

## **[Tutorial] LG Web\_Playing Video in Full Screen Mode**

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**LGDEV-057**

Home Entertainment Company  
LG Electronics, Inc.

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# About This Document

## Revision History

Document Version	Date	Comment
1.1	February 13, 2012	Needed APIs and Source codes are updated. Section 2.4 is added.
1.0	October 18, 2011	Initial Version

## Purpose

This document describes how to play video in full screen mode.

## Reference Documents

Refer to the following documents:

- LG Web Application Development Guide
- LG Web Open API Reference Guide

## Conventions

### Codes

Source code and examples are indicated in the `grey Courier New` font.

### Note, Caution

Note and caution are used to emphasize information.  
The following samples describe when each is used.

---

#### Note

Contains information about something that is helpful to you.

---

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#### Caution

Contains important information about something that you should know.

---

# Abbreviation

The following table defines the abbreviations used in this document.

Abbreviation	Description
API	Application Programming Interface

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# 1 Introduction

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This chapter provides an overview of this application and needed APIs.

1.1 Overview

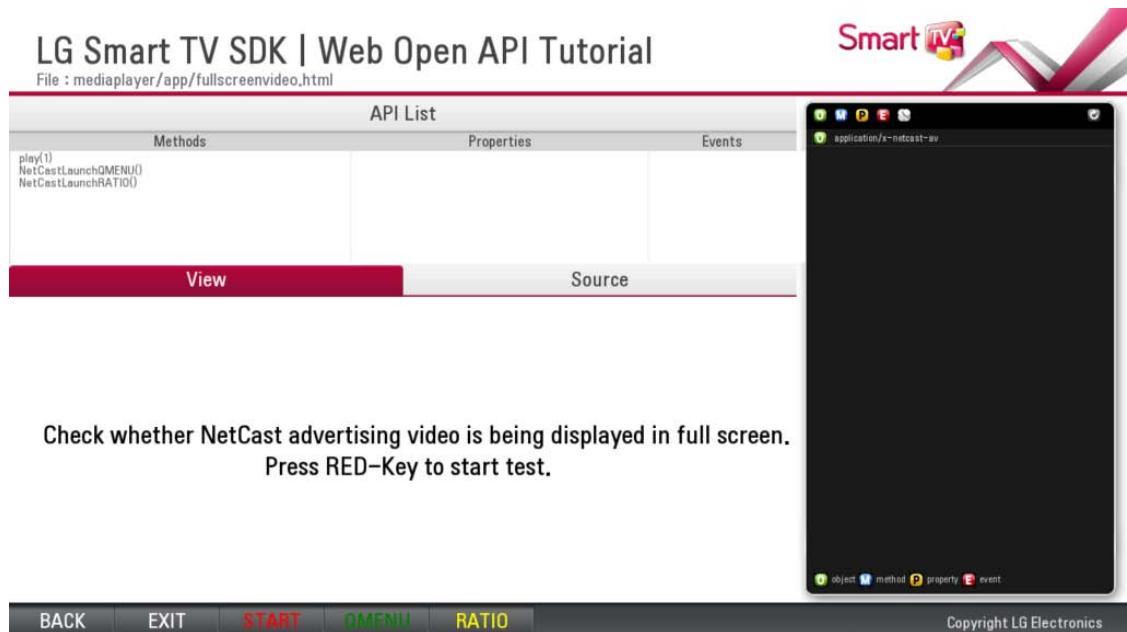
1.2 Needed APIs

## 1.1 Overview

This application shows how to play a video in full screen mode.

The LG Smart TV SDK provides no separate Web Open API that plays media content in full screen mode.

Basically, when the start position of the media object is set to (0, 0) and its size is set to 1280 X 720, the content is played in full screen mode. In this application, the width and height are set within the <body> and </body> tags and the elements used to compose the screen are hidden using the code 'style.visibility = "hidden"' so that only the video is played in full screen mode.



[Figure 1] Application to Play Video in Full Screen Mode

### Note

Log is used for checking the sequence of Web Open API; this will not be covered in the sample code description.

## 1.2 Needed APIs

This application uses following Web Open API:

[Table 1] Description of the Needed APIs

API Class	Name	Description
Method	Play(1)	Plays media.
	NetCastLaunchQMENU	Launches QMENU over a full screen video.
	NetCastLaunchRATIO	Sets aspect ratio of full screen video.
Property	N/A	N/A
Event	N/A	N/A

For more information on these functions, refer to “LG Web Open API Reference Guide”.





## 2 Creating Application

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This chapter describes how to play video in full screen mode.

2.1 Initializing the Page

2.2 Inputting Keys

2.3 Displaying and Playing Media Object in Full Screen Mode

2.4 Setting Object

2.5 Source Code of fullscreenvideo.html

## 2.1 Initializing the Page

Use the **initPage** function to set the basic functions of the application.

