CipherLab

User Guide

Android Deployment Configurator

For Android™

RS30
RS31
9700A
RS50

Version 1.00

CIPHERLAB

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RELEASE NOTES

Version	Date	Notes
1.00	Apr 27, 2017	Initial release

RELEASE NOTES ..... - 3 -
INTRODUCTION 6
GETTING STARTED 7
1.1 Prerequisites 8
1.2 Install ADC Program on PC 10
1.3 Start with a New Project 12
1.4 Start with an Existing Project 15
1.5 Main Screen 17
Security 20
Preferences 21
MANAGE PROJECTS 22
2.1 Create a Project 23
2.2 Open a Project 24
2.3 Delete a Project 25
2.4 Duplicate a Project 26
2.5 View Project Info 27
2.6 Customize Project Configurations 28
MULTI-LANGUAGE SUPPORT 44
3.1 Create Your Own Language File 45
3.2 Edit Your Own Language File 47

INTRODUCTION

Android Deployment Configurator (hereafter referred to as **ADC**) is a windows-based project configuration tool, helping you to devise configuration projects for your mobile computers to meet various needs.

ADC features

- Easy management interface for you to create/edit/save multiple projects
- Comprehensive scope of configurable settings to fulfill various requirements:
  - Transferring files (configuration files, applications or any file) from Server to the devices
  - Auto installation of APK files
  - Auto run of your designated applications
  - Configuration of Barcode reader settings, including symbology settings, scanning preferences, notification, data output, etc.
  - Turning On/Off wireless connection such as Wi-Fi, Bluetooth or Cellular data
  - Configuration of Wi-Fi settings by giving SSID, security mechanism used, password, etc.
  - Configuration of cellular data settings
  - Configuration of Terminal Emulation sessions properties
  - Configuration of AppLock by defining the applications allowed as well as showing/hiding notification bar, changing background display, setting up a password to restrict the access, etc.
- Password protection for critical project management actions
- Allowing for adding additional languages to user interface and customization of wording
- Device settings synchronization over USB connection
- One-at-a-time device deployment over USB connection

GETTING STARTED

This chapter helps you get ready for using this program. If you're running ADC on PC for the first time, everything starts with setting up a project.

IN THIS CHAPTER

1.1 Prerequisites 8
1.2 Install ADC Program on PC 10
1.3 Start with a New Project 12
1.4 Start with an Existing Project 15
1.5 Main Screen 17

1.1 PREREQUISITES

In order for ADC to work on your computer:

- Before installing ADC program on your computer, make sure the operating system is Windows 7 or 8.
- Your device is already set to **USB debugging Mode**.
- The device is connected to the computer with supplied USB cable. This is essential for data synchronization (of application list, Barcode Reader, Button Assignment, Wireless Manager, and AppLock) and device deployment.

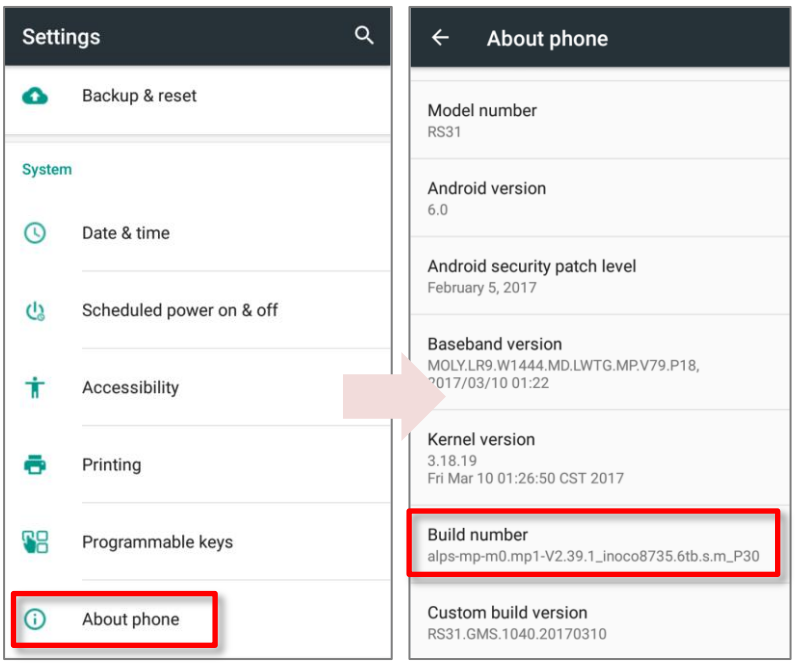
After devising the configuration tasks using ADC program, deploy them to your devices with WMDS program, please:

- Install WMDS Agent on your devices.
- Install WMDS (Wireless Mobile Deployment System) server program on a computer (better on the same computer as ADC program); after you finish devising a project, execute WMDS program and start deploying the configurations to devices. For more details on using WMDS, please refer to the help file embedded in WMDS program.

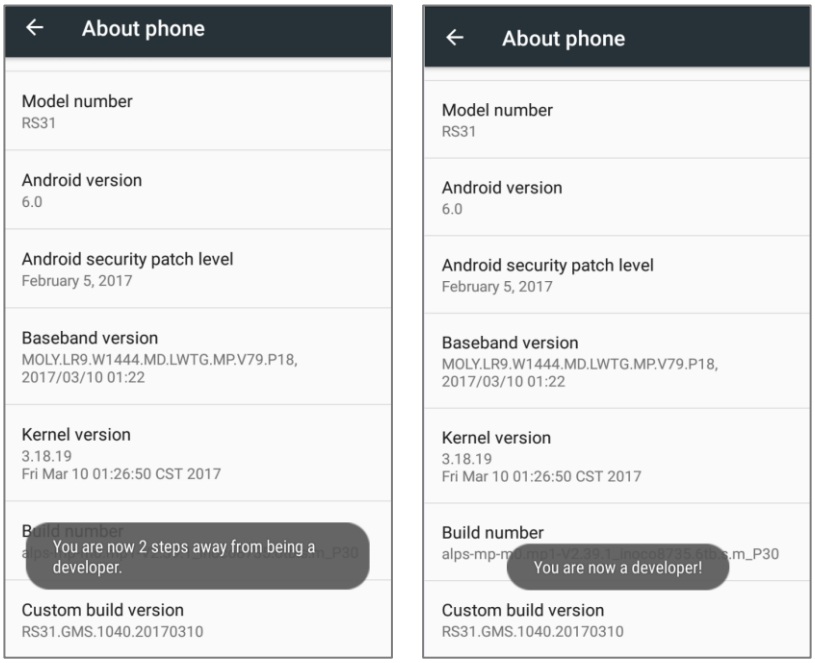
HOW DO I ENABLE DEBUGGING MODE ON MY DEVICE?

Please follow the steps below to turn on debugging mode on your device:

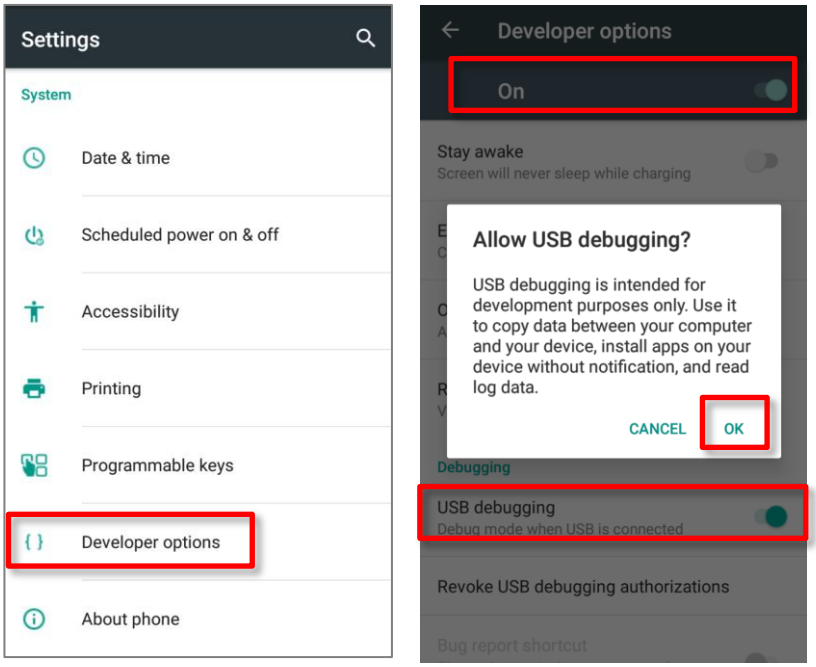
1) Go to **All Apps** | **Settings** | **About phone** | **Build number**.



2) Tap on **Build number** seven times to enter Developer mode. During the process, you'll see a prompt with a countdown reading "**You are now X steps way from being a developer.**" When you see "**You are now a developer!**" showing up, you have succeeded in entering developer mode.

