
VisionWorks (MTS) Application Installation **Document**

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This manual should be read and used as a guideline for properly installing and operating the product. This manual may be changed for the system improvement, standardization and other technical reasons without prior notice.

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Support: support@spirent.com

Revision History

Edition No.	Date of Issue	Author	Remarks
8.0	04/12/2017	Rabindranath Singh	Initial Draft
8.1	02/09/2018	Rabindranath Singh	VoLTE Feature Setting on GS8
8.2	05/11/2018	Rabindranath Singh	Flashing the Phone with engineering build firmware

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VisionWorks (MTS) Application Installation and E10 Configuration

Revision History

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1. Flashing the Phone with engineering build firmware

A.1. Hold down three buttons



Hold down Volume down, Bixby/lower key, and Power buttons all at the same time. Press volume up button to continue.

A.2. Connect PC and device using USB cable.

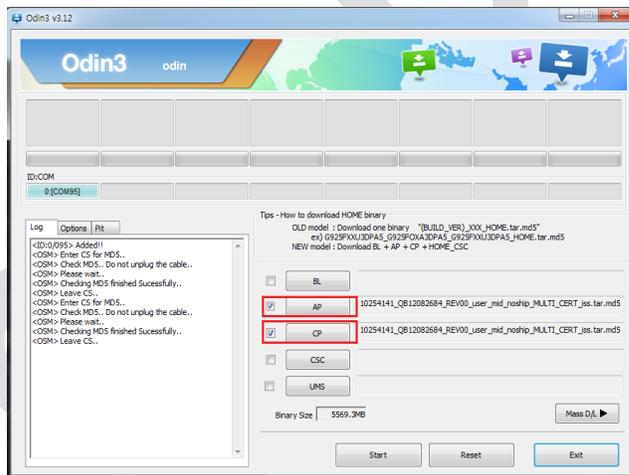
A.3. Prepare the download program (Odin 3.xx) and binary files.

Open Odin3 v3.12.xx.exe

Have the two binary files downloaded and ready on the connected pc.

- ALL_OYN_G950USQU1AQGL_G950UOYN1AQGL_CL11982677_QB14446179_REV00_user_mid_noship_MULTI_CERT.tar.md5
- USERDATA_SPR_G950USQU1AQGL_CL11982677_QB14446179_REV00_user_mid_noship_MULTI_CERT.tar

A.4. Open and load the binary files (AP and CP)



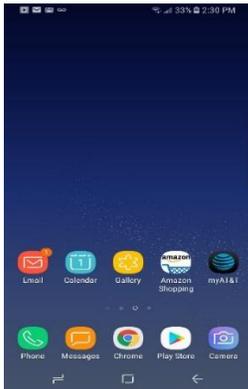
A.5. Click start to load the build

Wait for the phone to load the build and reset itself to the beginning provisioning screen. Click/skip through the menus (no need to load a gmail account, Samsung account, or Wifi).

2. Samsung Galaxy S8 features / options setup:

1.1. Power ON.

Navigate: Press Power ON button to turn ON new device.

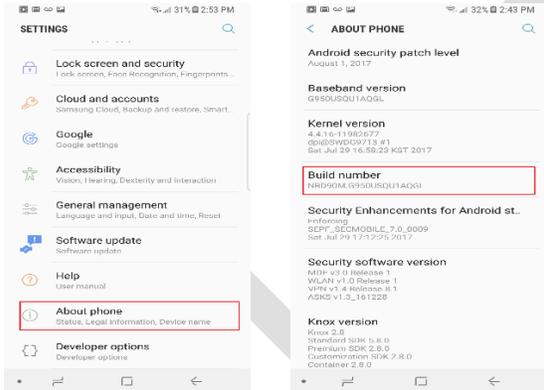


1.2. Development **No-Ship** Build check.

To check for the **no-ship** release build.

Navigate: **Apps** → **Settings** → **About Phone** → **Build Number**

Example (VoLTE build) : G950USQU2BRB3F_QB17030392_ **noship**

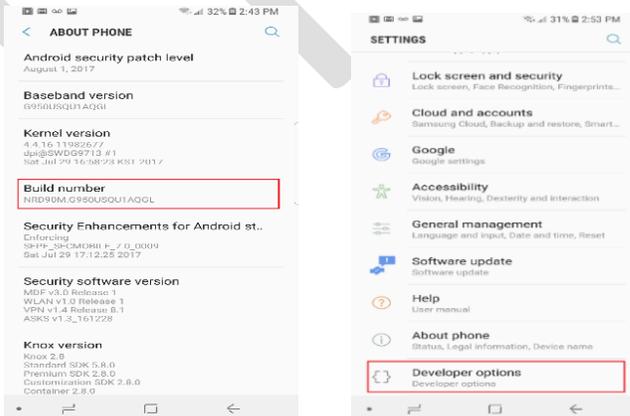


1.3. Developer Mode:

Enable Developer options on GS8.

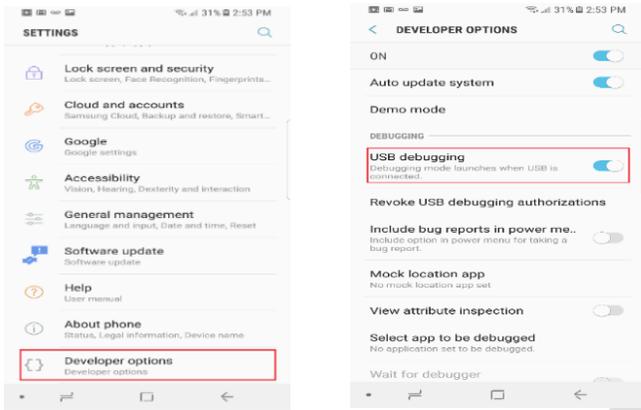
To enable the hidden developer options mode feature on the device. Tap “build number” 7 times to enable, click back arrow and check for developer options under About Phone option.

