CipherLab

User Guide

Wireless Mobile Deployment System

For Android™ 6.0

RS30
RS31
9700A
RS50

Version 1.00



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RELEASE NOTES

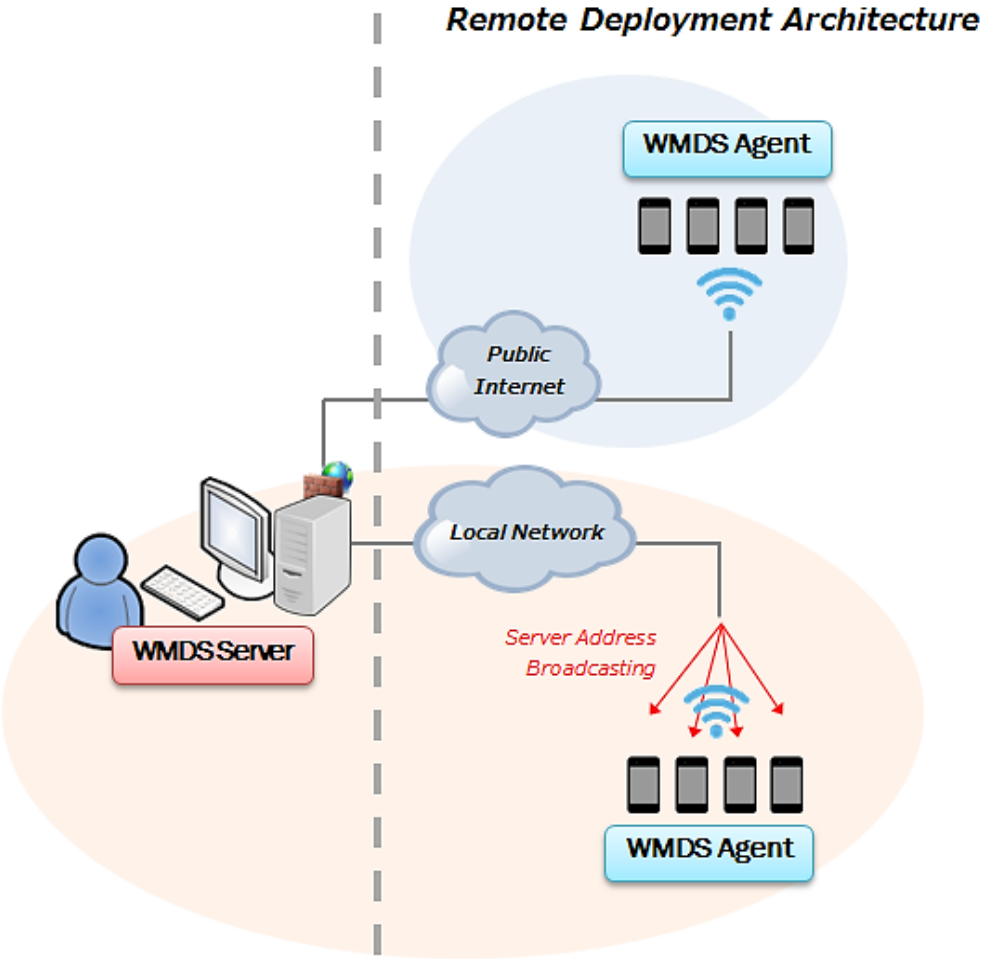
Version	Date	Notes
1.00	Apr 28, 2017	Initial release

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INTRODUCTION

Wireless Mobile Deployment System (hereafter referred to as **WMDS**) for Android is a windows-based server program that can deploy the configuration projects (created by **Android Deployment Configurato**r) to Android devices through wireless network. With the aim of optimizing the process of large-scaled device deployment task, WMDS can deploy multiple Android mobile computers simultaneously within in one task as well as monitoring all the devices' status. With **WMDS**, device deployment can't be more efficient.

As its name suggests, **WMDS** empowers you with a wireless solution which can perform device deployment not only within your intranet but over the Internet. What's more, **WMDS** Server can keep broadcasting its address to the devices within your private network, allowing the devices with **WMDS Agent** installed to automatically get connected with Server, saving your labor to configure every device for the initial server-client connection.



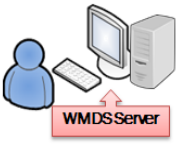
GETTING STARTED

This chapter helps you get ready for using this program.

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1.1 INSTALL WMDS SERVER



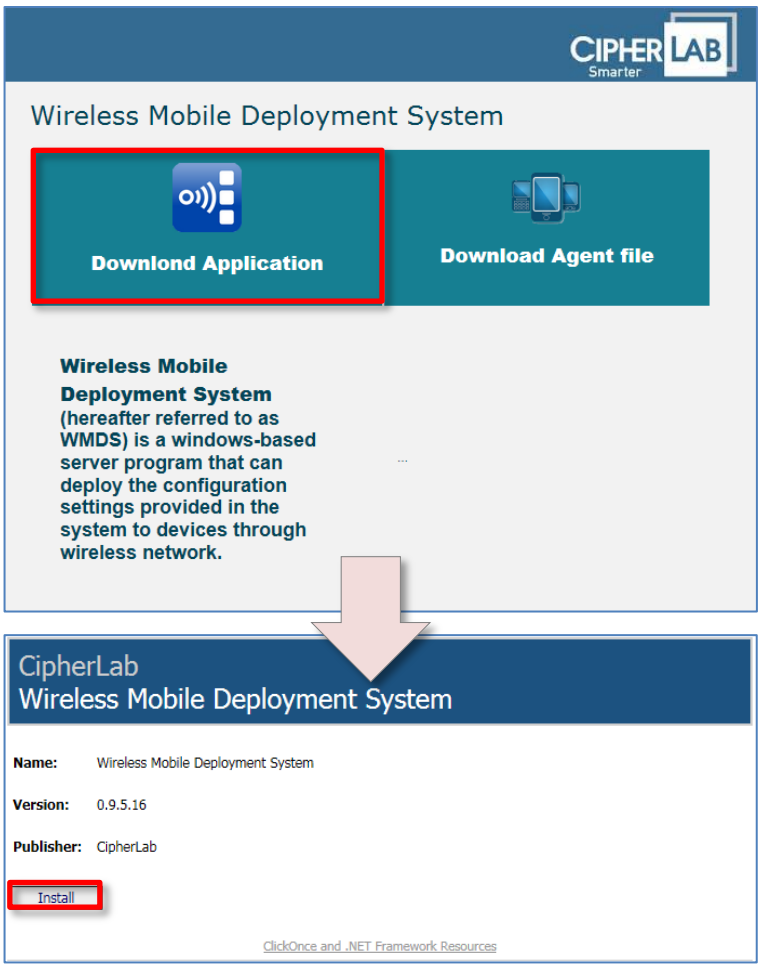
- **Install WMDS Server on PC**
- **Register for free license**

Note:

During installation and registration, please make sure your computer has access to the Internet.

1.1.1 INSTALL WMDS SERVER PROGRAM ON PC

1) Make sure the operating system is Windows 7 or 8.
2) Obtain the latest version of WMDS server program from http://wmds.cipherlab.com/. Follow the on-screen instructions to have this program installed.

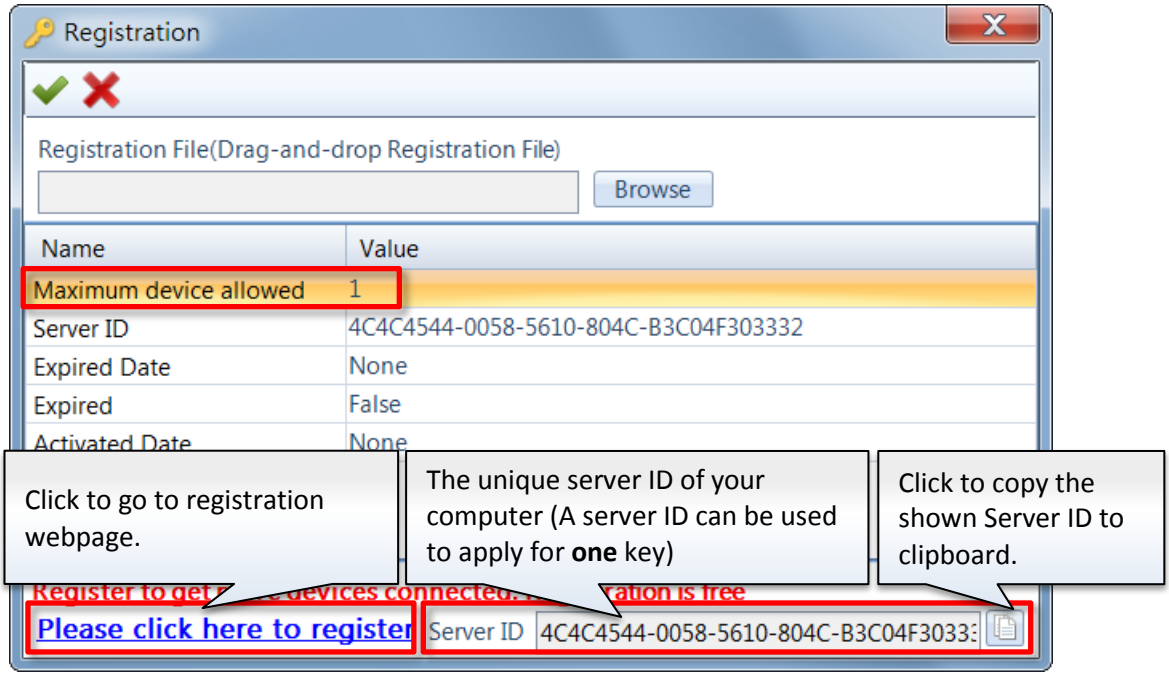


3) When installation is complete, WMDS program icon will appear on Windows Start Menu; in the meantime, a shortcut is added to your Desktop.

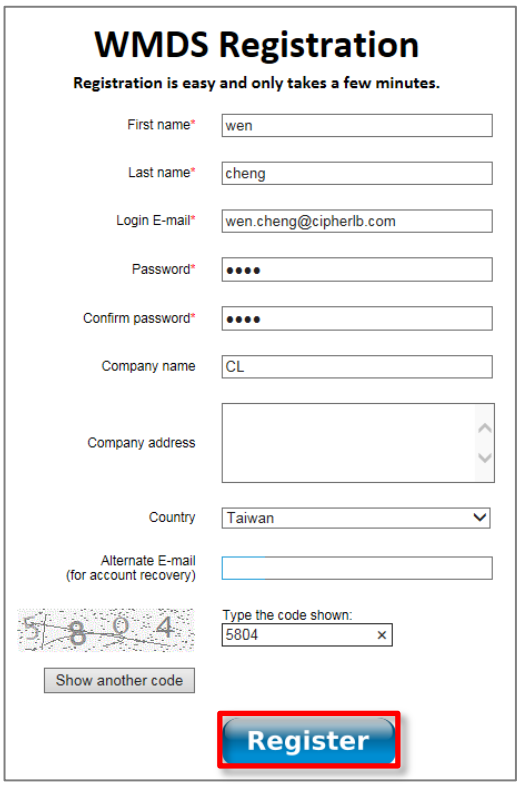
1.1.2 KEY REGISTRATION

In addition to a built-in free license for **one** connected device, you can obtain a key for four **more** connected devices through online registration.

1) Launch WMDS program.
2) On Registration window, the value for **Maximum device allowed** appears as **one** before the registration key is applied. Click on "Please click here to register" to go to registration webpage.



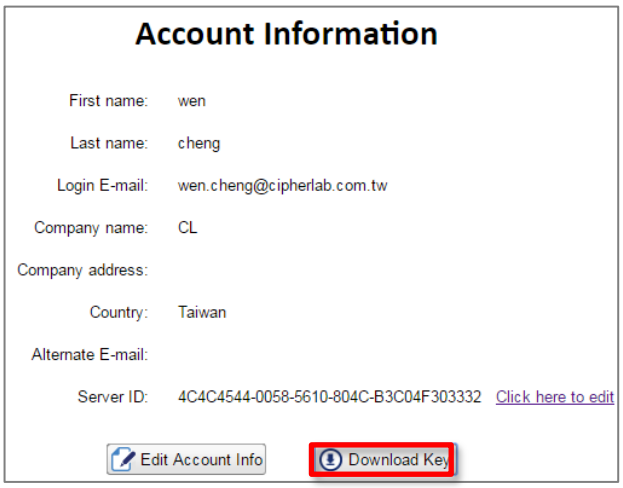
3) You will be brought to the registration form. Fill in the required fields and click on "**Register**". Please do provide a valid email address for the system to send a verification code.



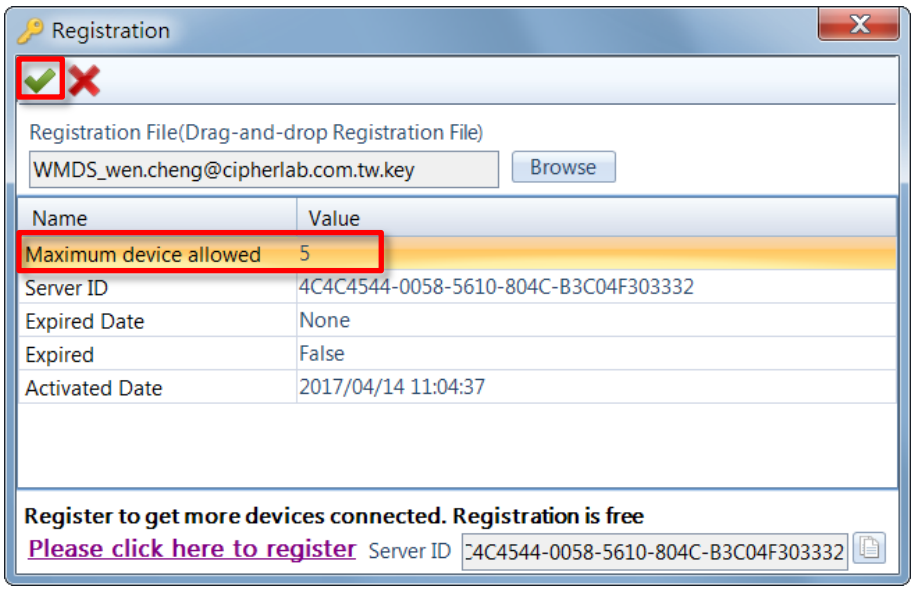
4) On verification page, input the verification code provided in the Customer Sign-up notice email sent by WMDS developer and then click on "**Activate**".