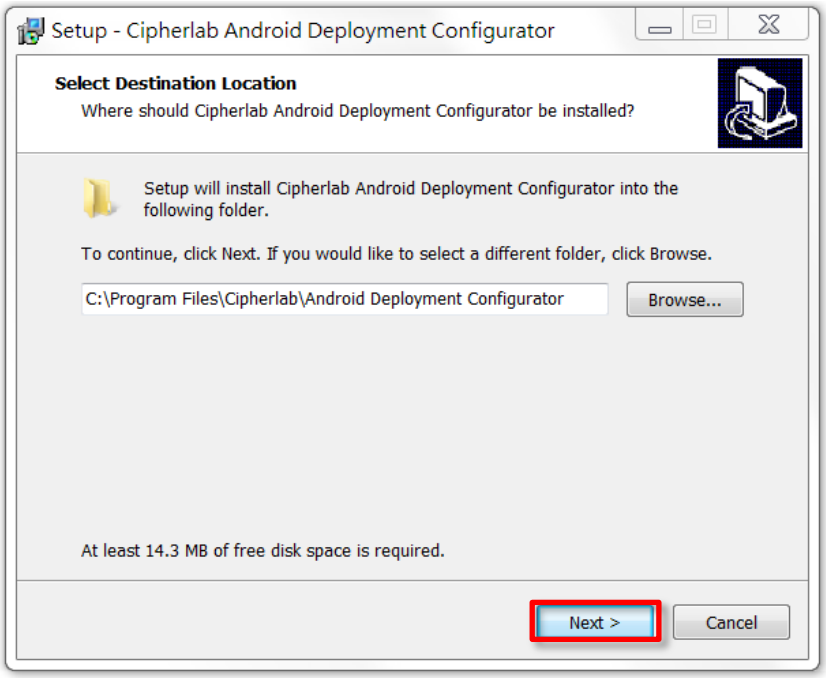


3) Return to **Settings** and tap on "**{}Developer options**", switch both **Developer** options and **USB debugging** to "**On**" , and tap on "**OK**" on the confirmation window.

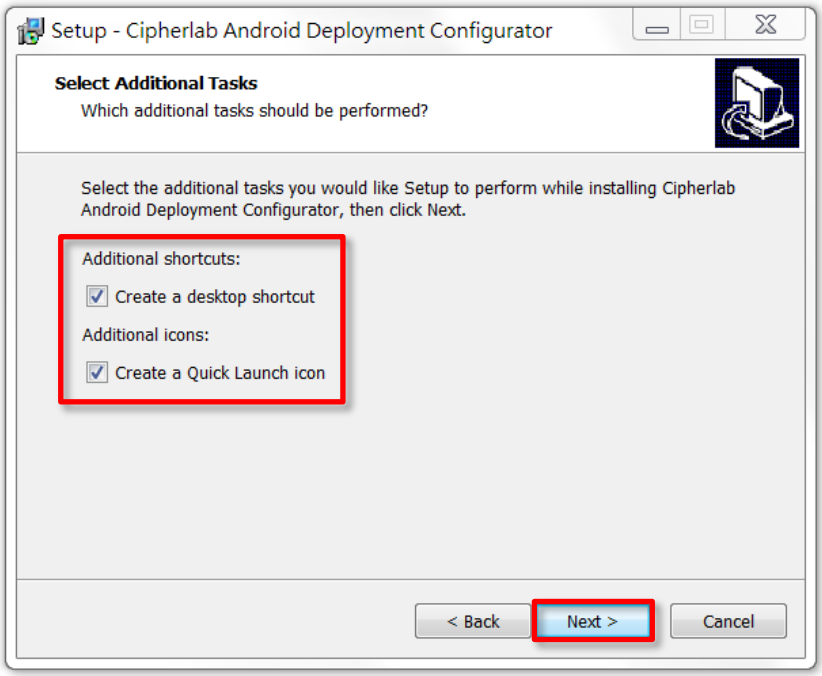


1.2 INSTALL ADC PROGRAM ON PC

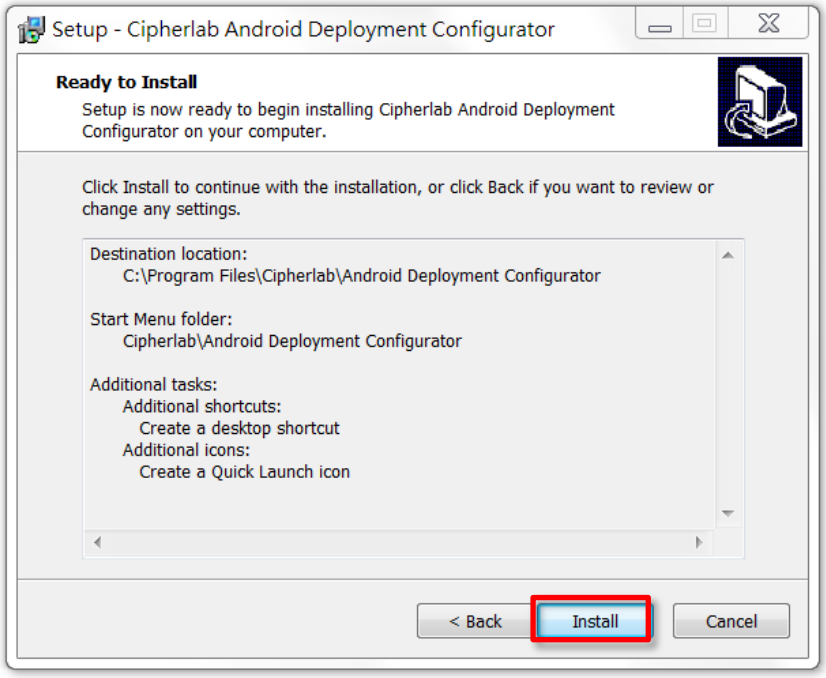
1) Run the ADC program installer following its on-screen instructions.
2) Click on "**Browse**" to select the folder to place this program. Click on "**Next**" to proceed.

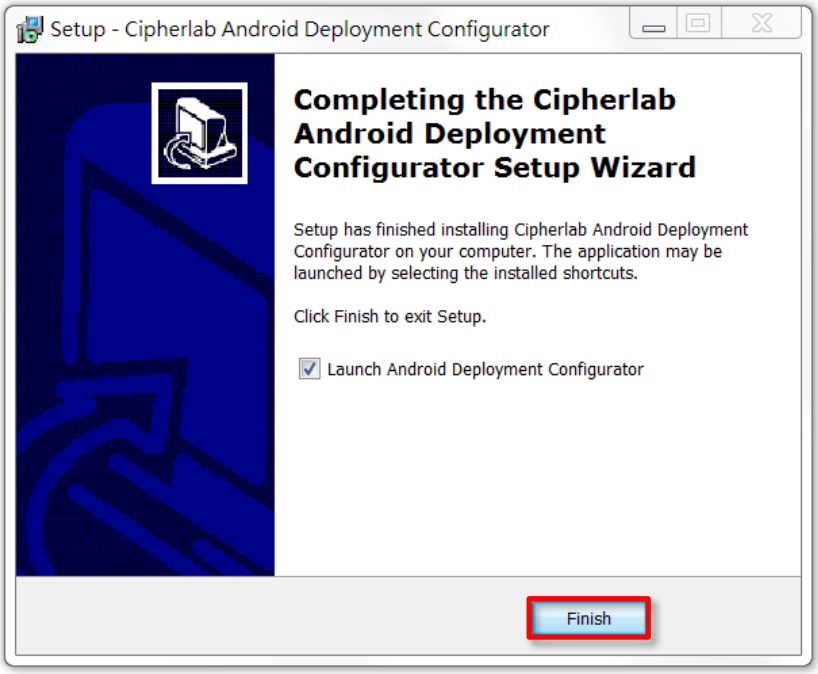


3) To have the installer create a desktop shortcut, please enable the options. Click on "**Next**" to proceed.