Navigate: **Apps** → **Setting** → **About Phone** → **Build number** → Tap 7 times → Click back arrow → Scroll down to developer options



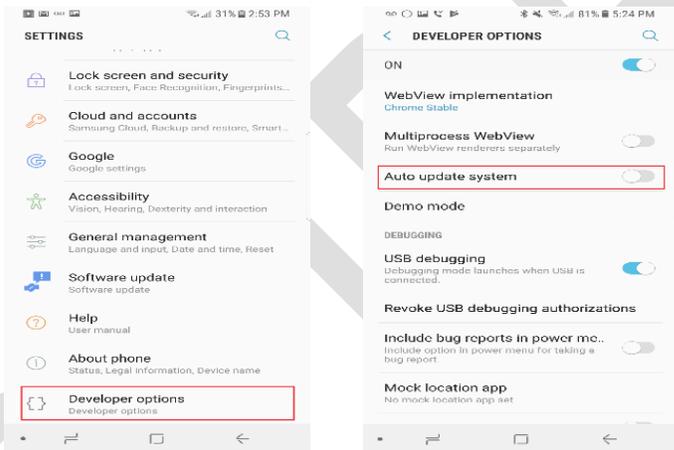
1.4. Enable USB debugging option on GS8.

To enable a connection between device and Landslide with software development kit.
 Navigate: **Apps → Settings → Developer Options → USB debugging → turn ON**

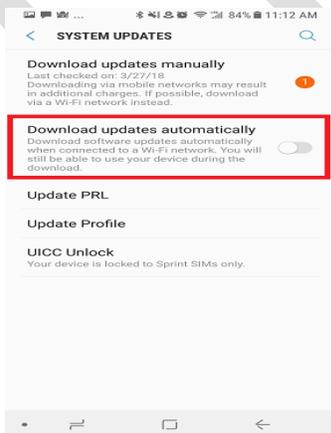


1.5a. Disable (OTA) Auto Update System options.

If the developer mode is not enabled. Enable developer mode on the device. Launch the Settings application scroll down and tap on the Developer Options and Look for Auto Update System option and toggle off.
 Navigate: **Apps → Settings → Developer Options → Auto update system → turn OFF**



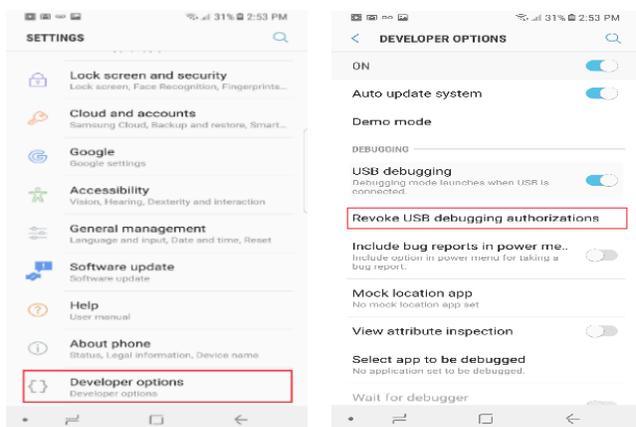
1.5b. Disable Automatic Update Downloads (Settings→ System Updates→Download updates Automatically→turn OFF



1.6. Revoke USB debugging authorizations.

This step will revoke all the previous connected devices used for USB connection by this phone.

Navigate: **Apps → Settings → Developer Options → Revoke USB debugging authorizations**



1.7. PlayStore Signup.

To access playstore.

Navigate: **Apps → Play Store**

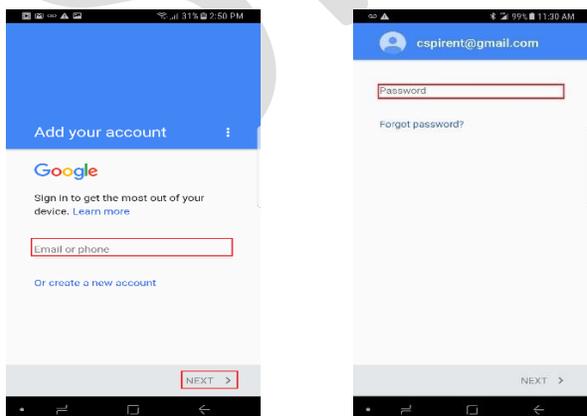


1.8. Create GMAIL Account.

To access Play Store. Create a new account / use below existing account.

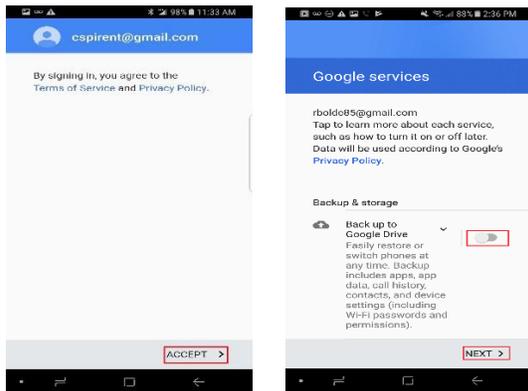
Requirement: Username: cspirent@gmail.com (Example)

Password: Spirent123



1.9. Accept Terms of Service and Privacy Policy.

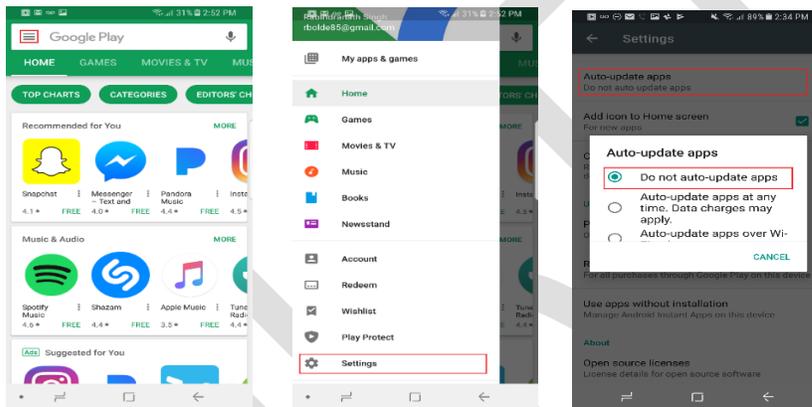
Agree Terms of Service and Privacy Policy by clicking **ACCEPT** and disable the Backup & Storage to Google Drive and Click **NEXT**.



