

# Vibrator Device API Guide Program

## Outline

VibratorAPI guide program is a guide application for eGov Device API, using the mobile device API framework to be used as a tool and a reference when developing hybrid applications. It supports the inquiry of notification related functions of mobile smart devices through JavaScript-based Vibrator DeviceAPI.

Also, it is comprised of a feature to send and inquire notification information within the Device, in conjunction with eGovFramwork based web server application.

### Feature

This Guide Program provides **notify with sound** , **notify with vibration** , **view notification list** features.

Using Notification API, it displays notificatio information at the time of user's designation.

### Preconditions

Category	Description
Local Device Environments	eGovFramework Runtime Environment 3.5, Android SDKAPI 22(version 5.0 Lollipop)
Server-side Developmental Environment	Runtime Environment for eGov Standard Framework 3.5
Works in sync with Mash up Open API	N/A
Test Device	Galaxy S2
Test Platform	Android 2.3
Libraries Added	N/A

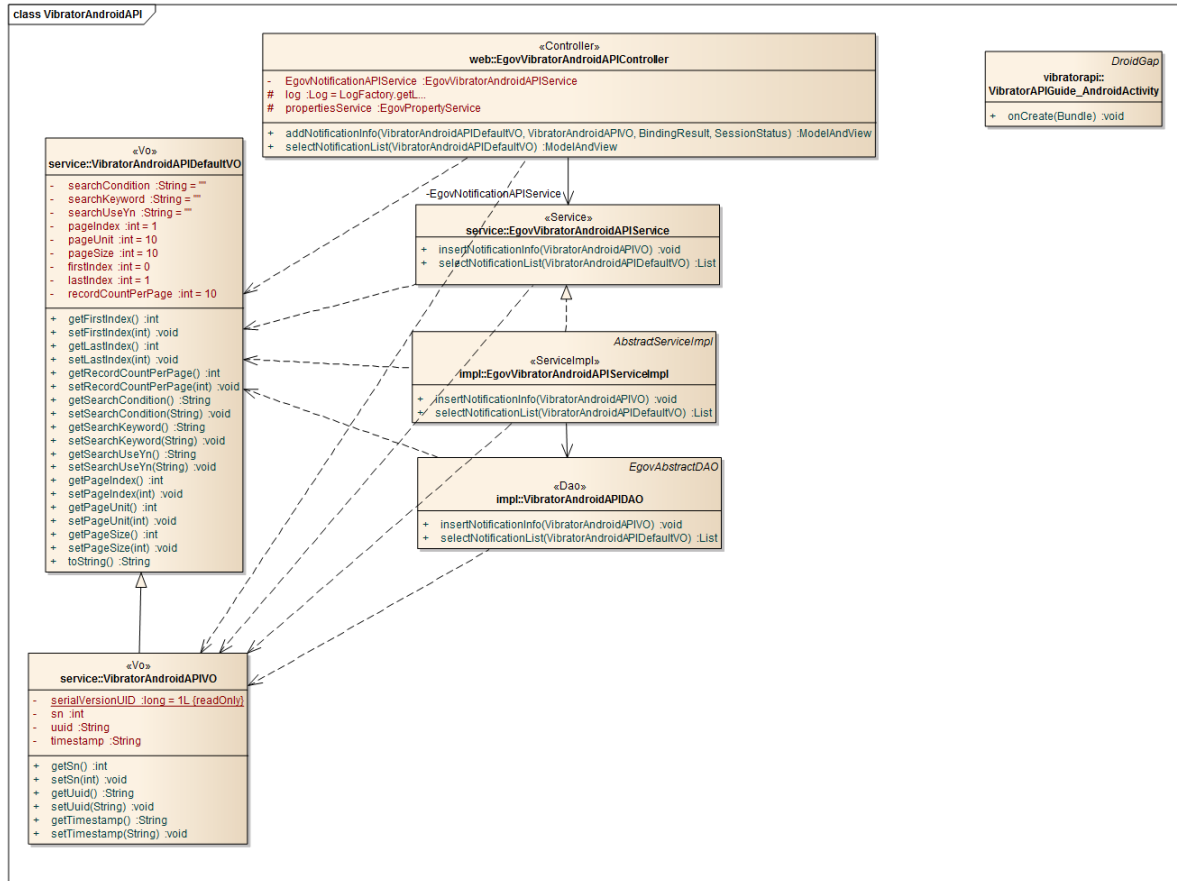
### Restriction

Category	Description
Using cross domain	When using certain outside domains or its subdomains on PhoneGap, add such domains on <access origin="" /> at Res/xml/config.xml.

## Description

Vibrator Device API Guide Program is comprised of features that a) sets and displays notification information and b) sends and inquires set notification information to web application. (refer to related functions section)

### Class Diagram



### Device Application

#### Source

Type	Title	Remark
Activity	kr.go.egovframework.hyb.vibratorapi.VibratorAPIGuide_Andr oidActivity	VibratorAPI Guide Program Activity Class
CSS	assets/www/css/egovframework/mbl/hyb/VibratorAPI.css	VibratorAPI Guide Program main Cascading Style Sheets
