGE.UI.GroupCheckBox({
  selector: ("td2"),
  boxOrient: 'Horizontal',
  legend: 'Default Group CheckBox',
  items: [
    {checked: 'checked', id: '1', text: 'I agree'},
    {id: '2', text: 'I agree2'},
  ],
});
```

id

Description

Element ID of the component in document.

Example

```
var Checkbox2 = LGE.UI.GroupCheckBox({
  selector: ("td2"),
  id: 'groupcheckbox',
  boxOrient: 'Horizontal',
  legend: 'Default Group CheckBox',
  items: [
    {checked: 'checked', id: '1', text: 'I agree'},
    {id: '2', text: 'I agree2'},
  ],
});
```



```
});
```

items

Description

A list of CheckBox Components

Example

```
var Checkbox2 = LGE.UI.GroupCheckBox({
  selector: ("td2"),
  boxOrient: 'Horizontal',
  legend: 'Default Group CheckBox',
  items: [
    {checked: 'checked', id: '1', text: 'I agree'},
    {id: '2', text: 'I agree2'},
  ],
});
```

legend

Description

Text of legend element with GroupCheckBox Components.

Example

```
var Checkbox2 = LGE.UI.GroupCheckBox({
  selector: ("td2"),
  boxOrient: 'Horizontal',
  legend: 'Default Group CheckBox',
  items: [
    {checked: 'checked', id: '1', text: 'I agree'},
    {id: '2', text: 'I agree2'},
  ],
});
```

selector

Description

The element that becomes parent of the component
Default is body.

Example

```
var Checkbox2 = LGE.UI.GroupCheckBox({
  selector: ("td2"),
  boxOrient: 'Horizontal',
  legend: 'Default Group CheckBox',
  items: [
    {checked: 'checked', id: '1', text: 'I agree'},
    {id: '2', text: 'I agree2'},
  ],
});
```

JS Interface (Methods)

Method	Description
addItem	Adds item to the GroupCheckBox.
getBoxOrient	Gets the order direction of the GroupCheckBox.
getItem	Gets the item of the GroupCheckBox.
getLegend	Gets the legend of the GroupCheckBox.
removeItem	Removes the item of the GroupCheckBox.
setBoxOrient	Sets the order direction of the GroupCheckBox.
setItem	Sets the item of the GroupCheckBox.
setLegend	Sets the order direction of the GroupCheckBox.

addItem

Description

Sets the order direction of the GroupCheckBox.

Parameters

check (Boolean) Whether the CheckBox should be checked or not
text (String) The text of CheckBox

Return Value

None

Example

```
groupCheckBox.addItem(true, "CheckBoxText");
```

Supported SDK / Emulator Version

SDK Version	Emulator Version
2.2 or higher	LG Smart TV Emulator 2011 : Not Supported LG Smart TV Emulator 2012 : SDK 2.2 or higher LG Smart TV Emulator 2013 : SDK 3.0 or higher

getBoxOrient

Description

Gets the order direction of the GroupCheckBox.

Parameters

None

Return Value

BoxOrient (String) The order direction of the GroupCheckBox

Example

```
alert( groupCheckBox.getBoxOrient() ); // "Vertical" or "Horizontal"
```

Supported SDK / Emulator Version

SDK Version	Emulator Version
-------------	------------------

SDK Version	Emulator Version
2.2 or higher	LG Smart TV Emulator 2011 : Not Supported LG Smart TV Emulator 2012 : SDK 2.2 or higher LG Smart TV Emulator 2013 : SDK 3.0 or higher

getItem

Description

Gets the item of the GroupCheckBox.

Parameters

`index` (Number) The index of CheckBox in GroupCheckBox

Return Value

`item` (Object) The item of Checkbox
For more information of this object, see JavaScript API in CheckBox component.

Example

```
var text = groupCheckBox.getItem(1).getText();
groupCheckBox.getItem(0).setText("test");
```

Supported SDK / Emulator Version

SDK Version	Emulator Version
2.2 or higher	LG Smart TV Emulator 2011 : Not Supported LG Smart TV Emulator 2012 : SDK 2.2 or higher LG Smart TV Emulator 2013 : SDK 3.0 or higher

getLegend

Description

Gets the legend of the GroupCheckBox.

Parameters

None

Return Value

`Legend` (String) The legend of GroupCheckBox

Example

```
var legend = groupCheckBox.getLegend();
```

Supported SDK / Emulator Version

SDK Version	Emulator Version
2.2 or higher	LG Smart TV Emulator 2011 : Not Supported LG Smart TV Emulator 2012 : SDK 2.2 or higher LG Smart TV Emulator 2013 : SDK 3.0 or higher

removeItem

Description

Removes the item of the GroupCheckBox.

Parameters

`index` (Number) The index of CheckBox in GroupCheckBox

Return Value

None

Example

```
groupCheckBox.removeItem(0);
```

Supported SDK / Emulator Version

SDK Version	Emulator Version
2.2 or higher	LG Smart TV Emulator 2011 : Not Supported
	LG Smart TV Emulator 2012 : SDK 2.2 or higher
	LG Smart TV Emulator 2013 : SDK 3.0 or higher

setBoxOrient

Description

Sets the order direction of the GroupCheckBox.

Parameters

`direction` (String) The order direction of the GroupCheckBox ('Vertical' | 'Horizontal')

Return Value

None

Example

```
groupCheckBox.setBoxOrient('Horizontal');
```

Supported SDK / Emulator Version

SDK Version	Emulator Version
2.2 or higher	LG Smart TV Emulator 2011 : Not Supported
	LG Smart TV Emulator 2012 : SDK 2.2 or higher
	LG Smart TV Emulator 2013 : SDK 3.0 or higher

setItem

Description

Sets the item of the GroupCheckBox.

Parameters

`index` (Number) The index of CheckBox in GroupCheckBox
`check` Whether the state of CheckBox should be checked or not.
`text` The text of CheckBox

Return Value

None

Example

```
groupCheckBox.setItem(1, true, 'Checkbox1');
```

Supported SDK / Emulator Version

SDK Version	Emulator Version
2.2 or higher	LG Smart TV Emulator 2011 : Not Supported LG Smart TV Emulator 2012 : SDK 2.2 or higher LG Smart TV Emulator 2013 : SDK 3.0 or higher

setLegend

Description

Sets the order direction of the GroupCheckBox.

Parameters

legend (String) The legend of the GroupCheckBox

Return Value

None

Example

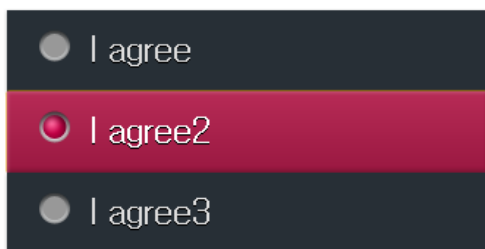
```
groupCheckBox.setLegend("Group Legend 1");
```

Supported SDK / Emulator Version

SDK Version	Emulator Version
2.2 or higher	LG Smart TV Emulator 2011 : Not Supported LG Smart TV Emulator 2012 : SDK 2.2 or higher LG Smart TV Emulator 2013 : SDK 3.0 or higher

GroupRadio

The GroupRadio component makes a group of Radios.



[Figure] GroupRadio Component

Inheritance Hierarchy

Object >> Component >> Container >> GroupCheckBoxRadioList >> GroupCheckBox

Markup Interface, JS Interface (Constructor Parameters), and JS Interface (Methods) are listed in the following sections.

- [Markup Interface](#)
- [JS Interface \(Constructor Parameters\)](#)
- [JS Interface \(Methods\)](#)

Markup Interface

Example

```
<div lge-type="GroupRadio">
<fieldset>
  <legend>Horizontal option Group Radio</legend>
  <label><input type="radio" lge-type=" Radio" />I agree</label>
  <label><input type="radio" lge-type=" Radio" />I agree2</label>
  <label><input type="radio" lge-type=" Radio" checked/>I agree3</label>
</fieldset>
</div>
```

Attributes Summary

Attribute	Description
lge-attr	Attributes of the LGE component

lge-attr	Description
box-orient	Aligns the parts of component vertically or horizontally.

box-orient

Description

Aligns the parts of Radios vertically or horizontally.
Default value is Vertical. (Vertical | Horizontal)

Example

```
<div lge-type="GroupRadio" lge-attr="box-orient:'Horizontal';" >
<fieldset>
<legend>Horizontal option Group Radio</legend>
<label><input type="radio" lge-type="Radio" />I agree</label>
<label><input type="radio" lge-type="Radio" />I agree2</label>
<label><input type="radio" lge-type="Radio" checked/>I agree3</label>
</fieldset>
</div>
```

JS Interface (Constructor Parameters)

Example

```
var Radio2 = LGE.UI.GroupRadio({
  selector: ("td2"),
  boxOrient: 'Vertical',
  legend: 'Default Group Radio',
  items: [
    {checked: 'checked', id: '1', text: 'I agree'},
    {id: '2', text: 'I agree2'},
    {id: '3', text: 'I agree3'},
  ],
});
```

Parameter	Description
boxOrient	Aligns the parts of component vertically or horizontally.
Legend	Text of legend tag in the component
Id	Element ID of the component in document
Items	A list of radios
Selector	The element that becomes parent of the component

boxOrient

Description

Aligns the parts of Radio vertically or horizontally.
Default value is Vertical. (Vertical | Horizontal)

Example

```
var Radio2 = LGE.UI.GroupRadio({
  selector: ("td2"),
  boxOrient: 'Vertical',
  legend: 'Default Group Radio',
  items: [
    {checked: 'checked', id: '1', text: 'I agree'},
    {id: '2', text: 'I agree2'},
  ],
});
```

legend

Description

Text of legend element with GroupRadio Components.

Example

```
var Radio2 = LGE.UI.GroupRadio({
  selector: ("td2"),
  boxOrient: 'Vertical',
  legend: 'Default Group Radio',
  items: [
    {checked: 'checked', id: '1', text: 'I agree'},
    {id: '2', text: 'I agree2'},
    {id: '3', text: 'I agree3'},
  ],
});
```

```
],  
});
```

id

Description

Element ID of the component in document.

Example

```
var Radio2 = LGE.UI.GroupRadio({  
  id:'groupradio',  
  selector:("\td2"),  
  boxOrient:'Vertical',  
  legend:'Default Group Radio',  
  items:[  
    {checked:'checked',id:'1', text:'I agree'},  
    {id:'2', text:'I agree2'},  
    {id:'3', text:'I agree3'},  
  ],  
});
```

items

Description

A list of Radio Components

Example

```
var Radio2 = LGE.UI.GroupRadio({  
  selector:("\td2"),  
  boxOrient:'Vertical',  
  legend:'Default Group Radio',  
  items:[  
    {checked:'checked',id:'1', text:'I agree'},  
    {id:'2', text:'I agree2'},  
    {id:'3', text:'I agree3'},  
  ],  
});
```

selector

Description

The element that becomes parent of the component
Default is body.

Example

```
var Radio2 = LGE.UI.GroupRadio({  
  selector:("\td2"),  
  boxOrient:'Vertical',  
  legend:'Default Group Radio',  
  items:[  
    {checked:'checked',id:'1', text:'I agree'},  
    {id:'2', text:'I agree2'},  
    {id:'3', text:'I agree3'},  
  ],  
});
```


JS Interface (Methods)

Method	Description
addItem	Adds item to the GroupCheckBox.
getBoxOrient	Gets the order direction of the GroupCheckBox.
getItem	Gets the item of the GroupCheckBox.
getLegend	Gets the legend of the GroupCheckBox.
removeItem	Removes the item of the GroupCheckBox.
setBoxOrient	Sets the order direction of the GroupCheckBox.
setItem	Sets the item of the GroupCheckBox.
setLegend	Sets the order direction of the GroupCheckBox.

addItem

Description

Sets the order direction of the GroupRadio.

Parameters

check (Boolean) Whether the status of Radio should be checked or not
text (String) The text of Radio

Return Value

None

Example

```
groupRadio.addItem(true, "Text");
```

Supported SDK / Emulator Version

SDK Version	Emulator Version
2.2 or higher	LG Smart TV Emulator 2011 : Not Supported LG Smart TV Emulator 2012 : SDK 2.2 or higher LG Smart TV Emulator 2013 : SDK 3.0 or higher

getBoxOrient

Description

Gets the order direction of the GroupRadio.

Parameters

None

Return Value

BoxOrient (String) The order direction of the GroupRadio

Example

```
alert( groupRadio.getBoxOrient() ); // "Vertical" or "Horizontal"
```

Supported SDK / Emulator Version

SDK Version	Emulator Version
-------------	------------------

SDK Version	Emulator Version
2.2 or higher	LG Smart TV Emulator 2011 : Not Supported LG Smart TV Emulator 2012 : SDK 2.2 or higher LG Smart TV Emulator 2013 : SDK 3.0 or higher

getItem

Description

Gets the item of the GroupRadio.

Parameters

`index` (Number) The index of Radio in GroupRadio

Return Value

`item` (Object) The item of Radio
For more information of this object, see JavaScript API in Radio component.

Example

```
var text = groupRadio.getItem(1).getText();
groupRadio.getItem(0).setText("test");
```

Supported SDK / Emulator Version

SDK Version	Emulator Version
2.2 or higher	LG Smart TV Emulator 2011 : Not Supported LG Smart TV Emulator 2012 : SDK 2.2 or higher LG Smart TV Emulator 2013 : SDK 3.0 or higher

getLegend

Description

Gets the legend of the GroupRadio.

Parameters

None

Return Value

`Legend` (String) The legend of GroupRadio

Example

```
var legend = groupRadio.getLegend();
```

Supported SDK / Emulator Version

SDK Version	Emulator Version
2.2 or higher	LG Smart TV Emulator 2011 : Not Supported LG Smart TV Emulator 2012 : SDK 2.2 or higher LG Smart TV Emulator 2013 : SDK 3.0 or higher

removeItem

Description

Removes the item of the GroupRadio.

Parameters

`index` (Number) The index of Radio in GroupRadio

Return Value

None

Example

```
groupRadio.removeItem(0);
```

Supported SDK / Emulator Version

SDK Version	Emulator Version
2.2 or higher	LG Smart TV Emulator 2011 : Not Supported
	LG Smart TV Emulator 2012 : SDK 2.2 or higher
	LG Smart TV Emulator 2013 : SDK 3.0 or higher

setBoxOrient

Description

Sets the order direction of the GroupRadio.

Parameters

`direction` (String) The order direction of the GroupRadio ('Vertical' | 'Horizontal')

Return Value

None

Example

```
groupRadio.setBoxOrient('Horizontal');
```

Supported SDK / Emulator Version

SDK Version	Emulator Version
2.2 or higher	LG Smart TV Emulator 2011 : Not Supported
	LG Smart TV Emulator 2012 : SDK 2.2 or higher
	LG Smart TV Emulator 2013 : SDK 3.0 or higher

setItem

Description

Sets the item of the GroupRadio.

Parameters

`index` (Number) The index of Radio in GroupRadio
`check` Whether the state of Radio should be checked or not.
`text` The text of Radio

Return Value

None

Example

```
groupRadio.setItem(1, true, 'Radio1');
```

Supported SDK / Emulator Version

SDK Version	Emulator Version
2.2 or higher	LG Smart TV Emulator 2011 : Not Supported LG Smart TV Emulator 2012 : SDK 2.2 or higher LG Smart TV Emulator 2013 : SDK 3.0 or higher

setLegend

Description

Sets the order direction of the GroupRadio.

Parameters

legend (String) The legend of the GroupRadio

Return Value

None

Example

```
groupRadio.setLegend("Group Legend 1");
```

Supported SDK / Emulator Version

SDK Version	Emulator Version
2.2 or higher	LG Smart TV Emulator 2011 : Not Supported LG Smart TV Emulator 2012 : SDK 2.2 or higher LG Smart TV Emulator 2013 : SDK 3.0 or higher

ImageList

The ImageList component is a group of images and used for showing like flow list.



[Figure] ImageList Component

Inheritance Hierarchy

Object >> Component >> Container >> ImageList

Markup Interface, JS Interface (Constructor Parameters), and JS Interface (Methods) are listed in the following sections.

- [Markup Interface](#)
- [JS Interface \(Constructor Parameters\)](#)
- [JS Interface \(Methods\)](#)

Markup Interface

Example

```
<div lge-type="ImageList" id="imgList" style='width:1000px;height:400px'>
  <li lge-type="ImageListItem" value="1">
    <img src='./image/imagelist_0.jpg'>
  </li>
  <li lge-type="ImageListItem" value="2">
    <img src='./image/imagelist_1.jpg'>
  </li>
  <li lge-type="ImageListItem" value="3">
    <img src='./image/imagelist_2.jpg'>
  </li>
  <li lge-type="ImageListItem" value="4">
    <img src='./image/imagelist_3.jpg'>
  </li>
  <li lge-type="ImageListItem" value="5">
    <img src='./image/imagelist_4.jpg'>
  </li>
</div>
```

Attributes Summary

None

JS Interface (Constructor Parameters)

Example

```
var ImageList = LGE.UI.ImageList({
  image:[
    './image/imagelist_0.jpg',
    './image/imagelist_1.jpg',
    './image/imagelist_2.jpg',
    './image/imagelist_3.jpg',
    './image/imagelist_4.jpg',
    './image/imagelist_5.jpg',
  ],
  selector: ("td2"),
  style: 'width:1000px;height:400px;',
});
```

Parameter	Description
id	Element ID of the component in document
image	A list of Images
selector	The element that becomes parent of the component
style	CSS Style of the component

id

Description

Element ID of the component in document.

Example