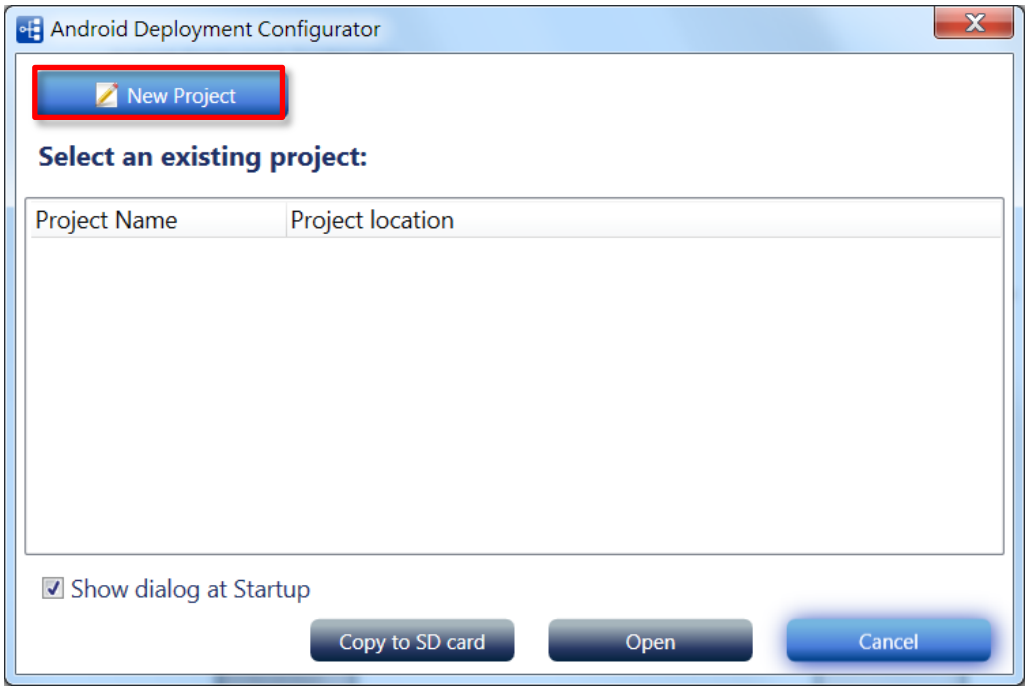
4) Click on "**Install**" to start the installation. And click on "**Finish**" when the setup is done.





1.3 START WITH A NEW PROJECT

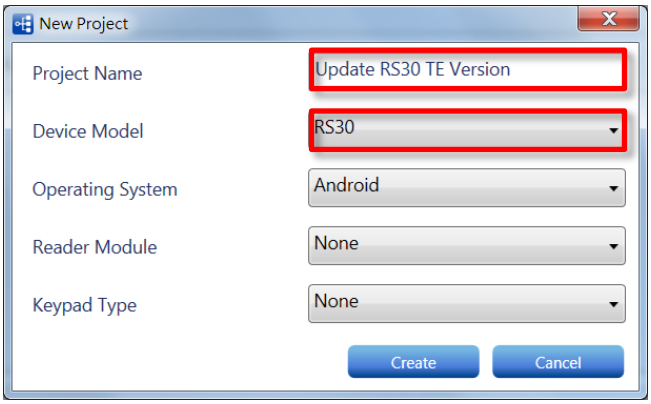
1) Execute **Android Deployment Configurator**. From the startup dialog shown below, click on "**New Project**" to start devising a project.

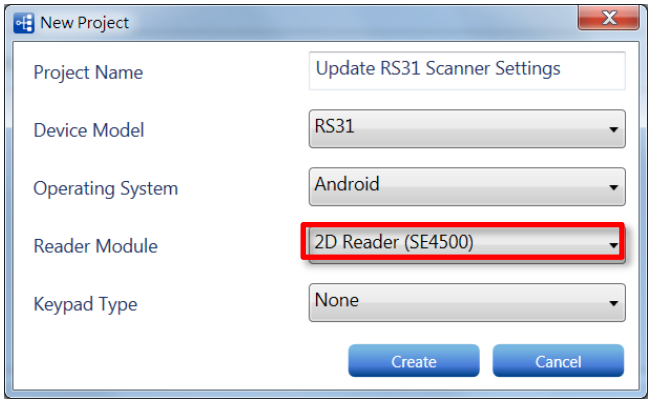


2) On **New Project** window, define the scope of your project and then click on "**Create**" to proceed. Pease make sure you have given the following items as specific definition as possible in order for the projects to be correctly deployed to the devices.

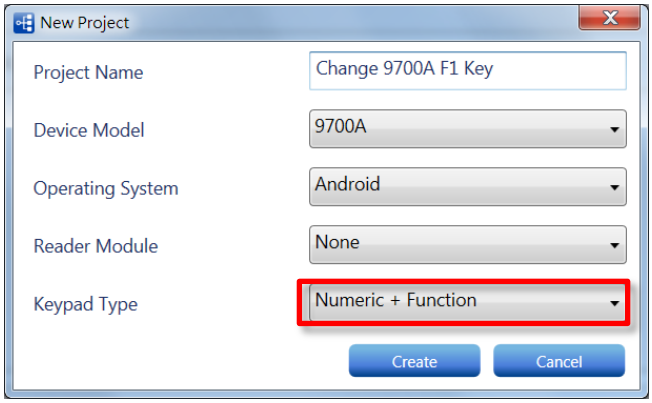
- Project Name – To achieve efficiency and convenience for management, it is suggested that you input a project name clear enough for you to easily to identify the purpose of this project.

- Device Model – Select the correct model name of the device(s)



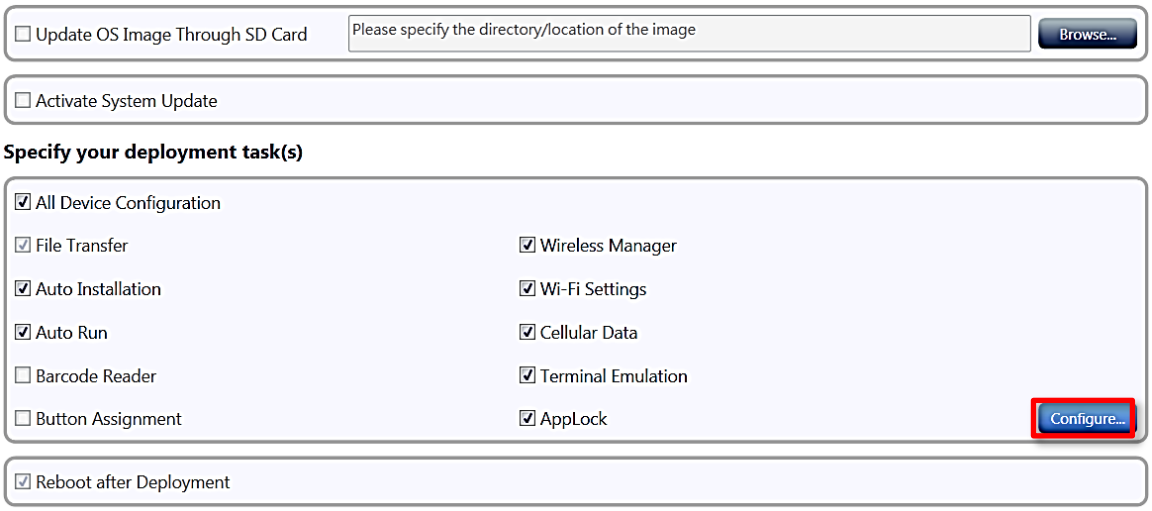


- Reader Module – If you will include the setting of Barcode Reader properties in this project, please select the reader type here.

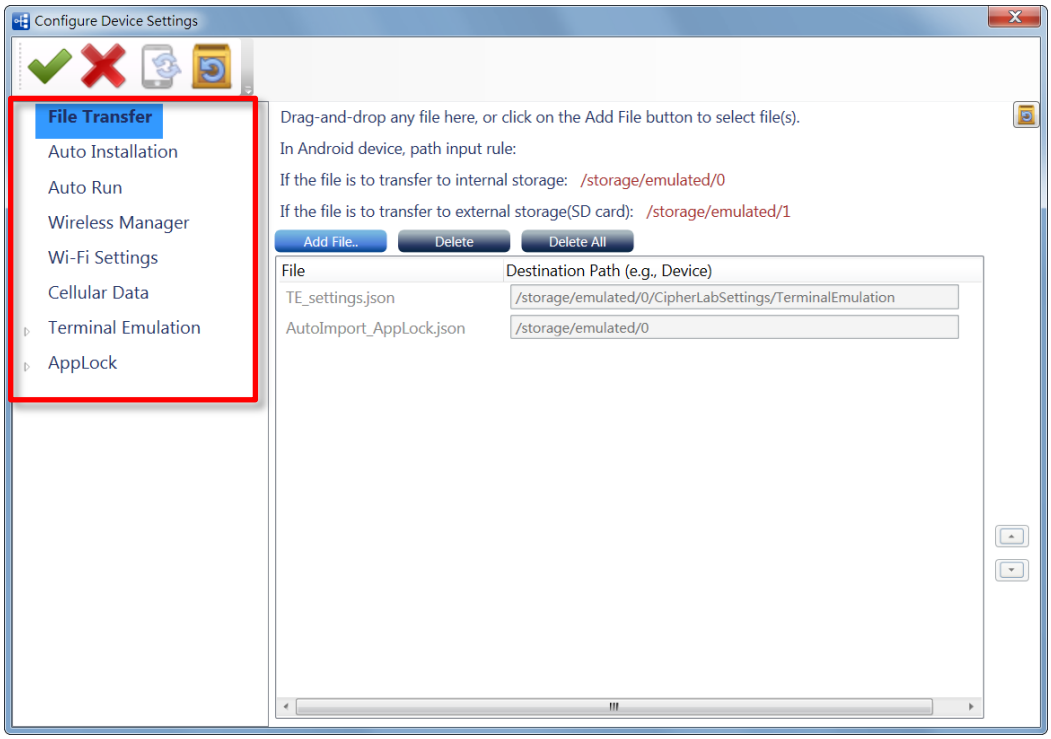


- Keypad Type –If you will include the setting of Buttons in this project, please select the corresponding Keypad type here.