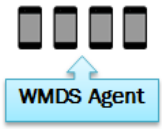
5) On Account information page, click on "**Download Key**".



6) Return to WMDS program, on Registration window, click on "**Browse**" to locate the key file (WMDS_*your email address*.key) you just downloaded. The **Maximum device allowed** has been increased to **five**. Click on "**OK** ✔" to save and exit this page.



1.2 INSTALL WMDS AGENT ON YOUR DEVICE



- **Install WMDS Agent on your device**
- **Update WMDS Agent version**

Note:

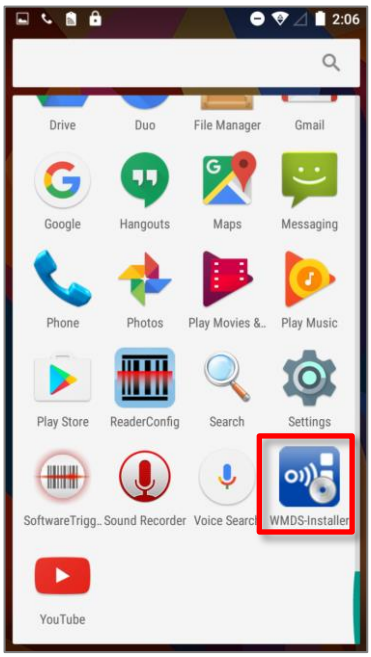
During installation, please make sure your computer has access to the Internet.

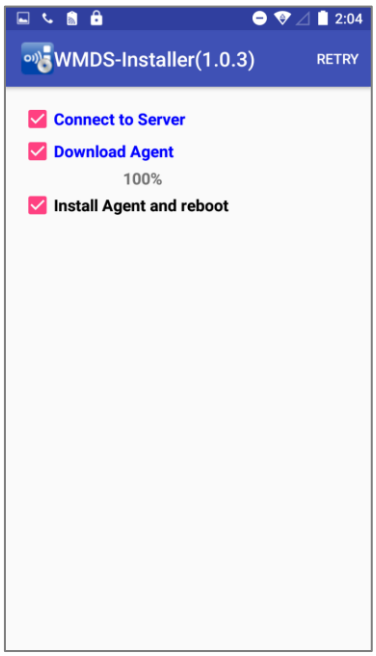
Your device is already preloaded with a **WMDS-installer**. Please DO NOT remove this application from your device, for it provides the following services that are essential to your device deployment architecture:

1. Automatically launches your WMDS Agent when this device is powered up
2. Provides an automated process where downloading, updating and device rebooting are completed in a row without your extra effort

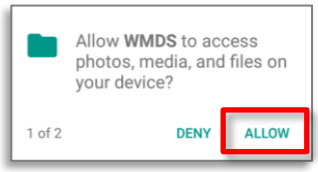
1.2.1 INSTALL WMDS AGENT

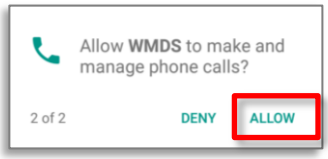
1) For the first time you enter the device's OS, WMDS Agent is not installed yet. Go to **All Apps** and execute **WMDS-Installer**. The installer will fetch the latest WMDS Agent version over the Internet and then perform auto-installation. A reboot will follow the completion of the installation.



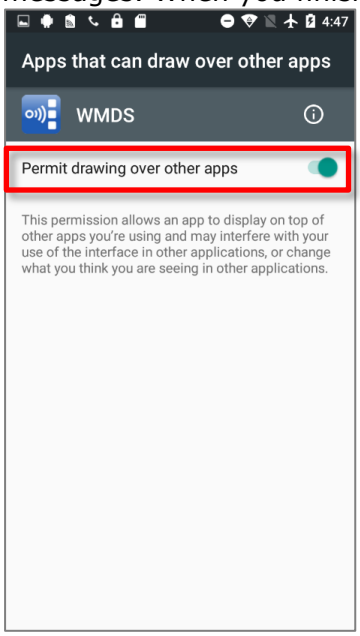


2) After the device restarts, WMDS Agent will automatically starts and prompt you the following query messages, please tap on **ALLOW** to proceed.



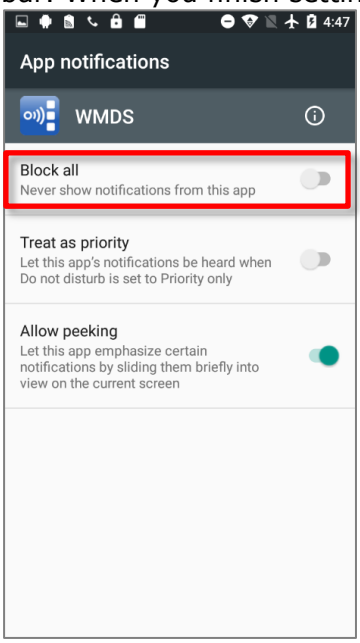


When prompted for changing the security settings, please enable "**Permit drawing over other apps**". This setting will enables WMDS server to push instant messages to WMDS devices. Please refer to Push Messages to Devices for details about push messages. When you finish setting, tap **Back** button to proceed.



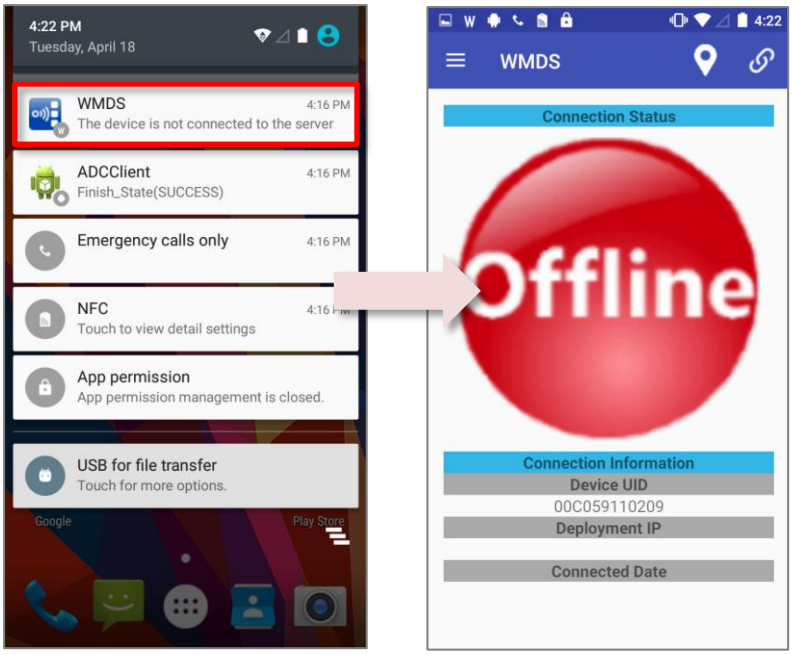
You can access this setting in **All Apps** | **Settings** | **Apps** | **Configure apps** | **Draw over other apps** | **WMDS**

When prompted for changing the App notification settings, you can choose to enable "**Block all**" function if you would like to hide all notifications from WMDS Agent on status bar. When you finish setting, tap **Back** button to proceed.



You can access this setting in **All Apps** | **Settings** | **Sound & notification** | **Notification** | **App notifications** | **WMDS**

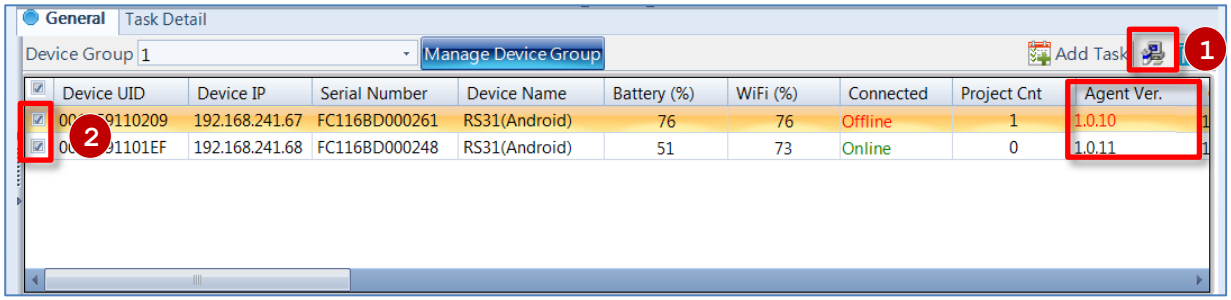
3) After installation, this agent will automatically run along with the device's starting up. On Homescreen, swipe down from the status bar and tap on "**WMDS**" to enter the application.



1.2.2 UPDATE WMDS AGENT

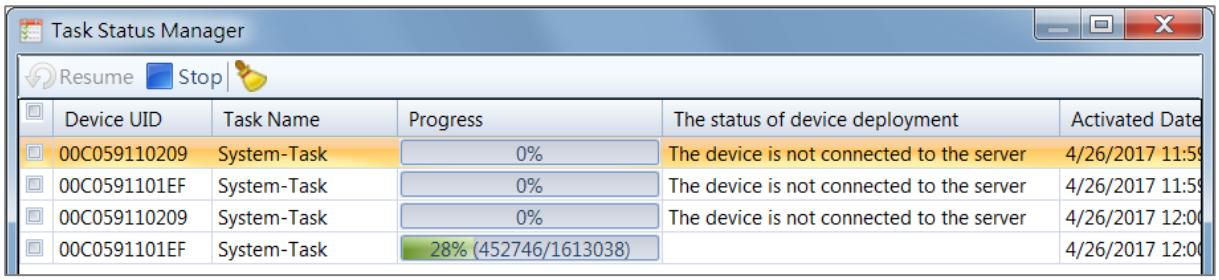
As the mobile deployment system is widely adopted, WMDS program and WMDS Agent are hence being enhanced on a regular basis to cater to new requirements from various industries.

On WMDS Server program, you can check out the version number of current agent installed on each device. When the version number in **Agent Ver.** column appears red, the agent version needs upgrading.



To perform a batch update:

1) Click on **Install WMDS-Agent** on Device Panel.
2) Select the devices which are to undergo WMDS Agent upgrade. A Task Status Manager will pop out to display this task progress.



3) The task will be completed followed by an auto-reboot of the device.

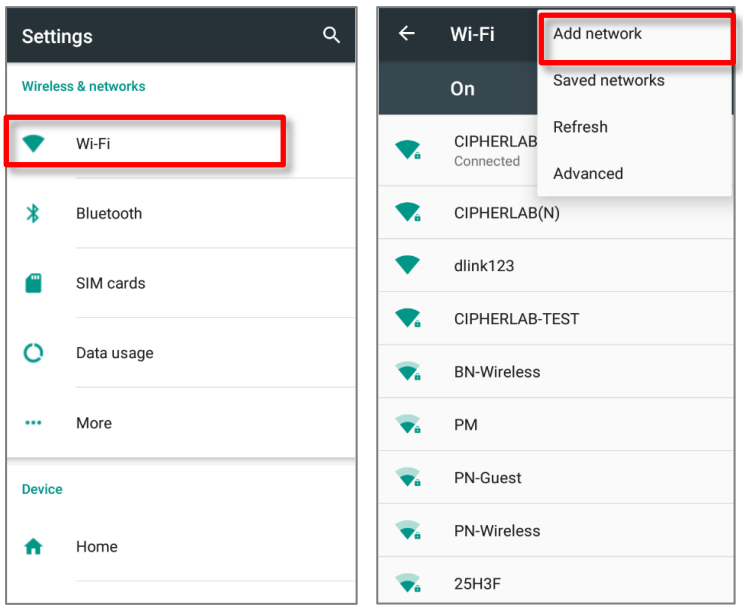
You can also update the WMDS Agent on a single device by executing **WMDS-Installer**. (Tap **All Apps** | **WMDS-Installer**).

1.3 BUILD UP CONNECTION BETWEEN DEVICES AND SERVER

Once a device is successfully connected to WMDS server, it immediately becomes an enrolled device whose status is displayed on the Device Panel on WMDS server interface. The 1st time client-server connection involves the following two stages: connecting to network and connecting to Server.