1.10. Disable Auto-Update Apps.

To disable auto-update apps feature for Google PlayStore in PlayStore Setting.

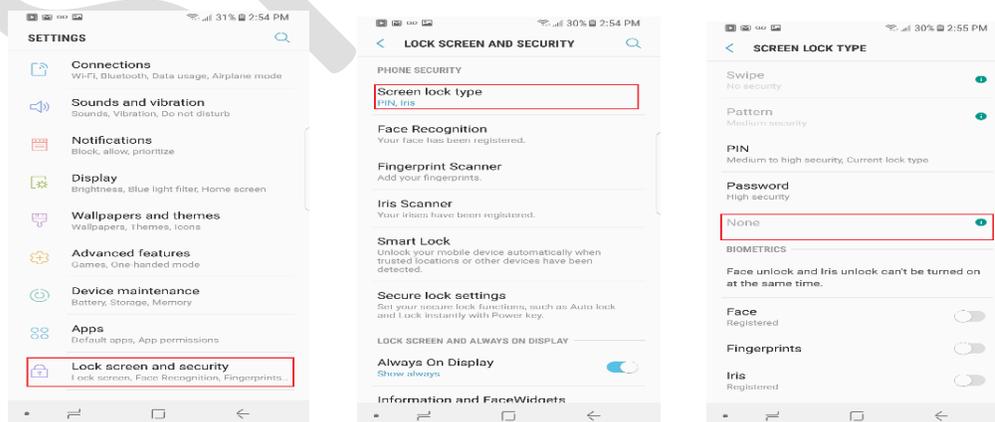
Navigate: **Google Play Store** → **setting** → **Auto-update apps** → **Select Do not auto-update apps**.



2. Enable and Disable options on GS8.

2.1. Change Lock Method.

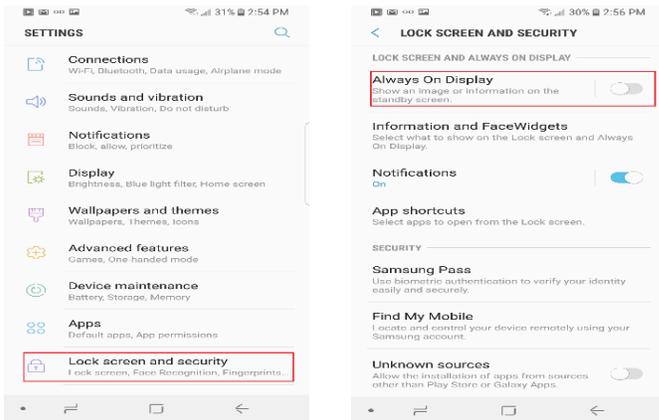
Navigate: **Apps** → **Setting** → **Lock screen and security** → **Screen lock type** → **None**



2.2. Disable Always ON display.

To turn OFF Always display ON feature.

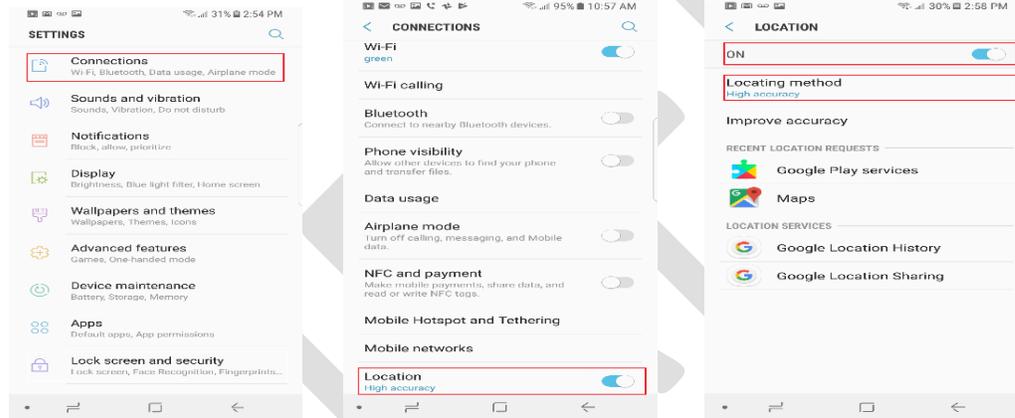
Navigate: Apps →Setting → Lock Screen and Security → Always On Display → turn OFF



2.3. Enable Location Services with High Accuracy.

To enable location service with high accuracy.

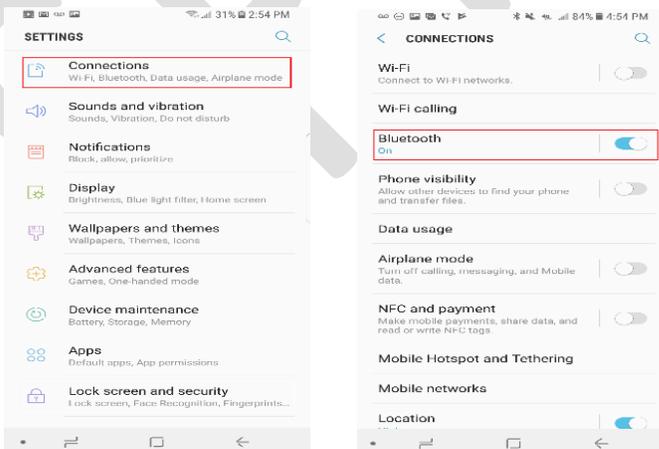
Navigate: Apps →Setting →Connections →Locations →turn ON / Location method (High Accuracy)



2.4. Enable Bluetooth Services.

To enable bluetooth on device.