- 04: Records the last visited page when running the application.
- 07: Initializes the page.
- 08: Gets the source code of the page using the XMLHttpRequest object.
- 09: Sets the page ID.
- 10: Initializes the Log function.
- 13-15: Registers an event handler which will executed when the corresponding button is pressed.

### Sample Code

```
01 : function initPage()  
02 : {  
03 :     //save page as last visited page  
04 :     setLastVisitPage();  
05 :  
06 :     //common initialize function  
07 :     commonInitialize();  
08 :     requestSourceCode();  
09 :     setPageID("Full Screen");  
10 :     jsLog.initLG();  
11 :  
12 :     //add onclick event handler  
13 :     addEventHandler(document.getElementById("btn_back"),"click",onClickListener);  
14 :     addEventHandler(document.getElementById("btn_red"),"click", onClickListener);  
15 :     addEventHandler(document.getElementById("btn_exit"),"click",onClickListener);  
16 :  
17 :     jsLog.lgobject('application/x-netcast-av');  
18 : }
```

## 2.2 Inputting Keys

The **onUserInput** function is called by the **onClickHandler** function; it receives a key value as the **userInput** parameter from **onClickHandler** and creates the corresponding function for each key value to operate the key.

- 06: When the Back key is pressed, this code is executed.
- 07: When the Red key is pressed, **changeTestProgress()** is called.
- 08: When the Green key is pressed, **NetCastLaunchQMENU()** is called.
- 10: When the Yellow key is pressed, **NetCastLaunchRATIO()** is called.

### Sample Code

```
01 : //onUserInput function should be implemented
02 : function onUserInput(userInput)
03 : {
04 :     switch(userInput)
05 :     {
06 :         case VK_BACK : window.location.replace("../menu_mediaPlayer.html");
            break;
07 :         case VK_RED : case 82 : changeTestProgress(); break;
08 :         case VK_GREEN : window.NetCastLaunchQMENU();
09 :             jsLog.lgmethod('NetCastLaunchQMENU()'); break;
10 :         case VK_YELLOW : window.NetCastLaunchRATIO();
11 :             jsLog.lgmethod('NetCastLaunchRATIO()'); break;
12 :     }
13 : }
```

## 2.3 Displaying and Playing Media Object in Full Screen Mode

The following function displays and plays a media object in full screen mode.

### **changeTestProgress**

Changes the test progress.

03-05: Declares the video, bodycontent, and sourcecode variables.

07: Plays the video.

09: Sets the visibility of the video to "visible" to display it on the screen.

11-12: Sets the visibility of both of the bodycontent and sourcecode to "hidden" to hide it from the screen.

13: Sets the visibility of the Red key to "hidden" to hide it from the menu bar.

### **Sample Code**

```
01 : function changeTestProgress()  
02 : {  
03 :   var video = document.getElementById("video");  
04 :   var bodycontent = document.getElementById("bodycontent");  
05 :   var sourcecode = document.getElementById("sourcecode");  
06 :  
07 :   video.play(1);  
08 :   jsLog.lgmethode('video.play(1)');  
09 :   video.style.visibility="visible";  
10 :  
11 :   bodycontent.style.visibility="hidden";  
12 :   sourcecode.style.visibility = "hidden";  
13 :   document.getElementById("btn_red").style.visibility="hidden";  
14 : }
```

## 2.4 Setting Object

The following code shows how to set object.

03: Set data type. Refer to “LG Web Application Development Guide” for related information.  
04-05: Set width and height.

### Sample Code

```
01 : <object  
02 :   id="video"  
03 :   type="application/x-netcast-av"  
04 :   width=1280  
05 :   height=720  
06 :   style="float: left; z-index: 1; visibility: hidden;"  
07 :   autoStart=false  
08 :   data="../../../mediafile/NetCastGeneratorClient.avi">  
09 : </object>
```