1.3.1 CONNECT TO NETWORK

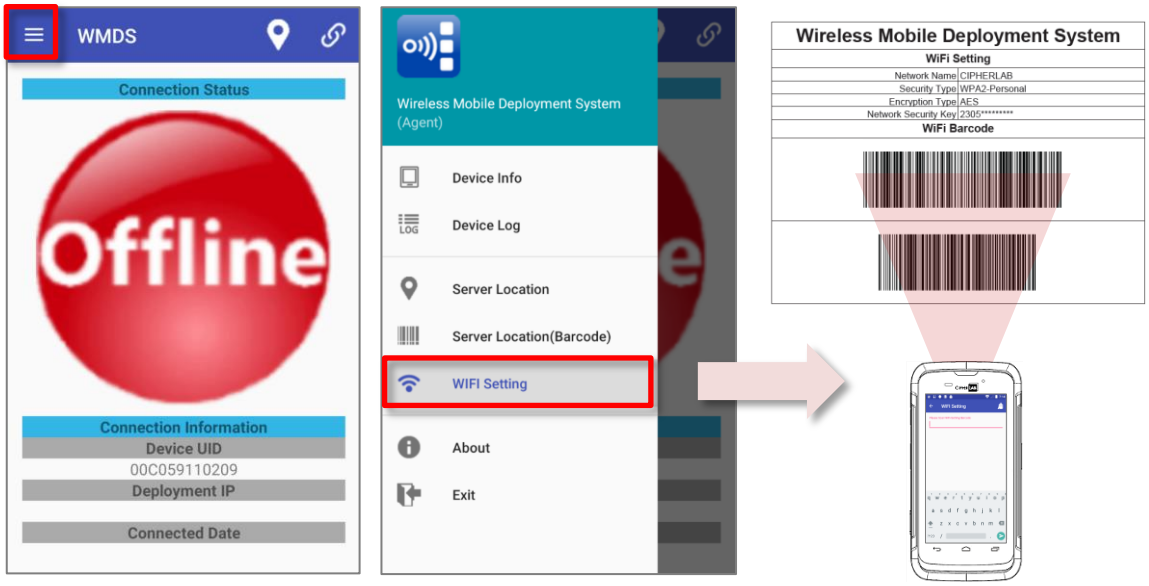
To have this device connected to the network segment of WMDS server, you can search and add the network in **All Apps** | **Settings** | **Wi-Fi** on the device.

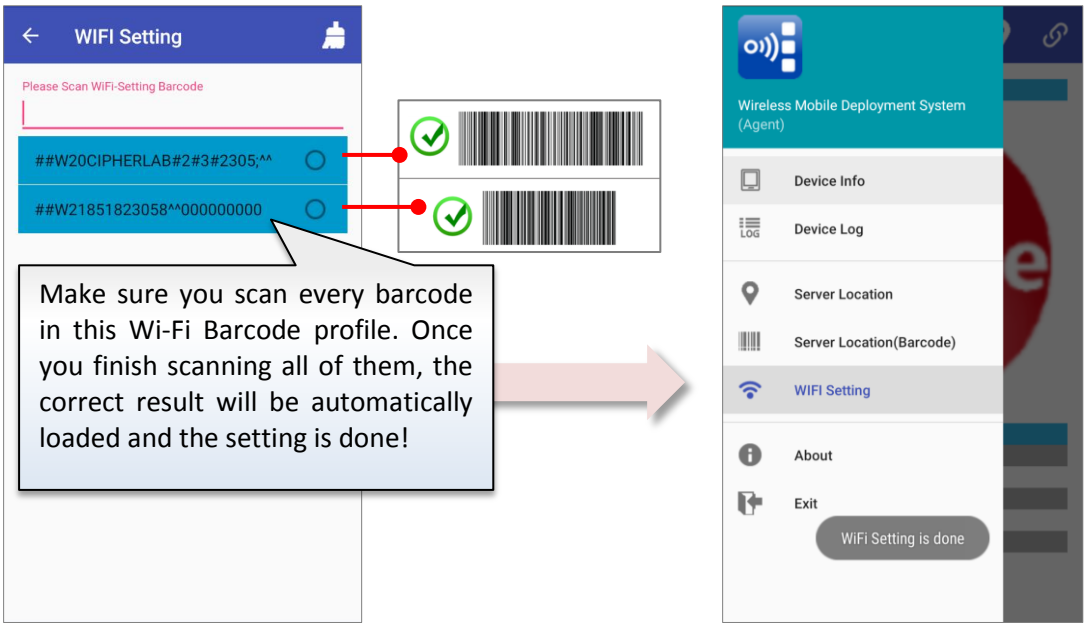


OR

Generate a set of barcodes from WMDS Server as a Wi-Fi profile (See Generate Printable Wi-Fi Profile Barcode) and print it out.

1) On your device, open WMDS Agent screen, select "**Wi-Fi Setting**" from menu .
2) Use your device to scan EVERY barcode in the profile so that WMDS Agent can load enough information and immediately start connecting to the network.




WIFI Setting
Please Scan WiFi-Setting Barcode
##W20CIPHERLAB#2#3#2305;^^
##W21851823058^^000000000
Make sure you scan every barcode in this Wi-Fi Barcode profile. Once you finish scanning all of them, the correct result will be automatically loaded and the setting is done!
Wireless Mobile Deployment System
(Agent)
Device Info
Device Log
Server Location
Server Location(Barcode)
WIFI Setting
About
Exit
WiFi Setting is done

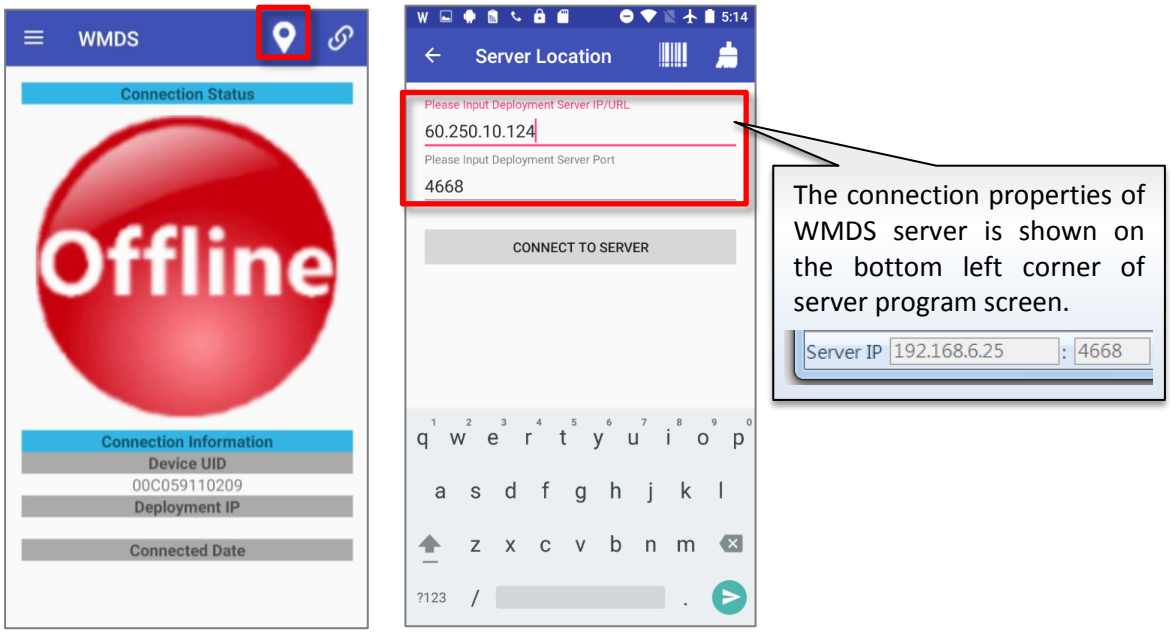
1.3.2 CONNECT TO SERVER

Depending on your deployment system architecture, we recommend different methods for you to build up client-server connection.

DEVICE AND SERVER ARE LOCATED IN DIFFERENT NETWORK SEGMENTS

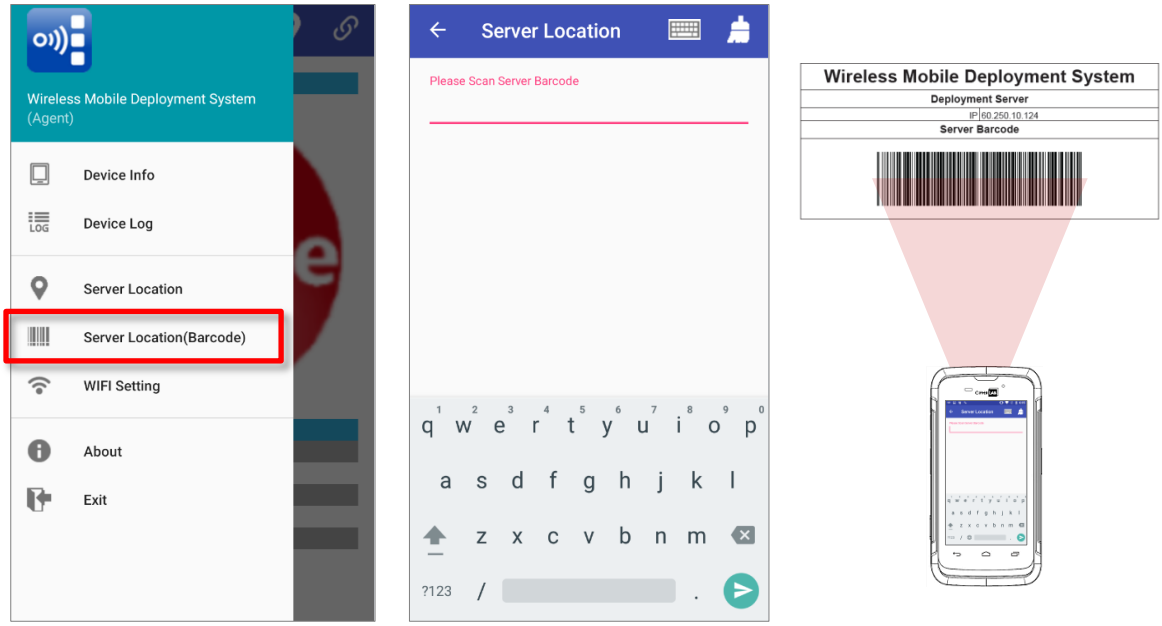
You can manually input the WMDS Server address in WMDS Agent (See Server IP Information for where to obtain the server IP/domain name address):

1) On your device, open WMDS Agent and tap on on the right top of the screen, fill in the Server connection properties and then tap on "**CONNECT TO SERVER**".

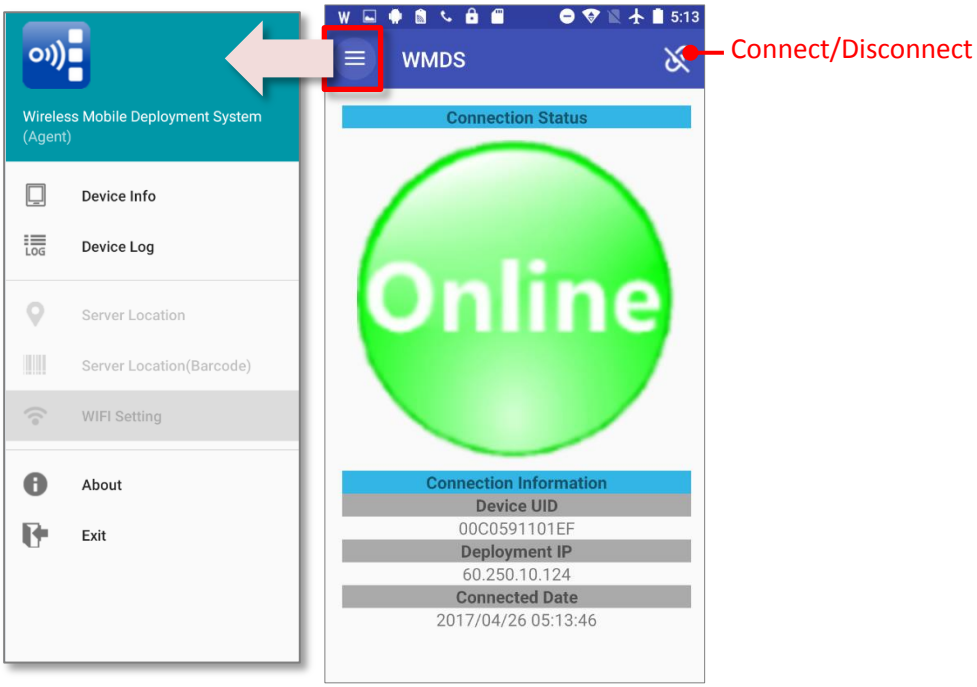


OR

Generate a set of barcodes from WMDS Server as a Server IP profile (See Generate Printable Server Info Barcode) and print it out. On your device, open WMDS Agent screen, select "**Server Location (Barcode)**" from menu . Use your device to scan EVERY barcode in the profile so that WMDS Agent can load enough information and immediately start connecting to server.

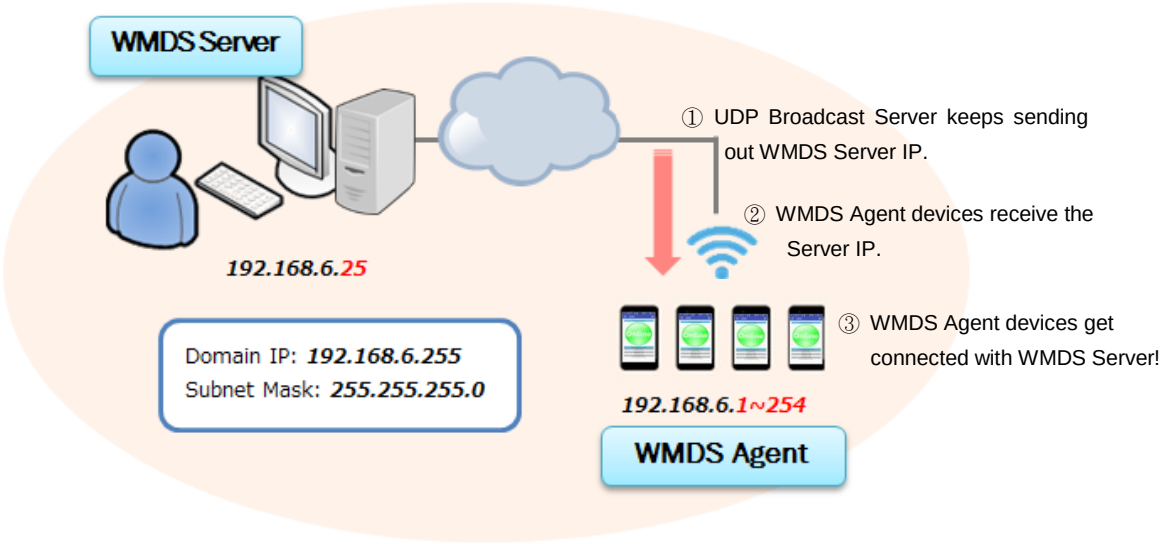


2) Once your device is successfully connected to WMDS server, a green "**Online**" status will show on the app's main screen. You can tap on the connection switch on the top right corner to connect/disconnect this device from WMDS server, or enter app menu to check out **Device Info** or **Device Log**.