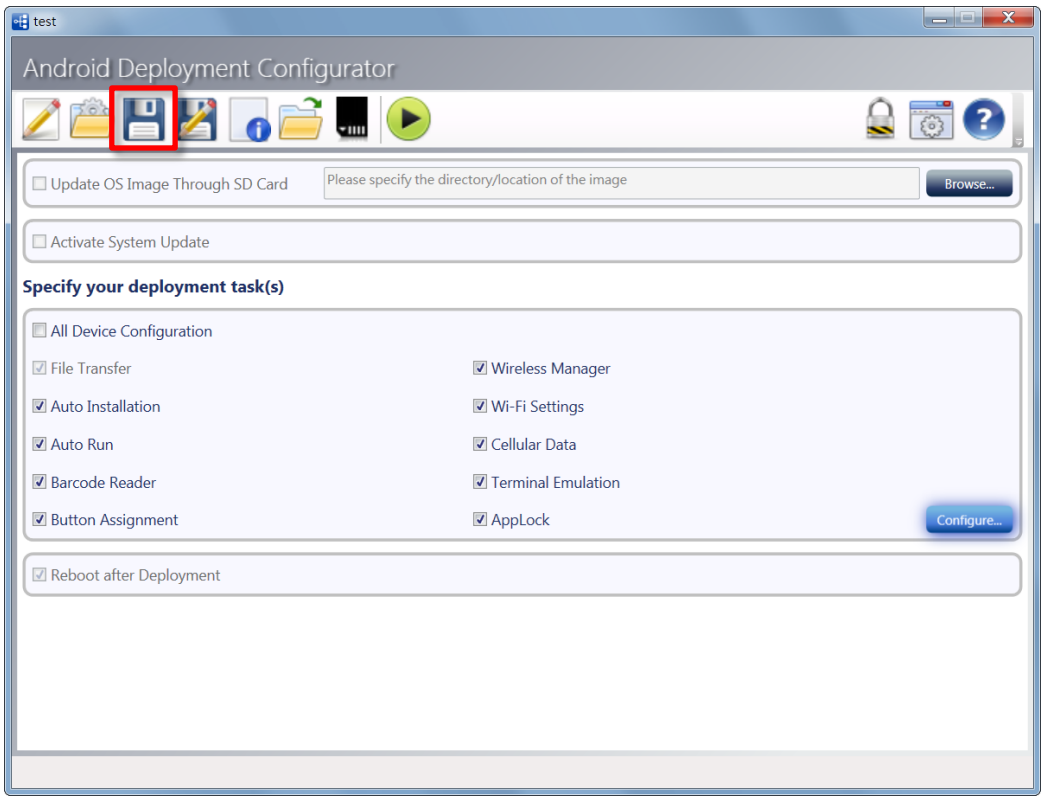
3) On **Specify your deployment task(s)** list, check **ONLY** the settings that you wish to be deployed in this project. Click on "**Configure...**" when you finish checking the items and proceed to modify detailed settings (refer to Configurable Deployment Tasks).



4) On **Configure Device Settings** screen, modify device configurations (see Customize Project Configurations for details). When you finish setting, click on "**Apply** ✔" to save the settings and return to Main Screen.



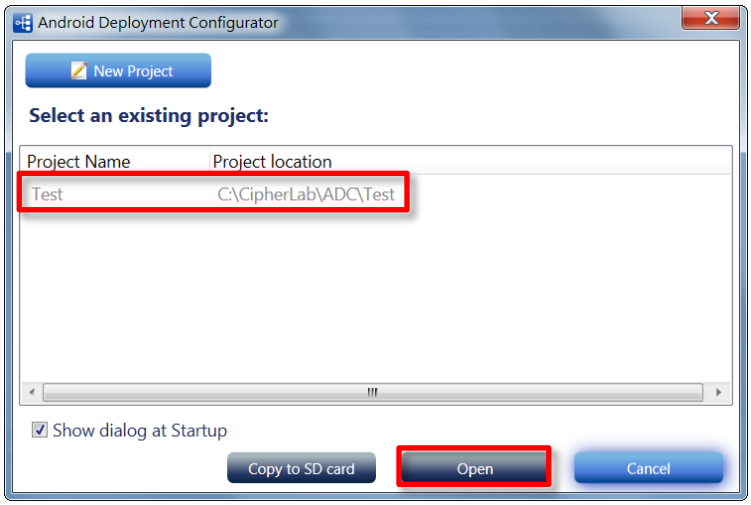
5) On Main Screen, click on "**Save Project**" to save the project.



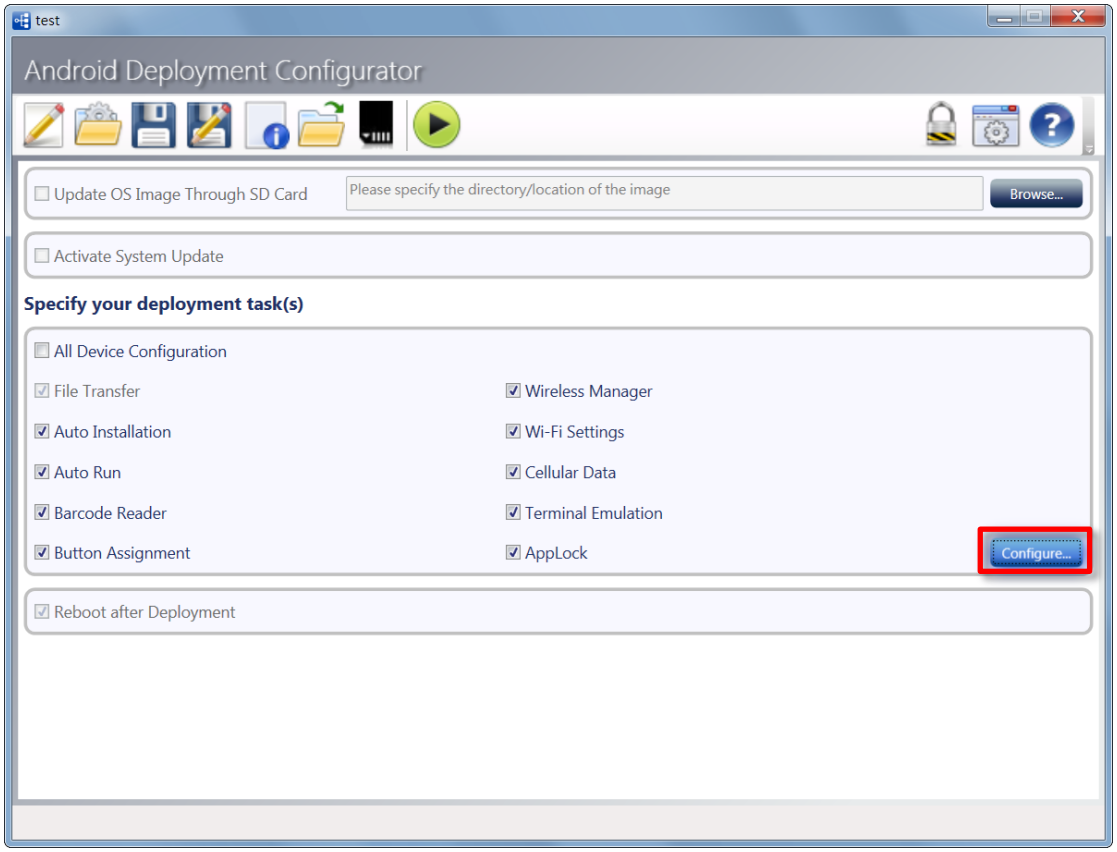
1.4 START WITH AN EXISTING PROJECT

You can load a saved project to make modifications to it. After starting this program, the projects saved in the designated folder (whose default path is *c:\CipherLab\ADC*).