```
var ImageList = LGE.UI.ImageList({
  id: 'imglist',
  image:[
    './image/imagelist_0.jpg',
    './image/imagelist_1.jpg',
  ],
  selector: ("td2"),
  style: 'width:1000px;height:400px;',
});
```

image

Description

List of the images

Example

```
var ImageList = LGE.UI.ImageList({
  image:[
    './image/imagelist_0.jpg',
    './image/imagelist_1.jpg',
    './image/imagelist_2.jpg',
    './image/imagelist_3.jpg',
    './image/imagelist_4.jpg',
    './image/imagelist_5.jpg',
  ],
  selector: ("td2"),
  style: 'width:1000px;height:400px;',
});
```

```
selector: ("td2"),
style: 'width:1000px;height:400px;',
});
```

selector

Description

The element that becomes parent of the component
Default is body.

Example

```
var ImageList = LGE.UI.ImageList({
  image: [
    './image/imagelist_0.jpg',
    './image/imagelist_1.jpg',
  ],
  selector: ("td2"),
  style: 'width:1000px;height:400px;',
});
```

style

Description

CSS style of the component

Example

```
var ImageList = LGE.UI.ImageList({
  image: [
    './image/imagelist_0.jpg',
    './image/imagelist_1.jpg',
  ],
  selector: ("td2"),
  style: 'width:1000px;height:400px;',
});
```


JS Interface (Methods)

Method	Description
addImageItem	Adds an ImageItem of the ImageList.
getCurrentIndex	Gets the current index of the ImageItem.
moveImageItem	Moves to the ImageItem index of the ImageList.
removeImageItem	Removes the indexed Item of the ImageList.

addImageItem

Description

Adds an ImageItem of the ImageList.

Parameters

`index` (Number) The index of the ImageItem
`path` (String) The path of the ImageItem

Return Value

None

Example

```
var imagelist = LGE.UI.getComp('imagelist');  
imagelist.addImageItem(5, './image1.gif');
```

Supported SDK / Emulator Version

SDK Version	Emulator Version
2.2 or higher	LG Smart TV Emulator 2011 : Not Supported LG Smart TV Emulator 2012 : SDK 2.2 or higher LG Smart TV Emulator 2013 : SDK 3.0 or higher

getCurrentIndex

Description

Gets the current index of the ImageItem.

Parameters

None

Return Value

`index` (Number) The current index of ImageItem

Example

```
var imagelist = LGE.UI.getComp('imagelist');  
var index = imagelist.getCurrentIndex();
```

Supported SDK / Emulator Version

SDK Version	Emulator Version
2.2 or higher	LG Smart TV Emulator 2011 : Not Supported LG Smart TV Emulator 2012 : SDK 2.2 or higher LG Smart TV Emulator 2013 : SDK 3.0 or higher

moveImageItem

Description

Moves to the ImageItem of the ImageList.

Parameters

index (Number) The index of the ImageItem

Return Value

None

Example

```
var imagelist = LGE.UI.getComp('imagelist');  
imagelist.moveImageItem(3);
```

Supported SDK / Emulator Version

SDK Version	Emulator Version
2.2 or higher	LG Smart TV Emulator 2011 : Not Supported LG Smart TV Emulator 2012 : SDK 2.2 or higher LG Smart TV Emulator 2013 : SDK 3.0 or higher

removeImageItem

Description

Removes the Item of the ImageList.

Parameters

index (Number) The index of the ImageItem

Return Value

None

Example

```
var imagelist = LGE.UI.getComp('imagelist');  
imagelist.removeImageItem(2);
```

Supported SDK / Emulator Version

SDK Version	Emulator Version
2.2 or higher	LG Smart TV Emulator 2011 : Not Supported LG Smart TV Emulator 2012 : SDK 2.2 or higher LG Smart TV Emulator 2013 : SDK 3.0 or higher

ImageTile

The ImageTile component is a group of images and used for showing like a tile.



[Figure] ImageTile Component

Inheritance Hierarchy

Object >> Component >> Container >> ImageTile

Markup Interface, JS Interface (Constructor Parameters), and JS Interface (Methods) are listed in the following sections.

- [Markup Interface](#)
- [JS Interface \(Constructor Parameters\)](#)
- [JS Interface \(Methods\)](#)

Markup Interface

Example

```
<div lge-type="ImageTile" lge-attr="option:'1';" style="width:700px;height:500px;"
id="imgTile3">
  <table lge-type="ImageTileItem">
    <tr>
      <td>
        <img lge-type="ImageItem" lge-attr="tabRight:'img1';" src='images/21.jpg'>
      </td>
      <td>
        <img lge-type="ImageItem" id="img1" src='images/11.jpg'></td>
    </tr>
  </table>
  <table lge-type="ImageTileItem">
    <tr>
      <td>
        <img lge-type="ImageItem" src='images/12.jpg'>
      </td>
      <td>
        <img lge-type="ImageItem" src='images/11.jpg'>
      </td>
    </tr>
  </table>
</div>
```

Attributes Summary

None

JS Interface (Constructor Parameters)

Example

```
var ts = LGE.UI.ImageTile({
  selector: $("td2"),
  tables: [
    {table: [ // 1st table
      {images: [ // 1st table, 1st row
        {tabRight: 'img1', src: 'images/21.jpg', rowspan: '1', colspan: '2'}, // 1st row, 1st ~2nd column
        {src: 'images/11.jpg'}, // 1st row, 3rd column
      ]},
      {images: [ // 2nd row
        {src: 'images/11.jpg'}, // 2nd row, 1st column
        {src: 'images/11.jpg'}, // 2nd row, 2nd column
        {src: 'images/11.jpg'}, // 2nd row, 3rd column
      ]},
    ]},
    {table: [ // 2nd table
      {images: [ // 2nd table, 1st row
        {src: 'images/11.jpg'}, // 1st row, 1st column
        {src: 'images/11.jpg'}, // 1st row, 2nd column
        {src: 'images/11.jpg'}, // 1st row, 3rd column
      ]},
      {images: [ // 2nd table, 2nd row
        {src: 'images/11.jpg'}, // 2nd row, 1st column
        {src: 'images/11.jpg'}, // 2nd row, 2nd column
        {src: 'images/11.jpg'}, // 2nd row, 3rd column
      ]},
    ]},
  ],
  option: '1',
  style: 'width:700px;height:500px;',
  id: 'imgTile3',
});
```

Parameter	Description
id	Element ID of the component in document
option	Table moves in one drag
selector	The element that becomes parent of the component
style	CSS Style of the component
tables	A list of tables that has images

id

Description

Element ID of the component in document.

Example

```
var ts = LGE.UI.ImageTile({
  selector: $("td2"),
  tables: [
    {table: [ // 1st table
      {images: [ // 1st table, 1st row
        {src: 'images/11.jpg'}, // 1st row, 1st column
      ]},
      {images: [ // 2nd row
```

```

        {src:'images/11.jpg'}, // 2nd row, 1st column
      ]},
    ]},
    option:'1',
    style:'width:700px;height:500px;',
    id:'imgTile3',
  });

```

option

Description

This option is times of table moves in one drag. For example, if option:2 and one drag, the table moves two time.

Example

```

var ts = LGE.UI.ImageTile({
  selector:$("#td2"),
  tables:[
    {table:// 1st table
      {images:// 1st table, 1st row
        {src:'images/11.jpg'}, // 1st row, 1st column
      ]},
      {images:// 2nd row
        {src:'images/11.jpg'}, // 2nd row, 1st column
      ]},
    ]},
  option:'1',
  style:'width:700px;height:500px;',
  id:'imgTile3',
});

```

selector

Description

The element that becomes parent of the component
Default is body.

Example

```

var ts = LGE.UI.ImageTile({
  selector:$("#td2"),
  tables:[
    {table:// 1st table
      {images:// 1st table, 1st row
        {src:'images/11.jpg'}, // 1st row, 1st column
      ]},
      {images:// 2nd row
        {src:'images/11.jpg'}, // 2nd row, 1st column
      ]},
    ]},
  option:'1',
  style:'width:700px;height:500px;',
  id:'imgTile3',
});

```

style

Description

CSS style of the component

Example

```
var ts = LGE.UI.ImageTile({
  selector: $("td2"),
  tables: [
    {table: [ // 1st table
      {images: [ // 1st table, 1st row
        {src: 'images/11.jpg'}, // 1st row, 1st column
      ]},
      {images: [ // 2nd row
        {src: 'images/11.jpg'}, // 2nd row, 1st column
      ]},
    ]},
    option: '1',
    style: 'width:700px;height:500px;',
    id: 'imgTile3',
  });
```

tables

Description

tables : A list of tables that has images.

- table : A table of images. It has several rows.

+ images : A row of images. It has several images.

> src : path of image

> rowspan , colspan : how many cross or how many down cells

> tabRight, tabLeft, tabUp, tabDown : Indicate next UI component by each key action.

Example

```
var ts = LGE.UI.ImageTile({
  selector: $("td2"),
  tables: [
    {table: [ // 1st table
      {images: [ // 1st table, 1st row
        {tabRight: 'img1', src: 'images/21.jpg', rowspan: '1', colspan: '2'}, // 1st row, 1st ~2nd column
        {src: 'images/11.jpg'}, // 1st row, 3rd column
      ]},
      {images: [ // 2nd row
        {src: 'images/11.jpg'}, // 2nd row, 1st column
        {src: 'images/11.jpg'}, // 2nd row, 2nd column
        {src: 'images/11.jpg'}, // 2nd row, 3rd column
      ]},
    ]},
    {table: [ // 2nd table
      {images: [ // 2nd table, 1st row
        {src: 'images/11.jpg'}, // 1st row, 1st column
        {src: 'images/11.jpg'}, // 1st row, 2nd column
        {src: 'images/11.jpg'}, // 1st row, 3rd column
      ]},
      {images: [ // 2nd table, 2nd row
        {src: 'images/11.jpg'}, // 2nd row, 1st column
        {src: 'images/11.jpg'}, // 2nd row, 2nd column
        {src: 'images/11.jpg'}, // 2nd row, 3rd column
      ]},
    ]},
  ],
```

```
    }},  
    ],  
    option:'1',  
    style:'width:700px;height:500px;',  
    id:'imgTile3',  
});
```


JS Interface (Methods)

Method	Description
getBackground	Gets background color of ImageTile.
getBorderSpacing	Gets border spacing of ImageTile.
getMargin	Gets margin of ImageTile.
getNumToMove	Gets num to move of ImageTile.
setBackground	Sets background color of ImageTile.
setBorderSpacing	Sets border spacing of ImageTile.
setMargin	Sets margin of ImageTile.
setNumToMove	Sets num to move of ImageTile.

getBackground

Description

Gets background color of ImageTile.

Parameters

None

Return Value

Color (String) The background color of Image

Example

```
var imagetile = LGE.UI.getComp('imagetile');  
var color = imagetile.getBackground();
```

Supported SDK / Emulator Version

SDK Version	Emulator Version
2.2 or higher	LG Smart TV Emulator 2011 : Not Supported LG Smart TV Emulator 2012 : SDK 2.2 or higher LG Smart TV Emulator 2013 : SDK 3.0 or higher

getBorderSpacing

Description

Gets border spacing of ImageTile.

Parameters

None

Return Value

borderSpacing (String) The border spacing of ImageTile with unit

Example

```
var imagetile = LGE.UI.getComp('imagetile');  
var space = imagetile.getBorderSpacing(); // ex) 10px
```

Supported SDK / Emulator Version

SDK Version	Emulator Version
-------------	------------------

SDK Version	Emulator Version
2.2 or higher	LG Smart TV Emulator 2011 : Not Supported LG Smart TV Emulator 2012 : SDK 2.2 or higher LG Smart TV Emulator 2013 : SDK 3.0 or higher

getMargin

Description

Gets margin of ImageTile.

Parameters

None

Return Value

margin (String) The margin of ImageTile with unit

Example

```
var imagetile = LGE.UI.getComp('imagetile');
var margin = imagetile.getMargin(); // 10px
```

Supported SDK / Emulator Version

SDK Version	Emulator Version
2.2 or higher	LG Smart TV Emulator 2011 : Not Supported LG Smart TV Emulator 2012 : SDK 2.2 or higher LG Smart TV Emulator 2013 : SDK 3.0 or higher

getNumToMove

Description

Gets number to move of ImageTile. This option is times of table moves in one drag. For example, if option:2 and and one drag, the table moves two times.

Parameters

None

Return Value

index (Number) The index of ImageTile

Example

```
var imagetile = LGE.UI.getComp('imagetile');
var index = imagetile.getNumToVome();
```

Supported SDK / Emulator Version

SDK Version	Emulator Version
2.2 or higher	LG Smart TV Emulator 2011 : Not Supported LG Smart TV Emulator 2012 : SDK 2.2 or higher LG Smart TV Emulator 2013 : SDK 3.0 or higher

setBackground

Description

Sets background color of ImageTile.

Parameters

Color (String) The background color of Image

Return Value

None

Example

```
var imagetile = LGE.UI.getComp('imagetile');  
imagetile.setBackground("blue");
```

Supported SDK / Emulator Version

SDK Version	Emulator Version
2.2 or higher	LG Smart TV Emulator 2011 : Not Supported LG Smart TV Emulator 2012 : SDK 2.2 or higher LG Smart TV Emulator 2013 : SDK 3.0 or higher

setBorderSpacing

Description

Sets border spacing of ImageTile.

Parameters

borderSpacing (String) The border spacing of ImageTile with unit

Return Value

None

Example

```
var imagetile = LGE.UI.getComp('imagetile');  
imagetile.setBorderSpacing("10px");
```

Supported SDK / Emulator Version

SDK Version	Emulator Version
2.2 or higher	LG Smart TV Emulator 2011 : Not Supported LG Smart TV Emulator 2012 : SDK 2.2 or higher LG Smart TV Emulator 2013 : SDK 3.0 or higher

setMargin

Description

Sets margin of ImageTile.

Parameters

margin (String) the margin of ImageTile with unit

Return Value

None

Example

```
var imagetile = LGE.UI.getComp('imagetile');
```

```
imagetile.setMaring("10px");
```

Supported SDK / Emulator Version

SDK Version	Emulator Version
2.2 or higher	LG Smart TV Emulator 2011 : Not Supported LG Smart TV Emulator 2012 : SDK 2.2 or higher LG Smart TV Emulator 2013 : SDK 3.0 or higher

setNumToMove

Description

Sets number to move of ImageTile. This option is times of table moves in one drag. For example, if option:2 and one drag, table moves two times.

Parameters

index (Number) The index of Imagetem

Return Value

None

Example

```
var imagetile = LGE.UI.getComp('imagetile');  
imagetile.setNumToMove(1);
```

Supported SDK / Emulator Version

SDK Version	Emulator Version
2.2 or higher	LG Smart TV Emulator 2011 : Not Supported LG Smart TV Emulator 2012 : SDK 2.2 or higher LG Smart TV Emulator 2013 : SDK 3.0 or higher

Label

The Label represents a caption in a user interface.



[Figure] Label Component

Inheritance Hierarchy

Object >> Component >> Container >> ItemListComponent >> Label

Markup Interface, JS Interface (Constructor Parameters), and JS Interface (Methods) are listed in the following sections.

- [Markup Interface](#)
- [JS Interface \(Constructor Parameters\)](#)
- [JS Interface \(Methods\)](#)

Markup Interface

Example

```
<label lge-type='Label'>label2</label>
```

Attributes Summary

Attribute	Description
lge-attr	Attributes of the LGE component

lge-attr	Description
text-inline	More compact component that is only as wide as the text inside
text-scroll	Specifies whether text should be moved in the label.
text-scroll-direction	When you add lge-scroll='true' attribute in the label, specifies moving direction.

text-inline

Description

More compact component that is only as wide as the text inside
Default value is false. (true | false)

Example

```
<label lge-type='Label' lge-attr="text-inline:true;">label2</label>
```

text-scroll

Description

Specifies whether text should be moved in the label.
Default value is false. (true | false)

Example

```
<label lge-type='Label' lge-attr='text-scroll:true;text-scroll-direction:up'>label2</label>
```

text-scroll-direction

Description

When you add lge-scroll='true' attribute in the label, specifies moving direction.
Default value is Left. (Left | Right | Up | Down)

Example

```
<label lge-type='Label' lge-attr='text-scroll-direction:Up';text-scroll:true;>label2</label>
```

JS Interface (Constructor Parameters)

Example

```
var label1 = LGE.UI.Label({
  selector: ("td2"),
  text: 'label3',
  id: 'label1',
  style: 'width:100%',
});
```

Parameter	Description
id	Element ID of the component in document
selector	The element that becomes parent of the component
style	CSS style of the component
text	Text of the component
textInline	More compact component that is only as wide as the text inside
textScroll	Specifies whether text should be moved in the label.
textScrollDirection	When you add lge-scroll='true' attribute in the label, specifies moving direction.

id

Description

Element ID of the component in document.

Example

```
var label1 = LGE.UI.Label({
  selector: ("td2"),
  id: 'label1',
  text: 'label3',
});
```

selector

Description

The element that becomes parent of the component
Default is body.

Example

```
var label1 = LGE.UI.Label({
  selector: ("td2"),
  id: 'label1',
  text: 'label3',
});
```

style

Description

CSS style of the component

Example

```
var label1 = LGE.UI.Label({
  selector: ("td2"),
  id: 'label1',
  text: 'label3',
  style: 'width:200px',
});
```

text

Description

Text of the component

Example