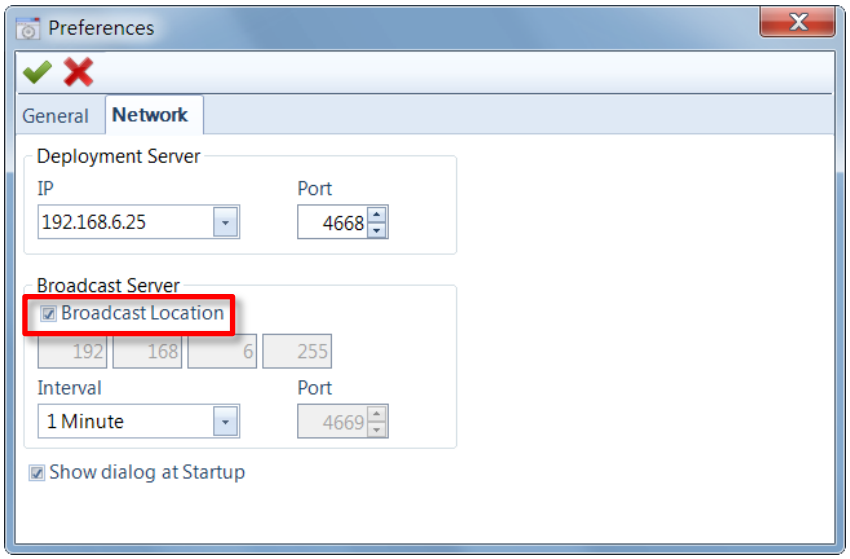


DEVICE AND SERVER ARE LOCATED IN THE SAME NETWORK SEGMENTS

Thanks to WMDS built-in UDP broadcasting server, within its network segment, it keeps broadcasting WMDS server IP to WMDS Agent installed devices, allowing the devices to automatically connect WMDS Server while saving much of your maintenance labor.



The Broadcast Server is enabled by default. If there is more than one WMDS server in a network, you may have to consider disabling this feature in **Main Screen** > **Preferences** > "**Preferences**" > **Network** tab lest the devices should connect themselves with the wrong Server.



USER INTERFACE INTRODUCTION

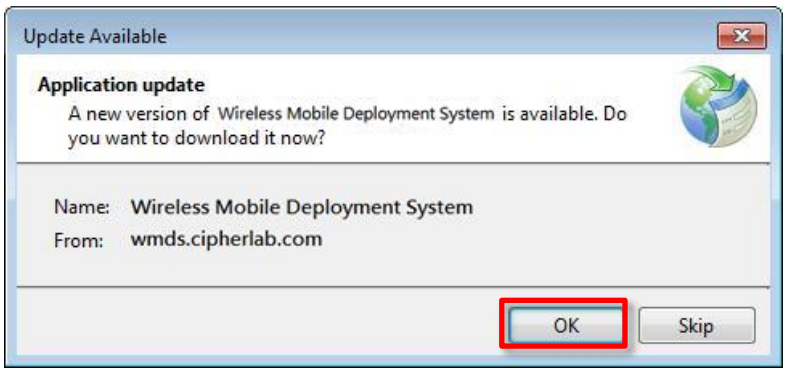
This chapter walks you through the basics of WMDS Server user interface.

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2.3 Main Screen 23

2.1 AUTOMATED SERVER PROGRAM UPDATE

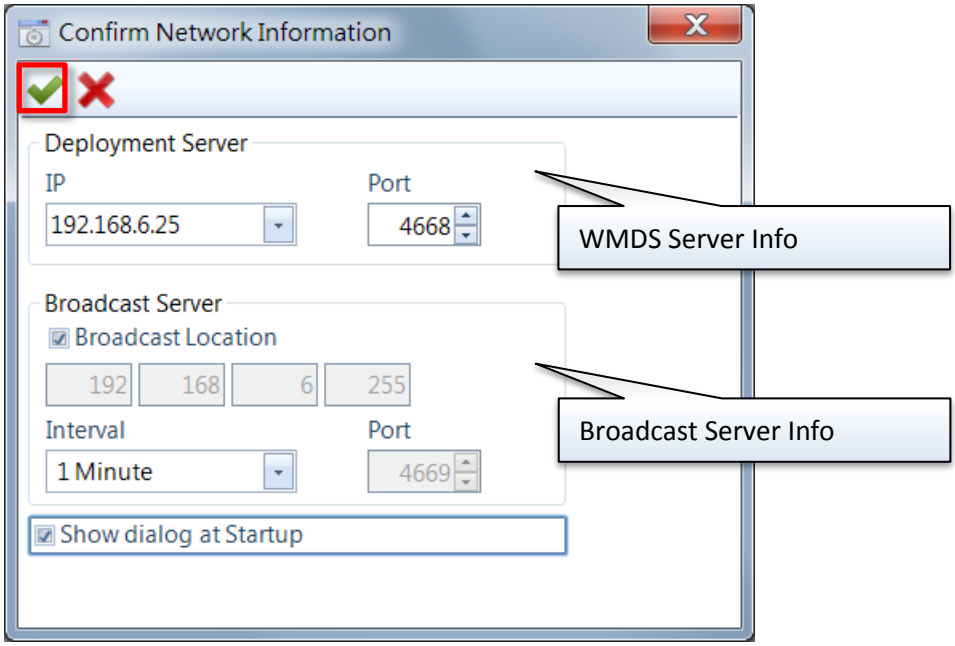
The program is equipped with an automatic update mechanism, ensuring that your copy of WMDS server is always up-to-date with the latest improvements. When you launch the program, this mechanism checks for the latest updates from CipherLab's server (which means your WMDS server PC is required to have access to the Internet) and prompts you to confirm the downloading of available newer version.



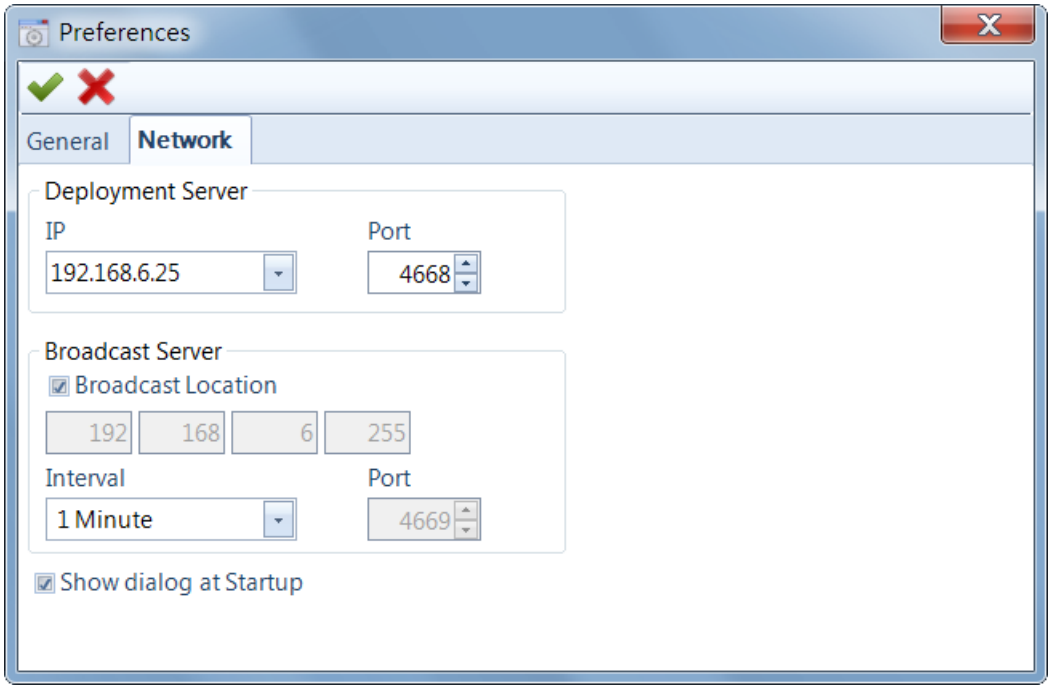
2.2 SERVER IP INFORMATION

Every time you launch this program, you will be prompted with a dialog window to confirm the server's network information. Confirm the Deployment Server IP and Port info shown here and click on "**OK** ✔" to exit this dialog.

By default, the server will keep broadcasting its location, allowing the mobile devices to get connected automatically to Server. You can modify the broadcasting interval time or disable this function.

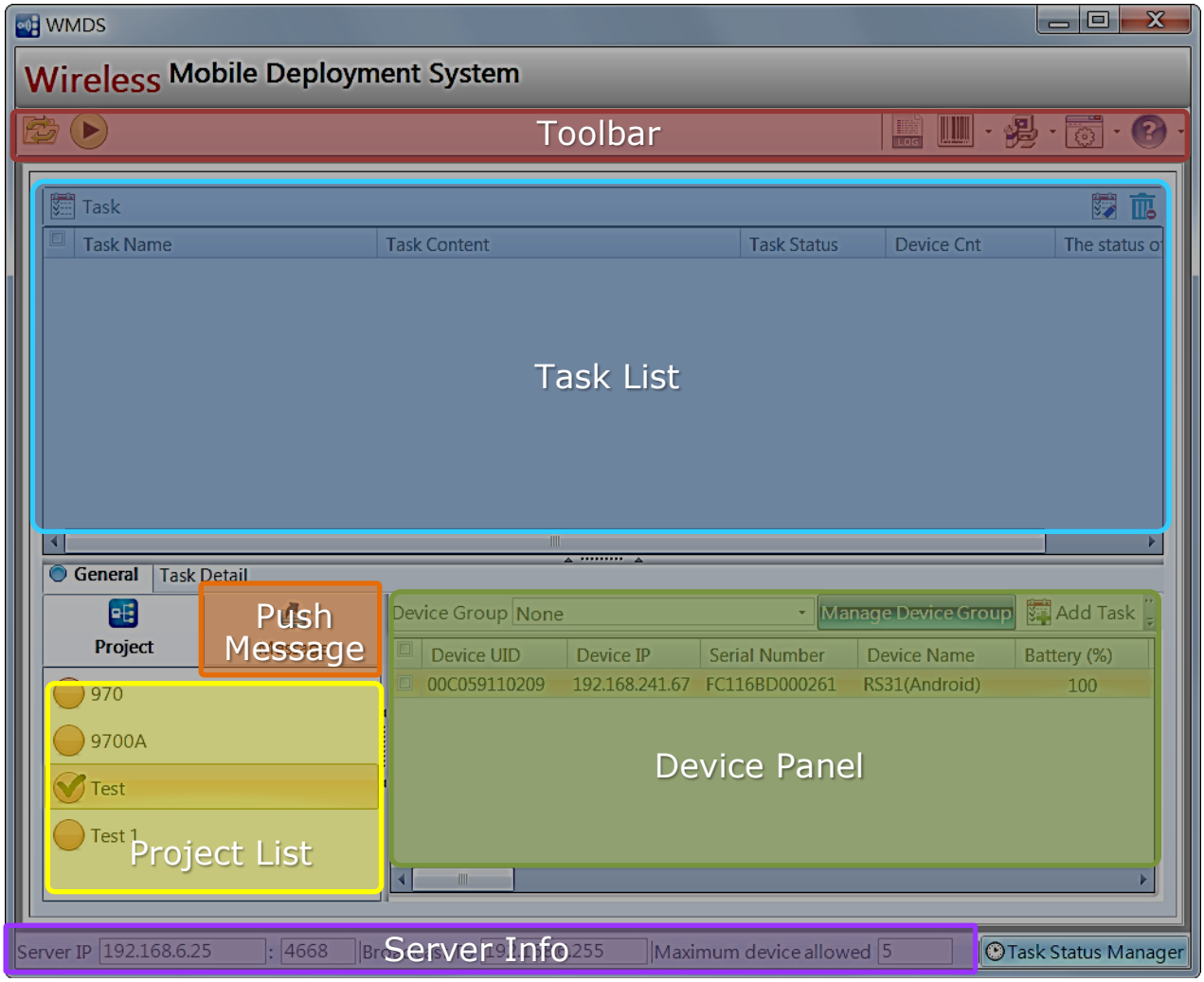


If you disable the "**Show dialog at startup**" function, you can still access this window through **Main Screen** > **Preferences** > "**Preferences**" > **Network** tab.



2.3 MAIN SCREEN

The main screen of WMDS Server is composed of the following building blocks:



Item		Description
Toolbar	**Synchronize Projects**	If you have modified an existing project in ADC program, you can have the task that employs this project updated to the latest version. Select a task from Task List and click this button.
	Deploy	Click to deploy the selected task.
	Open Log	Click to open the log file which is kept in *C:\CipherLab\WMDS\Log*
	Open WMDS Barcode	Click to generate printable WMDS server and Wi-Fi profile info. See Generate Printable Server Info Barcode and Generate Printable Wi-Fi Profile Barcode.