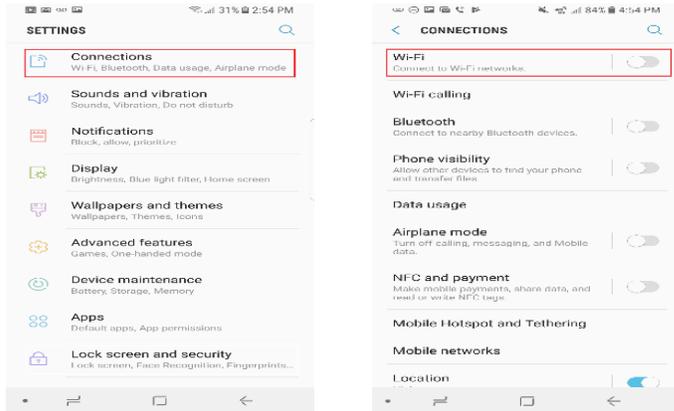
Navigate: Apps →Setting → Connections → Bluetooth → turn ON



2.5. Disable WIFI Services.

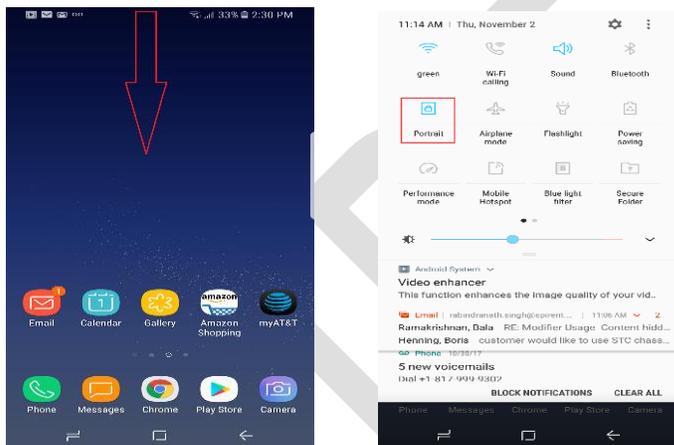
To disable WIFI on the device.

Navigate: **Apps** → **Setting** → **Connections** → **WIFI** → turn OFF.



2.6. Change Auto Rotate to (Portrait) mode.

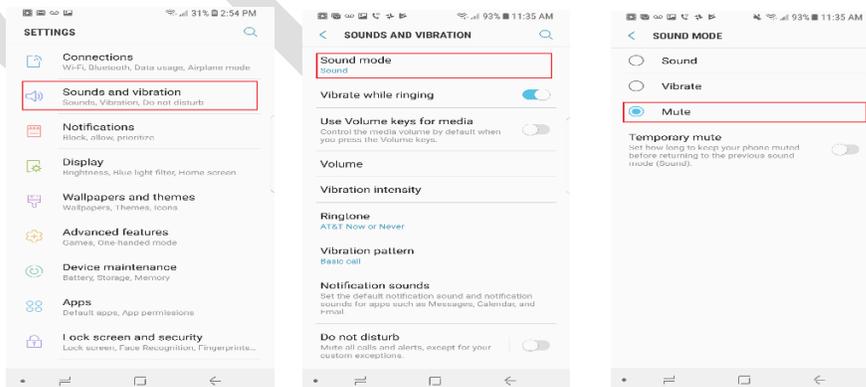
Swipe down from top of the screen to reveal notification panel. These instructions apply to standard mode only. Tap Auto Rotate Tapping Auto Rotate locks the screen into the current viewing mode (i.e., Portrait, Landscape). To return to Auto rotate, tap the current mode icon (i.e., Auto rotate , Lock rotation).



2.7. Disable Sound mode.

You can switch between sound modes, while preserving the individual sound settings you have made.

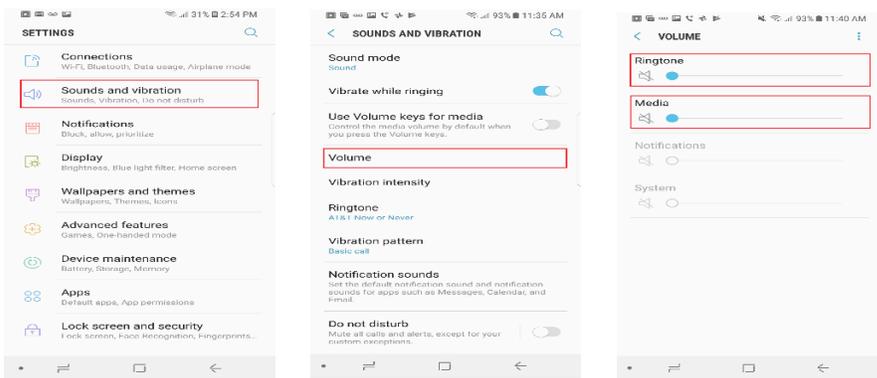
Navigate: **Apps** → **Settings** → **Sounds and vibration** → **Sound mode**, and then choose a mode: **Sound: Mute**: Your phone plays no sounds or vibrations. Onscreen reminders will still occur.



2.8. Disable Ringtone and Media volume.

To disable all volume controls.