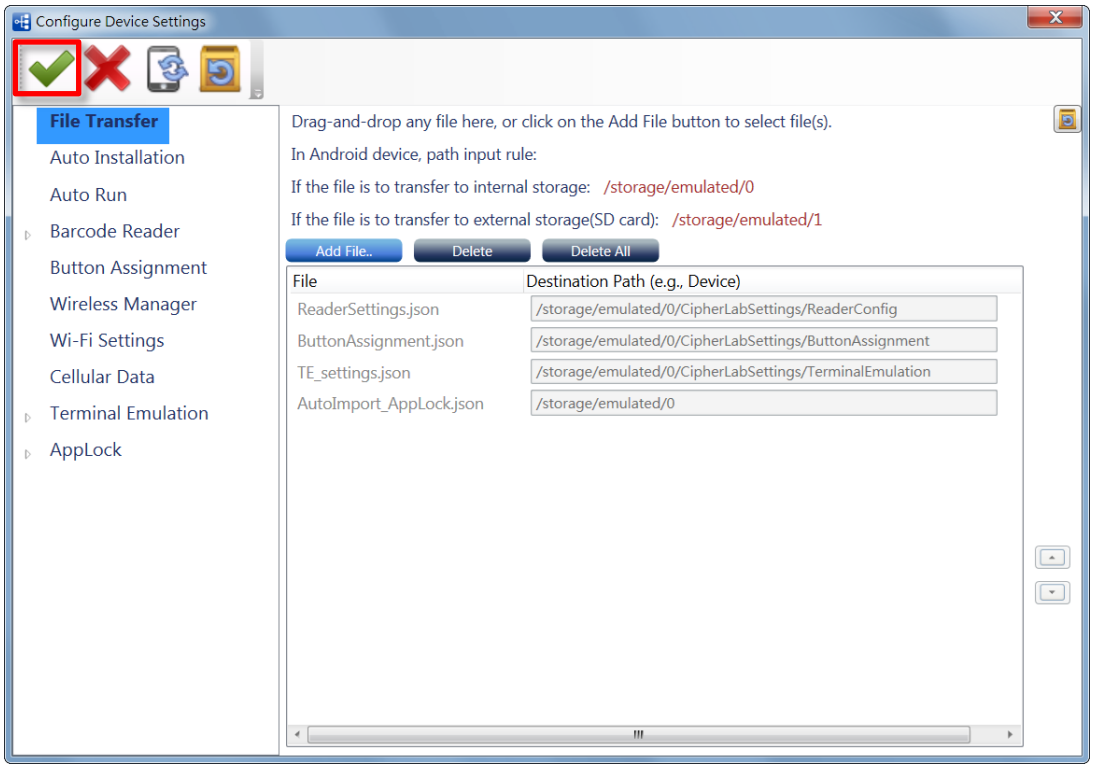
1) From the startup dialog shown below, double-click on a project and click on "**Open"** if you already have some projects.



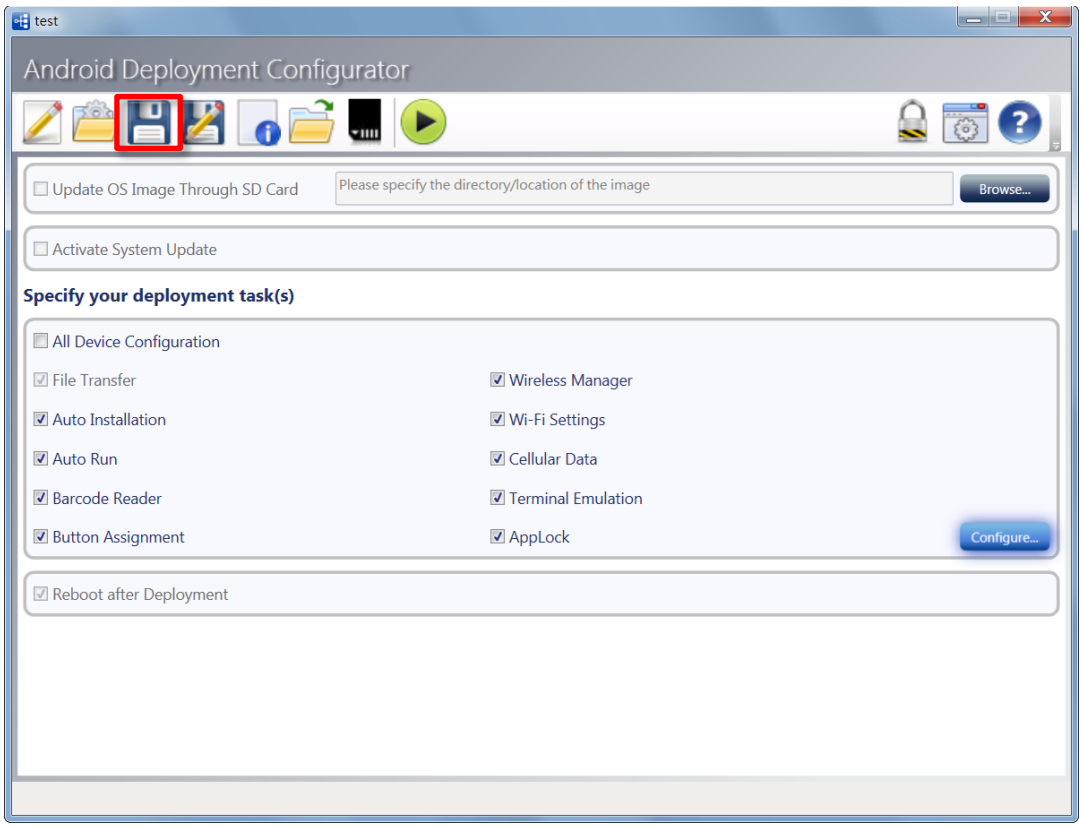
2) On Main screen, check the configuration types you are about to modify and click on "**Configure…"**



3) On **Configure Device Settings** screen, modify device configuration. See Customize Project Configurations for details. When you finish setting, click on "**Apply** ✔" to save the settings and return to Main Screen.

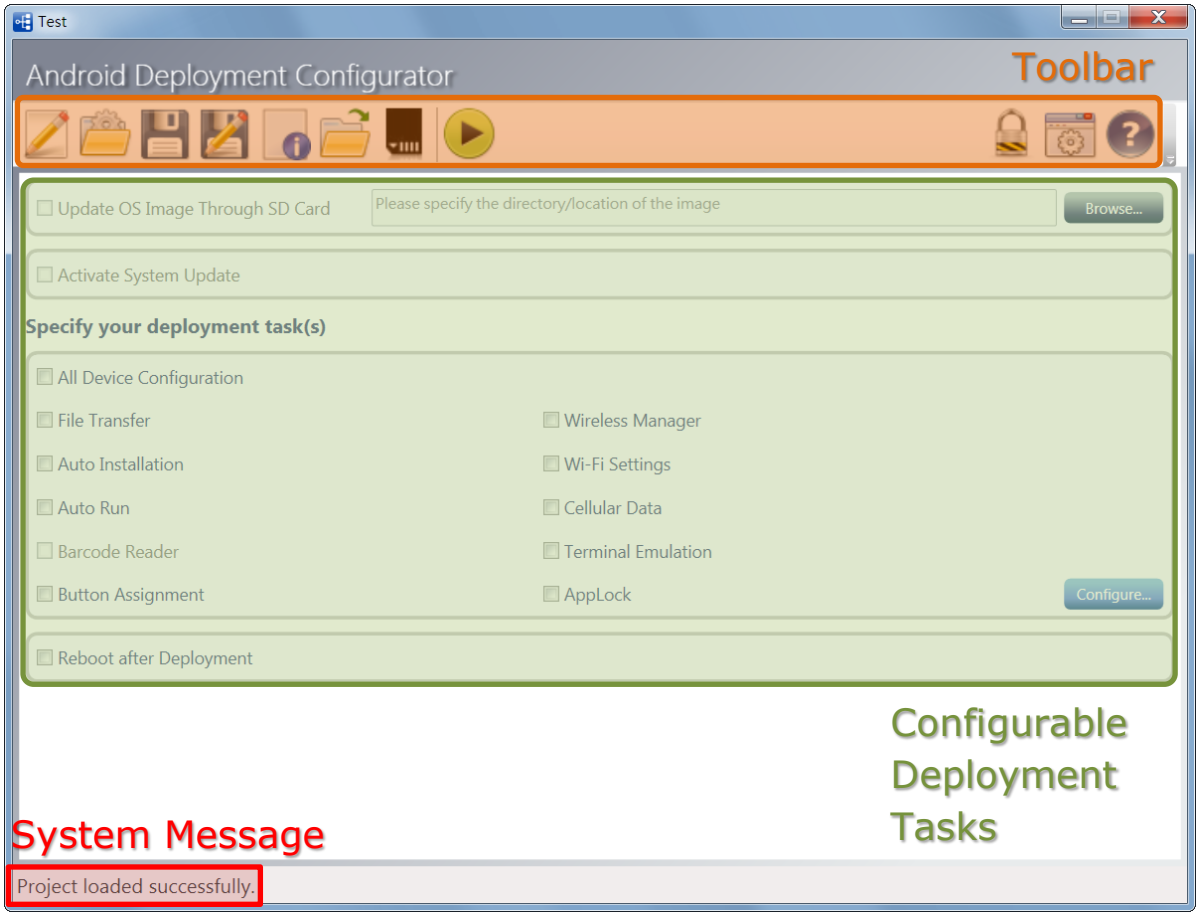


4) On Main Screen, click on "**Save Project**" to save the project.