```
var label1 = LGE.UI.Label({
  selector: ("td2"),
  id: 'label1',
  text: 'label3',
});
```

textInline

Description

More compact component that is only as wide as the text inside
Default value is false. (true | false)

Example

```
var label1 = LGE.UI.Label({
  selector: ("td2"),
  text: 'label3',
  textInline: true,
});
```

textScroll

Description

Specifies whether text should be moved in the label.
Default value is false. (true | false)

Example

```
var label1 = LGE.UI.Label({
  selector: ("td2"),
  id: 'label1',
  text: 'label3',
  textScroll: true,
  textScrollDirection: 'up'
});
```

textScrollDirection

Description

When you add lge-scroll='true' attribute in the label, specifies moving direction.

Default value is Left. (Left | Right | Up | Down)

Example

```
var label1 = LGE.UI.Label({
  selector: ("td2"),
  id: 'label1',
  text: 'label3',
  textScroll: true,
  textScrollDirection: 'Up'
});
```


JS Interface (Methods)

Method	Description
getText	Gets the text of the Label.
getTextInline	Returns true if this label is text-inline label.
getTextScroll	Returns true if this label text is scrolled.
getTextScrollDirection	Gets the text scroll direction of the Label.
setText	Sets the text of the Label.
setTextInline	Sets the text-inline of this label.
setTextScroll	Sets the scroll of this label text.
setTextScrollDirection	Sets the text scroll direction of the Label.

getText

Description

Gets the text of the Label.

Parameters

None

Return Value

text (String) The text of Label

Example

```
var text = label1.getText();
```

Supported SDK / Emulator Version

SDK Version	Emulator Version
2.2 or higher	LG Smart TV Emulator 2011 : Not Supported LG Smart TV Emulator 2012 : SDK 2.2 or higher LG Smart TV Emulator 2013 : SDK 3.0 or higher

getTextInline

Description

Returns true if this label is text-inline label.

Parameters

None

Return Value

bool (Boolean) Whether this label is text-inline or not

Example

```
var isInline = label1.getTextInline();
```

Supported SDK / Emulator Version

SDK Version	Emulator Version
-------------	------------------

SDK Version	Emulator Version
2.2 or higher	LG Smart TV Emulator 2011 : Not Supported LG Smart TV Emulator 2012 : SDK 2.2 or higher LG Smart TV Emulator 2013 : SDK 3.0 or higher

getTextScroll

Description

Returns true if this label text is scrolled.

Parameters

None

Return Value

bool (Boolean) Whether this label is scollable or not

Example

```
var isScrollable = label1.getTextScroll();
```

Supported SDK / Emulator Version

SDK Version	Emulator Version
2.2 or higher	LG Smart TV Emulator 2011 : Not Supported LG Smart TV Emulator 2012 : SDK 2.2 or higher LG Smart TV Emulator 2013 : SDK 3.0 or higher

getTextScrollDirection

Description

Gets the text scroll direction of the Label.

Parameters

None

Return Value

textScrollDirection (String) The text scroll direction of the Label.

Example

```
var scrollDirection = label1.getTextScrollDirection();
```

Supported SDK / Emulator Version

SDK Version	Emulator Version
2.2 or higher	LG Smart TV Emulator 2011 : Not Supported LG Smart TV Emulator 2012 : SDK 2.2 or higher LG Smart TV Emulator 2013 : SDK 3.0 or higher

setText

Description

Sets the text of the Label.

Parameters

text (String) The text of Label

Return Value

None

Example

```
label1.setText("Hello world");
```

Supported SDK / Emulator Version

SDK Version	Emulator Version
2.2 or higher	LG Smart TV Emulator 2011 : Not Supported LG Smart TV Emulator 2012 : SDK 2.2 or higher LG Smart TV Emulator 2013 : SDK 3.0 or higher

setTextInline

Description

Sets the text-inline of this label.

Parameters

bool (Boolean) Whether this label is text-inline or not

Return Value

None

Example

```
label1.setTextInline(true);
```

Supported SDK / Emulator Version

SDK Version	Emulator Version
2.2 or higher	LG Smart TV Emulator 2011 : Not Supported LG Smart TV Emulator 2012 : SDK 2.2 or higher LG Smart TV Emulator 2013 : SDK 3.0 or higher

setTextScroll

Description

Sets the scroll of this label text.

Parameters

bool (Boolean) Whether this label is scollable or not

Return Value

None

Example

```
label1.setTextScoll(true);
```

Supported SDK / Emulator Version

SDK Version	Emulator Version
2.2 or higher	LG Smart TV Emulator 2011 : Not Supported LG Smart TV Emulator 2012 : SDK 2.2 or higher

SDK Version	Emulator Version
	LG Smart TV Emulator 2013 : SDK 3.0 or higher

setTextScrollDirection

Description

Sets the text scroll direction of the Label.

Parameters

`textScrollDirection` (String) The text scroll direction of the Label (Left | Right | Up | Down)

Return Value

None

Example

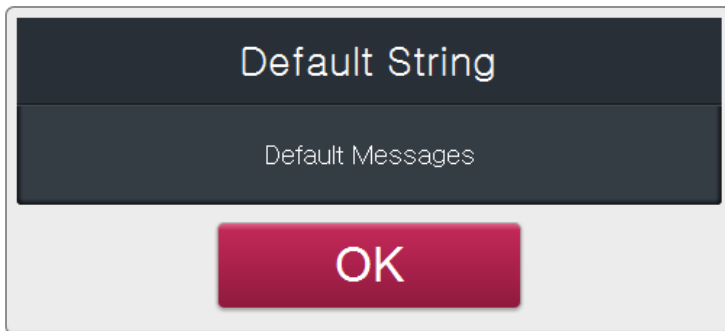
```
label1.setTextScrollDirection("Left");
```

Supported SDK / Emulator Version

SDK Version	Emulator Version
2.2 or higher	LG Smart TV Emulator 2011 : Not Supported LG Smart TV Emulator 2012 : SDK 2.2 or higher LG Smart TV Emulator 2013 : SDK 3.0 or higher

MsgBox

The MsgBox component is used to forward a popup message.



[Figure] MsgBox Component

Inheritance Hierarchy

Object >> Component >> Container >> Popup >> MsgBox

Markup Interface, JS Interface (Constructor Parameters), and JS Interface (Methods) are listed in the following sections.

- [Markup Interface](#)
- [JS Interface \(Constructor Parameters\)](#)
- [JS Interface \(Methods\)](#)

Markup Interface

Example

```
<div lge-type="MsgBox" lge-attr="option:BtnYesNo" id="MsgBoxTest">
  <div>MessageBox Title</div>
  <div>
    Message Box Contents
  </div>
</div>
```

Attributes Summary

Attribute	Description
lge-attr	Attributes of the LGE component

lge-attr	Description
option	Type of the button in message box

option

Description

Type of the button in message box.

There are four types of button. (BtnOK | BtnOKCancel | BtnYesNo | BtnYesNoCancel)

Example

```
<div lge-type="MsgBox" lge-attr="option:BtnYesNo" id="MsgBoxTest">
  <div>MessageBox Title</div>
  <div>
    Message Box Contents
  </div>
</div>
```

JS Interface (Constructor Parameters)

Example

```
var msg16 = LGE.UI.MsgBox({
  title:'Default String',
  message:'Default Messages',
  btnType:'BtnYesNoCancel'
});
```

Parameter	Description
btnType	Type of the button in message box
id	Element ID of the component in document
message	Contents of message box
messageRes	Contents of message box, It has key of resource.
title	Title of message box
titleRes	Title of message box, It has key of resource.

btnType

Description

Type of the button in message box.

There are four type of button. (BtnOK | BtnOKCancel | BtnYesNo | BtnYesNoCancel)

Example

```
var msg16 = LGE.UI.MsgBox({
  title:'Default String',
  message:'Default Messages',
  btnType: 'BtnYesNoCancel'
});
```

id

Description

Element ID of the component in document.

Example

```
var msg16 = LGE.UI.MsgBox({
  id:'msgbox1',
  title:'Default String',
  message:'Default Messages',
  btnType:'BtnYesNoCancel'
});
```

message

Description

Contents of message box

Example

```
var msg16 = LGE.UI.MsgBox({
  title:'Default String',
  message:'Default Messages',
  btnType:'BtnYesNoCancel'
});
```

messageRes

Description

Contents of message box. The value is key of resource.

Example

```
var msg16 = LGE.UI.MsgBox({
  title:'Default String',
  messageRes:'key1',
  btnType:'BtnYesNoCancel'
});
```

title

Description

Title of message box

Example

```
var msg16 = LGE.UI.MsgBox({
  title:'Default String',
  message:'Default Messages',
  btnType:'BtnYesNoCancel'
});
```

titleRes

Description

Title of message box. The value is key of resource.

Example

```
var msg16 = LGE.UI.MsgBox({
  titleRes:'key2',
  message:'Default Messages',
  btnType:'BtnYesNoCancel'
});
```

JS Interface (Methods)

Method	Description
addEventListener	Adds the event listener.
close	Closes the popup.
doModal	Shows the popup of Modal type.
getBtnType	Gets the button type of the MsgBox.
getMessage	Gets the message in the MsgBox.
getTitle	Gets the title in the MsgBox.
setBtnType	Sets the button type of the MsgBox.
setMessage	Sets the message in the MsgBox.
setMessageRes	Sets the resource message in the MsgBox.
setTitle	Sets the title in the MsgBox.
setTitleRes	Sets the resource title in the MsgBox.

addEventListener

Description

Adds the event listener. There is only “closed” event. When happened “closed” event, it sends Button value as a parameter to target function.

Parameters

None

Return Value

event (String) The type of event for listening event of the MsgBox. There is “closed” event if MsgBox is closed.
target (String) The target function that processes event.

Example

```
var msgBox = LGE.UI.getComp('msgBox');  
msgBox.addEventListener('closed', function(aEvent) {  
    if(aEvent.btn == 'Yes' || aEvent.btn == 'OK') {  
        alert("OK or YES");  
    }else{  
        alert("others");  
    }  
});
```

Supported SDK / Emulator Version

SDK Version	Emulator Version
2.2 or higher	LG Smart TV Emulator 2011 : Not Supported LG Smart TV Emulator 2012 : SDK 2.2 or higher LG Smart TV Emulator 2013 : SDK 3.0 or higher

close

Description

Closes the MsgBox.

Parameters

None

Return Value

None

Example

```
var msgBox = LGE.UI.getComp('msgBox');  
msgBox.close();
```

Supported SDK / Emulator Version

SDK Version	Emulator Version
2.2 or higher	LG Smart TV Emulator 2011 : Not Supported LG Smart TV Emulator 2012 : SDK 2.2 or higher LG Smart TV Emulator 2013 : SDK 3.0 or higher

doModal

Description

Shows the popup of Modal type.

Parameters

None

Return Value

None

Example

```
var msgBox = LGE.UI.getComp('msgBox');  
msgBox.doModal();
```

Supported SDK / Emulator Version

SDK Version	Emulator Version
2.2 or higher	LG Smart TV Emulator 2011 : Not Supported LG Smart TV Emulator 2012 : SDK 2.2 or higher LG Smart TV Emulator 2013 : SDK 3.0 or higher

getBtnType

Description

Gets the button type of the MsgBox.

Parameters

None

Return Value

`btnType` (String) The Button type of the MsgBox.
There are four types of button. (BtnOK | BtnOKCancel | BtnYesNo | BtnYesNoCancel)

Example

```
var msgBox = LGE.UI.getComp('msgBox');  
var btnType = msgBox.getBtnType();
```

Supported SDK / Emulator Version

SDK Version	Emulator Version
2.2 or higher	LG Smart TV Emulator 2011 : Not Supported LG Smart TV Emulator 2012 : SDK 2.2 or higher LG Smart TV Emulator 2013 : SDK 3.0 or higher

getMessage

Description

Gets the message in the MsgBox.

Parameters

None

Return Value

message (String) The message in the MsgBox

Example

```
var msgBox = LGE.UI.getComp('msgBox');  
var msg = msgBox.getMessage();
```

Supported SDK / Emulator Version

SDK Version	Emulator Version
2.2 or higher	LG Smart TV Emulator 2011 : Not Supported LG Smart TV Emulator 2012 : SDK 2.2 or higher LG Smart TV Emulator 2013 : SDK 3.0 or higher

getTitle

Description

Gets the title in the MsgBox.

Parameters

None

Return Value

title (String) The title of the MsgBox

Example

```
var msgBox = LGE.UI.getComp('msgBox');  
var title = msgBox.getTitle();
```

Supported SDK / Emulator Version

SDK Version	Emulator Version
2.2 or higher	LG Smart TV Emulator 2011 : Not Supported LG Smart TV Emulator 2012 : SDK 2.2 or higher LG Smart TV Emulator 2013 : SDK 3.0 or higher

setBtnType

Description

Sets the button type of the MsgBox.

Parameters

`btnType` (String) The Button type of the MsgBox.
There are four types of button. (BtnOK | BtnOKCancel | BtnYesNo | BtnYesNoCancel)

Return Value

None

Example

```
var msgBox = LGE.UI.getComp('msgBox');  
msgBox.setBtnType(BtnOK);
```

Supported SDK / Emulator Version

SDK Version	Emulator Version
2.2 or higher	LG Smart TV Emulator 2011 : Not Supported LG Smart TV Emulator 2012 : SDK 2.2 or higher LG Smart TV Emulator 2013 : SDK 3.0 or higher

setMessage

Description

Sets the message in the MsgBox.

Parameters

`message` (String) The message in the MsgBox

Return Value

None

Example

```
var msgBox = LGE.UI.getComp('msgBox');  
msgBox.setMessage("message contents");
```

Supported SDK / Emulator Version

SDK Version	Emulator Version
2.2 or higher	LG Smart TV Emulator 2011 : Not Supported LG Smart TV Emulator 2012 : SDK 2.2 or higher LG Smart TV Emulator 2013 : SDK 3.0 or higher

setMessageRes

Description

Sets the message in the MsgBox.

Parameters

`value` (String) Contents of message box. The value is key of resource.

Return Value

None

Example

```
var msgBox = LGE.UI.getComp('msgBox');
msgBox.setMessageRes("key1");
```

Supported SDK / Emulator Version

SDK Version	Emulator Version
2.2 or higher	LG Smart TV Emulator 2011 : Not Supported LG Smart TV Emulator 2012 : SDK 2.2 or higher LG Smart TV Emulator 2013 : SDK 3.0 or higher

setTitle

Description

Sets the title in the MsgBox.

Parameters

title (String) The title of the MsgBox

Return Value

None

Example

```
var msgBox = LGE.UI.getComp('msgBox');
msgBox.setTitle("title1");
```

Supported SDK / Emulator Version

SDK Version	Emulator Version
2.2 or higher	LG Smart TV Emulator 2011 : Not Supported LG Smart TV Emulator 2012 : SDK 2.2 or higher LG Smart TV Emulator 2013 : SDK 3.0 or higher

setTitleRes

Description

Sets the title in the MsgBox.

Parameters

title (String) Title of message box. The value is key of resource.

Return Value

None

Example

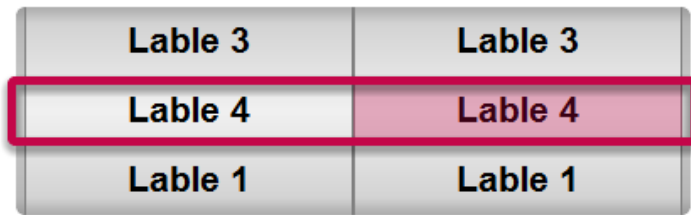
```
var msgBox = LGE.UI.getComp('msgBox');
msgBox.setTitleRes("key2");
```

Supported SDK / Emulator Version

SDK Version	Emulator Version
2.2 or higher	LG Smart TV Emulator 2011 : Not Supported LG Smart TV Emulator 2012 : SDK 2.2 or higher LG Smart TV Emulator 2013 : SDK 3.0 or higher

Picker

The Picker component is an element that allows the user to choose options of a predefined set.



[Figure] Picker Component

Inheritance Hierarchy

Object >> Component >> Container >> PickerHost

Object >> Component >> Container >> ItemListComponent >> Picker

Markup Interface, JS Interface (Constructor Parameters), and JS Interface (Methods) are listed in the following sections.

- [Markup Interface](#)
- [JS Interface \(Constructor Parameters\)](#)
- [JS Interface \(Methods\)](#)

Markup Interface

Example

```
<div lge-type="PickerHost" lge-attr="option:General" id="picker1" style="width:400px;">
  <select lge-attr="index:1">
    <option> Table 1 </option>
    <option> Table 2 </option>
    <option> Table 3 </option>
    <option> Table 4 </option>
  </select>
  <select lge-attr="index:2">
    <option> Table 1 </option>
    <option> Table 2 </option>
    <option selected="selected"> Table 3 </option>
    <option> Table 4 </option>
  </select>
</div>
```

Attributes Summary

Attribute	Description
lge-attr	Attributes of the LGE component
lge-res	Resource text of components

lge-attr	Description
index	The index of the Picker in PickerHost
option	The type of the PickerHost

index

Description

The index of the Picker in PickerHost. This attribute is only for <Select> tag.

Example