IMAGE	assets/www/images/egovframework/mbl/hyb/	VibratorAPI Guide Program main Image folder
JS	assets/www/js/egovframework/mbl/hyb/VibratorAPI.js	VibratorAPI Guide Program main JavaScript
JS	assets/www/js/egovframework/mbl/hyb/messages_ko.js	JavaScript for Validate Message Processing
RES	assets/www/res/	VibratorAPI Guide Program main Resource fold

er

XML	AndroidManifest.xml	Configuration XML for Android
HTML	assets/www/VibratorAPI.html	VibratorAPI main page
HTML	assets/www/Intro.html	VibratorAPI Intro page
HTML	assets/www/license.html	VibratorAPI license page
HTML	assets/www/overview.html	VibratorAPI feature description page

### APIs Used

notification.beep

- Notifies beep in the device
- times: Beep counts repeated

```
navigator.notification.beep(times);  
notification.vibrate
```

- Vibrates the device for the pre-determined period of time
- Lasting of vibration in milliseconds

```
navigator.notification.vibrate(milliseconds);  
Server Application
```

### Source

Type	Title	Remark
Controller	egovframework.hyb.add.vbr.web.EgovVibratorAndroidAPIController.java	VibratorAPI Guide Program Controller Class
Service	egovframework.hyb.add.vbr.service.EgovVibratorAndroidAPIService.java	VibratorAPI Guide Program Service Class
ServiceImpl	egovframework.hyb.add.vbr.service.impl.EgovVibratorAndroidAPIServiceImpl.java	VibratorAPI Guide Program ServiceImpl Class
VO	egovframework.hyb.add.vbr.service.VibratorAndroidAPIDefaultVO.java	VibratorAPI Guide Program VO Class
VO	egovframework.hyb.add.vbr.service.VibratorAndroidAPIVO.java	VibratorAPI Guide Program VO Class
VO	egovframework.hyb.add.vbr.service.VibratorAndroidAPIXMLVO.java	VibratorAPI Guide Program XML related VO Class
DAO	egovframework.hyb.add.vbr.service.impl.VibratorAndroidAPIDAO.java	VibratorAPI Guide Program Dao Class
QUERY XML	resources/egovframework/sqlmap/hyb/add/vbr/EgovVibratorAndroidAPIGuide_XXX_mysql.xml	VibratorAPI Guide Program QUERY XML

