

[Tutorial] LG Web_Getting and Displaying Device Information

Version 1.0 – December 2011

LGDEV-065

Home Entertainment Company
LG Electronics, Inc.

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About This Document

Revision History

Document Version	Date	Comment
1.0	December 14, 2011	Initial Version

Purpose

This document describes how to get and display device information of LG Smart TV using properties in LG Web Open APIs.

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

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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 shows how to get LG Smart TV information using properties of LG Web Open API.

LG Smart TV SDK | Web Open API Tutorial

File : /deviceinfo/deviceinfo01.html



API List		
Methods	Properties	Events
	version manufacturer modelName serialNumber swVersion / hwVersion osdResolution preferredSubtitleLanguage preferredAudioLanguage preferredSubtitleStatus	

View

Source

```
version :  
manufacturer : undefined  
modelName : undefined  
serialNumber : undefined  
swVersion : undefined  
hwVersion : undefined  
osdResolution : undefined  
preferredSubtitleLanguage : undefined  
preferredAudioLanguage : undefined  
preferredSubtitleStatus : undefined
```

application/x-netcast-info

manufacturer

modelName

serialNumber

swVersion

hwVersion

osdResolution

preferredSubtitleLanguage

preferredAudioLanguage

preferredSubtitleStatus

object

method

property

event

BACK

EXIT

NEXT PAGE

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[Figure 1] Device Information Application

1.2 Needed APIs

This application uses following Web Open API:

[Table 1] Description of the Needed APIs

API Class	Name	Description
Property	version	Version of Device Info Plugin.
	manufacturer	Manufacturer ID (LGE)
	modelName	Device model name
	serialNumber	Device serial number
	swVersion	Software version.
	hwVersion	Hardware version
	osdResolution	OSD resolution (Returns in number)
	preferredSubtitleLanguage	Subtitle language set in TV
	preferredAudioLanguage	Audio language set in TV
	preferredSubtitleStatus	On/off status of subtitle

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 get and display device information of LG Smart TV using properties in LG Web Open APIs.

- 2.1 Initializing the Page
- 2.2 Inputting Keys
- 2.3 Getting and Displaying Device Information
- 2.4 Setting Object
- 2.5 Source Code of deviceinfo01.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: Initialize the Log function.
- 12-14: Add an event handler which will be executed when the corresponding button is pressed.
- 18: Display device information on screen by calling `getDeviceInfo()` method.

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 :     jsLog.initLG();  
10 :  
11 :     //add onclick event handler  
12 :     addEventHandler(document.getElementById("btn_back"), "click", onClickHand  
ler);  
13 :     addEventHandler(document.getElementById("btn_exit"), "click", onClickHand  
ler);  
14 :     addEventHandler(document.getElementById("btn_green"), "click", onClickHan  
dler);  
15 :  
16 :     jsLog.lgobject('application/x-netcast-info');  
17 :  
18 :     getDeviceInfo();  
19 : }
```

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.
- 08: When the Green key is pressed, set the page where to move.

Sample Code

```
01 : function onUserInput(userInput)
02 : {
03 :     switch(userInput)
04 :     {
05 :         case VK_BACK :
06 :             window.location.replace("../main_menu.html");
07 :             break;
08 :         case VK_GREEN :
09 :             window.location.replace("../deviceinfo02.html");
10 :             break;
11 :     }
12 : }
```

2.3 Getting and Displaying Device Information

The following code shows how to get and display device information of LG Smart TV.

getDeviceInfo

This method displays the information got from the device when the application is started.

```
03:   Declare device.
05:   Call getDeviceVersionInfo() method to display version information.
07:   Call setInnerTextById method to display to display manufacturer information.
10:   Call setInnerTextById method to display modelName information.
13:   Call setInnerTextById method to display serialNumber information.
16:   Call setInnerTextById method to display swVersion information.
19:   Call setInnerTextById method to display hwVersion information.
22:   Call setInnerTextById method to display osdResolution information.
25:   Call setInnerTextById method to display preferredSubtitleLanguage information.
28:   Call setInnerTextById method to display preferredAudioLangage information.
31:   Call setInnerTextById method to display preferredSubtitleStatus information.
```

getDeviceVersionInfo

This method is called in getDeviceInfo method and display the device version information.

```
38:   Declare device.
40:   Check the device version. Refer to "Web Open API Reference Guide" for related information.
42:   Call setInnerTextById method to display version information.
```

Sample Code

```
01 :   function getDeviceInfo()
02 :   {
03 :       var device = document.getElementById('device');
04 :
05 :       getDeviceVersionInfo();
06 :
07 :       setInnerTextById("manufacturer_value", "manufacturer:" +
device.manufacturer);
08 :       jsLog.lgproperty('manufacturer');
09 :
10 :       setInnerTextById("modelName_value", "modelName : " +
device.modelName);
11 :       jsLog.lgproperty('modelName');
12 :
13 :       setInnerTextById("serialNumber_value", "serialNumber:" +
device.serialNumber);
14 :       jsLog.lgproperty('serialNumber');
15 :
16 :       setInnerTextById("swVersion_value", "swVersion : " +
device.swVersion);
17 :       jsLog.lgproperty('swVersion');
18 :
19 :       setInnerTextById("hwVersion_value", "hwVersion : " +
device.hwVersion);
20 :       jsLog.lgproperty('hwVersion');
21 :
22 :       setInnerTextById("osdResolution_value", "osdResolution:" + devic
e.osdResolution);
23 :       jsLog.lgproperty('osdResolution');
24 :
25 :       setInnerTextById("preferredSubtitleLanguage_value",
"preferredSubtitleLanguage : " + device.preferredSubtitleLanguage);
26 :       jsLog.lgproperty('preferredSubtitleLanguage');
27 :
28 :       setInnerTextById("preferredAudioLanguage_value",
"preferredAudioLanguage : " + device.preferredAudioLanguage);
29 :       jsLog.lgproperty('preferredAudioLanguage');
30 :
31 :       setInnerTextById("preferredSubtitleStatus_value",
"preferredSubtitleStatus : " + device.preferredSubtitleStatus);
```