```
<div lge-type="PickerHost" lge-attr="option:General" id="picker1" style="width:400px;">
  <select lge-attr="index:1">
    <option> Table 1 </option>
    <option> Table 2 </option>
    <option> Table 3 </option>
    <option> Table 4 </option>
  </select>
  <select lge-attr="index:2">
    <option> Table 1 </option>
    <option> Table 2 </option>
    <option selected="selected"> Table 3 </option>
    <option> Table 4 </option>
  </select>
</div>
```

option

Description

The type of the PickerHost. It has three types.

- General : It is option for customizing. (default value)
- Date : It is option for date. PickerHost component has three Pickers: year, month, and day.
- Time: It is option for time. PickerHost component has three Pickers: AM/PM, hour, and minutes.

Example

```
<div lge-type="PickerHost" lge-attr="option:General" id="picker1">  
  <select lge-attr="index:1">  
    <option> Lable 1 </option>  
    <option> Lable 2 </option>  
    <option> Lable 3 </option>  
  </select>  
  <select lge-attr="index:2">  
    <option> Lable 1 </option>  
    <option> Lable 2 </option>  
    <option selected="selected"> Lable 3 </option>  
  </select>  
</div>
```

```
<div lge-type="PickerHost" lge-attr="option:Date" id="picker2">  
</div>
```

```
<div lge-type="PickerHost" lge-attr="option:Time" id="picker3">  
</div>
```

JS Interface (Constructor Parameters)

Example

```
var picker = LGE.UI.Picker({
  type: 'General',
  text: [
    ["Label 1", "Label 2", "Label 3"],
    ["Label 1", "Label 2", "Label 3"]
  ],
  selector: ("td2"),
  id: 'picker1',
  style: 'width:50%'
});
```

Parameter	Description
id	Element ID of the component in document
selector	The element that becomes parent of the component
text	A list of text list of Pickers
textures	A list of text or resource list of Pickers
type	The type of the PickerHost
width	The width of the PickerHost

id

Description

Element ID of the component in document.

Example

```
var picker = LGE.UI.Picker({
  selector: ("td2"),
  id: 'picker',
  type: 'General',
  text: [
    ["Label 1", "Label 2", "Label 3"],
    ["Label 1", "Label 2", "Label 3"]
  ],
});
```

selector

Description

The element that becomes parent of the component
Default is body.

Example

```
var picker = LGE.UI.Picker({
  selector: ("td2"),
  type: 'General',
  text: [
    ["Label 1", "Label 2", "Label 3"],
    ["Label 1", "Label 2", "Label 3"]
  ]
});
```



```
],
});
```

text

Description

A list of Picker. It consists of only text.

Example

```
var picker = LGE.UI.Picker({
  selector: ("td2"),
  type: 'General',
  text: [
    ["Label 1", "Label 2", "Label 3"],
    ["Label 1", "Label 2", "Label 3"]
  ],
});
```

textRes

Description

A list of Picker. It consists of text and resource text.

Example

```
var picker = LGE.UI.Picker({
  selector: ("td2"),
  type: 'General',
  textRes: [
    {text: ["Text 1", "Text 2", "Text 3"]},
    {res: ["Label 1", "Label 2", "Label 3"]},
  ],
});
```

type

Description

The type of the PickerHost. It has three types.

- General : It is option for customizing. (default value)
- Date : It is option for date. PickerHost component has three Pickers: year, month, and day.
- Time : It is option for time. PickerHost component has three Pickers: AM/PM, hour, and minutes.

Example

```
var picker = LGE.UI.Picker({
  selector: ("td2"),
  type: 'General',
  text: [
    ["Label 1", "Label 2", "Label 3"],
    ["Label 1", "Label 2", "Label 3"]
  ],
});
```

```
var picker = LGE.UI.Picker({
  selector: ("td2"),
  type: 'Date',
```

```
});
```

```
var picker = LGE.UI.Picker({  
  selector: ("td2"),  
  type: 'Time',  
});
```

width

Description

Width of the PickerHost. The unit is pixel.

Example

```
var picker = LGE.UI.Picker({  
  selector: ("td2"),  
  type: 'General',  
  text: [  
    ["Label 1", "Label 2", "Label 3"],  
    ["Label 1", "Label 2", "Label 3"]  
  ],  
  width: 500,  
});
```

JS Interface (Methods)

Method	Description
<code>addItem</code>	Adds an Item of the Picker.
<code>addItemWithRes</code>	Adds an Item of the Picker.
<code>getOption</code>	Gets option of Picker.
<code>getSelected</code>	Gets focused option of Picker.
<code>removeItem</code>	Removes the Item of the Picker.
<code>setOption</code>	Sets option of the Picker.
<code>setPickerStyle</code>	Sets the style of the Picker.
<code>setSelect</code>	Sets focus option of the Picker.

addItem

Description

Adds an Item of the Picker.

Parameters

<code>pickerId</code>	(Number) The index of picker
<code>text</code>	(String) The text of the item
<code>value</code>	(String) The value of the item

Return Value

None

Example

```
picker.addItem(1, "text1", "value1");
```

Supported SDK / Emulator Version

SDK Version	Emulator Version
2.2 or higher	LG Smart TV Emulator 2011 : Not Supported LG Smart TV Emulator 2012 : SDK 2.2 or higher LG Smart TV Emulator 2013 : SDK 3.0 or higher

addItemWithRes

Description

Adds an Item of the Picker with resource text.

Parameters

<code>pickerId</code>	(Number) The index of picker
<code>res</code>	(String) The resource text of the item
<code>value</code>	(String) The value of the item

Return Value

None

Example

```
picker.addItemWithRes(1, "on", "value1");
```

Supported SDK / Emulator Version

SDK Version	Emulator Version
2.2 or higher	LG Smart TV Emulator 2011 : Not Supported LG Smart TV Emulator 2012 : SDK 2.2 or higher LG Smart TV Emulator 2013 : SDK 3.0 or higher

getOption

Description

Gets the option of the picker.

Parameters

None

Return Value

`option` (String) The type of the picker (general | date | time)

Example

```
var pickerType = picker.getOption();
```

Supported SDK / Emulator Version

SDK Version	Emulator Version
2.2 or higher	LG Smart TV Emulator 2011 : Not Supported LG Smart TV Emulator 2012 : SDK 2.2 or higher LG Smart TV Emulator 2013 : SDK 3.0 or higher

getSelected

Description

Gets focused option of Picker.

Parameters

`pickerId` (Number) The index of picker

Return Value

`value` (String) The value of focused option in Picker.

Example

```
var text = picker.getSelected(0);
```

Supported SDK / Emulator Version

SDK Version	Emulator Version
2.2 or higher	LG Smart TV Emulator 2011 : Not Supported LG Smart TV Emulator 2012 : SDK 2.2 or higher LG Smart TV Emulator 2013 : SDK 3.0 or higher

removeItem

Description

Removes the Item of the Picker.

Parameters

`pickerId` (Number) The index of picker
`index` (Number) The index of the item

Return Value

None

Example

```
picker.removeItem(0, 1);
```

Supported SDK / Emulator Version

SDK Version	Emulator Version
2.2 or higher	LG Smart TV Emulator 2011 : Not Supported LG Smart TV Emulator 2012 : SDK 2.2 or higher LG Smart TV Emulator 2013 : SDK 3.0 or higher

setOption

Description

Sets option of the Picker.

Parameters

`option` (String) The type of Picker (General | Date | Time)

Return Value

None

Example

```
picker.setOption("Date");
```

Supported SDK / Emulator Version

SDK Version	Emulator Version
2.2 or higher	LG Smart TV Emulator 2011 : Not Supported LG Smart TV Emulator 2012 : SDK 2.2 or higher LG Smart TV Emulator 2013 : SDK 3.0 or higher

setPickerStyle

Description

Sets CSS style of the picker.

Parameters

`pickerId` (Number) The index of picker
`style` (String) CSS style of the picker

Return Value

None

Example

```
picker.setPickerStyle(1, "color:red");
```

Supported SDK / Emulator Version

SDK Version	Emulator Version
2.2 or higher	LG Smart TV Emulator 2011 : Not Supported LG Smart TV Emulator 2012 : SDK 2.2 or higher LG Smart TV Emulator 2013 : SDK 3.0 or higher

setSelect

Description

Sets focus of the picker.

Parameters

`pickerId` (Number) The index of picker
`index` (Number) The index of the picker item

Return Value

None

Example

```
picker.setPickerStyle(1, "color:red");
```

Supported SDK / Emulator Version

SDK Version	Emulator Version
2.2 or higher	LG Smart TV Emulator 2011 : Not Supported LG Smart TV Emulator 2012 : SDK 2.2 or higher LG Smart TV Emulator 2013 : SDK 3.0 or higher

Progress

The Progress component shows the progress of external data loading.



[Figure] Progress Component

Inheritance Hierarchy

Object >> Component >> Container >> ItemListComponent >> ProgressBar

Markup Interface, JS Interface (Constructor Parameters), and JS Interface (Methods) are listed in the following sections.

- [Markup Interface](#)
- [JS Interface \(Constructor Parameters\)](#)
- [JS Interface \(Methods\)](#)

Markup Interface

Example

```
<input type="range" id='progress1' lge-type="ProgressBar" name="progress" value="1" min="0" max="100" />
```

Attributes Summary

Attribute	Description
min	Indicates the allowed range of values for the element.
max	Indicates the allowed range of values for the element. The default maximum is 100.
value	Gives the default value of the input element.

JS Interface (Constructor Parameters)

Example

```
var progress1 = LGE.UI.Progress({
  id:'progress1',
  max:'100',
  min:'0',
  selector: ("td2"),
  style:'width:100%;height:100%',
  value:'10',
});
```

Parameter	Description
id	Element ID of the component in document
max	Maximum value of the component
min	Minimum value of the component
style	CSS style of the component
selector	The element that becomes parent of the component
value	Value of the component

id

Description

Element ID of the component in document.

Example

```
var progress1 = LGE.UI.Progress({
  id: 'progress1'
  max:'100',
  min:'0',
  selector: ("td2"),
  value:'10',
});
```

max

Description

Maximum value of the slider can have.

Example

```
var progress1 = LGE.UI.Progress({
  id:'progress1'
  max: '100',
  min:'0',
  selector: ("td2"),
  value:'10',
});
```

min

Description

Minimum value of the slider can have.

Example

```
var progress1 = LGE.UI.Progress({
  id:'progress1'
  min:'0',
  max:'100',
  selector: ("td2"),
  value:'10',
});
```

style

Description

CSS style of the component

Example

```
var progress1 = LGE.UI.Progress({
  id:'progress1'
  max:'100',
  min:'0',
  selector: ("td2"),
  style:'width:100%;height:100%',
  value:'10',
});
```

selector

Description

The element that becomes parent of the component
Default is body.

Example

```
var progress1 = LGE.UI.Progress({
  id:'progress1'
  max:'100',
  min:'0',
  selector: ("td2"),
  value:'10',
});
```

value

Description

Value of the component. The value of the component must be biggerer than the min value and less than max value.

Example

```
var progress1 = LGE.UI.Progress({
  id:'progress1'
  max:'100',
  min:'0',
  selector: ("td2"),
```

```
value: '10',  
});
```

JS Interface (Methods)

Method	Description
getMax	Gets the max value of the Progress.
getMin	Gets the min value of the Progress.
getStep	Gets the step value of the Progress.
getValue	Gets the value of the Progress.
resetProgress	Resets progress.
setMax	Sets the max value of the Progress.
setMin	Sets the min value of the Progress.
setStep	Sets the step value of the Progress.
setValue	Sets the value of the Progress.
startProgress	Starts the progress.
stopProgress	Stops the progress.

getMax

Description

Gets the max value of the Progress.

Parameters

None

Return Value

max (Number) The max value of the Progress

Example

```
var max = progress.getMax();
```

Supported SDK / Emulator Version

SDK Version	Emulator Version
2.2 or higher	LG Smart TV Emulator 2011 : Not Supported LG Smart TV Emulator 2012 : SDK 2.2 or higher LG Smart TV Emulator 2013 : SDK 3.0 or higher

getMin

Description

Gets the min value of Progress.

Parameters

None

Return Value

min (Number) The min value of the Progress

Example

```
var max = progress.getMin();
```

Supported SDK / Emulator Version

SDK Version	Emulator Version
2.2 or higher	LG Smart TV Emulator 2011 : Not Supported LG Smart TV Emulator 2012 : SDK 2.2 or higher LG Smart TV Emulator 2013 : SDK 3.0 or higher

getStep

Description

Gets the step value of the Progress.

Parameters

None

Return Value

step (Number) The step value of the Progress

Example

```
var step = progress.getStep();
```

Supported SDK / Emulator Version

SDK Version	Emulator Version
2.2 or higher	LG Smart TV Emulator 2011 : Not Supported LG Smart TV Emulator 2012 : SDK 2.2 or higher LG Smart TV Emulator 2013 : SDK 3.0 or higher

getValue

Description

Gets the value of the progress.

Parameters

None

Return Value

value (Number) The value of the progress

Example

```
var value = progress.getValue();
```

Supported SDK / Emulator Version

SDK Version	Emulator Version
2.2 or higher	LG Smart TV Emulator 2011 : Not Supported LG Smart TV Emulator 2012 : SDK 2.2 or higher LG Smart TV Emulator 2013 : SDK 3.0 or higher

resetProgress

Description

Resets the progress.

Parameters

None

Return Value

None

Example

```
var progress = LGE.UI.getComp('progress');
$('#reset_btn').click(function() {
    progress.resetProgress();
});
```

Supported SDK / Emulator Version

SDK Version	Emulator Version
2.2 or higher	LG Smart TV Emulator 2011 : Not Supported LG Smart TV Emulator 2012 : SDK 2.2 or higher LG Smart TV Emulator 2013 : SDK 3.0 or higher

setMax

Description

Sets the max value of the Progress.

Parameters

max (Number) The max value of the Progress

Return Value

None

Example

```
var progress = LGE.UI.getComp('progress');
progress.setMax(10);
```

Supported SDK / Emulator Version

SDK Version	Emulator Version
2.2 or higher	LG Smart TV Emulator 2011 : Not Supported LG Smart TV Emulator 2012 : SDK 2.2 or higher LG Smart TV Emulator 2013 : SDK 3.0 or higher

setMin

Description

Sets the min value of the Progress.

Parameters

min (Number) The min value of the Progress

Return Value

None

Example

```
var progress = LGE.UI.getComp('progress');
progress.setMin(-10);
```

Supported SDK / Emulator Version

SDK Version	Emulator Version
2.2 or higher	LG Smart TV Emulator 2011 : Not Supported LG Smart TV Emulator 2012 : SDK 2.2 or higher LG Smart TV Emulator 2013 : SDK 3.0 or higher

setStep

Description

Sets the step value of the Progress.

Parameters

step (Number) The step value of the Progress

Return Value

None

Example

```
var progress = LGE.UI.getComp('progress');
progress.setStep(1);
```

Supported SDK / Emulator Version

SDK Version	Emulator Version
2.2 or higher	LG Smart TV Emulator 2011 : Not Supported LG Smart TV Emulator 2012 : SDK 2.2 or higher LG Smart TV Emulator 2013 : SDK 3.0 or higher

setValue

Description

Sets the value of the Progress.

Parameters

value (Number) The value of the progress

Return Value

None

Example

```
var progress = LGE.UI.getComp('progress');
progress.setValue(0);
```

Supported SDK / Emulator Version

SDK Version	Emulator Version
2.2 or higher	LG Smart TV Emulator 2011 : Not Supported LG Smart TV Emulator 2012 : SDK 2.2 or higher LG Smart TV Emulator 2013 : SDK 3.0 or higher

startProgress

Description

Starts the progress.

Parameters

None

Return Value

None

Example

```
var progress = LGE.UI.getComp('progress');
$('#start_btn').click(function() {
    progress.startProgress();
});
```

Supported SDK / Emulator Version

SDK Version	Emulator Version
2.2 or higher	LG Smart TV Emulator 2011 : Not Supported LG Smart TV Emulator 2012 : SDK 2.2 or higher LG Smart TV Emulator 2013 : SDK 3.0 or higher

stopProgress

Description

Stops the progress.

Parameters

None

Return Value

None

Example

```
var progress = LGE.UI.getComp('progress');
$('#stop_btn').click(function() {
    progress.stopProgress();
});
```

Supported SDK / Emulator Version

SDK Version	Emulator Version
2.2 or higher	LG Smart TV Emulator 2011 : Not Supported LG Smart TV Emulator 2012 : SDK 2.2 or higher LG Smart TV Emulator 2013 : SDK 3.0 or higher

Radio

The Radio component is an element that allows the user to choose only one of a predefined set of options.



[Figure] Radio Component

Inheritance Hierarchy

Object >> Component >> Container >> ItemListComponent >> CheckBoxRadioList >> Radio

Markup Interface, JS Interface (Constructor Parameters), and JS Interface (Methods) are listed in the following sections.

- [Markup Interface](#)
- [JS Interface \(Constructor Parameters\)](#)
- [JS Interface \(Methods\)](#)

Markup Interface

Example

```
<input type="radio" lge-type="Radio" checked />
```

Attributes Summary

Attribute	Description
lge-attr	Attributes of the LGE component

lge-attr	Description
text-inline	More compact component that is only as wide as the text inside.

text-inline

Description

More compact component that is only as wide as the text inside.
Default value is false. (true | false)

Example

```
<input type="radio" lge-type="Radio" checked lge-attr='text-inline:true' value='text' />
```

JS Interface (Constructor Parameters)

Example