**Related Tables**

**Title Table Remark**

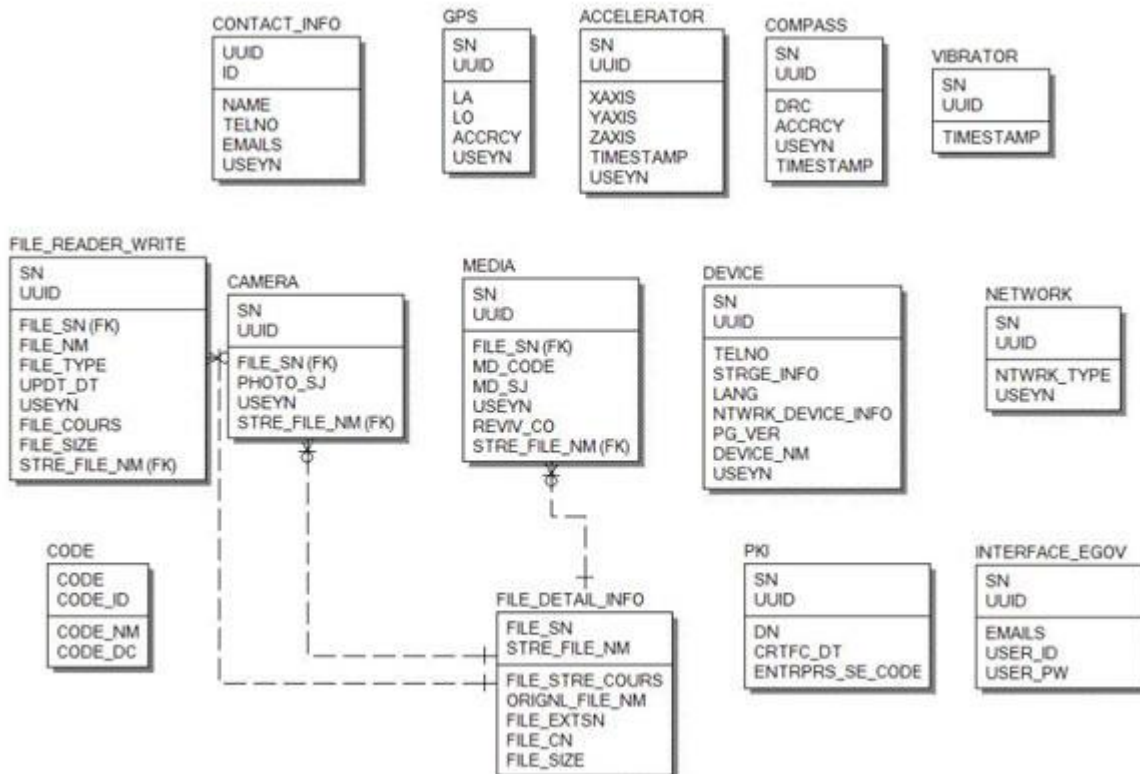
Vibrator VIBRATOR Manages notification information

**Table Definition**

- VIBRATOR

No	Column ID	Title of Column	Type	Length	NULL
1	SN	Serial No.	NUMERIC	6	NotNull
2	UUID	UUID	VARCHAR	50	NotNull
3	TIMESTAMP	timestamp	VARCHAR	20	Null

**ERD**



**Properties**

Necessary sections and settings for using alarm related features of mobile device, provided by Vibrator Device API Guide Program, are as follows.

Device Application

**res/xml/config.xml**

```
<pluginname="Notification" value="org.apache.cordova.Notification"/>
res/values/serverinfo.xml
```

```
<!-- Server Directory for eGov Interface Device API Class -->
```

```
<?xmlversion="1.0"encoding="utf-8"?>
```

```
<resources>
```

```
  <stringname="SERVER_URL">http://192.168.100.222:8080/DeviceAPIGuideTotal_Web
_V1.7.1</string>
```

```
</resources>
```

**AndroidManifest.xml**

```
<uses-permissionandroid:name="android.permission.VIBRATE"/>
```

Server Application

**resource/egovframework/sqlmap/sql-map-config\_[DB NAME].xml**

```
<sqlMapresource="egovframework/sqlmap/hyb/add/vbr/EgovDeviceAndroidAPIGuide_SQL_[DB
NAME].xml"/>
```

## Functions

Notify with sound

**Business Logic**

Notifies the user using beeps at the set notification time.

