

[Tutorial] LG Web_Playing Media with ASX File

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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 | Section 2.5 is added. |
| 1.0 | October 12, 2011 | Initial Version |

Purpose

This document describes how to play media with ASX file using the Web Open API of Smart TV.

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.

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 |
| ASX | Advanced Stream Redirector |

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1 Introduction

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

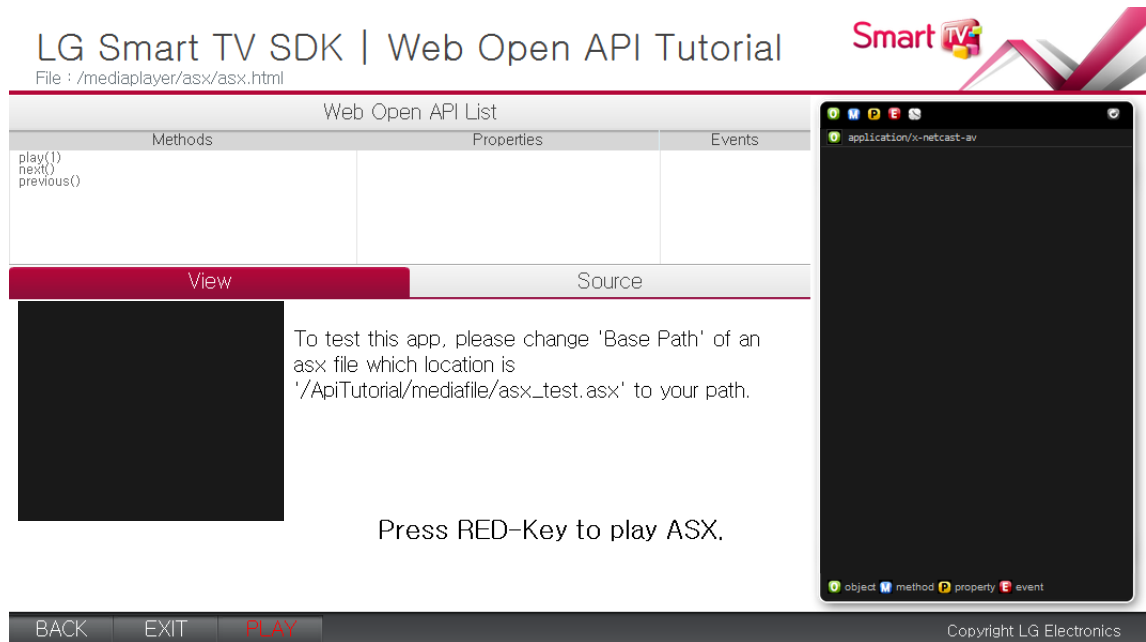
1.1 Overview

1.2 Needed APIs

1.1 Overview

This application show how to play media with ASX file, which is play list file format, using the Web Open API of Smart TV.

Refer to “LG Web Application Development Guide” for supported elements in ASX format.



[Figure 1] Application to Play ASX File

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. |
| | next() | Plays the next media. |
| | previous() | Plays the previous media. |

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

Note

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



2 Creating Application

This chapter describes how to play media with ASX file using the Web Open API.

- 2.1 Initializing the Page
- 2.2 Inputting Keys
- 2.3 Displaying Text
- 2.4 Executing Test
- 2.5 Setting Object
- 2.6 Source Code of asx.html

2.1 Initializing the Page

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

- 04: Record the last visited page when running the application.
- 07: Initialize the page.
- 08: Get the source code of the page using the XMLHttpRequest object.
- 09: Set the page ID.
- 10: Initialize the Log function.
- 13-15: Add an event handler which will be executed when the corresponding button is pressed.
- 18: Declare userAgent and set the value of navigator.userAgent.
- 20~23: Check if the device uses LG Browser and set true or false to isLGEBrowser.

Note

For information on userAgent string, refer to “LG Web Application Development Guide”.