1.5 MAIN SCREEN

After the Startup dialog, you will enter Main Screen.

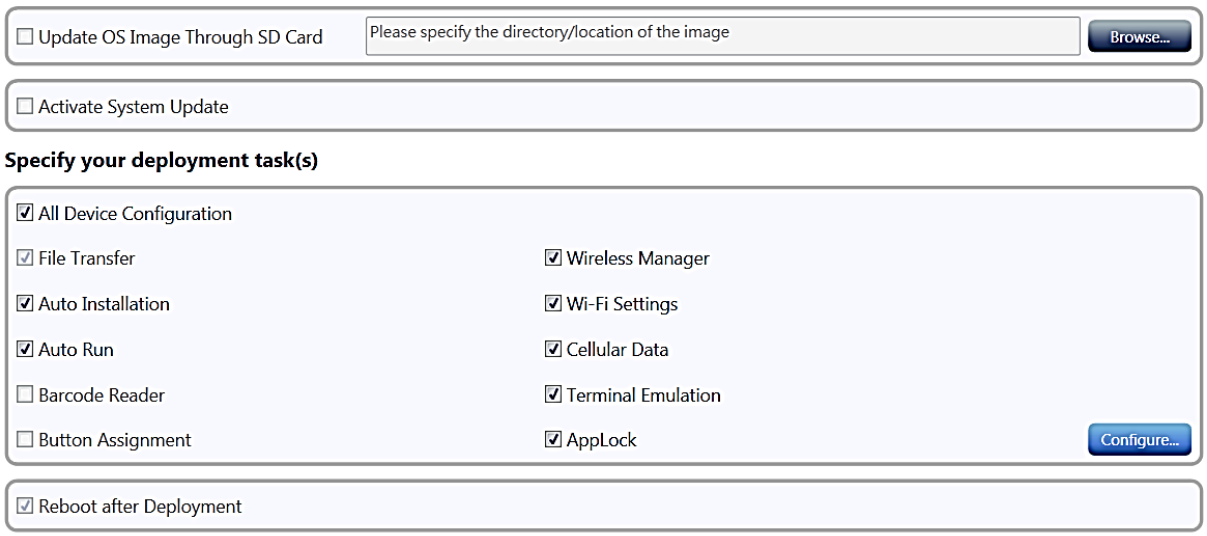


TOOLBAR

Button	Description
New Project	Click to create a new project
Open Project	Click to open an existing project
Save Project	Click to save your current project
Save Project As	Click to save your current project to a different project name
View Project Information	Click to view information about the current project
Open ADC Folder	Click to open the project folder. You may view, delete or duplicate project files. By default, all projects are saved in *C:\DensoWave\ADC*, which can be modified in Preferences

Save to SD Card	Copy a project to an SD card, and you can deploy the project to a device with this card. Please insert an SD card into a card reader and connect it to your PC in advance.
Deploy	Save and deploy the current project to the connected device via USB connection
Launch WMDS	This icon will appear once WMDS server is already installed on the same computer as ADC program. Click on it to launch **WMDS** program.
Security	Click to change security settings if necessary
Preferences	Click to change preferences if necessary
Help	Click to access either the Help contents or the About information

CONFIGURABLE DEPLOYMENT TASKS



Item	Description
Update OS Image through SD Card	To deploy a project to a device using SD card, remember to check this item and give the file path (*.zip file with ***sdupgrade*** in its file name). With the correct file path, the OS image will be stored onto the SD card after you click on "**Save current project to SD card**". Please make sure there is enough space on this SD card.

Activate System Update	Upon completion of deployment, the device will automatically check the latest OS image available over the Internet OS image. Please make sure the selected devices are connected to public Internet.
Specify your deployment task(s) ☐ All Device Configuration ☐ Wireless Manager ☐ File Transfer ☐ Wi-Fi Settings ☐ Auto Installation ☐ Cellular Data ☐ Auto Run ☐ Terminal Emulation ☐ Barcode Reader ☐ AppLock ☐ Button Assignment	It is essential that you be careful with the selection made here, for once you check an item, its relevant settings will all be written to the devices; therefore, by checking "**All Device Configuration**", you will have all the default settings applied to selected devices.
Reboot after Deployment	Upon completion of deployment, the selected devices will automatically start rebooting process.

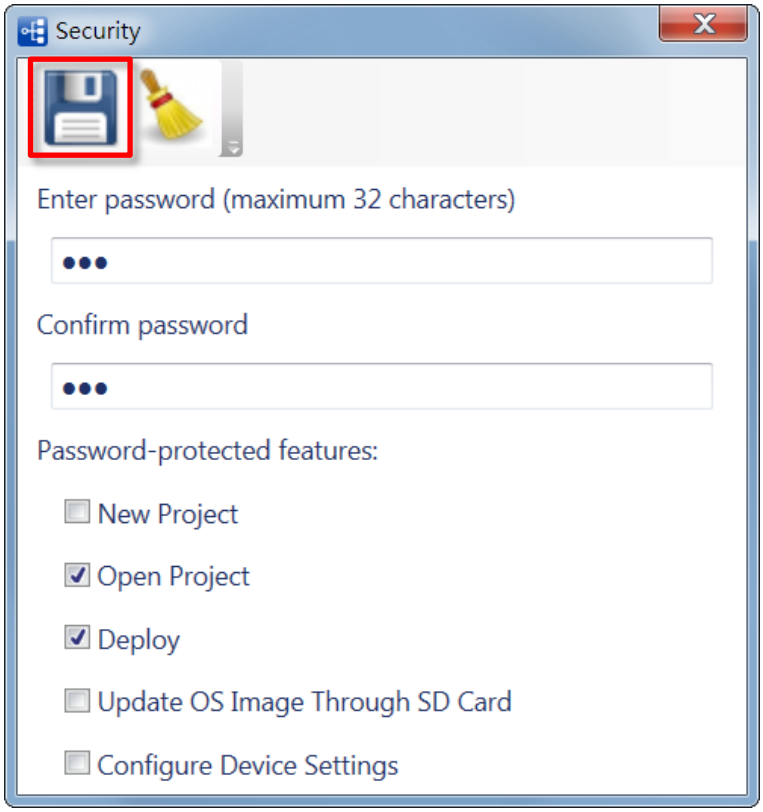
STATUS BAR & MESSAGES

The status bar at the bottom gives information or feedback after you take an action. Certain critical messages will also show in a pop-up window to catch your attention. If you want to adjust status bar messages timeout or turn off the pop-up messages, see Preferences .

SECURITY

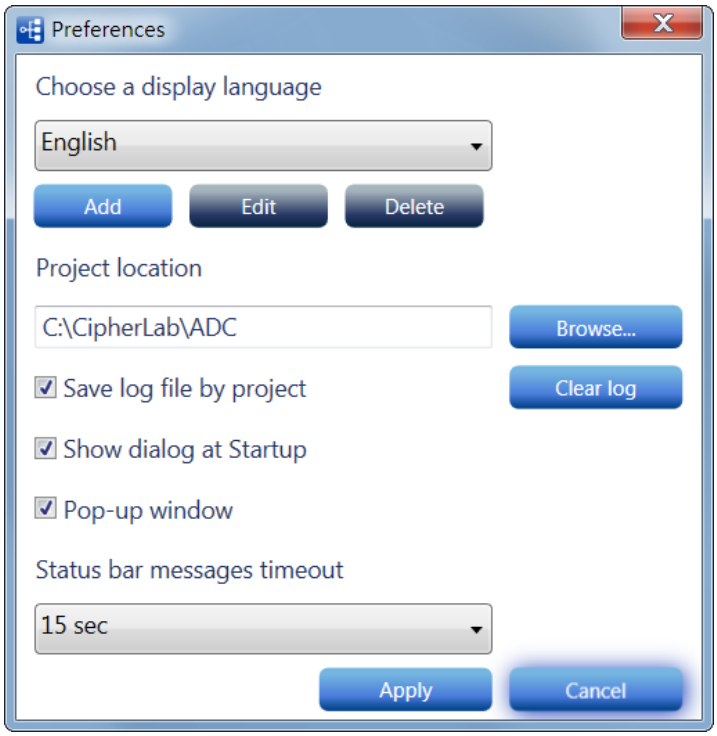
You can enable the password protection for certain features in this program.

1) On Main Screen, click on "**Security** "on the top right of Toolbar.
2) Enter and confirm your password if you want to enable password protection.
3) Click on "**Save** " to save the setting. This setting will be immediately applied.