**Code**

```
function fn_egov_save_notificationConfig() {
    ...
    var setTime = $("#txtNotification").val();
    if(fn_egov_network_check(true)) {
        setTimeout ( "fn_egov_set_alam()", setTime * 1000);
        jAlert("Alarm set for " + setTime + " seconds.", "Alert", "b");
    }
    ...
}
function fn_egov_set_alam() {
    console.log("DeviceAPIGuide fn_egov_set_alam Success");
    if($("#swchBeep").val() === "on") {
```

```

        navigator.notification.beep(3);
    }
    ...
    fn_egov_insert_data();
    jAlert("Alarm", "Alert", "b");
}

```

**Related Screen and Implementation Manual**

Action	URL	Controller method	QueryID
Send notification information	/vbr/addVibratorAndroidInfo.do	insertVibrator	"vibratorAndroidAPIDAO.insertVibrator"



Set "notify with sound" button to "On," set the notification time, and click "OK."  
Note, however, that you need to validate the input data. Error messages are out in the event of insufficient condition.

Feature description: moves to **feature description** page.

License: moves to **License** page.

Notify with sound : set to "On" for "notify with sound" feature.

Notification list: move to notification list inquiry screen.

OK: set notification based on current settings.

Notify with vibration

#### **Business Logic**

Notifies the user using vibrations at the set notification time.

#### **Code**

```
function fn_egov_save_notificationConfig() {  
    ...  
    var setTime = $("#txtNotification").val();  
    if(fn_egov_network_check(true)) {  
        setTimeout ( "fn_egov_set_alam()", setTime * 1000);  
        jAlert("Alarm set for " + setTime + " seconds.", "Alert", "b");  
    }  
    ...  
}  
function fn_egov_set_alam() {  
    console.log("DeviceAPIGuide fn_egov_set_alam Success");  
    ...  
    if($("#swchVibration").val() === "on") {  
        navigator.notification.vibrate(3000);  
    }  
    ...  
    fn_egov_insert_data();  
    jAlert("Alarm", "Alert", "b");  
}
```

#### **Related Screen and Implementation Manual**

<b>Action</b>	<b>URL</b>	<b>Controller method</b>	<b>QueryID</b>
---------------	------------	--------------------------	----------------

Send notification information /vbr/addVibratorAndroidInfo.d  
n insertVibrator

“vibratorAndroidAPIDAO.insertVibrator”



Set "notify with vibration" button to "On," set the notification time, and click "OK."  
Note, however, that you need to validate the input data. Error messages are out in the event of insufficient condition.

- Feature description: moves to **feature description** page.
- License: moves to **License** page.
- Notify with vibration : set to "On" for "notify with vibration" feature.
- Notification list: move to notification list inquiry screen.
- OK: set notification based on current settings.



View notification list

### **Business Logic**

Displays notification setting information saved in server.

### **Code**

```
function fn_egov_select_data() {  
    var url = "/vbr/VibratorAndroidInfoList.do";  
    var acceptType = "xml";  
  
    $.mobile.showPageLoadingMsg();  
    egovHyb.post(url, acceptType, {}, function(xmldata) {  
  
        console.log("DeviceAPIGuide fn_egov_select_data request Completed");  
  
        fn_egov_go_detailPage(xmldata);  
    });  
}
```

### **Related Screen and Implementation Manual**

<b>Action</b>	<b>URL</b>	<b>Controller method</b>	<b>QueryID</b>
Notification information uiry	inq /vbr/VibratorAndroidInfoList.do	selectVibratorInfoList	“vibratorAndroidAPIDAO.selectVibratorList”



Displays notification information list saved in server.