```
var Radiol = LGE.UI.Radio({
  selector: ("td2"),
  checked: 'true',
  id: 'radiol',
  text: 'Basic radiol',
});
```

Parameter	Description
checked	Whether the Radio component should be checked or not
id	Element ID of the component in document
selector	The element that becomes parent of the component
style	CSS style of the component
text	Text in the component
textInline	More compact component that is only as wide as the text inside

checked

Description

Whether the Radio component should be checked or not
Default value is false. (true | false)

Example

```
var Radiol = LGE.UI.Radio({
  selector: ("td2"),
  checked: 'true',
  id: 'radiol',
  text: 'Basic radiol',
});
```

id

Description

Element ID of the component in document.

Example

```
var Radiol = LGE.UI.Radio({
  selector: ("td2"),
  id: 'radiol',
  text: 'Basic radiol',
});
```

selector

Description

The element that becomes parent of the component
Default is body.

Example

```
var Radio1 = LGE.UI.Radio({
  selector: ("td2"),
  checked: 'true',
  id: 'radio1',
  text: 'Basic radio1',
  textInline: 'true'
});
```

style

Description

CSS style of the component

Example

```
var Radio1 = LGE.UI.Radio({
  selector: ("td2"),
  id: 'radio1',
  text: 'Basic radio1',
  style: 'width:200px',
});
```

text

Description

Text of the component

Example

```
var Radio1 = LGE.UI.Radio({
  selector: ("td2"),
  checked: 'true',
  id: 'radio1',
  text: 'Basic radio1',
  textInline: 'true'
});
```

textInline

Description

More compact component that is only as wide as the text inside.
Default value is false. (true | false)

Example

```
var Radio1 = LGE.UI.Radio({
  selector: ("td2"),
  id: 'radio1',
  text: 'Basic radio1',
  textInline: 'true'
});
```

JS Interface (Methods)

Method	Description
getCheck	Gets check state of the Radio.
getText	Gets the text of the Radio.
getTextInline	Gets the text-inline of the Radio
setCheck	Sets check state of the Radio.
setText	Sets the text of the Radio.
setTextInline	Sets the text-inline of the Radio.

getCheck

Description

Gets check state of the Radio.

Parameters

None

Return Value

`bool` (Boolean) The check state of the Radio

Example

```
var checked = radio1.getCheck();
```

Supported SDK / Emulator Version

SDK Version	Emulator Version
2.2 or higher	LG Smart TV Emulator 2011 : Not Supported LG Smart TV Emulator 2012 : SDK 2.2 or higher LG Smart TV Emulator 2013 : SDK 3.0 or higher

getText

Description

Gets the text of the Radio.

Parameters

None

Return Value

`text` (String) The text of Radio

Example

```
var text = radio1.getText();
```

Supported SDK / Emulator Version

SDK Version	Emulator Version
2.2 or higher	LG Smart TV Emulator 2011 : Not Supported LG Smart TV Emulator 2012 : SDK 2.2 or higher LG Smart TV Emulator 2013 : SDK 3.0 or higher

getTextInline

Description

Gets the text-inline of the Radio.

Parameters

None

Return Value

bool (Boolean) The text-inline of the Radio

Example

```
var textinline = radio1.getTextInline();
```

Supported SDK / Emulator Version

SDK Version	Emulator Version
2.2 or higher	LG Smart TV Emulator 2011 : Not Supported LG Smart TV Emulator 2012 : SDK 2.2 or higher LG Smart TV Emulator 2013 : SDK 3.0 or higher

setCheck

Description

Sets whether the state of the Radio should be checked or not.

Parameters

bool (Boolean) The check state of the Radio

Return Value

None

Example

```
radio1.setCheck(true);
```

Supported SDK / Emulator Version

SDK Version	Emulator Version
2.2 or higher	LG Smart TV Emulator 2011 : Not Supported LG Smart TV Emulator 2012 : SDK 2.2 or higher LG Smart TV Emulator 2013 : SDK 3.0 or higher

setText

Description

Sets the text of the Radio.

Parameters

text (String) The text of Radio

Return Value

None

Example

```
radio1.setText("Radio Text");
```

Supported SDK / Emulator Version

SDK Version	Emulator Version
2.2 or higher	LG Smart TV Emulator 2011 : Not Supported LG Smart TV Emulator 2012 : SDK 2.2 or higher LG Smart TV Emulator 2013 : SDK 3.0 or higher

setTextInline

Description

Sets the text-inline of the Radio.

Parameters

`bool` (Boolean) The text-inline of the Radio

Return Value

None

Example

```
radio1.setTextInline(true);
```

Supported SDK / Emulator Version

SDK Version	Emulator Version
2.2 or higher	LG Smart TV Emulator 2011 : Not Supported LG Smart TV Emulator 2012 : SDK 2.2 or higher LG Smart TV Emulator 2013 : SDK 3.0 or higher

Rating

The Rating component is used for rating something.



[Figure] Rating Component

Inheritance Hierarchy

Object >> Component >> Container >> Rating

Markup Interface, JS Interface (Constructor Parameters), and JS Interface (Methods) are listed in the following sections.

- [Markup Interface](#)
- [JS Interface \(Constructor Parameters\)](#)
- [JS Interface \(Methods\)](#)

Markup Interface

Example

```
<div lge-type="Rating" id="rating1">  
  <input type="range" min="0" max="100"/>  
</div>
```

Attributes Summary

Attribute	Description
lge-attr	Attributes of the LGE component

lge-attr	Description
N/A	N/A

JS Interface (Constructor Parameters)

Example

```
var ts7 = LGE.UI.Rating({
  min:0,
  max:10,
  value:6,
  selector: ("td2")
});
```

Parameter	Description
id	Element ID of the component in document
max	Max value of the component
min	Min value of the component
selector	The element that becomes parent of the component
style	CSS style of the component
value	Value of the component

id

Description

Element ID of the component in document.

Example

```
var rating = LGE.UI.Rating({
  id:"rating1",
  selector: ("td2")
});
```

max

Description

Maximum value of the Rating component
Default value is 100.

Example

```
var ts8 = LGE.UI.Rating({
  id:"rating1",
  max:100,
  selector: ("td2")
});
```

min

Description

Minimum value of the Rating component.
Default value is 0.

Example

```
var ts8 = LGE.UI.Rating({
  id:"rating1",
  max:100,
  min:0,
  selector: ("td2")
});
```

selector

Description

The element that becomes parent of the component
Default is body.

Example

```
var ts8 = LGE.UI.Rating({
  id:"rating1",
  selector: ("td2")
});
```

style

Description

CSS style of the component

Example

```
var ts8 = LGE.UI.Rating({
  id:"rating1",
  selector: ("td2"),
  style:"width:500px",
});
```

value

Description

Value of the Rating component. It is bigger than the min value and less than max value.
Full star value has $(\text{Min}-\text{Max})/5$.
For example, if max is 100, min is 50, and 3 stars and half, the value is 85.

Example

```
var ts8 = LGE.UI.Rating({
  id:"rating1",
  selector: ("td2"),
  value:0,
});
```

JS Interface (Methods)

Method	Description
getMax	Gets the max value of the Rating.
getMin	Gets the min value of the Rating.
getValue	Gets the value of the Rating.
setMax	Sets the max value of the Rating.
setMin	Sets the min value of the Rating.
setValue	Sets the value of the Rating.

getMax

Description

Gets the max value of the Rating.

Parameters

None

Return Value

max (Number) the max value of the Rating

Example

```
var rating = LGE.UI.getComp('rating');  
var max = rating.getMax();
```

Supported SDK / Emulator Version

SDK Version	Emulator Version
2.2 or higher	LG Smart TV Emulator 2011 : Not Supported LG Smart TV Emulator 2012 : SDK 2.2 or higher LG Smart TV Emulator 2013 : SDK 3.0 or higher

getMin

Description

Gets the min value of Rating.

Parameters

None

Return Value

min (Number) The min value of the Rating

Example

```
var rating = LGE.UI.getComp('rating');  
var min = rating.getMin();
```

Supported SDK / Emulator Version

SDK Version	Emulator Version
2.2 or higher	LG Smart TV Emulator 2011 : Not Supported LG Smart TV Emulator 2012 : SDK 2.2 or higher

SDK Version	Emulator Version
	LG Smart TV Emulator 2013 : SDK 3.0 or higher

getValue

Description

Gets the value of the Rating.

Parameters

None

Return Value

value (Number) The value of the Rating

Example

```
var rating = LGE.UI.getComp('rating');
var max = rating.getValue();
```

Supported SDK / Emulator Version

SDK Version	Emulator Version
2.2 or higher	LG Smart TV Emulator 2011 : Not Supported LG Smart TV Emulator 2012 : SDK 2.2 or higher LG Smart TV Emulator 2013 : SDK 3.0 or higher

setMax

Description

Sets the max value of the Rating.

Parameters

max (Number) The max value of the Rating

Return Value

None

Example

```
var rating = LGE.UI.getComp('rating');
rating.setMax(10);
```

Supported SDK / Emulator Version

SDK Version	Emulator Version
2.2 or higher	LG Smart TV Emulator 2011 : Not Supported LG Smart TV Emulator 2012 : SDK 2.2 or higher LG Smart TV Emulator 2013 : SDK 3.0 or higher

setMin

Description

Sets the min value of the Rating.

Parameters

min (Number) The min value of the Rating

Return Value

None

Example

```
var rating = LGE.UI.getComp('rating');  
rating.setMin(-10);
```

Supported SDK / Emulator Version

SDK Version	Emulator Version
2.2 or higher	LG Smart TV Emulator 2011 : Not Supported LG Smart TV Emulator 2012 : SDK 2.2 or higher LG Smart TV Emulator 2013 : SDK 3.0 or higher

setValue

Description

Sets the value of the Rating.

Parameters

value (Number) The value of the Rating

Return Value

None

Example

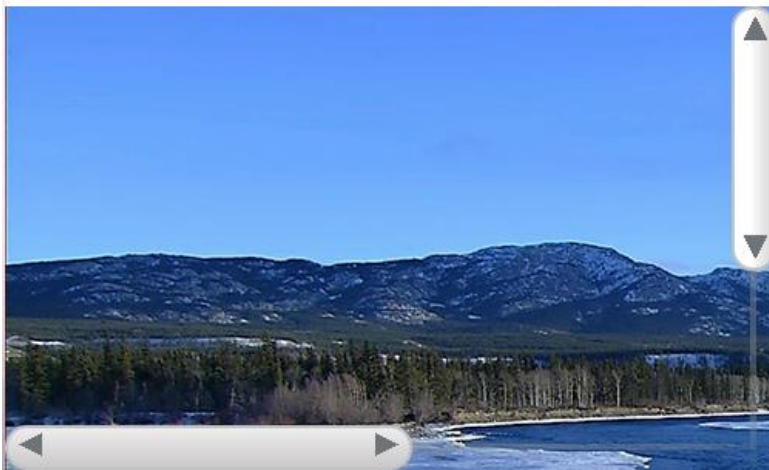
```
var rating = LGE.UI.getComp('rating');  
rating.setValue(0);
```

Supported SDK / Emulator Version

SDK Version	Emulator Version
2.2 or higher	LG Smart TV Emulator 2011 : Not Supported LG Smart TV Emulator 2012 : SDK 2.2 or higher LG Smart TV Emulator 2013 : SDK 3.0 or higher

Scroller

The Scroller component is scrollable container.



[Figure] Scroller Component

Inheritance Hierarchy

Object >> Component >> Container >> Scroller

Markup Interface, JS Interface (Constructor Parameters), and JS Interface (Methods) are listed in the following sections.

- [Markup Interface](#)
- [JS Interface \(Constructor Parameters\)](#)
- [JS Interface \(Methods\)](#)

Markup Interface

Example

```
<div lge-type="Scroller" lge-attr="img-scroll-direction:Both" id="Scroll11">  
...  
</div>
```

Attributes Summary

Attribute	Description
lge-attr	Attributes of the LGE component

lge-attr	Description
img-scroll-direction	Direction of scroll

img-scroll-direction

Description

Direction of scroll
Default is Vertical. (Vertical | Horizontal | Both)

Example

```
<div lge-type="Scroller" lge-attr="img-scroll-direction:Both">  
...  
</div>
```

JS Interface (Constructor Parameters)

Example

```
var ts6 = LGE.UI.Scroller({
  id: 'ScrollerTest',
  imgScrollDirection: 'Both',
  selector: ("td2"),
});
ts6.addContents("...");
```

Parameter	Description
id	Element ID of the component in document
imgScrollDirection	Direction of scroll
selector	The element that becomes parent of the component
style	CSS style of the component

id

Description

Element ID of the component in document.

Example

```
var ts6 = LGE.UI.Scroller({
  id: 'ScrollerTest',
  imgScrollDirection: 'Both',
  selector: ("td2"),
});
ts6.addContents("...");
```

imgScrollDirection

Description

Direction of scroll
Default is Vertical. (Vertical | Horizontal | Both)

Example

```
var ts6 = LGE.UI.Scroller({
  id: 'ScrollerTest',
  imgScrollDirection: 'Both',
  selector: ("td2"),
});
ts6.addContents("...");
```

selector

Description

The element that becomes parent of the component
Default is body.

Example

```
var ts6 = LGE.UI.Scroller({
  id: 'ScrollerTest',
  imgScrollDirection: 'Both',
  selector: ("td2"),
});
ts6.addContents("...");
```

style

Description

CSS style of the component

Example

```
var ts6 = LGE.UI.Scroller({
  id: 'ScrollerTest',
  imgScrollDirection: 'Both',
  selector: ("td2"),
  style: "width:100%",
});
ts6.addContents("...");
```


JS Interface (Methods)

Method	Description
addContents	Adds contents in the Scroller.
getScrollDirection	Gets the scroll direction in the Scroller.
getScrollLock	Returns true if scroll is locked.
setScrollDirection	Sets the scroll direction in the Scroller.
setScrollLock	Locks the scroll.

addContents

Description

Adds contents in the Scroller.

Parameters

`contents` (String or Object) Contents in the Scroller

Return Value

None

Example

```
var scroller = LGE.UI.getComp('scroller');
scroller.addContents("add contents");
scroller.addContents($("#otherElement"));
scroller.addContents(document.createTextNode("Hello"));
```

Supported SDK / Emulator Version

SDK Version	Emulator Version
2.2 or higher	LG Smart TV Emulator 2011 : Not Supported LG Smart TV Emulator 2012 : SDK 2.2 or higher LG Smart TV Emulator 2013 : SDK 3.0 or higher

getScrollDirection

Description

Gets the scroll direction in the Scroller.

Parameters

None

Return Value

`scrollDirection` (String) The scroll direction (Horizontal | Vertical | Both)

Example

```
var scroller = LGE.UI.getComp('scroller');
var direction = scroller.getScrollDirection();
```

Supported SDK / Emulator Version

SDK Version	Emulator Version
-------------	------------------

SDK Version	Emulator Version
2.2 or higher	LG Smart TV Emulator 2011 : Not Supported LG Smart TV Emulator 2012 : SDK 2.2 or higher LG Smart TV Emulator 2013 : SDK 3.0 or higher

getScrollLock

Description

Returns true if scroll is locked.

Parameters

None

Return Value

lock (Boolean) Whether the scroll is locked or not

Example

```
var scroller = LGE.UI.getComp('scroller');
if(scroller.getScrollLock())
    scroller.setScrollLock(false);
```

Supported SDK / Emulator Version

SDK Version	Emulator Version
2.2 or higher	LG Smart TV Emulator 2011 : Not Supported LG Smart TV Emulator 2012 : SDK 2.2 or higher LG Smart TV Emulator 2013 : SDK 3.0 or higher

setScrollDirection

Description

Sets the scroll direction in the Scroller.

Parameters

scrollDirection (String) The scroll direction (Horizontal | Vertical | Both)

Return Value

None

Example

```
var scroller = LGE.UI.getComp('scroller');
scroller.setScrollDirection("Horizontal");
```

Supported SDK / Emulator Version

SDK Version	Emulator Version
2.2 or higher	LG Smart TV Emulator 2011 : Not Supported LG Smart TV Emulator 2012 : SDK 2.2 or higher LG Smart TV Emulator 2013 : SDK 3.0 or higher

setScrollLock

Description

Locks the scroll.

Parameters

lock (String) Whether the scroll is locked or not (On | Off)

Return Value

None

Example

```
var scroller = LGE.UI.getComp('scroller');  
if(scroller.getScrollLock() == 'On')  
    scroller.setScrollLock('Off');
```

Supported SDK / Emulator Version

SDK Version	Emulator Version
2.2 or higher	LG Smart TV Emulator 2011 : Not Supported LG Smart TV Emulator 2012 : SDK 2.2 or higher LG Smart TV Emulator 2013 : SDK 3.0 or higher

Slider

The Slider is used for input fields that should contain a value from a range of numbers.



[Figure] Slider Component

Inheritance Hierarchy

Object >> Component >> Container >> ItemListComponent >> Slider

Markup Interface, JS Interface (Constructor Parameters), and JS Interface (Methods) are listed in the following sections.

- [Markup Interface](#)
- [JS Interface \(Constructor Parameters\)](#)
- [JS Interface \(Methods\)](#)

Markup Interface

Example

```
<input type="range" lge-type='Slider' value="0" min="0" max="100">
```

Attributes Summary

Attribute	Description
min	Indicates the allowed range of values for the element.
max	Indicates the allowed range of values for the element. The default maximum is 100.
value	Gives the default value of the input element.

JS Interface (Constructor Parameters)

Example