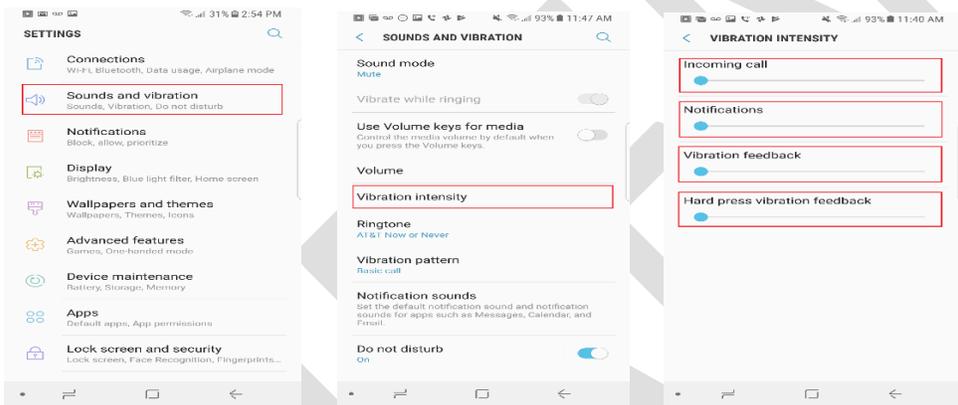
Navigate: **Apps → Settings → Sounds and Vibration → Volume → Change to all low**



2.9. Disable Vibration.

To disable vibration mode.

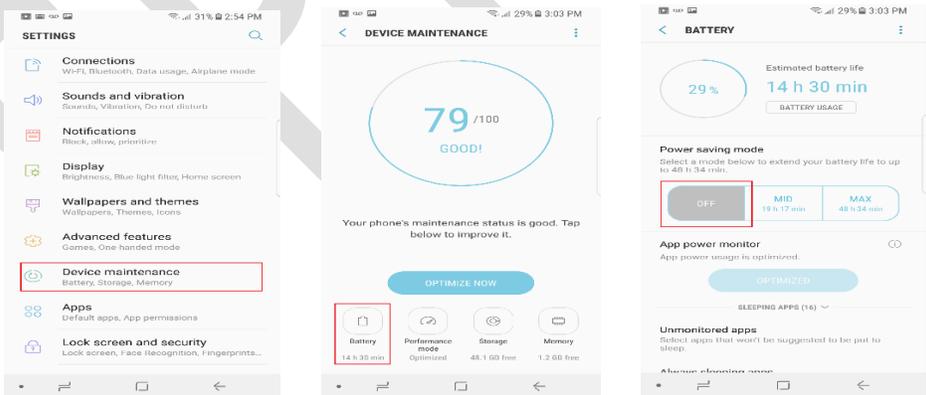
Navigate: **Setting → Sounds and Vibration → Vibration intensity → Change to all low**



2.10. Disable Battery optimization.

To disable battery optimization.

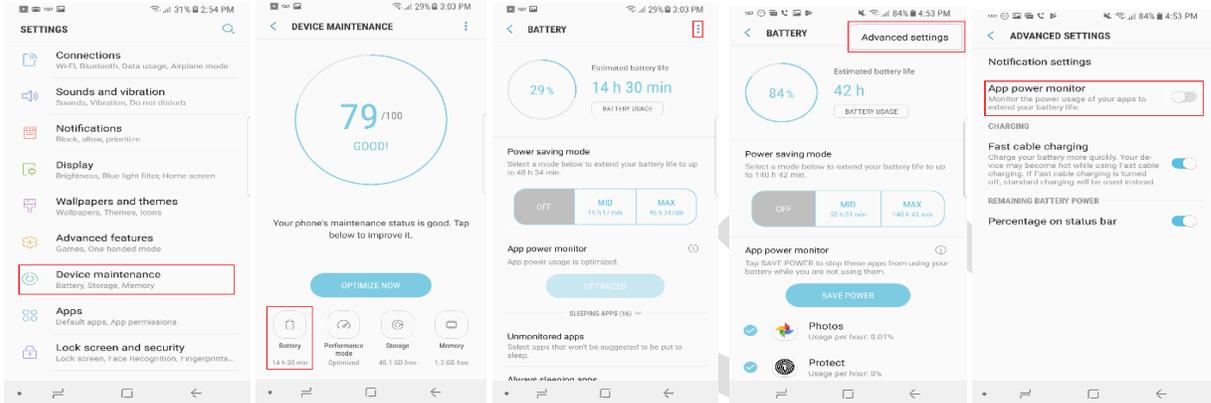
Navigate: **Apps → Settings → Device maintenance → Battery → Power saving mode → OFF.**



2.11. Disable Battery: App power monitor.

This means that app running in the background by the operating system are restricted. The App Energy Monitor on the devices will not be allowed to run in background.

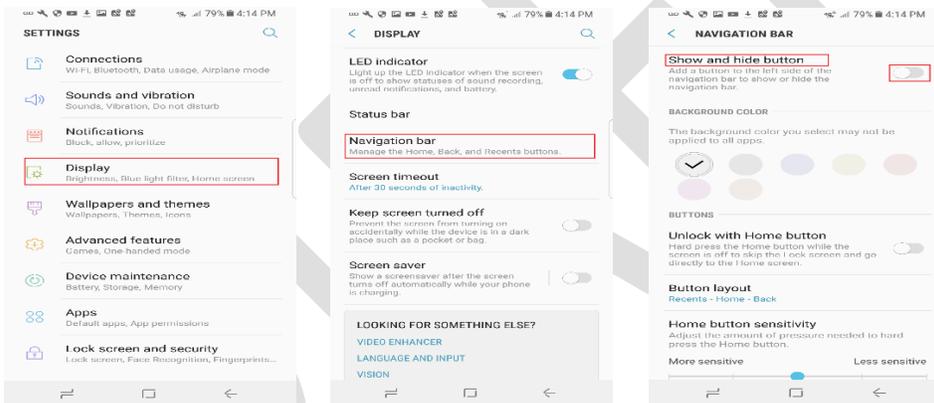
Navigate: **Apps → Settings → Device maintenance → Battery → Advanced Setting → App power monitor → turn OFF**



2.12. Disable Navigation Bar hide feature.

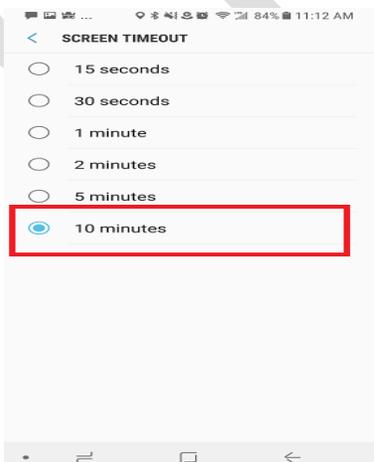
Disable the navigation bar to avoid application changing its pointer selection dimensions.