Feature description: moves to **feature description** page.

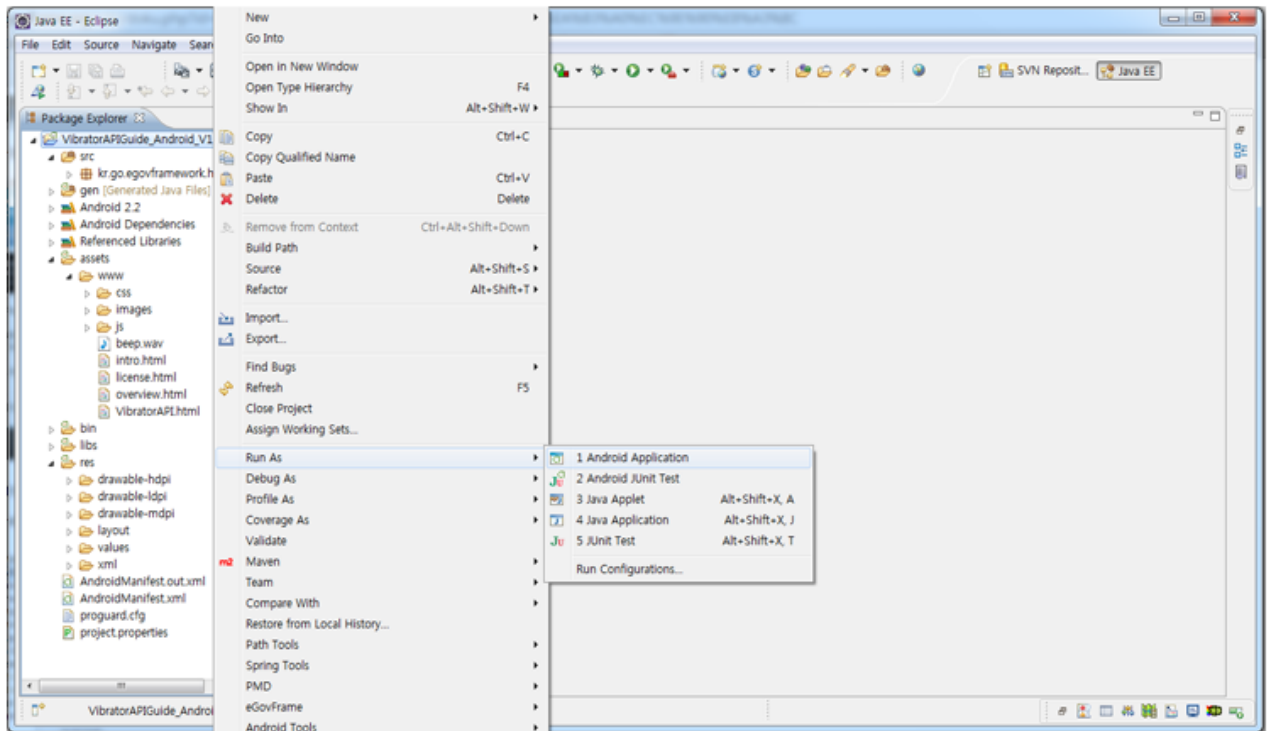
License: moves to **License** page.