```
32 :         jsLog.lgproperty('preferredSubtitleStatus');
33 :
34 :     }
35 :
36 :     function getDeviceVersionInfo()
37 :     {
38 :         var device = document.getElementById('device');
39 :
40 :         if(device.version)
41 :         {
42 :             setInnerTextById("version_value", "version : " +
device.version);
43 :             jsLog.lgproperty('version');
44 :         }
45 :     }
```

2.4 Setting Object

The following code shows how to set object.

03: Set deviceinfo type.

Refer to “LG Web Application Development Guide” for related information.

04-05: Set width and height.

Sample Code

```
01 : <object
02 :     type="application/x-netcast-info"
03 :     id="device"
04 :     width="0"
05 :     height="0"
06 :     style="float: left">
07 : </object>
```

2.5 Source Code of deviceinfo01.html

Source code of deviceinfo01.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=EUC-KR">
<title>Insert title here</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 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();
        jsLog.initLG();

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

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

        getDeviceInfo();
    }

    function onUserInput(userInput)
    {
        switch(userInput)
        {
            case VK_BACK :
                window.location.replace("../main_menu.html");
                break;
            case VK_GREEN :
                window.location.replace("../deviceinfo02.html");
                break;
        }
    }

    function getDeviceInfo()
    {
        var device = document.getElementById('device');

        getDeviceVersionInfo();

        setInnerTextById("manufacturer_value", "manufacturer : " +
device.manufacturer);
        jsLog.lgproperty('manufacturer');

        setInnerTextById("modelName_value", "modelName : " +
device.modelName);
    }
</script>
```

```

        jsLog.lgproperty('modelName');

        setInnerTextById("serialNumber_value", "serialNumber : " +
device.serialNumber);
        jsLog.lgproperty('serialNumber');

        setInnerTextById("swVersion_value", "swVersion : " +
device.swVersion);
        jsLog.lgproperty('swVersion');

        setInnerTextById("hwVersion_value", "hwVersion : " +
device.hwVersion);
        jsLog.lgproperty('hwVersion');

        setInnerTextById("osdResolution_value", "osdResolution : " +
device.osdResolution);
        jsLog.lgproperty('osdResolution');

        setInnerTextById("preferredSubtitleLanguage_value",
"preferredSubtitleLanguage : " + device.preferredSubtitleLanguage);
        jsLog.lgproperty('preferredSubtitleLanguage');

        setInnerTextById("preferredAudioLanguage_value",
"preferredAudioLanguage : " + device.preferredAudioLanguage);
        jsLog.lgproperty('preferredAudioLanguage');

        setInnerTextById("preferredSubtitleStatus_value",
"preferredSubtitleStatus : " + device.preferredSubtitleStatus);
        jsLog.lgproperty('preferredSubtitleStatus');
    }

    function getDeviceVersionInfo()
    {
        var device = document.getElementById('device');

        if(device.version)
        {
            setInnerTextById("version_value", "version : " +
device.version);
            jsLog.lgproperty('version');
        }
    }
}

</script>

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

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

    <!-- navigation -->
    <div class='SuiteNavigation'>
        <div style="float:left;">File :
        /deviceinfo/deviceinfo01.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'>

```

```

        </div>
    </div>
    <div class='PropertyTitleArea'>
        Properties
        <div class='PropertyListArea'>
            version<br>
            manufacturer<br>
            modelName<br>
            serialNumber<br>
            swVersion / hwVersion<br>
            osdResolution<br>
            preferredSubtitleLanguage<br>
            preferredAudioLanguage<br>
            preferredSubtitleStatus<br>
        </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
            type="application/x-netcast-info"
            id="device"
            width="0"
            height="0"
            style="float: left">
        </object>
        <table border="0" cellpadding="0" cellspacing="0"
style="position: relative; left: 30px; top:10px; width:450px; height:250px;">
            <tr height="10%" >
                <td ><div class="eachTestGuide "
id="version_value" >version :</div></td>
            </tr>
            <tr height=10%>
                <td ><div class="eachTestGuide "
id="manufacturer_value">manufacturer :</div></td>
            </tr>
            <tr height="10%">
                <td ><div class="eachTestGuide "
id="modelName_value">modelName :</div></td>
            </tr>
            <tr height="10%">
                <td><div class="eachTestGuide "
id="serialNumber_value">serialNumber :</div></td>
            </tr>
            <tr height="10%">
                <td ><div class="eachTestGuide "
id="swVersion_value">swVersion :</div></td>
            </tr>
            <tr height="10%">
                <td><div class="eachTestGuide "
id="hwVersion_value">hwVersion :</div></td>
            </tr>
            <tr height="10%">
                <td><div class="eachTestGuide "
id="osdResolution_value">osdResolution :</div></td>
            </tr>
            <tr height="10%">

```



```

        <td><div class="eachTestGuide "
id="preferredSubtitleLanguage_value">preferredSubtitleLanguage :</div></td>
        </tr>
        <tr height="10%">
            <td><div class="eachTestGuide "
id="preferredAudioLanguage_value">preferredAudioLanguage :</div></td>
            </tr>
            <tr height="10%">
                <td><div class="eachTestGuide "
id="preferredSubtitleStatus_value">preferredSubtitleStatus :</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'>

    <!-- button -->
    <div id='btn_back' class='buttonDescription'>BACK</div>

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

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

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

```