```
var slider1 = LGE.UI.Slider({
  selector: ("id1"),
  value: '0',
  min: '0',
  max: '100',
  id: 'slider1',
  style: 'width:500px',
});
```

Parameter	Description
id	Element ID of the component in document
max	Maximum value of the component
min	Minimum value of the component
style	CSS style of the component
selector	The element that becomes parent of the component
value	Value of the component

id

Description

Element ID of the component in document.

Example

```
var slider1 = LGE.UI.Slider({
  id: 'slider1',
  selector: ("id1"),
  value: '0',
  min: '0',
  max: '100',
});
```

max

Description

Maximum value of the slider can have.

Example

```
var slider1 = LGE.UI.Slider({
  id: 'slider1',
  selector: ("id1"),
  value: '0',
  min: '0',
  max: '100',
});
```

min

Description

Minimum value of the slider can have.

Example

```
var slider1 = LGE.UI.Slider({
  id: 'slider1',
  selector: ("id1"),
  value: '0',
  min: '0',
  max: '100',
});
```

style

Description

CSS style of the component

Example

```
var slider1 = LGE.UI.Slider({
  id: 'slider1',
  selector: ("id1"),
  value: '0',
  min: '0',
  max: '100',
  style: 'width:500px',
});
```

selector

Description

The element that becomes parent of the component
Default is body.

Example

```
var slider1 = LGE.UI.Slider({
  id: 'slider1',
  selector: ("id1"),
  value: '0',
  min: '0',
  max: '100',
  style: 'width:500px',
});
```

value

Description

Value of the component. The value of the component must be bigger than the min value and less than the max value.

Example

```
var slider1 = LGE.UI.Slider({
  id: 'slider1',
```

```
selector: ("id1"),  
value: '10',  
min: '0',  
max: '100',  
style: 'width:500px',  
});
```

JS Interface (Methods)

Method	Description
getMax	Gets the maximum value of the Slider.
getMin	Gets the minimum value of the Slider.
getValue	Gets the positioning value of the Slider.
setMax	Sets the maximum value of the Slider.
setMin	Sets the minimum value of the Slider.
setValue	Sets the positioning value of the Slider.

getMax

Description

Gets the max value of the Slider.

Parameters

None

Return Value

max (Number) The max value of the Slider

Example

```
var slider = LGE.UI.getComp('slider');  
var max = slider.getMax();
```

Supported SDK / Emulator Version

SDK Version	Emulator Version
2.2 or higher	LG Smart TV Emulator 2011 : Not Supported LG Smart TV Emulator 2012 : SDK 2.2 or higher LG Smart TV Emulator 2013 : SDK 3.0 or higher

getMin

Description

Gets the min value of Slider.

Parameters

None

Return Value

min (Number) The min value of the Slider

Example

```
var slider = LGE.UI.getComp('slider');  
var min = slider.getMin();
```

Supported SDK / Emulator Version

SDK Version	Emulator Version
2.2 or higher	LG Smart TV Emulator 2011 : Not Supported LG Smart TV Emulator 2012 : SDK 2.2 or higher

SDK Version	Emulator Version
	LG Smart TV Emulator 2013 : SDK 3.0 or higher

getValue

Description

Gets the value of the Slider.

Parameters

None

Return Value

value (Number) The value of the Slider

Example

```
var slider = LGE.UI.getComp('slider');
var max = slider.getValue();
```

Supported SDK / Emulator Version

SDK Version	Emulator Version
2.2 or higher	LG Smart TV Emulator 2011 : Not Supported LG Smart TV Emulator 2012 : SDK 2.2 or higher LG Smart TV Emulator 2013 : SDK 3.0 or higher

setMax

Description

Sets the max value of the Slider.

Parameters

max (Number) The max value of the Slider

Return Value

None

Example

```
var slider = LGE.UI.getComp('slider');
slider.setMax(10);
```

Supported SDK / Emulator Version

SDK Version	Emulator Version
2.2 or higher	LG Smart TV Emulator 2011 : Not Supported LG Smart TV Emulator 2012 : SDK 2.2 or higher LG Smart TV Emulator 2013 : SDK 3.0 or higher

setMin

Description

Sets the min value of the Slider.

Parameters

min (Number) The min value of the Slider

Return Value

None

Example

```
var slider = LGE.UI.getComp('slider');  
slider.setMin(-10);
```

Supported SDK / Emulator Version

SDK Version	Emulator Version
2.2 or higher	LG Smart TV Emulator 2011 : Not Supported LG Smart TV Emulator 2012 : SDK 2.2 or higher LG Smart TV Emulator 2013 : SDK 3.0 or higher

setValue

Description

Sets the value of the Slider.

Parameters

value (Number) The value of the Slider

Return Value

None

Example

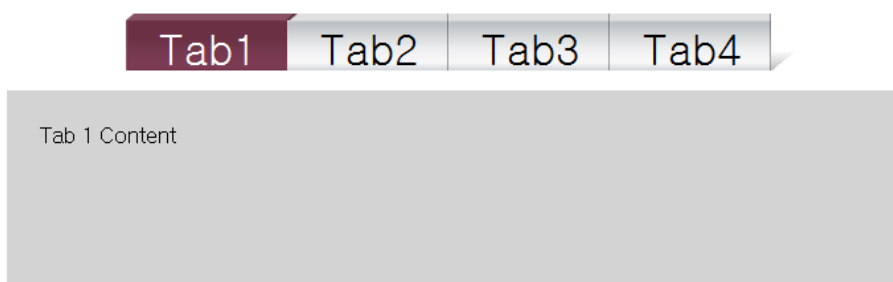
```
var slider = LGE.UI.getComp('slider');  
slider.setValue(0);
```

Supported SDK / Emulator Version

SDK Version	Emulator Version
2.2 or higher	LG Smart TV Emulator 2011 : Not Supported LG Smart TV Emulator 2012 : SDK 2.2 or higher LG Smart TV Emulator 2013 : SDK 3.0 or higher

Tab

The Tab component is container for group of tabs. This component consists of TabHeader and TabBody. TabHeader is a parent of TabInfo that is title of tab. TabBody is parent of the TabContents.



[Figure] Tab Component

Inheritance Hierarchy

Object >> Component >> Container >> TabHost

Markup Interface, JS Interface (Constructor Parameters), and JS Interface (Methods) are listed in the following sections.

- [Markup Interface](#)
- [JS Interface \(Constructor Parameters\)](#)
- [JS Interface \(Methods\)](#)

Markup Interface

Example

```
<div lge-type="TabHost" id="tab1">
  <div lge-type="TabHeader">
    <div lge-type="TabInfo" lge-attr="index:tab1;">
      <div>TabTitle1</div>
    </div>
    <div lge-type="TabInfo" lge-attr="index:tab2;">
      <div>TabTitle2</div>
    </div>
    <div lge-type="TabInfo" lge-attr="index:tab3;">
      <div>TabTitle3</div>
    </div>
  </div>

  <div lge-type="TabBody">
    <div lge-type="TabContents" lge-attr="index:tab1;">Tab1 Contents</div>
    <div lge-type="TabContents" lge-attr="index:tab2;">Tab2 Contents</div>
    <div lge-type="TabContents" lge-attr="index:tab3;">Tab3 Contents</div>
  </div>
</div>
```

Attributes Summary

Attribute	Description
lge-attr	Attributes of the LGE component

lge-attr	Description
index	Index of each tab

index

Description

Index of each tab. This attribute connects TabInfo and TabContents.

Example

```
<div lge-type="TabHost" id="tab1">
  <div lge-type="TabHeader">
    <div lge-type="TabInfo" lge-attr="index:tab1;">
      <div>TabTitle1</div>
    </div>
    <div lge-type="TabInfo" lge-attr="index:tab2;">
      <div>TabTitle2</div>
    </div>
  </div>

  <div lge-type="TabBody">
    <div lge-type="TabContents" lge-attr="index:tab1;">
      Tab1 Contents</div>
    <div lge-type="TabContents" lge-attr="index:tab2;">
      Tab2 Contents</div>
  </div>
</div>
```

JS Interface (Constructor Parameters)

Example

```
var tabhost = LGE.UI.Tab({
  text: [
    {title:'TabTitle1',content:'Tab 1 Content'},
    {title:'TabTitle2',content:'Tab 2 Content'},
    {title:'TabTitle3',content:'Tab 3 Content'}
  ]
  selector: ("td2"),
});
```

Parameter	Description
id	Element ID of the component in document
selector	The element that becomes parent of the component
text	A list of tabs

id

Description

Element ID of the component in document.

Example

```
var tabhost = LGE.UI.Tab({
  text: [
    {title:'TabTitle1',content:'Tab 1 Content'},
    {title:'TabTitle2',content:'Tab 2 Content'},
    {title:'TabTitle3',content:'Tab 3 Content'}
  ]
  selector: ("td2"),
  id:'tabhost',
});
```

selector

Description

The element that becomes parent of the component
Default is body.

Example

```
var tabhost = LGE.UI.Tab({
  text: [
    {title:'TabTitle1',content:'Tab 1 Content'},
    {title:'TabTitle2',content:'Tab 2 Content'},
    {title:'TabTitle3',content:'Tab 3 Content'}
  ]
  selector: ("td2"),
});
```

text

Description

A list of tabs. Each tab has two parameters.

- title : Title of tab.
- content : Content of tab

Example

```
var tabhost = LGE.UI.Tab({
  text:[
    {title:'TabTitle1',content:'Tab 1 Content'},
    {title:'TabTitle2',content:'Tab 2 Content'},
    {title:'TabTitle3',content:'Tab 3 Content'}
  ]
  selector: ("td2"),
});
```

JS Interface (Methods)

Method	Description
addTab	Adds an item of the Tab.
getSelected	Gets the current selected item of the Tab.
getTabHeight	Gets the height of the Tab
getTabWidth	Gets the width of the Tab
setSelected	Selects index item of the Tab.
setTab	Sets the item of the Tab.
setTabHeight	Sets the height of the Tab.
setTabWidth	Sets the width of the Tab.

addTab

Description

Adds an item of the Tab.

Parameters

`tabInfo` (Object) A set (tabTitle, content) of Tab information
- tabTitle : The title of the tab
- content : The content of the tab

Return Value

None

Example

```
var tabhost = LGE.UI.getComp('tab');
tabhost.addTab({
  tabTitle: "title1",
  content: "<p>hellow world!</p>",
});
```

Supported SDK / Emulator Version

SDK Version	Emulator Version
2.2 or higher	LG Smart TV Emulator 2011 : Not Supported LG Smart TV Emulator 2012 : SDK 2.2 or higher LG Smart TV Emulator 2013 : SDK 3.0 or higher

getSelected

Description

Gets the current selected item of the Tab.

Parameters

None

Return Value

`tabID` (Number) The index of the tab

Example

```
var tabhost = LGE.UI.getComp('tab');  
var index = tabhost.getSelected();
```

Supported SDK / Emulator Version

SDK Version	Emulator Version
2.2 or higher	LG Smart TV Emulator 2011 : Not Supported LG Smart TV Emulator 2012 : SDK 2.2 or higher LG Smart TV Emulator 2013 : SDK 3.0 or higher

getTabHeight

Description

Gets the height of the Tab.

Parameters

None

Return Value

height (Number) The height of the Tab

Example

```
var tabhost = LGE.UI.getComp('tab');  
var height = tabhost.getTabHieght();
```

Supported SDK / Emulator Version

SDK Version	Emulator Version
2.2 or higher	LG Smart TV Emulator 2011 : Not Supported LG Smart TV Emulator 2012 : SDK 2.2 or higher LG Smart TV Emulator 2013 : SDK 3.0 or higher

getTabWidth

Description

Gets the Width of the Tab.

Parameters

None

Return Value

width (Number) The width of the Tab

Example

```
var tabhost = LGE.UI.getComp('tab');  
var width = tabhost.getTabWidth();
```

Supported SDK / Emulator Version

SDK Version	Emulator Version
2.2 or higher	LG Smart TV Emulator 2011 : Not Supported LG Smart TV Emulator 2012 : SDK 2.2 or higher LG Smart TV Emulator 2013 : SDK 3.0 or higher

setSelected

Description

Selects the current selected item of the Tab.

Parameters

tabID (Number) The index of the tab

Return Value

None

Example

```
var tabhost = LGE.UI.getComp('tab');
tabhost.setSelected(1);
```

Supported SDK / Emulator Version

SDK Version	Emulator Version
2.2 or higher	LG Smart TV Emulator 2011 : Not Supported LG Smart TV Emulator 2012 : SDK 2.2 or higher LG Smart TV Emulator 2013 : SDK 3.0 or higher

setTab

Description

Sets the item of the Tab.

Parameters

tabID (Number) The index of the tab
tabInfo (Object) A set (tabTitle, content) of Tab information
- tabTitle : The title of the tab
- content : The content of the tab

Return Value

None

Example

```
var tabhost = LGE.UI.getComp('tab');
tabhost.setTab(2, {
  tabTitle: "title2",
  content: "<p>hellow world!</p>",
});
```

Supported SDK / Emulator Version

SDK Version	Emulator Version
2.2 or higher	LG Smart TV Emulator 2011 : Not Supported LG Smart TV Emulator 2012 : SDK 2.2 or higher LG Smart TV Emulator 2013 : SDK 3.0 or higher

setTabHeight

Description

Sets the height of the Tab.

Parameters

height (Number) The height of the Tab

Return Value

None

Example

```
var tabhost = LGE.UI.getComp('tab');
tabhost.setTabHieght(500);
```

Supported SDK / Emulator Version

SDK Version	Emulator Version
2.2 or higher	LG Smart TV Emulator 2011 : Not Supported LG Smart TV Emulator 2012 : SDK 2.2 or higher LG Smart TV Emulator 2013 : SDK 3.0 or higher

setTabWidth

Description

Sets the width of the Tab.

Parameters

width (Number) The width of the Tab

Return Value

None

Example

```
var tabhost = LGE.UI.getComp('tab');
tabhost.setTabWidth(800);
```

Supported SDK / Emulator Version

SDK Version	Emulator Version
2.2 or higher	LG Smart TV Emulator 2011 : Not Supported LG Smart TV Emulator 2012 : SDK 2.2 or higher LG Smart TV Emulator 2013 : SDK 3.0 or higher

TextInput

The TextInput component allows users to input data.



[Figure] TextInput Component

Inheritance Hierarchy

Object >> Component >> Container >> TextInput

Markup Interface, JS Interface (Constructor Parameters), and JS Interface (Methods) are listed in the following sections.

- [Markup Interface](#)
- [JS Interface \(Constructor Parameters\)](#)
- [JS Interface \(Methods\)](#)

Markup Interface

Example

```
<input type="text" lge-type="TextInput" value="value1" id='text1' />
```

```
<input type="password" lge-type="TextInput" value="value2" id='text1' />
```

```
<textarea lge-type="TextInput" name="textarea12" ></textarea>
```

Attributes Summary

Attribute	Description
lge-attr	Attributes of the LGE component
type	The type of Input

lge-attr	Description
text-inline	More compact component that is only as wide as the text inside

text-inline

Description

More compact component that is only as wide as the text inside
Default value is false. (true | false)

Example

```
<input type="text" lge-type="TextInput" value="value2" id='text1' lge-attr="text-  
inline:true;" />
```

JS Interface (Constructor Parameters)

Example

```
var ts8 = LGE.UI.TextInput({
  type:"text",
  selector: ("td2"),
});
```

```
var ts9 = LGE.UI.TextInput({
  type:"password",
  selector: ("td2"),
});
```

Parameter	Description
id	Element ID of the component in document
selector	The element that becomes parent of the component
style	CSS style of the component
text	Text of the the component
textInline	More compact component that is only as wide as the text inside
type	Type of the component
value	Value of the component

id

Description

Element ID of the component in document.

Example

```
var ts8 = LGE.UI.TextInput({
  id:"textinput1",
  type:"text",
  selector: ("td2"),
});
```

selector

Description

The element that becomes parent of the component
Default is body.

Example

```
var ts8 = LGE.UI.TextInput({
  id:"textinput1",
  type:"text",
  selector: ("td2"),
});
```

style

Description

CSS style of the component

Example

```
var ts8 = LGE.UI.TextInput({
  type:"text",
  selector:("\td2"),
  style:"left:100px",
});
```

text

Description

The text of the component

Example

```
var ts8 = LGE.UI.TextInput({
  type:"text",
  selector:("\td2"),
  style:"width:100px",
  text:"text . . .",
});
```

textinline

Description

More compact component that is only as wide as the text inside
Default value is false. (true | false)

Example

```
var ts8 = LGE.UI.TextInput({
  type:"text",
  selector:("\td2"),
  style:"width:100px",
  text:"text . . .",
  textInline: 'true',
});
```

type

Description

The type of the component (text | password)

Example

```
var ts8 = LGE.UI.TextInput({
  type: "text",
  selector:("\td2"),
  style:"width:100px",
  text:"text . . .",
});
```

JS Interface (Methods)

Method	Description
getText	Gets the text in the TextInput.
getTextInline	Gets the text-inline the TextInput
setText	Sets the text in the TextInput.
setTextInline	Sets the text-inline in the TextInput.

getText

Description

Gets the text in the TextInput.

Parameters

None

Return Value

text (String) The text in the TextInput

Example

```
var text = textInput1.getText();
```

Supported SDK / Emulator Version

SDK Version	Emulator Version
2.2 or higher	LG Smart TV Emulator 2011 : Not Supported LG Smart TV Emulator 2012 : SDK 2.2 or higher LG Smart TV Emulator 2013 : SDK 3.0 or higher

getTextInline

Description

Gets the text-inline of the TextInput.

Parameters

None

Return Value

bool (Boolean) The text-inline of the TextInput

Example