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("Asx");
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 :     //check if this is LG Browser
18 :     var userAgent = new String(navigator.userAgent);
19 :
20 :     if (userAgent != null && userAgent.search(/LG Browser/) > -1)
21 :         isLGEBrowser = true;
22 :     else
23 :         isLGEBrowser = false;
24 :
25 :     jsLog.lgobject('application/x-netcast-av');
26 : }
```

2.2 Inputting Keys

Use **onUserInput** function is called by **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.

05: When the Back key is pressed, this code is executed.

07: When the Red key is pressed, this code is executed.

Sample Code

```
01 : function onUserInput(userInput)
02 : {
03 :     switch(userInput)
04 :     {
05 :         case VK_BACK : window.location.replace ("../menu_mediaPlayer.html");
06 :             break;
07 :         case VK_RED : case 82 changeTestProgress(); break;
08 :             break;
09 :     }
10 : }
```

2.3 Displaying Text

Use **setVideoDescription** function receives text as the descriptionToSet parameter and display the text on corresponding ID.

Sample Code

```
01 : function setVideoDescription(descriptionToSet)
02 : {
03 :     document.getElementById("video_description").style.zIndex = "2";
04 :     document.getElementById("test_result").style.zIndex = "1";
05 :     setInnerTextById("video_description", descriptionToSet);
06 : }
```

2.4 Executing Test

The **changeTestProgress** function is called when user pressed Red button.

Using switch-case, execute testing according to the value of testStep.

- 01: Declare initialize testStep.
- 05-08: Declare video, asxPropertiesDiv, descriptionDiv, and redButtonDiv and save each element.
- 10-53: Using switch-case, execute the functions according to the value of testStep.
- 12-25: (case1) If the browser is LG Browser, declare video and play media.
- 27-34: (case2) If the browser is LG Browser, move to the next media.
- 36-43: (case3) If the browser is LG Browser, move to the next media.
- 45-52: (case4) If the browser is LG Browser, move to the previous media.
- 54: Increase testStep by 1.

Sample Code

```

01 :   var testStep = 1;
02 :
03 :   function changeTestProgress()
04 :   {
05 :       var video = document.getElementById("video");
06 :       var asxPropertiesDiv = document.getElementById("asxProperties");
07 :       var descriptionDiv = document.getElementById("buttonDescription");
08 :       var redButtonDiv = document.getElementById("btn_red");
09 :
10 :       switch(testStep)
11 :       {
12 :           case 1:
13 :               if(isLGEBrowser)
14 :               {
15 :                   var video = document.getElementById("video");
16 :                   video.play(1);
17 :                   jsLog.lgmethod('video.play()');
18 :               }
19 :               else
20 :                   setVideoDescription("This is not a LG
21 : Browser");
22 :                   setVideoDescription("Check whether snow boarding
23 : video is displayed.");
24 :                   setInnerTextById("buttonDescription", "Press RED-Key
25 : to play next video.");
26 :                   setInnerTextById("btn_red", "PLAY NEXT");
27 :                   break;
28 :           case 2:
29 :               if(isLGEBrowser){video.next();}
30 :               jsLog.lgmethod('video.next()');
31 :               setVideoDescription("Check whether NetCast
32 : advertising video is displayed.");
33 :               setInnerTextById("buttonDescription", "Press RED-Key
34 : to play next video.");
35 :               setInnerTextById("btn_red", "PLAY NEXT");
36 :               break;
37 :           case 3:
38 :               if(isLGEBrowser){ video.next(); }
39 :               jsLog.lgmethod('video.next()');
40 :               setVideoDescription("Check whether video with timer
41 : at the bottom is displayed.");
42 :               setInnerTextById("buttonDescription", "Press RED-Key
43 : to play previous video.");
44 :               setInnerTextById("btn_red", "PLAY PREVIOUS");
45 :               break;
46 :           case 4:

```

```
46 :             if(isLGEBrowser){video.previous();}
47 :             jsLog.lgmethod('video.previous()');
48 :
49 :             setVideoDescription("Check          whether          NetCast
advertising video is displayed.");
50 :             setInnerTextById("buttonDescription", "No more test
is left on this page.");
51 :             document.getElementById("btn_red").style.visibility
= "hidden";
52 :             break;
53 :         }
54 :         testStep++;
55 :     }
```

2.5 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=300  
05 :   height=250  
06 :   data="../../mediafile/asx_test.asx"  
07 :   style="float: left">  
08 :   autoStart=false>  
09 : </object>
```

2.6 Source Code of asx.html

Source code of subtitle.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>ASX 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" />