Navigate: **Apps → Settings → Display → Navigation Bar → Show and hide button → disable**



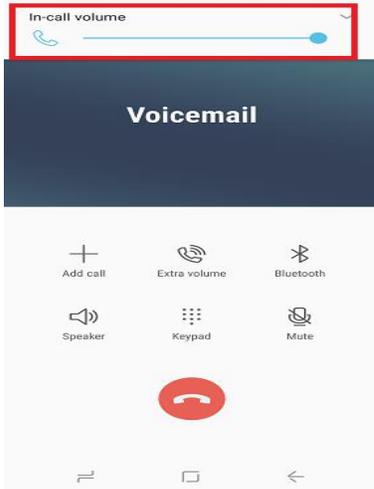
2.13. Set Screen Timeout to 10 minutes.

Navigate: **Apps → Settings → Display → Screen Timeout → 10 minutes → select**



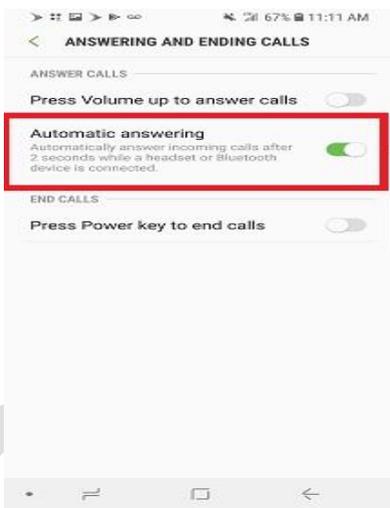
2.14. Set In-Call Volume

Make a call to voicemail (dial 1) and push the up volume button on the side to increase In-Call volume to max.



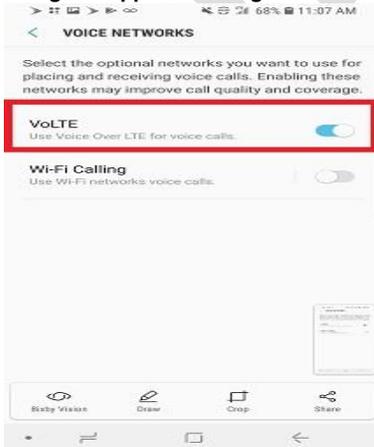
2.15. Enable Auto-Answering

Navigate: Apps → Settings → Accessibility → Answering and Ending calls → Automatic Answering → turn ON



2.16. Turn On VoLTE

Navigate: Apps → Settings → Connections → Voice Networks → VoLTE → turn ON



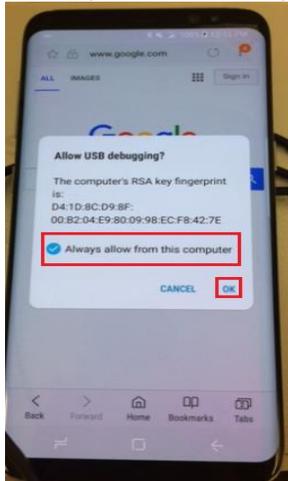
Application Installation.

3. Samsung GS8 and E10 communication.

Connect the phone via USB cable to the first available USB port of E10.

4. Samsung GS8 RSA Permissions Acceptance.

After step:8 of App installation. Accept the popup for RSA KEY verification on the phone (if it does not popup, Please, remove the USB cable from the phone and re do Step:7 of the Application Installation).



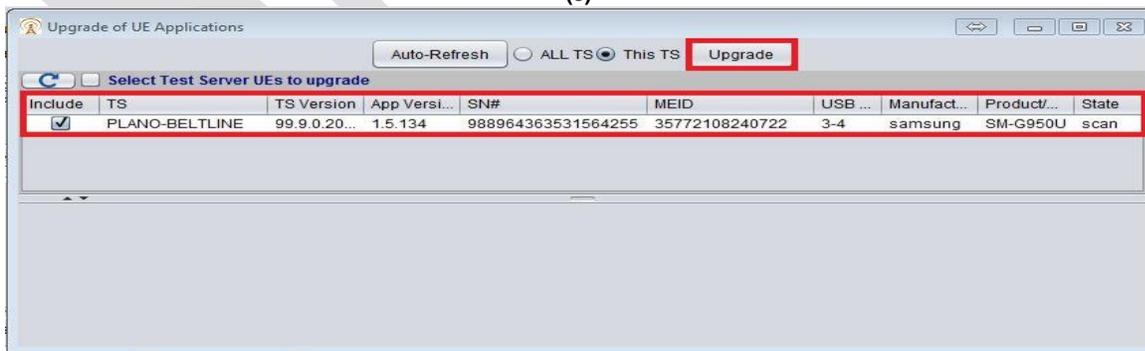
5. VisionWorks (MTS) Application Installation from E10.

To push the application MTS on the phone login into Test Server Administration: Select Test Server the phone is connected to, from the list of Servers add with the (hostname) (1) → Go to UE tab on the right → Click on Upgrade (2) → A new popup window appears (3) → Check / Select the UE from the list of UE's to upgrade (3). This upgrade button will push the application MTS on the phone.

Note: If UE tab doesn't appear please, recycle the E10.