PREFERENCES

On Main Screen, click on "**Preferences**  "on the top right of Toolbar.



Item	Description
Choose a display language	Choose a display language other than the default English if necessary. You may click "**Add**" to create your own language or "**Edit**" to customize wordings. See Multi-language Support .
Project location	Change your project location if necessary.
Save log file by project	Decide whether to have logs saved (in ADC program folder) while working on your project. You may click "**Clear log**" to clear all log files if necessary.
Show dialog at Startup	Decide whether to show the following dialog when ADC starts. You may de-select the checkbox right inside the dialog or in Preferences.
Pop-up window	Decide whether to show the status message on the pop-up window.
Status bar messages timeout	Adjust status bar messages timeout if necessary. See Status Bar & Messages.

MANAGE PROJECTS

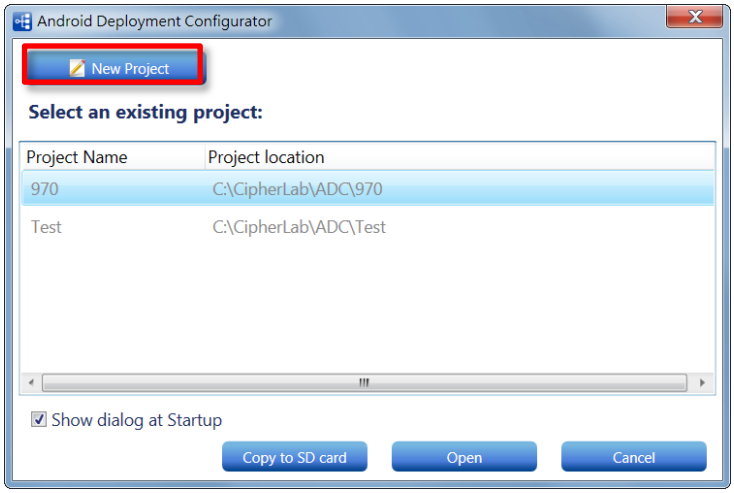
Click on "**Open Project** " on Toolbar to open the project folder. You may view, delete or duplicate project files. By default, all projects are saved in the path *C:\DensoWave\ADC*, which can be modified in Preferences.

IN THIS CHAPTER

2.1 Create a Project 23
2.2 Open a Project 24
2.3 Delete a Project 25
2.4 Duplicate a Project 26
2.5 View Project Info 27
2.6 Customize Project Configurations 28

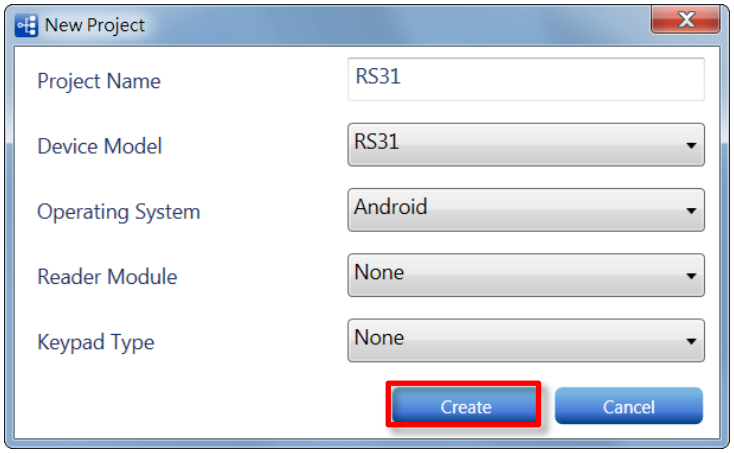
2.1 CREATE A PROJECT

1) From the startup dialog, click on "**New Project**" to create a project.



2) If the startup dialog has been dismissed, click on "**New Project**  " on Toolbar. Define the scope of your project and click on "**Create"**.

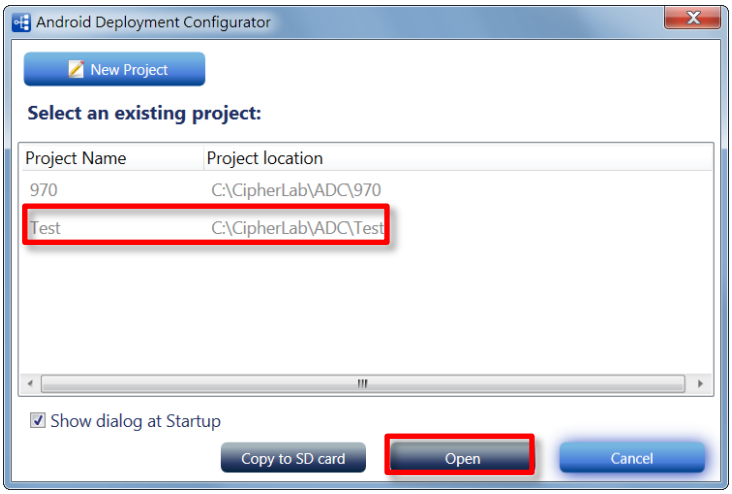




Item	Description
Project Name	Enter a name to identify your project.
Device Model	Specify which model will be used in the project.
Operating System	Specify which operating system the model is running.
Reader Module	Specify which barcode reader module is equipped on your device.
Keypad Type	Specify which type of keypad is equipped on your device.

2.2 OPEN A PROJECT

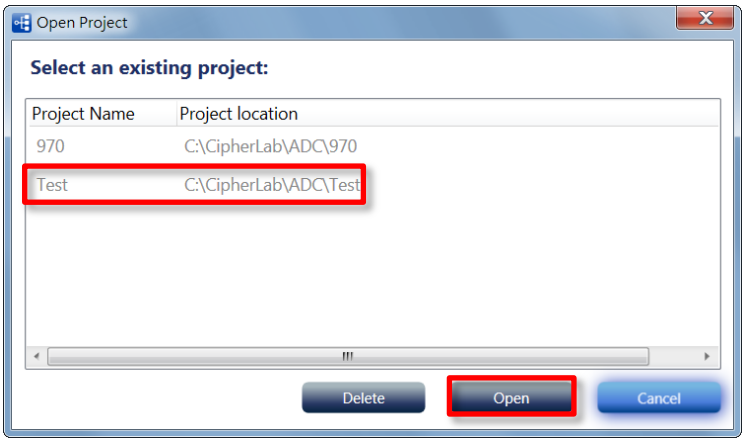
1) From the startup dialog, select a project and click on "**Open**" if you already have some projects.



2) If the startup dialog has been dismissed, click on "**Open Project**  " on Toolbar.



3) On the project list, double-click on the desired project to open it.



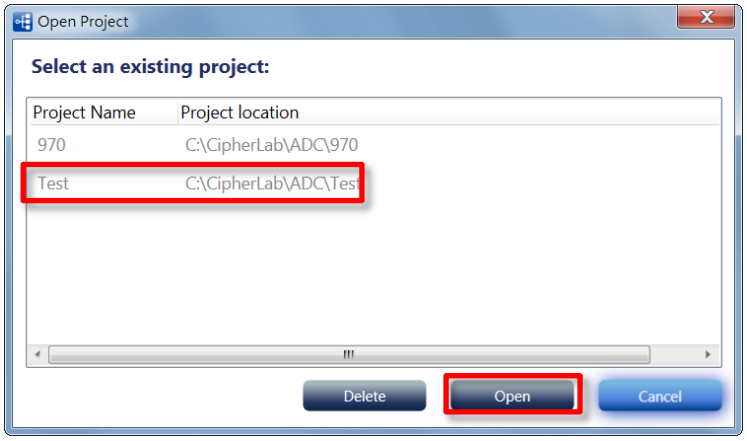
2.3 DELETE A PROJECT

If you want to delete an existing project,

1) Click on "**Open Project**  " on Toolbar.



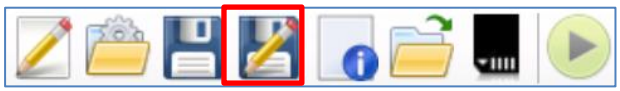
2) Then, select the project and click on "**Delete"**.



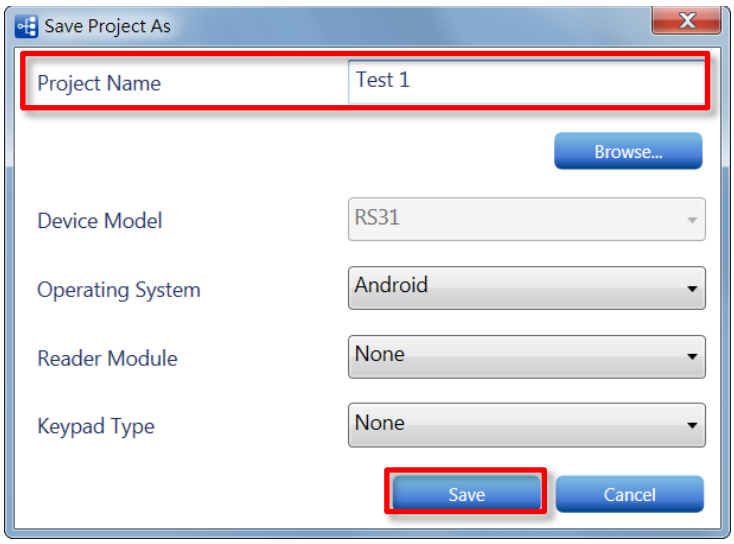
2.4 DUPLICATE A PROJECT

1) To duplicate an existing project, click on "**Open Project**  " on Toolbar.