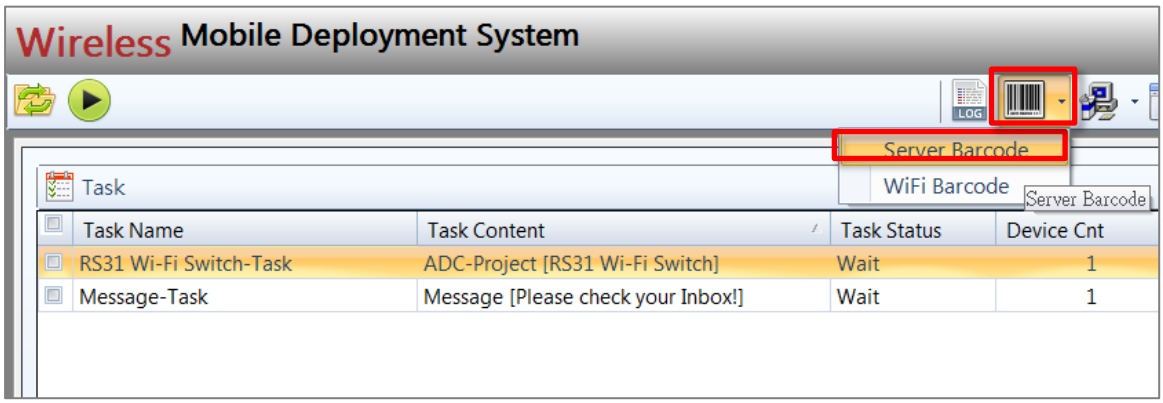
Toolbar	 **Install WMDS Agent**	Click to install the latest WMDS Agent application to the selected devices.
	 **Preferences**	Click to enter Multi-Language Support, Password Protection or Key Registration.
	 **About**	Click to check the WMDS server version.
Task List	Lists created tasks. See Manage Created Tasks.	
Push Message	Allows you to create a task to push to selected device. See Push Messages to Devices.	
Project List	Lists projects created in **ADC** program. This list will synchronize with the project files kept in *C:\ CipherLab\ADC* upon WMDS server's starting up.	
Device Panel	Lists the connected mobile devices. See Manage Created Tasks.	
Server Info	Displays the current server connection info.	

2.3.1 TOOLBAR

GENERATE PRINTABLE SERVER INFO BARCODE

With mobile devices' barcode scanning capability, WMDS Server makes managing multiple devices more efficient by providing an auto-generated printable barcode of its own server info.

1) On Main Screen, click on "**Open WMDS Barcode** " on Toolbar and then "**Server Barcode**".



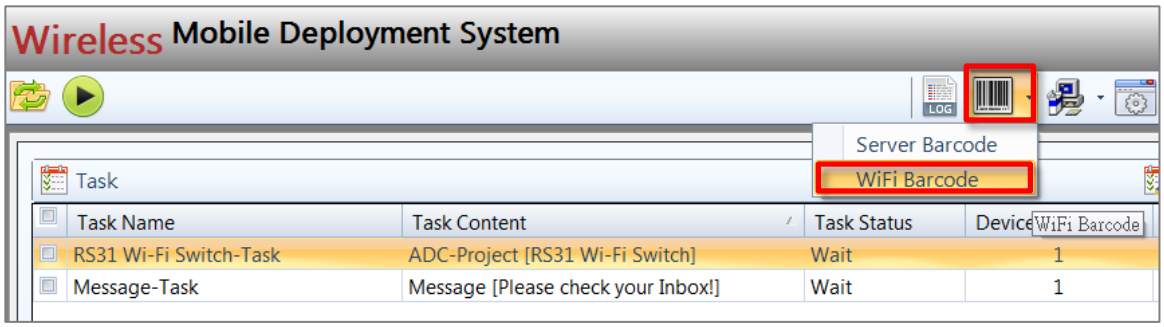
2) On Server Barcode window, define your server settings and then click on "**Open PDF** " to generate a printable PDF file. Use your device to scan this barcode into its WMDS Agent in order for the first –time connection. See **Connect to Server**.



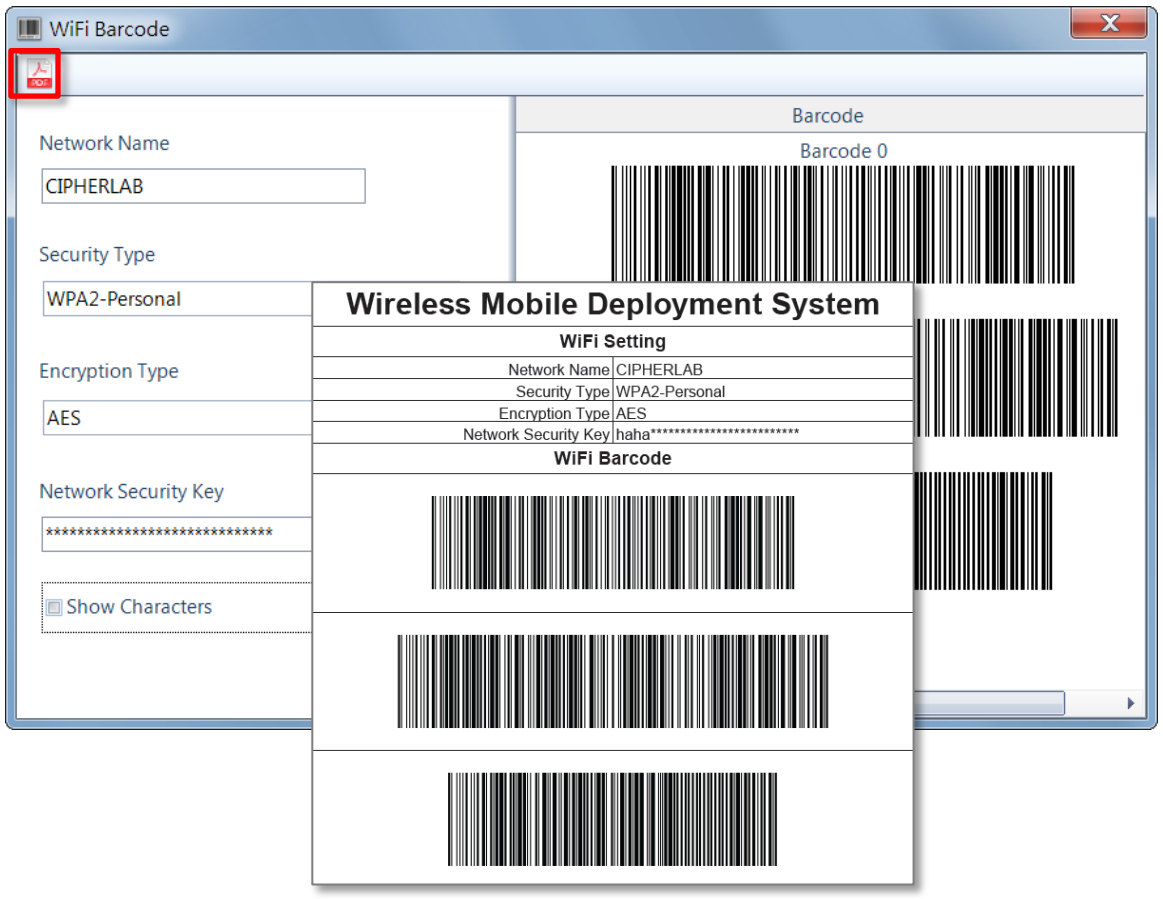
GENERATE PRINTABLE WI-FI PROFILE BARCODE

With mobile devices' barcode scanning capability, WMDS Server makes managing multiple devices more efficient by providing an auto-generated printable barcode of Wi-Fi profile info.

1) On Main Screen, click on "**Open WMDS Barcode** " on Toolbar and then "**Wi-Fi Barcode**".



2) On Wi-Fi Barcode window, define your network settings and then click on "**Open PDF** " to generate a printable PDF file. Use your device to scan EVERY barcode in the profile until WMDS Agent screen shows a message. See Connect to Network.

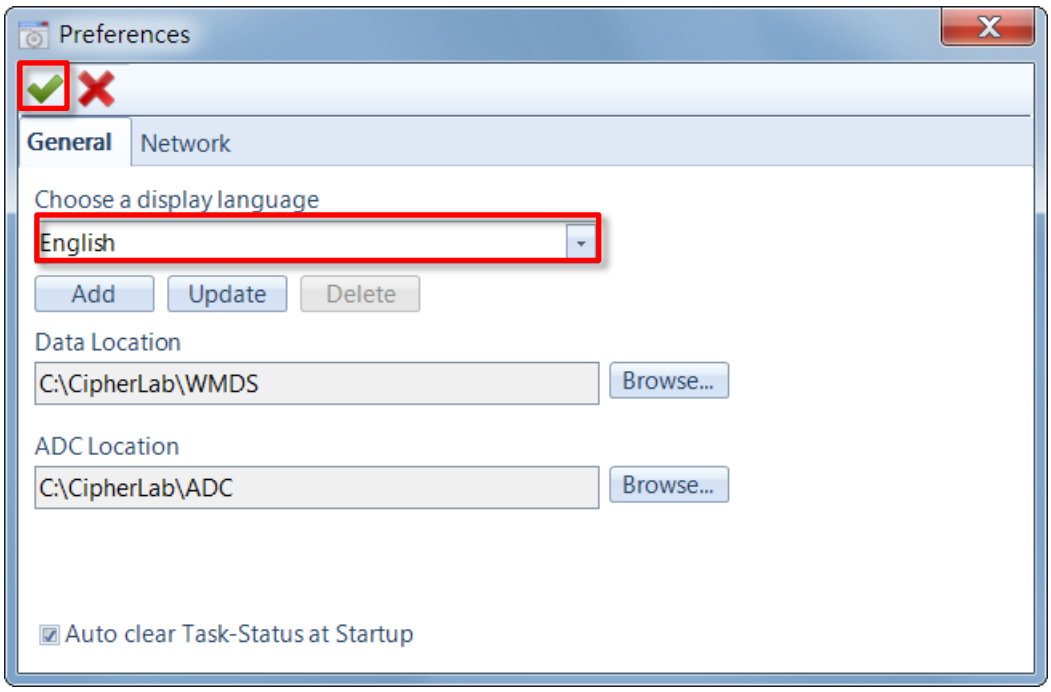


MULTI-LANGUAGE SUPPORT

On Main Screen, click on "**Preferences** " on Toolbar and then select "**Preferences**". On **General** tab, choose a display language other than English if any. By selecting a language other than the current one, WMDS server program will restart to have the new display language take effect.

CHANGE THE INTERFACE LANGUAGE

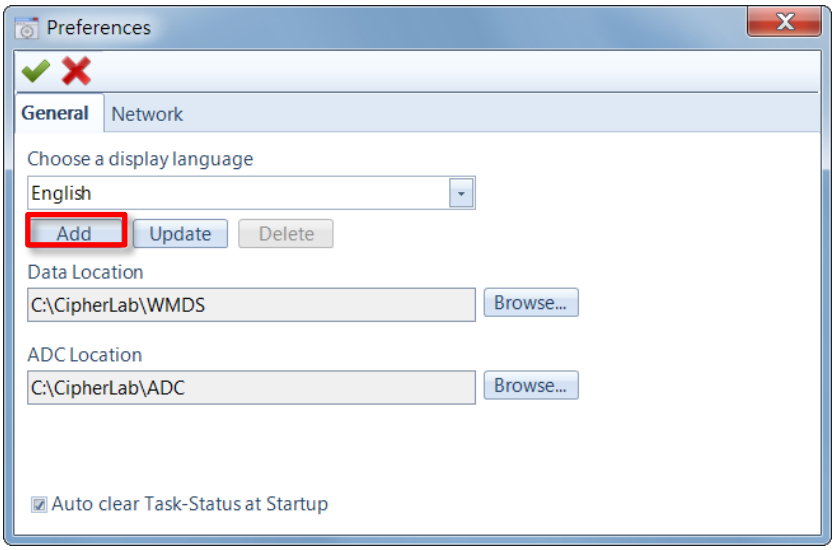
1) Select a desired language from the drop-sown list.



2) Click on "**OK** " to confirm the setting.

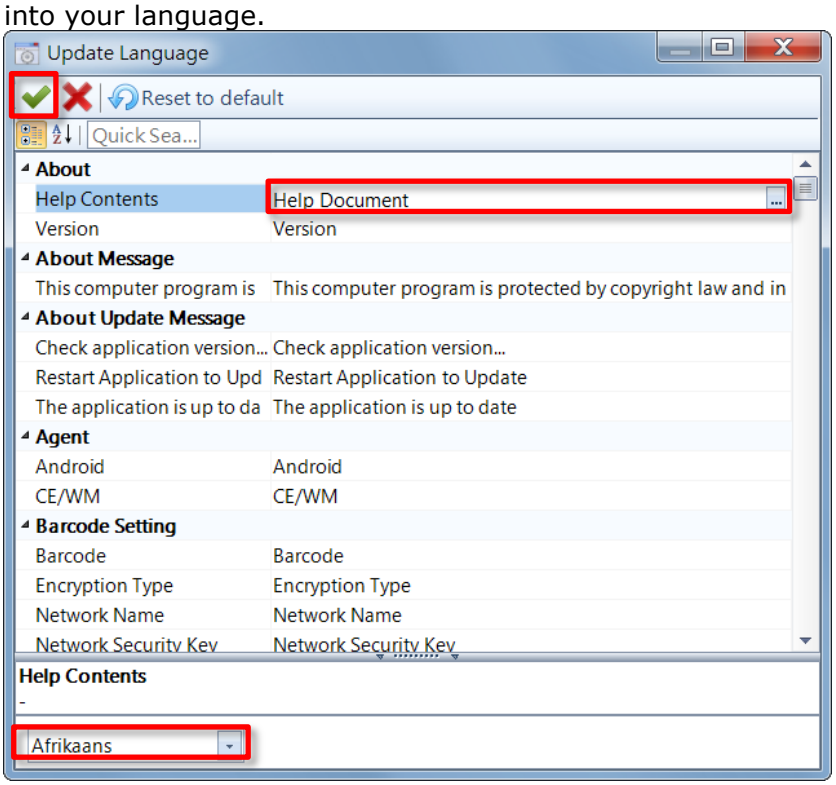
CREATE YOUR OWN LANGUAGE FILE

1) Click on "**Add**" to create your own language profile.