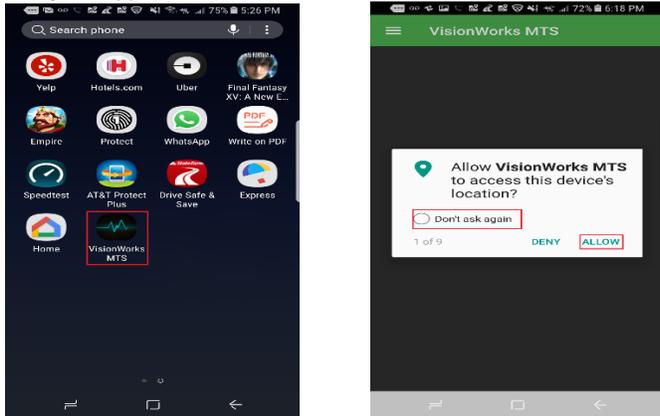
(3)



6. VisionWorks (MTS) Application permissions acceptance on GS8.

To check the above Step:10 is successful. Login on the phone → All Applications → Check for VisionWorks MTS app → Open the MTS application → it will prompt for permission → Accept all the 9/9 permissions on the phone.

Navigate: **Apps → VisionWorks MTS.**



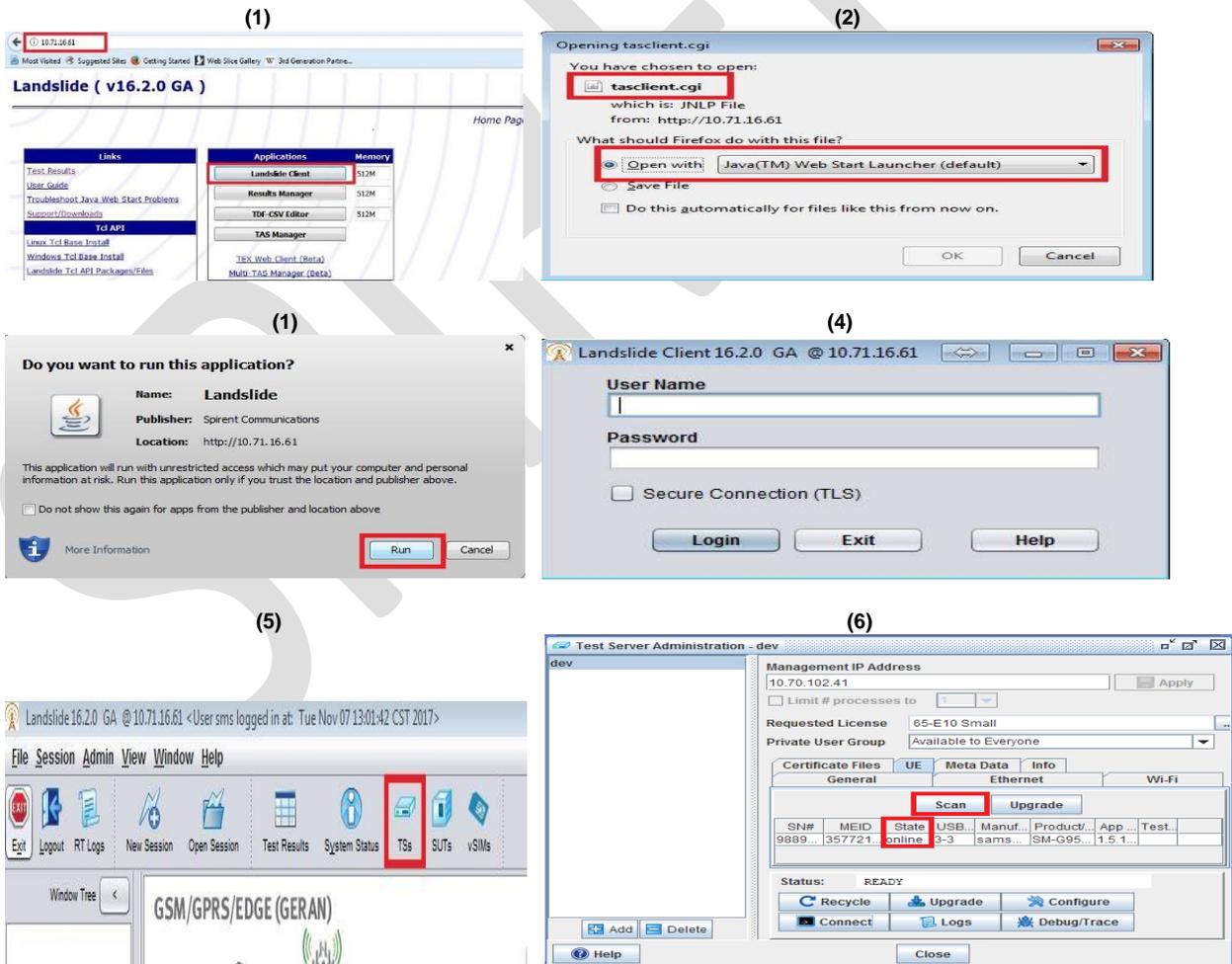
7. Mobile status / state check from Test Server Administration.

To verify the installation check the application / phone state on Test Server (E10).

Navigate: Login to TAS UI.

Example: TAS IP: (10.71.16.61) → Click on Landslide Client → look for a pop up tasclient.cgi should be open with Java web Start Launcher → click OK → Click Run (3) → Enter the credentials on the Landslide Client (4) → Click TSs (5) → Select E10 / TS the phone is connected to → click on UE Tab and hit Scan to check the state of UE (6) → State: Online → Close.

Note: If UE tab doesn't appear please, recycle the E10.



E10 (Test Server Configuration)

8. E10 Configuration.

8.1. Power ON.

Connect the power Cable to E10 and power ON.

8.2. Change default Management IP and Hostname.

It is easier to hook up a monitor and keyboard but below are the steps to assign / change the default mgmt IP address (192.168.0.100).

You may choose to connect a SEN network cable to the probe and query your reserved LAN IP (ipconfig/all) to statically assign to the E10 and if that is the case, skip to step 8.2.5.

Change / Assign Mgmt. IP (eth0) on Landslide E10.