## Compiling, debugging, distributing

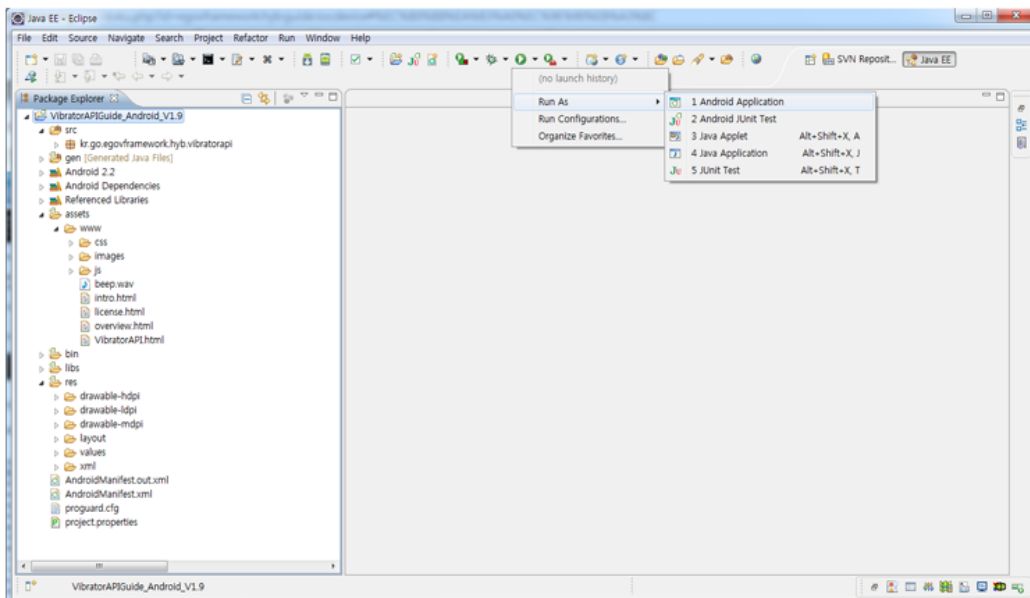
Compiling

**VibratorAPI Device Application Compile method**

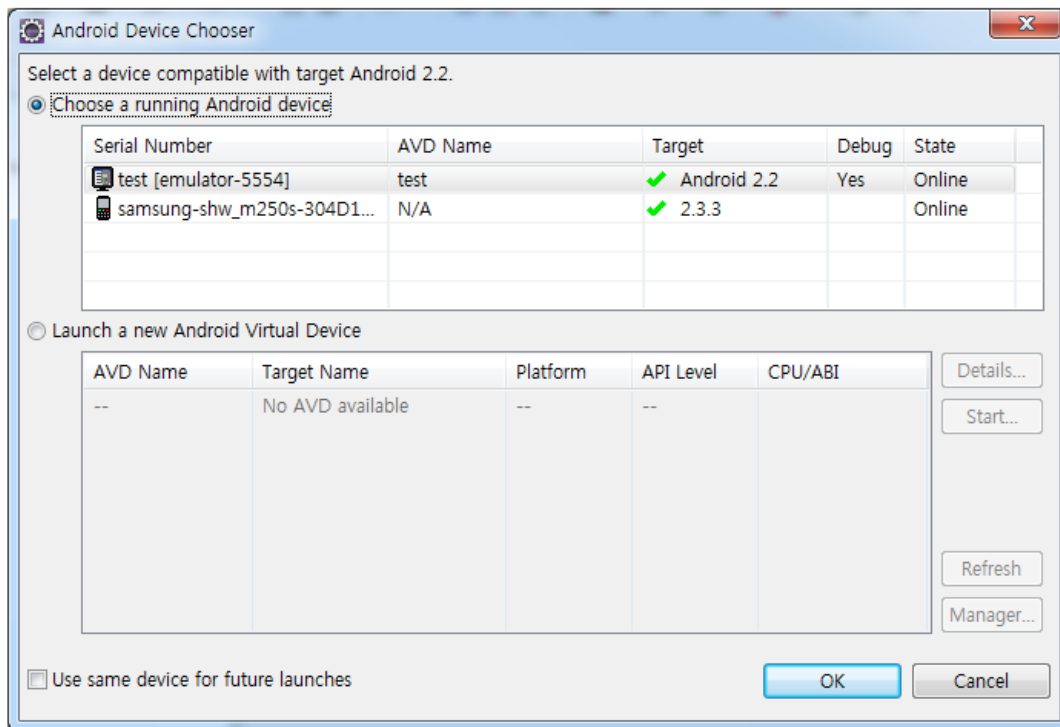
- Choose project > Right-click > Run As > Android Application