```
var textinline = textInput.getTextInline();
```

Supported SDK / Emulator Version

SDK Version	Emulator Version
2.2 or higher	LG Smart TV Emulator 2011 : Not Supported LG Smart TV Emulator 2012 : SDK 2.2 or higher LG Smart TV Emulator 2013 : SDK 3.0 or higher

setText

Description

Gets the text in the TextInput.

Parameters

text (String) The text in the TextInput

Return Value

None

Example

```
textInput1.setText("text input test");
```

Supported SDK / Emulator Version

SDK Version	Emulator Version
2.2 or higher	LG Smart TV Emulator 2011 : Not Supported LG Smart TV Emulator 2012 : SDK 2.2 or higher LG Smart TV Emulator 2013 : SDK 3.0 or higher

setTextInline

Description

Sets the text-inline of the TextInput.

Parameters

bool (Boolean) The text-inline of the TextInput

Return Value

None

Example

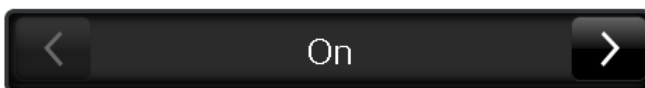
```
textInput1.setTextInline(true);
```

Supported SDK / Emulator Version

SDK Version	Emulator Version
2.2 or higher	LG Smart TV Emulator 2011 : Not Supported LG Smart TV Emulator 2012 : SDK 2.2 or higher LG Smart TV Emulator 2013 : SDK 3.0 or higher

ToggleSwitch

The ToggleSwitch is used for selecting option.



[Figure] ToggleSwitch Component

Inheritance Hierarchy

Object >> Component >> Container >> ItemListComponent >> SelectableList >> ToggleSwitch

Markup Interface, JS Interface (Constructor Parameters), and JS Interface (Methods) are listed in the following sections.

- [Markup Interface](#)

- [JS Interface \(Constructor Parameters\)](#)
- [JS Interface \(Methods\)](#)

Markup Interface

Example

```
<div lge-type="ToggleSwitch" id="toggleswitch1">  
  <select>  
    <option>On</option>  
    <option selected>Off</option>  
  </select>  
</div>
```

Attributes Summary

Attribute	Description
lge-attr	Attributes of the LGE component

lge-attr	Description
text-inline	More compact component that is only as wide as the text inside

text-inline

Description

More compact component that is only as wide as the text inside
Default value is false. (true | false)

Example

```
<div lge-type="ToggleSwitch" id="toggleswitch1" lge-attr="text-inline:true;" >  
  <select>  
    <option>On</option>  
    <option selected>Off</option>  
  </select>  
</div>
```

JS Interface (Constructor Parameters)

Example

```
var toggleswitch = LGE.UI.ToggleSwitch({
  on: {text: "On"},
  off: {text: "Off"},
  selector: ("td2")
});
```

Parameter	Description
id	Element ID of the component in document
on	Shows the text when the component is On.
off	Shows the text when the component is Off.
selector	The element that becomes parent of the component
textInline	More compact component that is only as wide as the text inside

id

Description

Element ID of the component in document.

Example

```
var toggleswitch = LGE.UI.ToggleSwitch({
  id: 'toggleswitch',
  on: {text: "On"},
  off: {text: "Off"},
  selector: ("td2"),
  textInline: true,
});
```

on

Description

Shows the text when the component is On.

Example

```
var toggleswitch = LGE.UI.ToggleSwitch({
  on: {text: "On"},
  off: {text: "Off"},
  selector: ("td2"),
  textInline: true,
});
```

off

Description

Shows the text when the component is Off.

Example

```
var toggleswitch = LGE.UI.ToggleSwitch({
  on:{text:"On"},
  off: {text:"Off"},
  selector: ("td2"),
  textInline:true,
});
```

selector

Description

The element that becomes parent of the component
Default is body.

Example

```
var toggleswitch = LGE.UI.ToggleSwitch({
  on:{text:"On"},
  off:{text:"Off"},
  selector: ("td2"),
  textInline:true,
});
```

textinline

Description

More compact component that is only as wide as the text inside
Default value is false. (true | false)

Example

```
var ts8 = LGE.UI.TextInput({
  type:"text",
  selector: ("td2"),
  style:"width:100px",
  text:"text . . .",
  textInline: 'true',
});
```

JS Interface (Methods)

Method	Description
getSelected	Gets the selected index of ToggleSwitch.
getText	Gets the selected text of ToggleSwitch.
getTextInline	Gets the text-inline of ToggleSwitch
setTextRes	Sets the resource text of the ToggleSwitch.
setSelected	Sets the selected index of the ToggleSwitch.
setText	Sets the text of the ToggleSwitch.
setTextInline	Sets the text-inline of ToggleSwitch.

getSelected

Description

Gets the selected index of ToggleSwitch.

Parameters

None

Return Value

`index` (Number) The selected index of ToggleSwitch

Example

```
var toggle = LGE.UI.getComp('toggle');  
var index = toggle.getSelected();
```

Supported SDK / Emulator Version

SDK Version	Emulator Version
2.2 or higher	LG Smart TV Emulator 2011 : Not Supported LG Smart TV Emulator 2012 : SDK 2.2 or higher LG Smart TV Emulator 2013 : SDK 3.0 or higher

getText

Description

Gets the selected text of ToggleSwitch.

Parameters

None

Return Value

`text` (String) The selected text of ToggleSwitch

Example

```
var toggle = LGE.UI.getComp('toggle');  
var text = toggle.getText();
```

Supported SDK / Emulator Version

SDK Version	Emulator Version
-------------	------------------

SDK Version	Emulator Version
2.2 or higher	LG Smart TV Emulator 2011 : Not Supported LG Smart TV Emulator 2012 : SDK 2.2 or higher LG Smart TV Emulator 2013 : SDK 3.0 or higher

getTextInline

Description

Gets the text-inline of the ToggleSwitch.

Parameters

None

Return Value

bool (Boolean) The text-inline of the ToggleSwitch

Example

```
var toggle = LGE.UI.getComp('toggle');
var textinline = toggle.getTextInline();
```

Supported SDK / Emulator Version

SDK Version	Emulator Version
2.2 or higher	LG Smart TV Emulator 2011 : Not Supported LG Smart TV Emulator 2012 : SDK 2.2 or higher LG Smart TV Emulator 2013 : SDK 3.0 or higher

setTextRes

Description

Sets the text of the ToggleSwitch.

Parameters

index (Number) The index of ToggleSwitch's text
value (String) The value of text resource

Return Value

None

Example

```
var toggle = LGE.UI.getComp('toggle');
toggle.setTextRes(1, "Off");
```

Supported SDK / Emulator Version

SDK Version	Emulator Version
2.2 or higher	LG Smart TV Emulator 2011 : Not Supported LG Smart TV Emulator 2012 : SDK 2.2 or higher LG Smart TV Emulator 2013 : SDK 3.0 or higher

setSelected

Description

Sets the selected index of the ToggleSwitch.

Parameters

`index` (Number) The index of ToggleSwitch's text

Return Value

None

Example

```
var toggle = LGE.UI.getComp('toggle');  
toggle.setSelected(1);
```

Supported SDK / Emulator Version

SDK Version	Emulator Version
2.2 or higher	LG Smart TV Emulator 2011 : Not Supported LG Smart TV Emulator 2012 : SDK 2.2 or higher LG Smart TV Emulator 2013 : SDK 3.0 or higher

setText

Description

Sets the text of the ToggleSwitch.

Parameters

`index` (Number) The index of ToggleSwitch's text
`text` (String) The text of the ToggleSwitch

Return Value

None

Example

```
var toggle = LGE.UI.getComp('toggle');  
toggle.setText(1, "Off");
```

Supported SDK / Emulator Version

SDK Version	Emulator Version
2.2 or higher	LG Smart TV Emulator 2011 : Not Supported LG Smart TV Emulator 2012 : SDK 2.2 or higher LG Smart TV Emulator 2013 : SDK 3.0 or higher

setTextInline

Description

Sets the text-inline of ToggleSwitch.

Parameters

`bool` (Boolean) Whether the text-inline is true or not.

Return Value

None

Example

```
var toggle = LGE.UI.getComp('toggle');
toggle.setTextInline(true);
```

Supported SDK / Emulator Version

SDK Version	Emulator Version
2.2 or higher	LG Smart TV Emulator 2011 : Not Supported LG Smart TV Emulator 2012 : SDK 2.2 or higher LG Smart TV Emulator 2013 : SDK 3.0 or higher

TvHelp

The TvHelp component support users control the Button with the remote control.



[Figure] TvHelp Component

Inheritance Hierarchy

Object >> Component >> Container >> ItemListComponent >> TvHelp

Markup Interface, JS Interface (Constructor Parameters), and JS Interface (Methods) are listed in the following sections.

- [Markup Interface](#)
- [JS Interface \(Constructor Parameters\)](#)
- [JS Interface \(Methods\)](#)

Markup Interface

Example

```
<div lge-type="TvHelp" id="TvHelpTest">
  <input type="button" lge-attr='option:Red' value="Red"/>
  <input type="button" lge-attr='option:Yellow' value="Yellow"/>
  <a href='http://www.lge.com' lge-attr='option:Green'>Green</a>
</div>
```

Attributes Summary

Attribute	Description
lge-attr	Attributes of the LGE component

lge-attr	Description
option	Color of the TvHelp button

option

Description

This option is color of TvHelp Button. There are four colors.
(Red, Yellow, Green, and Blue)

Example

```
<div lge-type="TvHelp" id="TvHelpTest">
  <input type="button" lge-attr='option:Red' value="Red"/>
  <input type="button" lge-attr='option:Yellow' value="Yellow"/>
  <a href='http://www.lge.com' lge-attr='option:Green'>Green</a>
</div>
```

JS Interface (Constructor Parameters)

Example

```
var tvhelp = LGE.UI.TvHelp({
  selector: ("td2"),
  id: 'tvhelp'
  items: [
    {tag: 'input', type: 'button', option: 'Red', text: 'Red'},
    {tag: 'input', type: 'image', option: 'Blue', text: 'Red'},
    {tag: 'a', option: 'Yellow', text: 'Yellow', link: 'http://lge.com'},
    {tag: 'a', option: 'Green', text: 'Green', link: 'http://lge.com'}, ],
});
```

Parameter	Description
items	A list of buttons
id	Element ID of the component in document
selector	The element that becomes parent of the component
style	CSS style of the component

id

Description

Element ID of the component in document.

Example

```
var tvhelp1 = LGE.UI.TvHelp({
  id: 'tvhelp',
  selector: ("td2"),
  items: [
    {tag: 'input', type: 'button', option: 'Red', text: 'Red'},
    {tag: 'input', type: 'image', option: 'Blue', text: 'Red'},
    {tag: 'a', option: 'Yellow', text: 'Yellow', link: 'http://lge.com'},
    {tag: 'a', option: 'Green', text: 'Green', link: 'http://lge.com'}, ],
});
```

items

Description

A list of buttons in TvHelp.

Button

- id : Element ID of the Button
- tag : tag of the button. There are two tags: <A> , <INPUT>
- type : type of the <INPUT> (if tag is <INPUT>) (button | reset | submit | image)
- option : Color of the button.
- text : text of the button.
- link : link of the button (if tag is <A>)
- style : CSS style of the component

Example

```
var tvhelp1 = LGE.UI.TvHelp({
  selector: ("td2"),
  items: [
```

```
{tag:'input', type:'button',option:'Red',text:'Red'},
{tag:'input', type:'image',option:'Blue',text:'Red'},
{tag:'a',option:'Yellow',text:'Yellow',link:'http://lge.com'},
{tag:'a',option:'Green',text:'Green',link:'http://lge.com'},],
});
```

selector

Description

The element that becomes parent of the component
Default is body.

Example

```
var tvhelp1 = LGE.UI.TvHelp({
  id:"TvHelp1",
  selector: ("td2"),
  items:[
    {tag:'input', type:'button',option:'Red',text:'Red'},
    {tag:'a',option:'Green',text:'green',link:'http://lge.com'},
  ],
});
```

style

Description

CSS style of the component

Example

```
var tvhelp1 = LGE.UI.TvHelp({
  selector: ("td2"),
  items:[
    {tag:'input', type:'button',option:'Red',text:'Red'},
    {tag:'a',option:'Green',text:'green',link:'http://lge.com'},
  ],
  style:"top:100px",
});
```

JS Interface (Methods)

Method	Description
addItem	Adds a TvHelp Button in the TvHelp.
getLink	Gets the link url of the TvHelp Button in the TvHelp.
getOption	Gets the option (Red,Blue,Yellow,Green) of the TvHelp Button.
getText	Gets the text of the Button.
removeItem	Removes the TvHelp Button in the TvHelp.
setItem	Sets the TvHelp Button.

addItem

Description

Adds a TvHelp Button in the TvHelp.

Parameters

`options` (Object) The sets of the TvHelp Button Information.
- tag : the element tag type of the Button.
- type : the type of the Button (If tag is INPUT, required)
- link : the url link of the Button (if tag is <A>)
- text : the text of the Button
- option : the color of the Button (Red | Blue| Green | Yellow)

Return Value

None

Example

```
var tvhelp = LGE.UI.getComp('tvhelp');
tvhelp.addItem({
  tag: "a",
  link: "http://www.lge.com",
  text: "button",
  option: "Red"
});
```

Supported SDK / Emulator Version

SDK Version	Emulator Version
2.2 or higher	LG Smart TV Emulator 2011 : Not Supported LG Smart TV Emulator 2012 : SDK 2.2 or higher LG Smart TV Emulator 2013 : SDK 3.0 or higher

getLink

Description

Gets the link url of the TvHelp Button in the TvHelp.

Parameters

`index` (Number) The index of the TvHelp Button in the TvHelp

Return Value

`url` (String) The link url of this TvHelp Button

Example

```
var tvhelp = LGE.UI.getComp('tvhelp');  
var url = tvhelp.getLink();
```

Supported SDK / Emulator Version

SDK Version	Emulator Version
2.2 or higher	LG Smart TV Emulator 2011 : Not Supported LG Smart TV Emulator 2012 : SDK 2.2 or higher LG Smart TV Emulator 2013 : SDK 3.0 or higher

getOption

Description

Gets the option (Red, Blue, Yellow, Green) of the TvHelp Button.

Parameters

`index` (Number) The index of the TvHelp Button in the TvHelp

Return Value

`option` (String) The option (Red, Blue, Yellow, Green) of the TvHelp Button

Example

```
var tvhelp = LGE.UI.getComp('tvhelp');  
var colorOfButton = tvhelp.getOption(1);
```

Supported SDK / Emulator Version

SDK Version	Emulator Version
2.2 or higher	LG Smart TV Emulator 2011 : Not Supported LG Smart TV Emulator 2012 : SDK 2.2 or higher LG Smart TV Emulator 2013 : SDK 3.0 or higher

getText

Description

Gets the text of the Button.

Parameters

`index` (Number) The index of the TvHelp Button in the TvHelp

Return Value

`text` (String) The text of the Button

Example

```
var tvhelp = LGE.UI.getComp('tvhelp');  
var colorOfButton = tvhelp.getOption(1);
```

Supported SDK / Emulator Version

SDK Version	Emulator Version
2.2 or higher	LG Smart TV Emulator 2011 : Not Supported LG Smart TV Emulator 2012 : SDK 2.2 or higher LG Smart TV Emulator 2013 : SDK 3.0 or higher

removeItem

Description

Removes the TvHelp Button in the TvHelp.

Parameters

`index` (Number) The index of the TvHelp Button in the TvHelp

Return Value

None

Example

```
var tvhelp = LGE.UI.getComp('tvhelp');  
tvhelp.removeItem(1);
```

Supported SDK / Emulator Version

SDK Version	Emulator Version
2.2 or higher	LG Smart TV Emulator 2011 : Not Supported LG Smart TV Emulator 2012 : SDK 2.2 or higher LG Smart TV Emulator 2013 : SDK 3.0 or higher

setItem

Description

Gets the selected index of ToggleSwitch.

Parameters

`index` (Number) The index of the TvHelp Button in the TvHelp
`options` (Object) The set of the TvHelp Button Information
- link : the url link of the Button (if tag is A)
- text : the text of the Button
- option : the color of the Button (Red | Blue| Green | Yellow)

Return Value

None

Example

```
var tvhelp = LGE.UI.getComp('tvhelp');  
tvhelp.setItem(0, {  
  link: "http://www.lge.com",  
  text: "button",  
  option: "Red"  
});
```

Supported SDK / Emulator Version

SDK Version	Emulator Version
2.2 or higher	LG Smart TV Emulator 2011 : Not Supported LG Smart TV Emulator 2012 : SDK 2.2 or higher LG Smart TV Emulator 2013 : SDK 3.0 or higher

PageEffects

Page effect allows you to change page with effects. There are four types of page effect and methods. (Fade, Flip, Pop, and Slide)

JS Interface (Constructor Parameters), JS Interface (Methods), and Effects are listed in the following sections.

- [JS Interface \(Constructor Parameters\)](#)
- [JS Interface \(Methods\)](#)
- [FadeEffect](#) (LGE.PageEffect.FadeEffect)
- [FlipEffect](#) (LGE.PageEffect.FlipEffect)
- [PopEffect](#) (LGE.PageEffect.PopEffect)
- [SlideEffect](#) (LGE.PageEffect.SlideEffect)

JS Interface (Constructor Parameters)

Parameter	Description
currentPage	The current page for effect

currentPage

Description

The current page for effect

Example