## 2.5 Source Code of fullscreenvideo.html

Source code of fullscreenvideo.html is as follows:

```
<!DOCTYPE html PUBLIC "-//W3C//DTD HTML 4.01 Transitional//EN"
"http://www.w3.org/TR/html4/loose.dtd">
<html>
<head>
<meta http-equiv="Content-Type" content="text/html; charset=UTF-8">
<title>Full Screen Video Test Page</title>
<link rel="stylesheet" href="../../css/style.css">
<script language="javascript" src="../../js/common.js"></script>
<script language="javascript" src="../../js/keycode.js"></script>
<script language="javascript" src="../../js/menu.js"></script>
<script language="javascript" src="../../js/media.js"></script>

<script type="text/javascript" src="../../blackbirdjs/blackbird.js"></script>
<link type="text/css" rel="Stylesheet" href="../../blackbirdjs/blackbird.css" />
<style type="text/css">
    .Overlay { position: relative; z-index:10; opacity: 1; filter: alpha(opacity
=100); }
    body { height: 100%; }
    html { height: 100%; }
</style>
<script>

    //initialize page
    function initPage()
    {
        //save page as last visited page
        setLastVisitPage();

        //common initialize function
        commonInitialize();
        requestSourceCode();
        setPageID("Full Screen");
        jsLog.initLG();

        //add onclick event handler
        addEventHandler(document.getElementById("btn_back"), "click",
onClickHandler);
        addEventHandler(document.getElementById("btn_exit"), "click",
onClickHandler);
        addEventHandler(document.getElementById("btn_red"), "click",
onClickHandler);
        addEventHandler(document.getElementById("btn_green"), "click",
onClickHandler);
        addEventHandler(document.getElementById("btn_yellow"), "click",
onClickHandler);

        jsLog.lgobject('application/x-netcast-av');
    }

    function onUserInput(userInput)
    {
        switch(userInput)
        {
            case VK_BACK :
window.location.replace("../menu_mediaPlayer.html"); break;
            case VK_RED : case 82 : changeTestProgress(); break;
            case VK_GREEN : window.NetCastLaunchQMENU();

```

```

jsLog.lgmethod('NetCastLaunchQMENU()');
break;
        case VK_YELLOW : window.NetCastLaunchRATIO();
                        jsLog.lgmethod('NetCastLaunchRATIO()');
break;
    }
}
function changeTestProgress()
{
    var video = document.getElementById("video");
    var bodycontent = document.getElementById("bodycontent");
    var sourcecode = document.getElementById("sourcecode");

    video.play(1);
    jsLog.lgmethod('video.play(1)');
    video.style.visibility="visible";

    bodycontent.style.visibility="hidden";
    sourcecode.style.visibility = "hidden";
    document.getElementById("btn_red").style.visibility="hidden";
}
</script>
</head>

<body ondragstart='return false' onselectstart='return false'
onload="javascript:initPage();">
<div id='bodycontent'>
    <div>
        <object
            id="video"
            type="application/x-netcast-av"
            width=1280
            height=720
            style="float: left; z-index: 1; visibility: hidden;"
            autoStart=false
            data="../../../mediafile/NetCastGeneratorClient.avi">

        </object>
    </div>

    <!-- title -->
    <div class='SuiteTitle' >LG Smart TV SDK | Web Open API Tutorial</div>

    <!-- navigation -->
    <div class='SuiteNavigation'>
        <div
style="float:left;">File : mediaplayer/app/fullscreenvideo.html</div>
    </div>

    <div class='SuiteTitleLine'> </div>

    <!-- test contents -->
    <div class='ContentArea'>
        <div class='ApiListTitleArea '>API List</div>
        <div class='ApiListArea OverLay'>
            <div class='MethodTitleArea'>
                Methods
                <div class='MethodListArea'>
                    play(1)<br>
                    NetCastLaunchQMENU()<br>
                    NetCastLaunchRATIO()

```

```

        </div>
    </div>
    <div class='PropertyTitleArea'>
        Properties
        <div class='PropertyListArea'>
        </div>
    </div>
    <div class='EventTitleArea'>
        Events
        <div class='EventListArea'>
        </div>
    </div>
</div>

<div class='ViewTitleArea'>
    <div id='tabViewArea' class='SelectedViewArea'
style='float:left;' onclick="showView();">View</div>
    <div id='tabCodeArea' class='UnselectedViewArea'
style='float:right;' onclick='showCode();'>Source</div>
</div>

<div id='view'>
    <div class='ViewArea'>
        <table width="100%" height="100%" cellpadding="0"
cellspacing="0"><tr><td align="center" valign="middle">
            <div class='centerTestGuide '>Check whether NetCast
advertising video is being displayed in full screen.<br>Press RED-Key to start
test.</div>
        </td></tr></table>
    </div>
</div>

    <div style="visibility: hidden" id='codeview'>
        <textarea class="SourceCodeArea" value=""
id='sourcecode'></textarea>
    </div>
</div>

<!-- button and copyright -->
<div class='SuiteButtonArea '>
    <!-- back key description -->
    <div id='btn_back' class='buttonDescription'>BACK</div>

    <!-- exit key description -->
    <div id='btn_exit' class='buttonDescription'>EXIT</div>

    <!-- red key description -->
    <div id='btn_red' class='buttonDescription redColor'>START</div>

    <!-- green key description -->
    <div id='btn_green' class='buttonDescription greenColor'>QMENU</div>

    <!-- yellow key description -->
    <div id='btn_yellow' class='buttonDescription yellowColor'>RATIO</div>

    <!-- copyright -->
    <div class='copyright '>Copyright LG Electronics</div>
</div>

```



```
</body>  
</html>
```