- Top menu > Run As > Android Application



- Select target to run > emulator, Device(debug mode)



- Program display on the emulator



- Program display on the device



Vibrator API 디바이스  
가이드 프로그램 

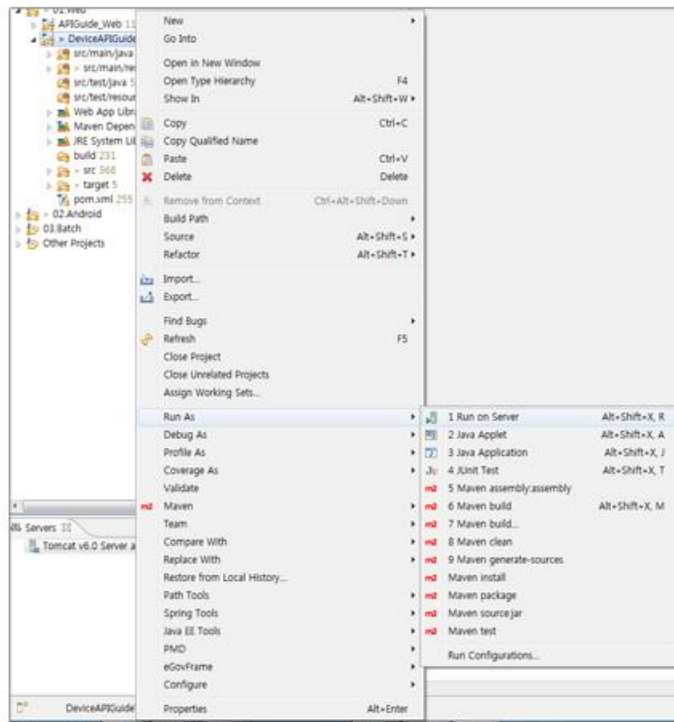


행정안전부



#### How to compile VibratorAPI Server Applicaton

- Right-click on the project and click on Run As>Run On Server in order to run the VibratorAPI server-side Guide Program.



- When the build is successfully completed, a message reading 'Server Startup in xxx ms' will display on the console window on the Eclipse.

```

2012-09-14 09:15:49,759 DEBUG [org.springframework.beans.factory.support.DefaultListableBeanFactory] Returning cached instance of singleton bean 'org.springframework.web.serv
2012-09-14 09:15:49,767 DEBUG [org.springframework.beans.factory.support.DefaultListableBeanFactory] Returning cached instance of singleton bean 'org.springframework.web.serv
2012-09-14 09:15:49,768 DEBUG [org.springframework.beans.factory.support.DefaultListableBeanFactory] Creating instance of bean 'org.springframework.web.servlet.view.DefaultRe
2012-09-14 09:15:49,771 DEBUG [org.springframework.web.servlet.DispatcherServlet] Finished creating instance of bean 'org.springframework.web.servlet.view
2012-09-14 09:15:49,771 DEBUG [org.springframework.web.servlet.DispatcherServlet] Unable to locate RequestToViewNameTranslator with name 'viewNameTranslator': using default
2012-09-14 09:15:49,771 DEBUG [org.springframework.beans.factory.support.DefaultListableBeanFactory] Returning cached instance of singleton bean 'org.springframework.web.serv
2012-09-14 09:15:49,772 DEBUG [org.springframework.web.servlet.DispatcherServlet] Returning cached instance of singleton bean 'viewResolver'
2012-09-14 09:15:49,772 INFO [org.springframework.web.servlet.DispatcherServlet] Published WebApplicationContext of servlet 'action' as ServletContext attribute with name [c
2012-09-14 09:15:49,772 INFO [org.springframework.web.servlet.DispatcherServlet] FrameworkServlet 'action': initialization completed in 1373 ms
2012-09-14 09:15:49,772 DEBUG [org.springframework.web.servlet.DispatcherServlet] Servlet 'action' configured successfully
2012. 9. 14 오전 9:15:49 org.apache.coyote.http11.Http11Protocol start
정보: Starting Coyote HTTP/1.1 on http-80
2012. 9. 14 오전 9:15:49 org.apache.jk.common.ChannelSocket init
정보: JK: ajp13 listening on /0.0.0.0:8009
2012. 9. 14 오전 9:15:49 org.apache.jk.server.JkMain start
정보: Jk running ID=0 time=0/30 config=null
2012. 9. 14 오전 9:15:49 org.apache.catalina.startup.Catalina start
정보: Server startup in 7209 ms