2) On the **Update Language** window as shown below, translate text in the right columns.

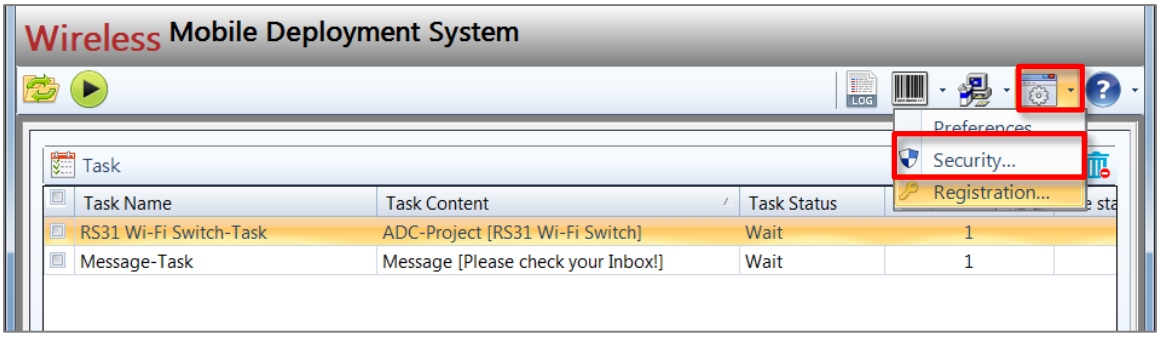
The default language English is shown on the left while the one on the right is for editing into your language.



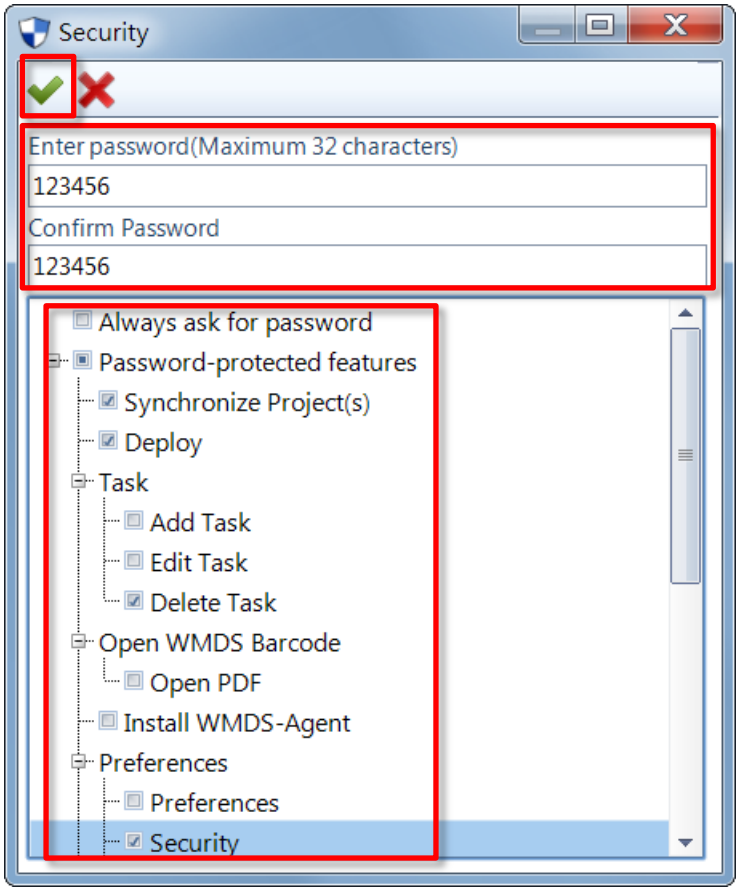
3) Select a label for your language from the drop-down menu on the lower-left and click on "**OK** ✔" to confirm the setting.

PASSWORD PROTECTION

1) On Main Screen, Click on **Preferences**  on the toolbar and then select "**Security**".



2) Enter and confirm your password if you want to enable password protection.
3) Select features to apply password protection.
4) Click on "**OK** " to save the setting. This setting will be immediately applied.



TASKS

This chapter provides all you need to know from creating a Task, deploying Tasks to enrolled devices.

IN THIS CHAPTER

3.1 Create a New Configuration Task 31
3.2 Deploy a Task..... 35
3.3 Monitor Enrolled Devices..... 38

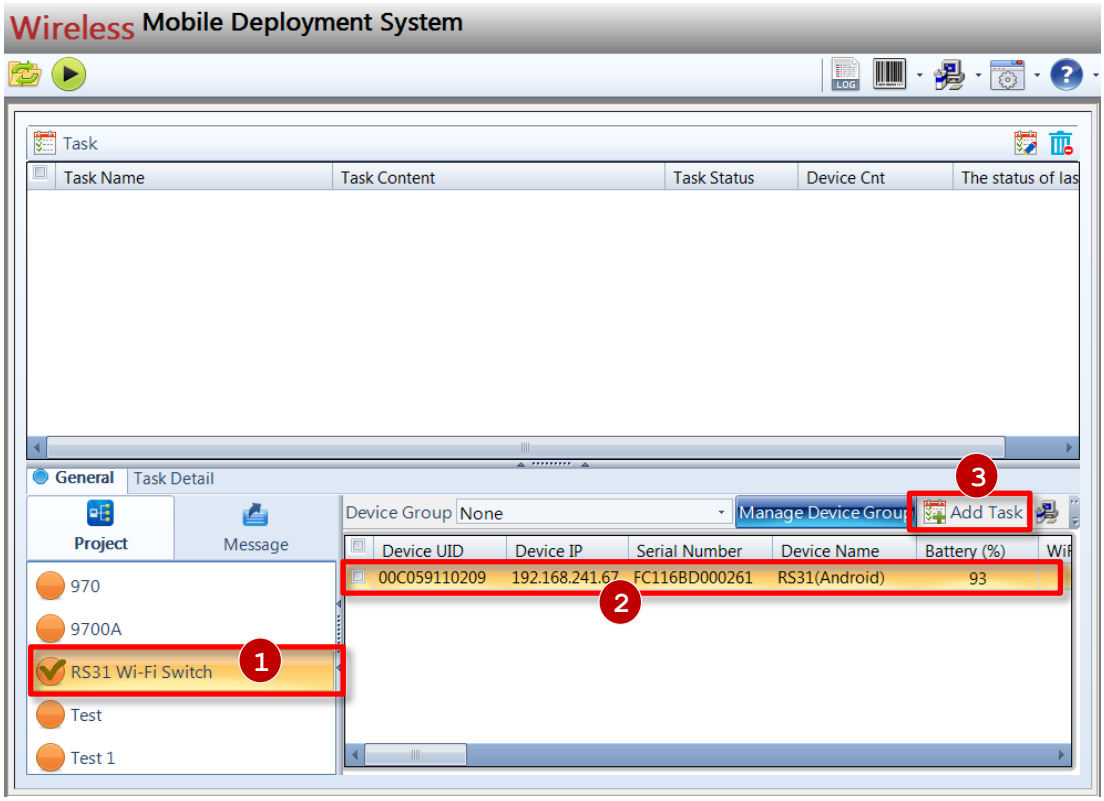
3.1 CREATE A NEW CONFIGURATION TASK

To create a new task:

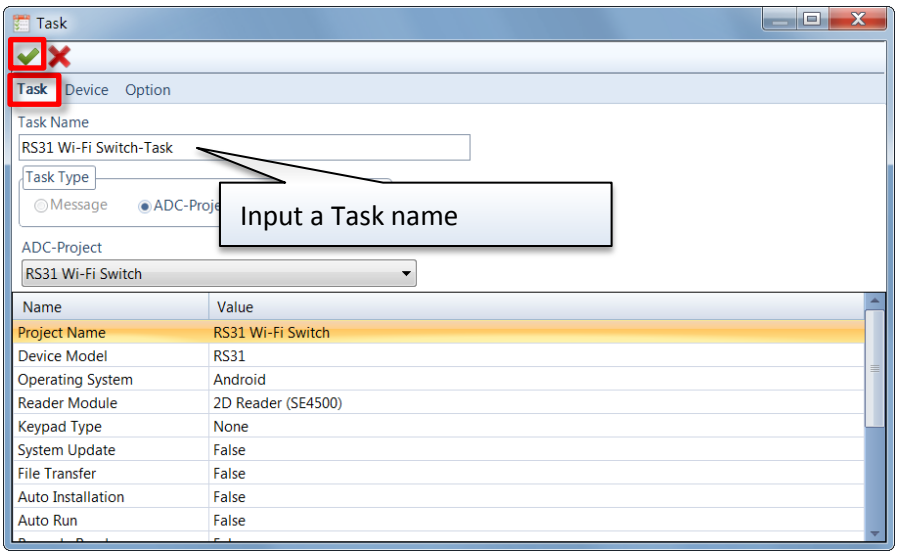
1) Select a project from Project List. If this panel does not show the projects you created with ADC program, please go to **Preferences** > "**Preferences**" > **General** tab, and relocate the ADC location.

2) Select the devices that are to be deployed with this task from Device Panel.

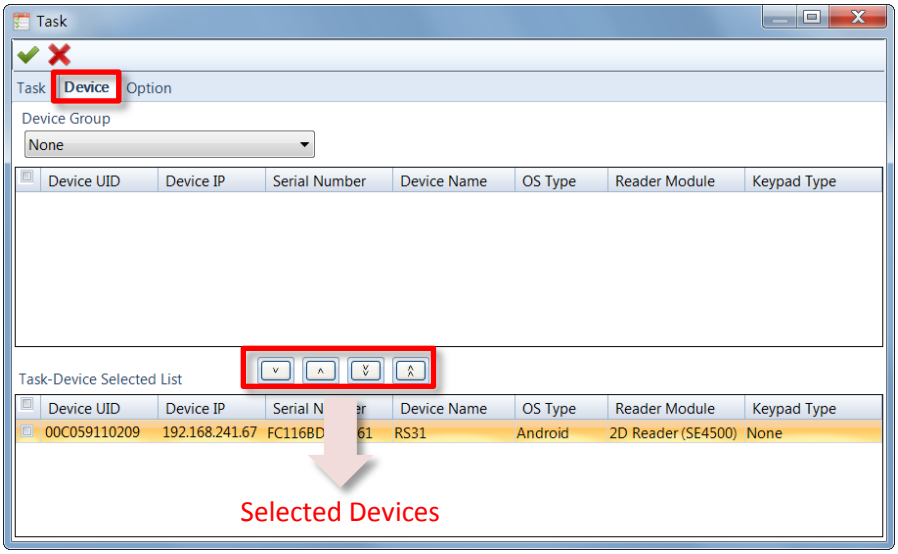
3) Click on **Add Task** Add Task on the top right corner of Device Panel.



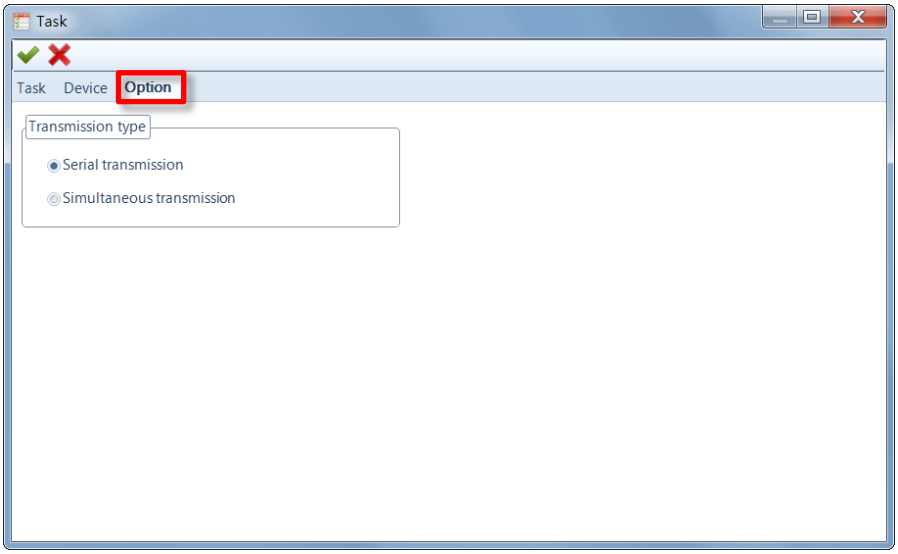
4) On **Task** window, you can switch among **Task**, **Device**, and **Options** tab to make further modifications. After finish modifying, click on ✔ to save the settings



On **Device** tab, use the arrow buttons to select the devices for this task.