```
effect = IGE.PageEffect.FlipEffect({
  currentPage: $('#page1'),
});
```


JS Interface (Methods)

Method	Description
execute	Executes effect

execute

Description

Executes effect animation.

Parameters

target	(Object) The page will be on the display after effect.
options	(Object) The options for effect. (duration timing direction) - duration : Determines how long the animation will run. This unit is milliseconds. - timing : Determines how an animation progresses between keyframes. (ease linear ease-in ease-out ease-in-out) - direction : Determines animation direction. (left right up down)
commands	(Object) The command that has 'before' and 'after'. 'before' command is executed before effect. 'after' command is executed after effect.

Return Value

None

Example

```
var cCmd = {
  before:function() {
    if(isCurrentPage) $page2.css('visibility','hidden');
    else $page1.css('visibility','hidden');
  },
  after:function() {
    if(isCurrentPage) {
      $page2.css('visibility','visible');
      $page1.css('visibility','hidden');
      isCurrentPage = false;
    }else {
      $page1.css('visibility','visible');
      $page2.css('visibility','hidden');
      isCurrentPage = true;
    }
  }
};

var opt = {
  duration: 500,
  timing:'linear',
  direction: 'left',
};

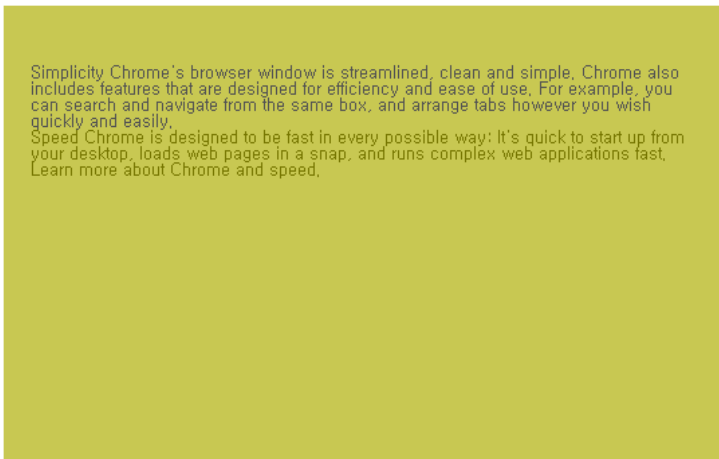
effect.execute($page2,opt,cCmd);
```

Supported SDK / Emulator Version

SDK Version	Emulator Version
2.2 or higher	LG Smart TV Emulator 2011 : Not Supported LG Smart TV Emulator 2012 : SDK 2.2 or higher LG Smart TV Emulator 2013 : SDK 3.0 or higher

FadeEffect

FadeEffect causes the current page to fade out while making the other page seems to be concealed.



[Figure] FadeEffect

Example

```
<script type="text/javascript">

var isCurrentPage = true;

$('#button1').bind('click',function(){
  var $page1 = $('#page1'), $page2 = $('#page2');

  var cCmd = {
    before:function() {
      if(isCurrentPage) $page2.css('visibility','hidden');
      else $page1.css('visibility','hidden');
    },
    after:function() {
      if(isCurrentPage) {
        $page2.css('visibility','visible');
        $page1.css('visibility','hidden');
        isCurrentPage = false;
      }else {
        $page1.css('visibility','visible');
        $page2.css('visibility','hidden');
        isCurrentPage = true;
      }
    }
  };

  var opt = {
    duration: 500,
    timing:'linear',
    direction: 'down',
  };

  var effect = {};
  if(isCurrentPage) {
    effect = LGE.PageEffect.FadeEffect({currentPage:$page1});
    effect.execute($page2,opt,cCmd);
  }else {
    effect = LGE.PageEffect.SlideEffect({currentPage:$page2});
    effect.execute($page1,opt,cCmd);
  }
};
```

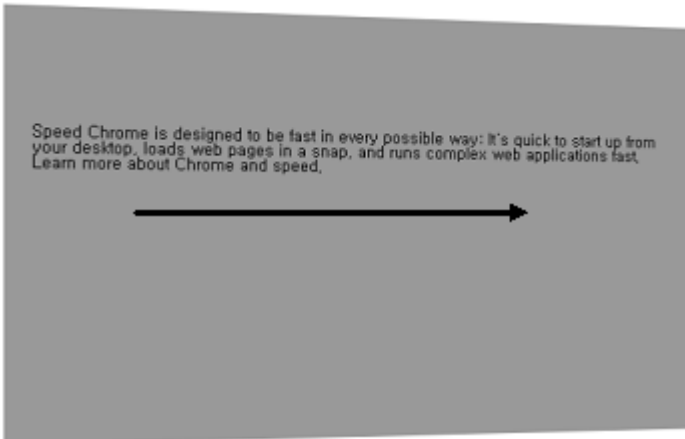
```
}  
  
});  
</script>  
  
<input id="button1" type="button" lge-type="Button" value="Change" />  
  
<div id="page1"> page1 </div>  
<div id="page2"> page2 </div>
```

Supported SDK / Emulator Version

SDK Version	Emulator Version
2.2 or higher	LG Smart TV Emulator 2011 : Not Supported
	LG Smart TV Emulator 2012 : SDK 2.2 or higher
	LG Smart TV Emulator 2013 : SDK 3.0 or higher

FlipEffect

FlipEffect causes the current page to flip while making the other page seems to be concealed.



[Figure] FlipEffect

Example

```
<script type="text/javascript">

var isCurrentPage = true;

$('#button1').bind('click',function(){
    var $page1 = $('#page1'), $page2 = $('#page2');

    var cCmd = {
        before:function() {
            if(isCurrentPage) $page2.css('visibility','hidden');
            else $page1.css('visibility','hidden');
        },
        after:function() {
            if(isCurrentPage) {
                $page2.css('visibility','visible');
                $page1.css('visibility','hidden');
                isCurrentPage = false;
            }else {
                $page1.css('visibility','visible');
                $page2.css('visibility','hidden');
                isCurrentPage = true;
            }
        }
    };

    var opt = {
        duration: 500,
        timing:'linear',
        direction: 'down',
    };

    var effect = {};
    if(isCurrentPage) {
        effect = LGE.PageEffect.FadeEffect({currentPage:$page1});
        effect.execute($page2,opt,cCmd);
    }else {
```

```

    effect = LGE.PageEffect.SlideEffect({currentPage:$page2});
    effect.execute($page1,opt,cCmd);
  }

});
</script>

<input id="button1" type="button" lge-type="Button" value="Change" />

<div id="page1"> page1 </div>
<div id="page2"> page2 </div>

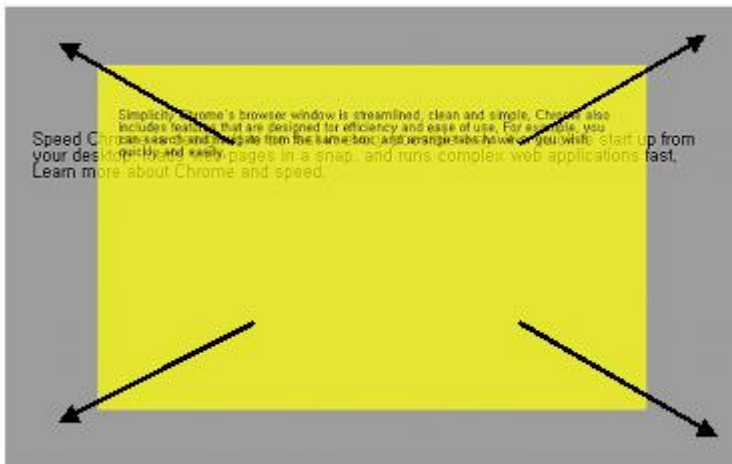
```

Supported SDK / Emulator Version

SDK Version	Emulator Version
2.2 or higher	LG Smart TV Emulator 2011 : Not Supported
	LG Smart TV Emulator 2012 : SDK 2.2 or higher
	LG Smart TV Emulator 2013 : SDK 3.0 or higher

PopEffect

PopEffect causes the current page to pop up while making the other page seems to be concealed.



[Figure] PopEffect

Example

```
<script type="text/javascript">

var isCurrentPage = true;

$('#button1').bind('click',function(){
    var $page1 = $('#page1'), $page2 = $('#page2');

    var cCmd = {
        before:function() {
            if(isCurrentPage) $page2.css('visibility','hidden');
            else $page1.css('visibility','hidden');
        },
        after:function() {
            if(isCurrentPage) {
                $page2.css('visibility','visible');
                $page1.css('visibility','hidden');
                isCurrentPage = false;
            }else {
                $page1.css('visibility','visible');
                $page2.css('visibility','hidden');
                isCurrentPage = true;
            }
        }
    };

    var opt = {
        duration: 500,
        timing:'linear',
        direction: 'down',
    };

    var effect = {};
    if(isCurrentPage) {
        effect = LGE.PageEffect.PopEffect({currentPage:$page1});
        effect.execute($page2,opt,cCmd);
    }else {
        effect = LGE.PageEffect.PopEffect({currentPage:$page2});
        effect.execute($page1,opt,cCmd);
    }
};
```

```

    }

});
</script>

<input id="button1" type="button" lge-type="Button" value="Change" />

<div id="page1"> page1 </div>
<div id="page2"> page2 </div>

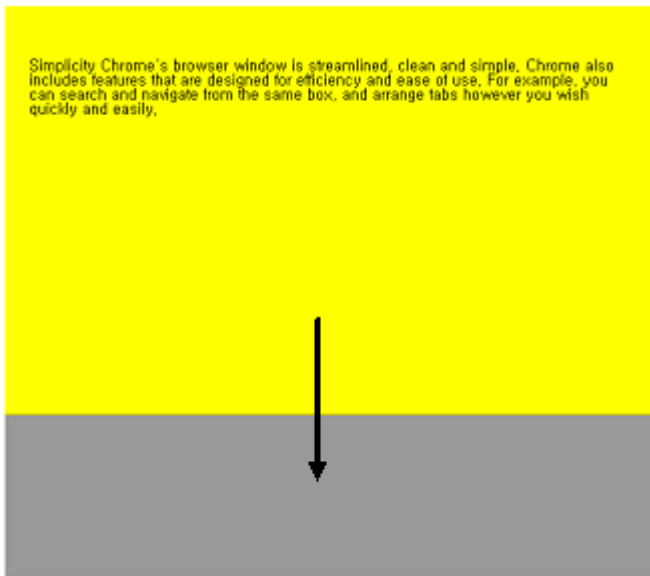
```

Supported SDK / Emulator Version

SDK Version	Emulator Version
2.2 or higher	LG Smart TV Emulator 2011 : Not Supported
	LG Smart TV Emulator 2012 : SDK 2.2 or higher
	LG Smart TV Emulator 2013 : SDK 3.0 or higher

SlideEffect

SlideEffect causes the current page to slide up while making the other page seems to be concealed.



[Figure] SlideEffect

Example

```
<script type="text/javascript">

var isCurrentPage = true;

$('#button1').bind('click',function(){
  var $page1 = $('#page1'), $page2 = $('#page2');

  var cCmd = {
    before:function() {
      if(isCurrentPage) $page2.css('visibility','hidden');
      else $page1.css('visibility','hidden');
    },
    after:function() {
      if(isCurrentPage) {
        $page2.css('visibility','visible');
        $page1.css('visibility','hidden');
        isCurrentPage = false;
      }else {
        $page1.css('visibility','visible');
        $page2.css('visibility','hidden');
        isCurrentPage = true;
      }
    }
  };

  var opt = {
    duration: 500,
    timing:'linear',
    direction: 'down',
  };

  var effect = {};
  if(isCurrentPage) {
    effect = LGE.PageEffect.SlideEffect({currentPage:$page1});
```



```

    effect.execute($page2,opt,cCmd);
  }else {
    effect = LGE.PageEffect.SlideEffect({currentPage:$page2});
    effect.execute($page1,opt,cCmd);
  }

});
</script>

<input id="button1" type="button" lge-type="Button" value="Change" />

<div id="page1"> page1 </div>
<div id="page2"> page2 </div>

```

Supported SDK / Emulator Version

SDK Version	Emulator Version
2.2 or higher	LG Smart TV Emulator 2011 : Not Supported LG Smart TV Emulator 2012 : SDK 2.2 or higher LG Smart TV Emulator 2013 : SDK 3.0 or higher

Annex A Differences in Media Devices

Media products partly support NetCast 3.0. Please see the detailed information below for Media products development.

Chapter of this Document	Constraints and difference of Media Devices compared with TV
NetCast API	<p>A. window.NetCastSetDefaultAspectRatio : Not applicable (Media products set Aspect Ratio at Device Setup menu)</p> <p>B. Media specific API (window.NetCastSetScreenSaver(control)): Refer to section Media Device NetCast API.</p> <p>C. window.NetCastLaunchQMENU(), window.NetCastLaunchRATIO() : Not applicable.</p>
Media Object	<p>A. mode3D : from [Table] Available values for “mode3D” property 3, Media products do not support variable “off” and “from_2d_to_3d”.</p>
Media Player Plugin (Methods)	<p>A. In “Set Widevine Credential Information”, the following are added.</p> <ul style="list-style-type: none"> i. media.setWidevinePortalID("Portal"); ii. media.setWidevineStoreFront("StoreFront"); <p>B. In example, the following are added.</p> <ul style="list-style-type: none"> i. UserData (Portal), additional optional user data (Identifies the operator) ii. UserData (Storefront), additional optional user data (Identifies store run by operator)
Media Player API (Properties)	<p>A. error - ErrorCode (1200) : Verimatrix failure</p> <p>B. mode3D - Media products do not support variable “off” and “from_2d_to_3d”. - Media products only support “checker_bd” for HD format (1080p @ 24Hz).</p>
Device Info Plugin (Methods)	<p>A. getResponseFailMsg() is added.</p> <p>B. The following APIs are not supported.</p> <ul style="list-style-type: none"> - getLocalTime - getSystemTime - pentouchInfo
Voice Recognition Plugin and API AppToApp Plugin and API Sound Plugin and API	<p>A. Media devices do not use these Plugin and APIs.</p>

Annex B Utilities for Using Web UI Components

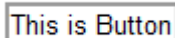
This section describes utilities for using LG Web UI components.

- [Converting HTML Components into LG Components](#)
- [JavaScript Handler for UI Components](#)
- [Defining the Next Focus](#)

Converting HTML Components into LG Components

If you call 'LGE.initialize()' method in HTML file, web engine searches markup interface and converts HTML UI components into LG Web UI components with LG look and feel GUI. Then, it generates LG Web UI Component APIs that a web developer can use.

For example, there is a button in HTML file before calling the 'LGE.initialize()' method.



[Figure] HTML UI component - button

```
<input type="button" lge-type="Button" value="This is Button">
```

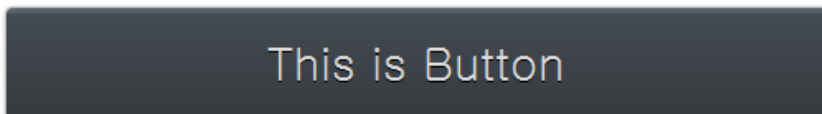
After calling 'LGE.initialize()' method, the button component is converted into LG UI component in HTML file and LG Web UI Component APIs are generated by web engine.

This function must be called after the DOM is fully loaded. If you want to use a JavaScript Open API, you have to call 'LGE.initialize()' before using it. It is recommended to call 'LGE.initialize()' in the beginning of the JavaScript code.

Example

```
LGE.initialize();
```

```
LGE.initialize('#contents');
```



[Figure] LG UI component - button

```
<div class="btn-noinline btn" tabindex="0">  
  <span class="btn-inner">  
    <span class="btn-icon"></span>  
    <span class="btn-text">This is Button</span>  
  </span>  
  <input type="button" lge-type="Button" value="This is Button" class="btn-hidden">  
</div>
```

JavaScript Handler for UI Components

Developers can handle all UI components. Also, developers can access APIs.

Example

```
var button = LGE.UI.getComp("button");  
button.setText("Hello");
```

Defining the Next Focus

Every UI component gets focus by using direction key. When pressing the direction key, focus is moved to the next UI component. By adding some attributes, the next focus to the UI component can be defined.

There are following three ways to define the next focus.

- [Adding attribute in Ige-attr](#)
- [Adding parameters in JavaScript constructor](#)
- [Calling direction key event](#)

Adding attribute in lge-attr

Developers can define the next focus to UI component by adding attribute in lge-attr.

There are four types of attributes. (tab-right, tab-left, tab-up, and tab-down) Each attribute has value that is Element ID of the component in document.

Example

```
<input lge-type='Button'  
lge-attr="tab-right:'otherButtonID1' tab-left:'otherButtonID2' ;"  
type='button' value='button' />
```

Adding parameters in JavaScript constructor

Developers can define the next focus to UI component by adding parameters in constructor.

There are four types of parameters. (tabRight, tabLeft, tabUp, and tabDown) Each parameter has value that is Element ID of the component in document.

Example

```
var btn1 = LGE.UI.Button({
  type: 'input',
  value: 'text1',
  iconType: 'plus',
  selector: ("td2"),
  tabRight: 'otherButtonID1',
  tabDown: 'otherButtonID2',
});
```

Calling direction key event

Also, developers can call Direction Key event using JavaScript methods.

There are four types of methods.(tabRight, tabLeft, tabUp, and tabDown)

Example

```
$('#button').bind('click',function(){  
    button.tabRight();  
})
```