```

### Debugging

Use console.log in order to check the details on any errors on the device application, and to conduct debugging. Debug codes in console.log are available in JavaScript syntaxes that you can use in both Eclipse and Xcode.

See the following for how to code console.log:

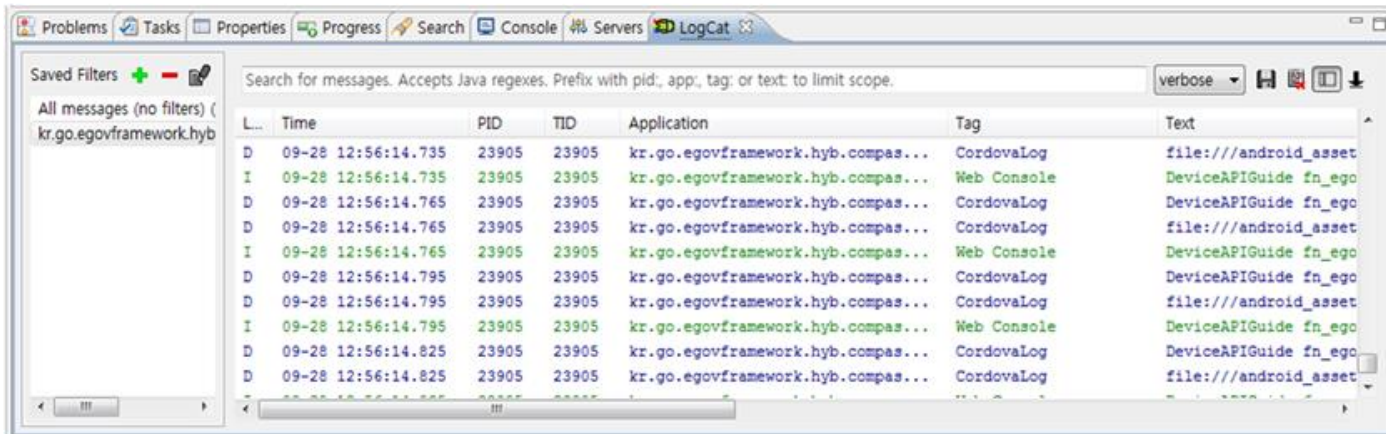
```

function fn_egov_network_check(doCheck)
{
    console.log('DeviceAPIGuide fn_egov_network_check');
    var networkState = navigator.network.connection.type;
    ...
}

```

When the debugging code is executed, check out the following console message appears:





Vibrator device API Guide Program will output the following console information for debugging.

#### Debug code

#### Debug information

DeviceAPIGuide fn\_egov\_insert\_data request Completed

Successfully saved device's notification setting information to web server application.

DeviceAPIGuide fn\_egov\_select\_data request Completed

Successfully inquired device's notification setting information to web server application.

DeviceAPIGuide fn\_egov\_set\_alarm Success

Successfully executed notification set by the user.

Distribution

Download Vibrator Device API Guide: [Click](#)

## References

- UX/UI Library : jQuery Mobile [Click](#)
- Phonegap 4.3.0 : [Click](#)