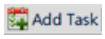


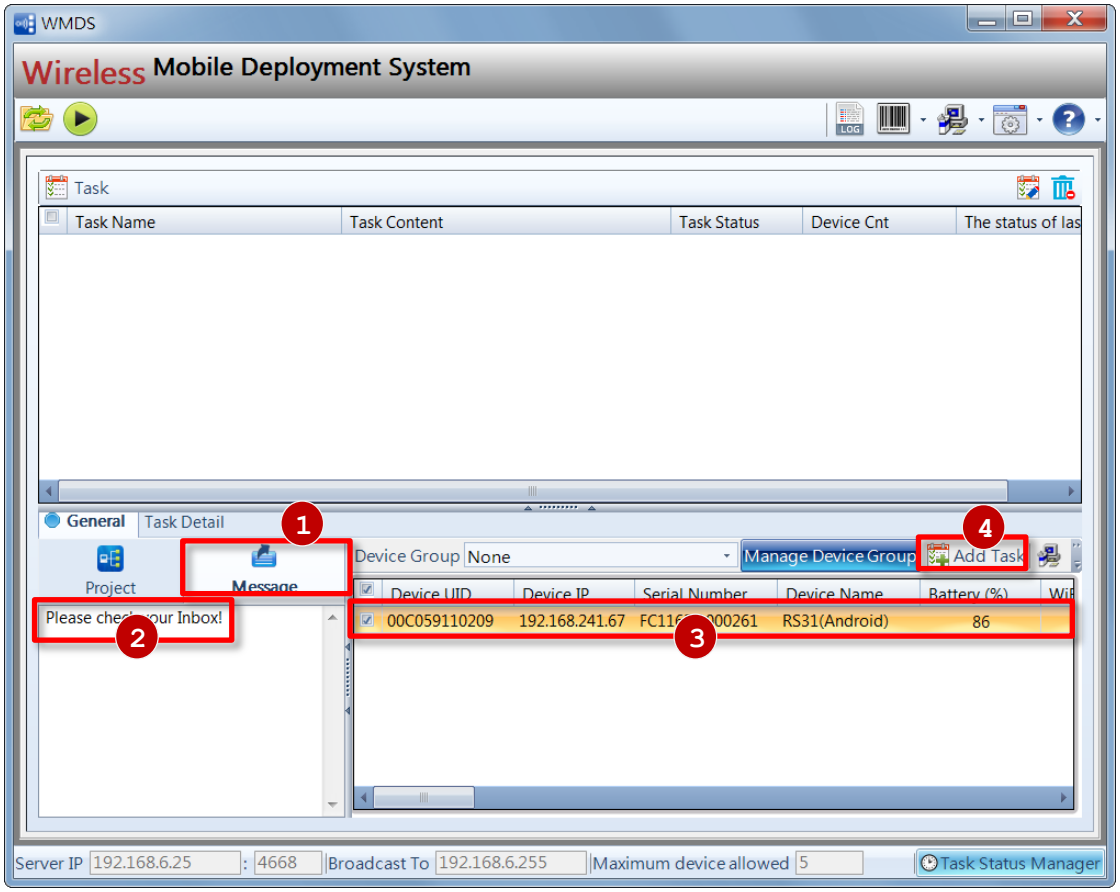
On **Option** tab, define if this task will perform configuration deployment to one device after another or to all at the same time. It is suggested that you use the default "**Serial transmission**" lest vast amounts of data transmission should consume too much of your network bandwidth.



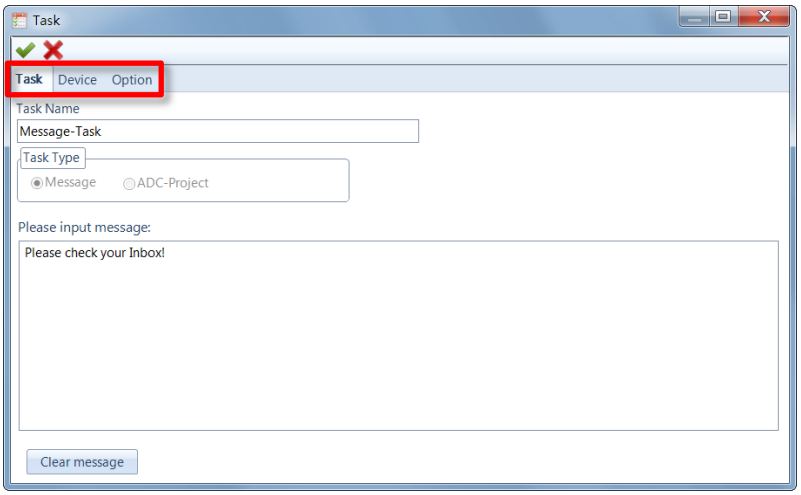
3.1.1 PUSH MESSAGES TO DEVICES

You can push a message to selected devices.

1) On Main screen, click on "**Message**".
2) In the edit window, input your message (up to 2000 alphabets or numeric letters).
3) Select the devices that are to be deployed with this task from Device Panel.
4) Click on **Add Task**  on the top right corner of Device Panel.

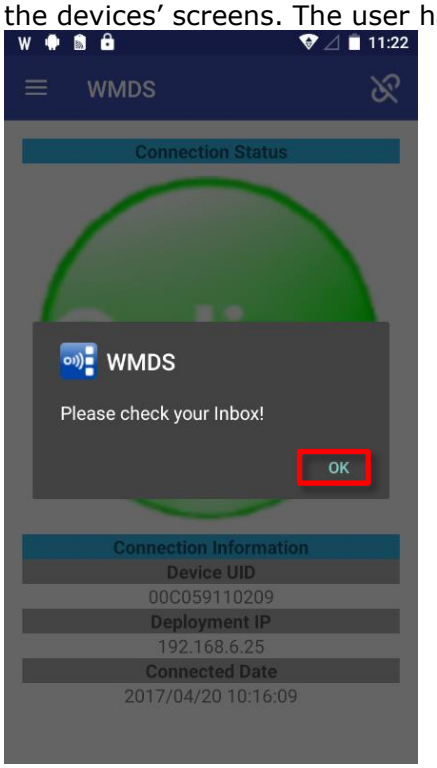


5) On **Task** window, make further modifications on **Task**, **Device**, and **Options** tab. After finish modifying, click on "**OK**✔**"** to save the settings.



RECEIVE A PUSH MESSAGE FROM WMDS SERVER

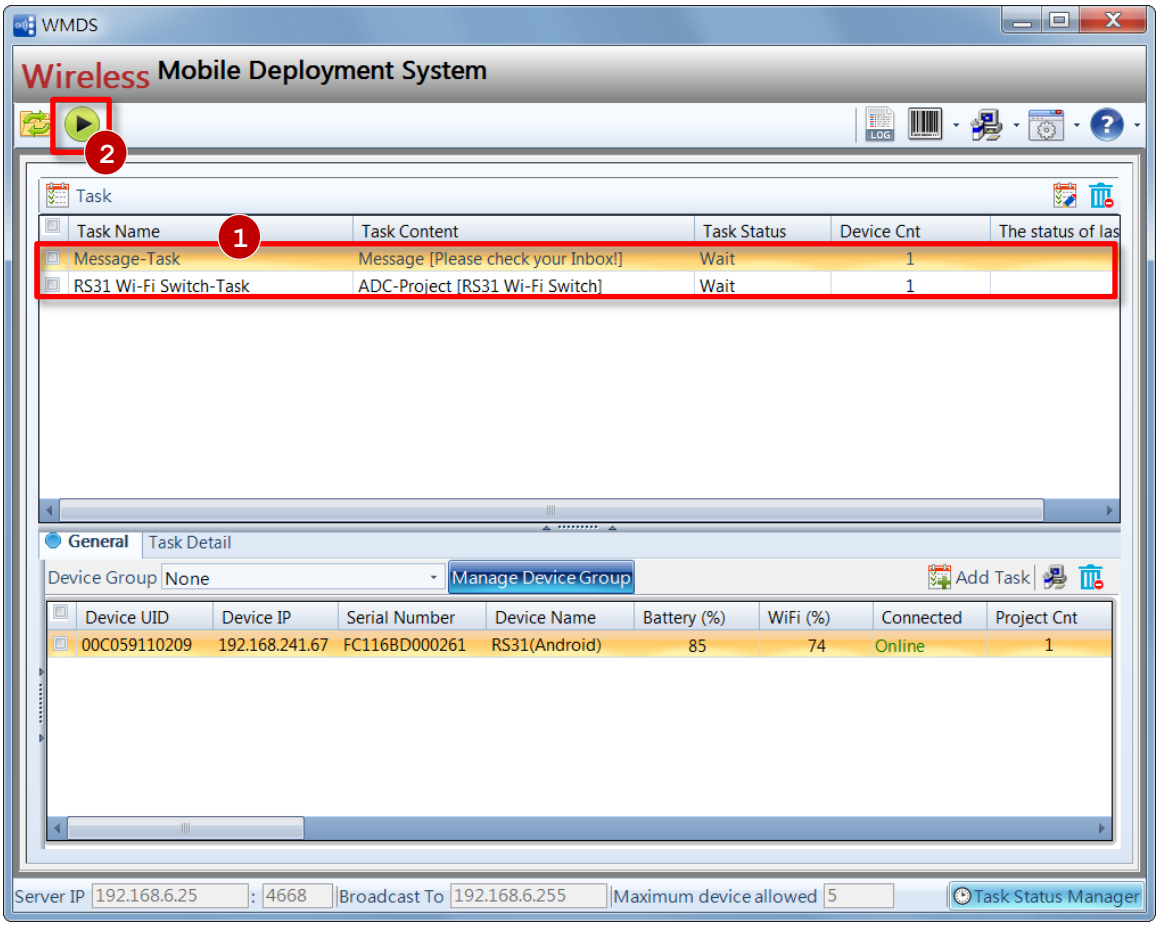
Once your message task is successfully deployed, the message window will pop up on all the devices' screens. The user has to tap "**OK"** to confirm and close it.



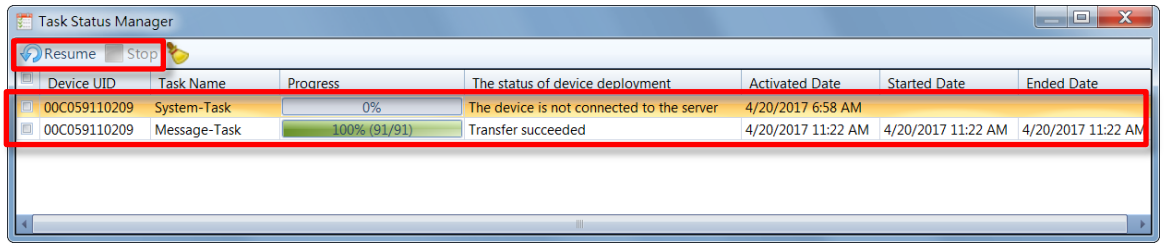
3.2 DEPLOY A TASK

1) On Task List, select one or more tasks.

2) Click on "**Deploy** " on Toolbar.



3) A **Task Status Manager** window will pop out. This window displays the deployment progress as well as their results by device. You can have certain tasks performed on selected devices again by clicking on "**Resume**" or simply stop a deployment task by clicking on "**Stop**".

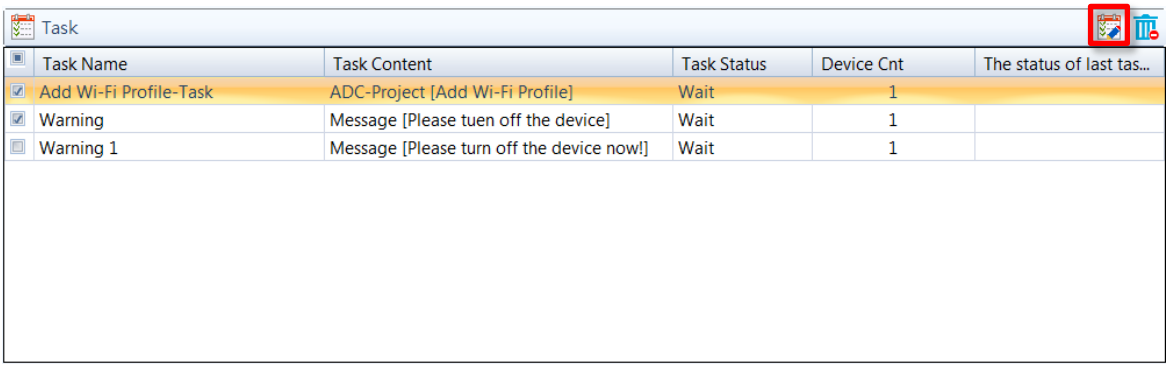


3.2.1 MANAGE CREATED TASKS

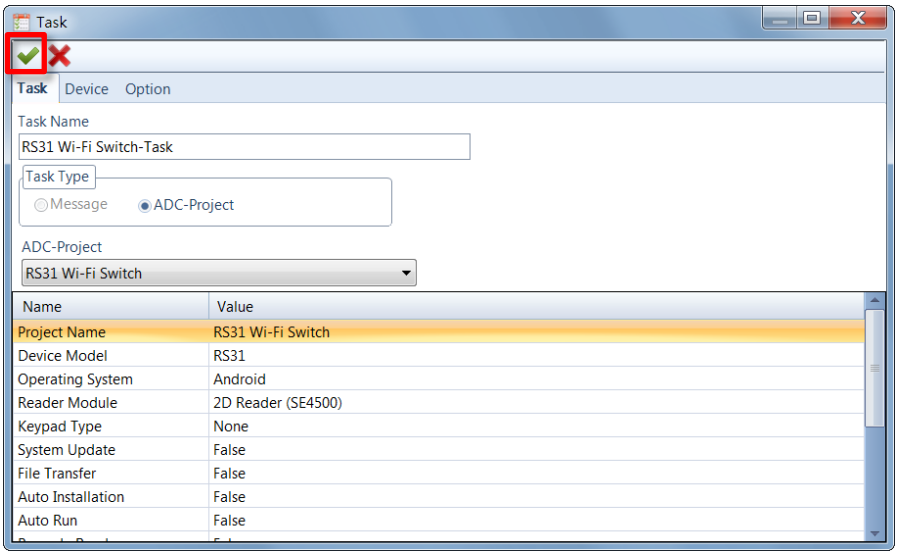
For a created task, you can modify its name or target devices.