<script>

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

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

        //add onclick event handler

        addEventHandler(document.getElementById("btn_back"),"click",onClickHandler);
        addEventHandler(document.getElementById("btn_red"),"click", onClickHandler);
        addEventHandler(document.getElementById("btn_exit"),"click",onClickHandler);

        //check if this is LG Browser
        var userAgent = new String(navigator.userAgent);

        if (userAgent != null && userAgent.search(/LG Browser/) > -1)
            isLGEBrowser = true;
        else
            isLGEBrowser = false;

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

    //onUserInput function should be implemented
    function onUserInput(userInput)
    {
        switch(userInput)
        {
            case VK_BACK :
                window.location.replace("../menu_mediaPlayer.html"); break;
            case VK_RED : case 82 : changeTestProgress(); break;
        }
    }

    //set video description
    function setVideoDescription(descriptionToSet)
    {
        document.getElementById("video_description").style.zIndex = "2";
        document.getElementById("test_result").style.zIndex = "1";
        setInnerTextById("video_description", descriptionToSet);
    }
}
```



```

//change test progress
var testStep = 1;
function changeTestProgress()
{
    var video = document.getElementById("video");
    var asxPropertiesDiv = document.getElementById("asxProperties");
    var descriptionDiv = document.getElementById("buttonDescription");
    var redButtonDiv = document.getElementById("btn_red");

    switch(testStep)
    {
        case 1:
            if(isLGEBrowser)
            {
                var video = document.getElementById("video");
                video.play(1);
                jsLog.lgmethod('video.play()');
            }
            else
                setVideoDescription("This is not a LG Browser");

            setVideoDescription("Check whether snow boarding video
is displayed.");
            setInnerTextById("buttonDescription", "Press RED-Key to
play next video.");
            setInnerTextById("btn_red", "PLAY NEXT");
            break;

        case 2:
            if(isLGEBrowser){video.next();}
            jsLog.lgmethod('video.next()');

            setVideoDescription("Check whether NetCast advertising
video is displayed.");
            setInnerTextById("buttonDescription", "Press RED-Key to
play next video.");
            setInnerTextById("btn_red", "PLAY NEXT");
            break;

        case 3:
            if(isLGEBrowser){ video.next(); }
            jsLog.lgmethod('video.next()');

            setVideoDescription("Check whether video with timer at
the bottom is displayed.");
            setInnerTextById("buttonDescription", "Press RED-Key to
play previous video.");
            setInnerTextById("btn_red", "PLAY PREVIOUS");
            break;

        case 4:
            if(isLGEBrowser){video.previous();}
            jsLog.lgmethod('video.previous()');

            setVideoDescription("Check whether NetCast advertising
video is displayed.");
            setInnerTextById("buttonDescription", "No more test is
left on this page.");
            document.getElementById("btn_red").style.visibility =
"hidden";
            break;
    }
    testStep++;
}

</script>

</head>
<body ondragstart='return false' onselectstart='return false'
onload="javascript:initPage();">

```

```

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

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

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

<!-- test contents -->
<div class='ContentArea'>
    <div class='ApiListTitleArea'>API List</div>
    <div class='ApiListArea'>
        <div class='MethodTitleArea'>
            Methods
            <div class='MethodListArea'>
                play(1)<br>
                next()<br>
                previous()
            </div>
        </div>
        <div class='PropertyTitleArea'>
            Properties
            <div class='PropertyListArea'>

        </div>
    </div>
    <div class='EventTitleArea'>
        Events
        <div class='EventListArea'>

    </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'>
            <object
                id="video"
                type="application/x-netcast-av"
                width=300
                height=250
                data="/ApiTutorial/mediafile/asx_test.asx"
                style="float: left"
                autoStart=false
            >
            </object>

            <!-- video description -->
            <div id='test_result' >
                <table width="550px" height="200px" border="0"
cellpadding="0" cellspacing="0" style="position :relative; top: 10px; left:10px;
font-size: 25px">
                    <tr><td>To test this app, please change
'Base Path' of an asx file which location is '/ApiTutorial/mediafile/asx_test.asx'
to your path.</td></tr>
                    <tr ><td><div id="video_description"
class="eachTestGuide" style="font-size: 25px"></div></td></tr>
                </table>
            </div>

            <br><br>
            <div id='buttonDescription' style="font-size: 30px;

```

```

text-align: center; "> Press RED-Key to play ASX.</div>
</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'>PLAY</div>

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

</body>
</html>

```