8.2.1. Configure an Ethernet interface on a laptop or workstation with an IPV4 address (192.168.0.101) and a network mask (255.255.255.128) and Gateway (192.168.0.100) to allow communications with the management port.

8.2.2. Connect the laptop or workstation to the management port using a standard Ethernet cable.

8.2.3. Telnet to the management port from the laptop or workstation. From a command prompt, enter: telnet 192.168.0.100

8.2.4. Log in to the cfguser account on the Landslide platform. The default password is the same as the user name.

login: cfguser

password: cfguser

8.2.5. Enter ipcfg to open ip configuration utility. This utility will ask for permission to kill E10 server. See below example:

```
##- ipcfg
Note: Do not terminate this Utility, otherwise it can lead to system instability
Do you wish to Continue (yes/no) [no]: yes
TS related processes detected: 1/1.
Stopping Test Server (waiting 10 seconds).
### Killing Test Server
```

8.2.6. You are prompted to identify the port to be used as the management port. You must select the recommended and default port number as the management port (eth0). Example below.

```
NOTE - Preferred management port is eth0
Designate management port (eth0/eth0v6 -- eth2/eth2v6) [eth0]:
```

Please note the following IPCFG configurations.

Preferred management port- Eth0

Static IP address- Enter the requested IP addresses configuration from the step 8.2.

Subnet Mask- 255.255.192.0

Auto Negotiate- YES

Gateway- 10.65.64.1

Hostname- See Spreadsheet tracker and use appropriate TAS IP for the next step.

TAS1- 10.79.32.17

TAS2- 10.65.117.101

TAS3- 10.65.72.112

NTP- 144.230.31.245

8.2.7. The initial Mgmt IP configuration is complete at this point. The system will ask / must be rebooted for these changes to take affect.

Please, type yes or hit enter for system to reboot. Example below:

```
System must be rebooted for these changes to take effect... Reboot now? (yes/no) [yes]:
```

9.0. Add License and Upgrade E10 Firmware

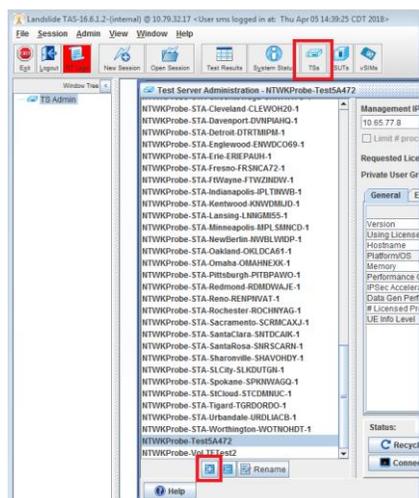
9.1. Apply License

Once the E10 has finished its reboot, Log into the appropriate TAS like in step 7 (enter the IP from step 8.2.6 in a browser) so you can apply the license and upgrade the firmware.

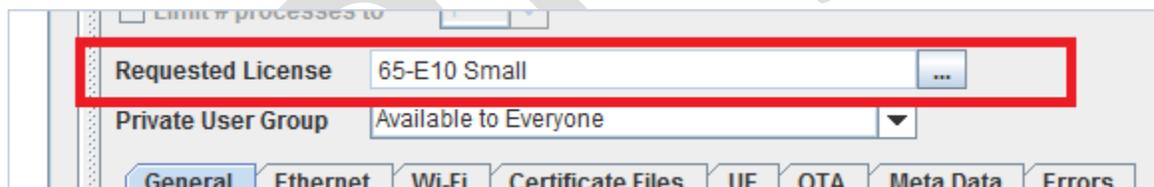
TAS username- SMS

TAS password- a1b2c3d4

Select TSs (Test Servers) and if the probe is not listed, click the plus symbol to add the hostname.



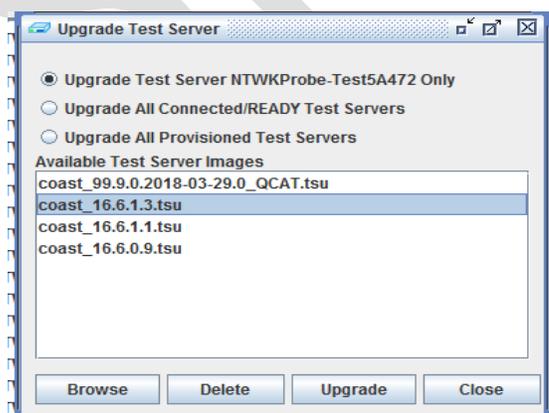
Select the 3 dots to Apply the license as seen below.



9.2. Upgrade Firmware

After a minute or so, the probe will be in a READY state to upgrade the firmware.

Click on Upgrade and select the most recent version (In the example below at this current time, it is coast_16.6.1.3.tsu) to upgrade the firmware and the E10 will reboot and take a few minutes to upgrade and reboot.



9.3. IPCFG again

Once the probe is in a READY state, switch back to the command line prompt in the E10 (whether via keyboard and monitor or telnet to it).

Type IPCFG

Everything will remain the same except for the following new options-

Configure TS IP Address mode- Dynamic

Configure TAS IP Address mode- Static (unless connected to TAS1, which will be set to Dynamic)

TAS hostname- landslide.prep.dev.sprint.com

DNS override- NO

```
Designate TS management port (eth0/eth0v6 -- eth2/eth2v6) [eth0]:
Configure TS IP Address mode (static/dynamic) [dynamic]:
TS Host Name [NTWKProbe-VoLTETest2]:
Configure TAS IP Address mode (static/dynamic) [dynamic]:
TAS Host Name [landslide.poc.dev.sprint.com]:
```

Once you finish these steps it will prompt to reboot; type yes to reboot and apply the new configurations.

9.4. Upgrade the E10 with the file QCAT.tsu

Just like in step 9.3, select the probe and click on upgrade.

This time, select the QCAT.tsu file as seen below and apply.

It will take a minute or so to apply and reboot the E10.