1) Select a task from **Task List**.

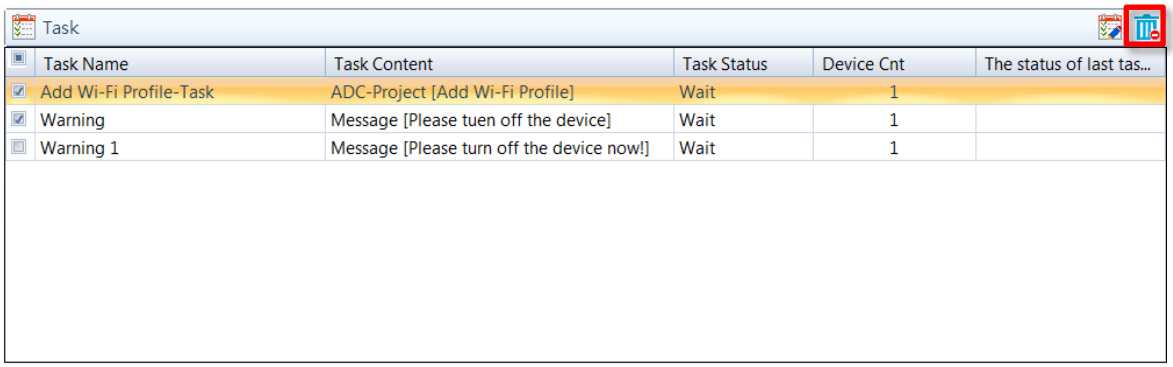
2) Click on "**Edit Task** " on the top right corner.



3) On **Task** window, you can switch among **Task**, **Device**, and **Options** tab to make further modifications. After finish modifying, click on "**OK** " to save the settings.

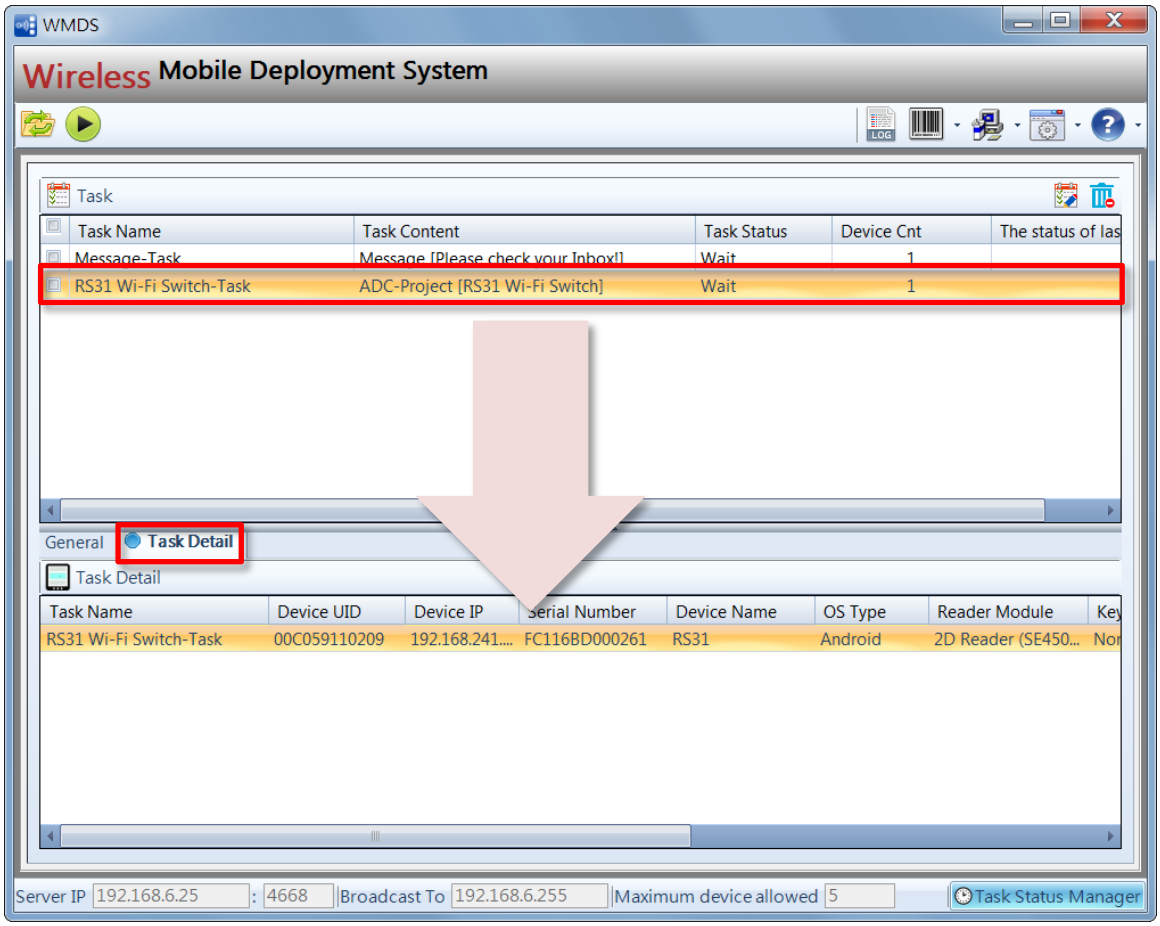


4) To delete a task, simply select it and click on "**Delete Task** " on the top right corner.



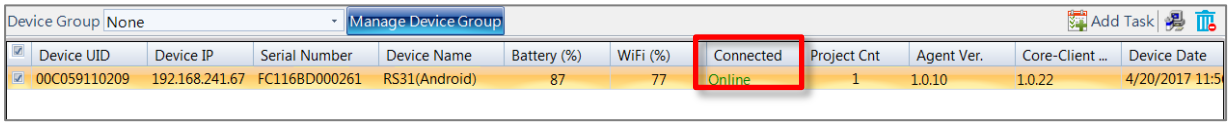
3.2.2 CHECK TASK DETAIL

You can review the details of a specific task by selecting the task from Task List and then click on "**Task Detail**".



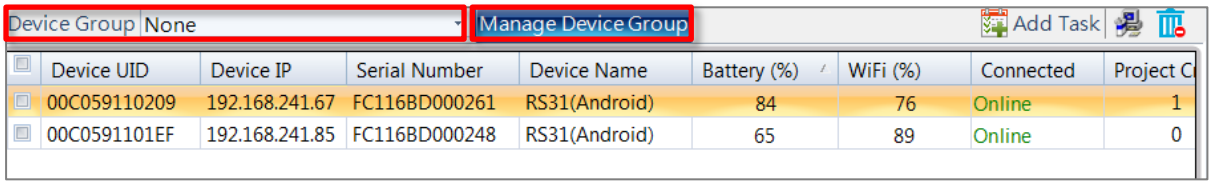
3.3 MONITOR ENROLLED DEVICES

On Device Panel list devices which have been enrolled in WMDS Server. You can have a glance of the devices' current status including Device IP, Serial Number, remaining power level as well as their connection status. If a device appears to be Offline, you will need to bring it back to **Online** status before executing a deployment task to it.



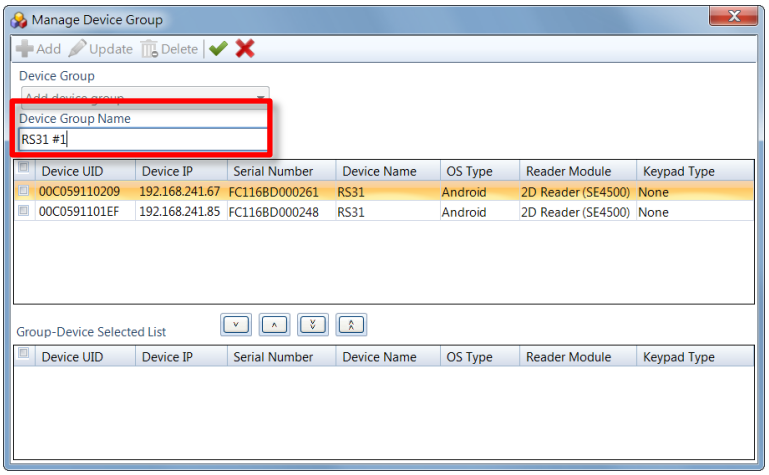
GROUP DEVICES

You may group multiple devices to avoid hassles and save time when managing a number of devices. On Device Panel, click on "**Manage Device Group"**. By default, a group named "**None**" already exists and contains all the ungrouped devices.

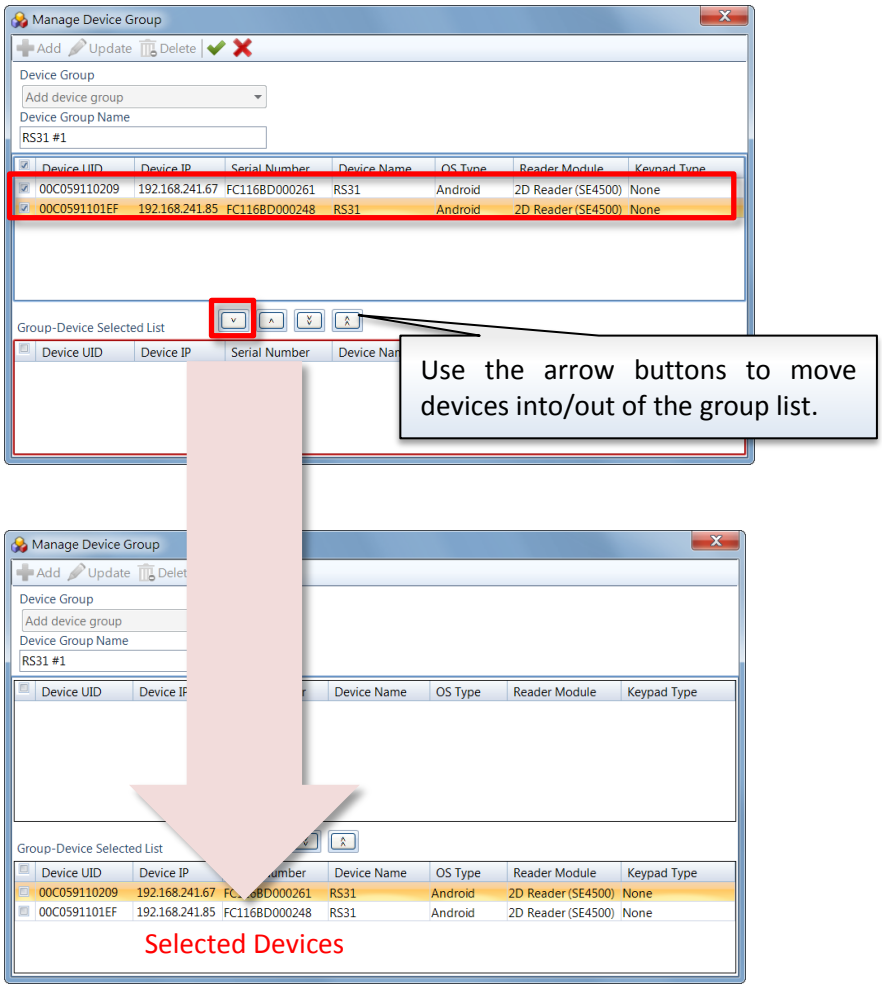


CREATE A DEVICE GROUP

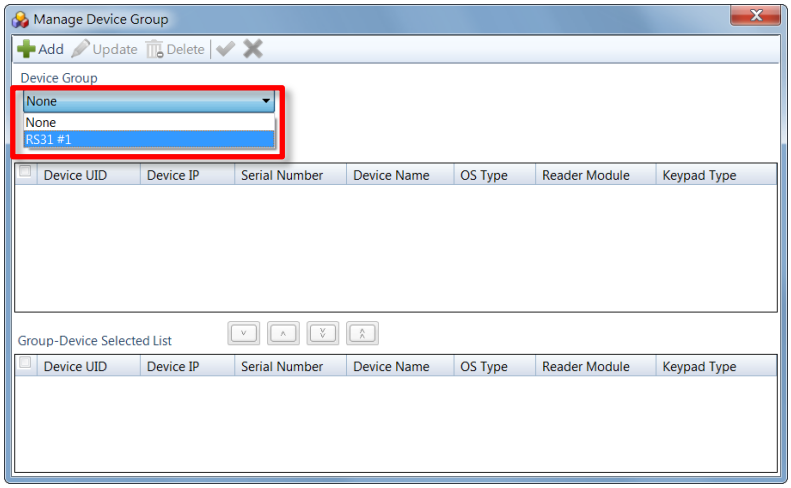
1) On **Manage Device Group** window, input the group name and click on "**OK** ✔".



2) Select the devices that will be included in this group and click on the **Down** arrow button. Click on "**OK** ✔" again to apply this setting.



3) The newly-created group will appear in the Device Group list.



4) By selecting the group, you can click on "**Update"** to modify the name and member devices or click on "**Delete"** to delete it. After you finish setting, click on "**OK** ✔" to save and exit this window.