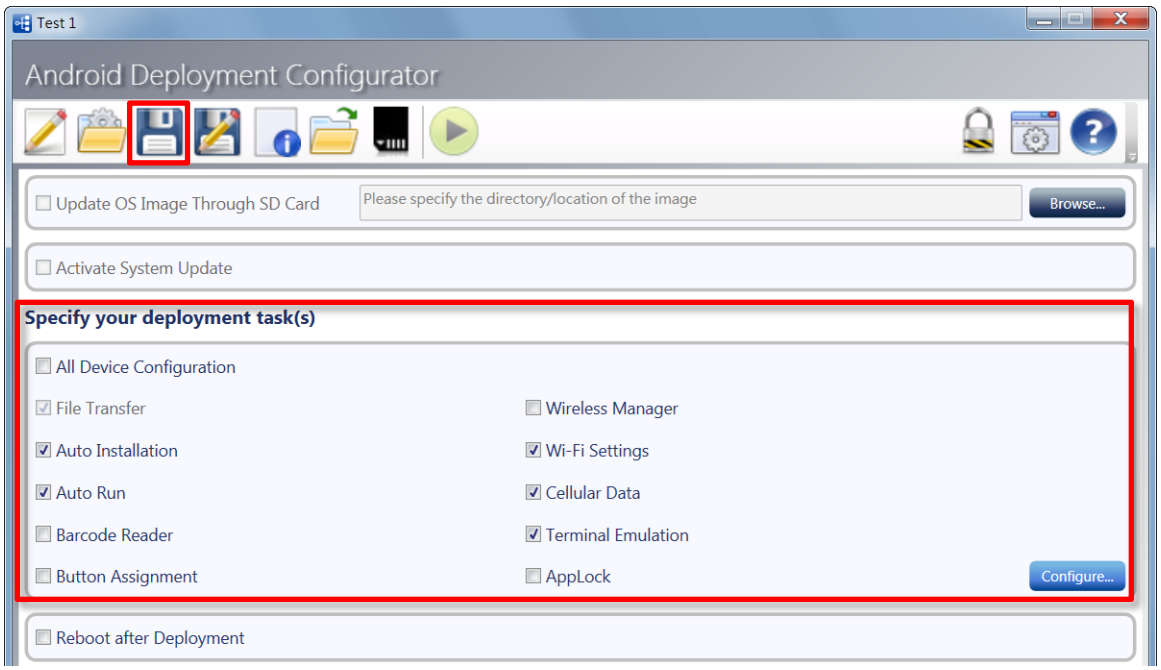
2) Click on "S**ave Project As** "on **Toolbar**.



3) Change the project scope if necessary, and then save it to a different project name. Click on "**Save"** after making changes to the project scope.



4) On Man Screen, modify the configuration settings and click on "**Save**  " on Toolbar to save this new project.



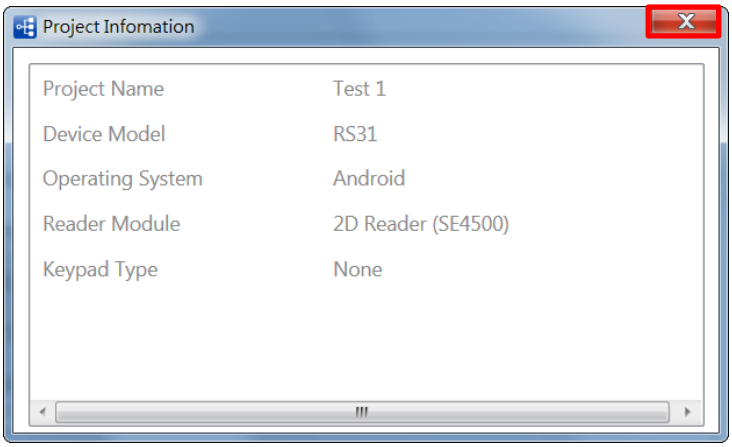
2.5 VIEW PROJECT INFO

If you want to view the summary of the current project,

1) Click on "**Project Information** " on Toolbar.

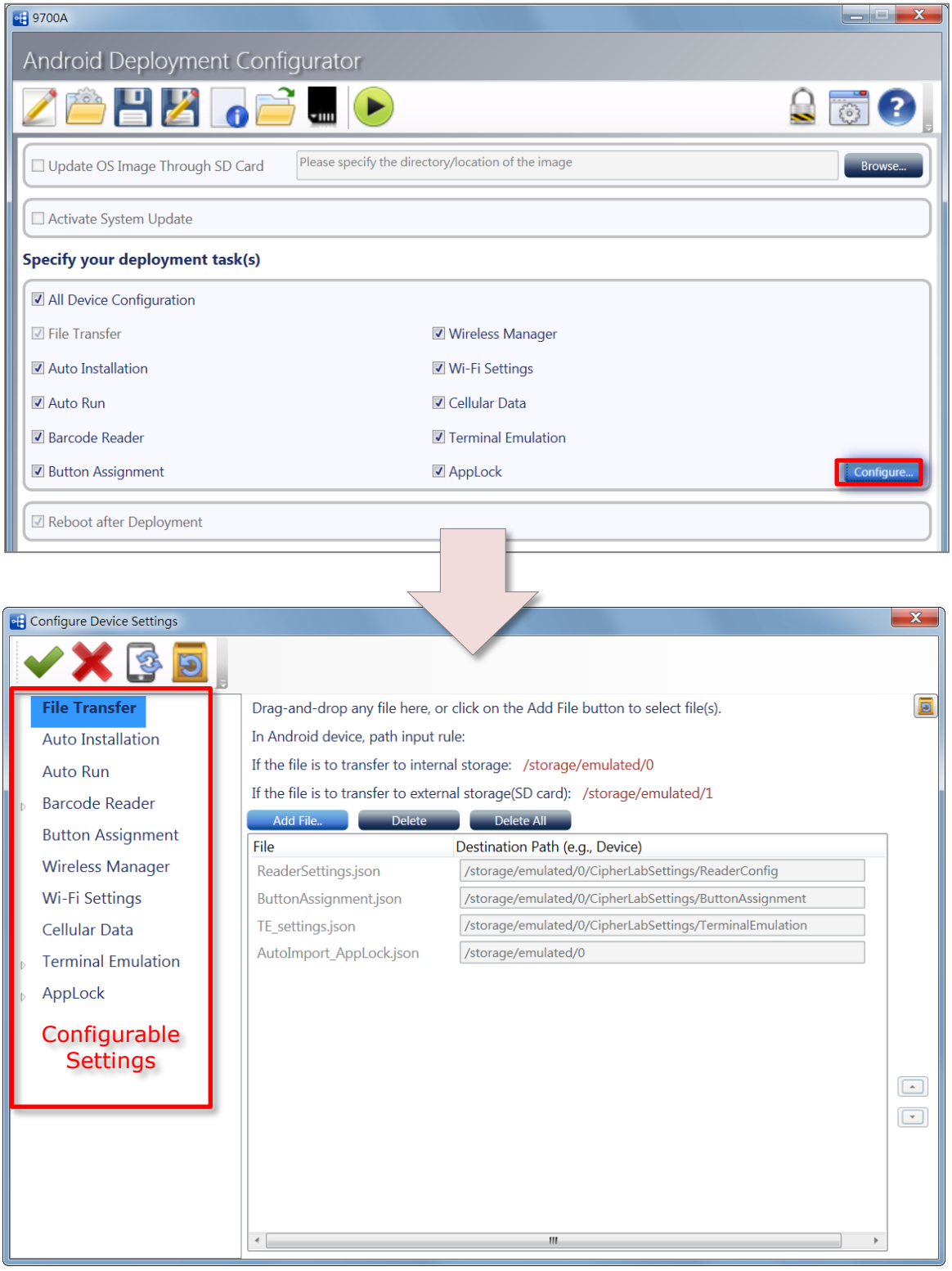


2) A Project Information window will pop up, you can click on "**X**" to close it.



2.6 CUSTOMIZE PROJECT CONFIGURATIONS

Before going into detailed settings of the project configurations, please read carefully through this chapter. In **Specify your deployment task(s)** area, click on "**Configure...**"

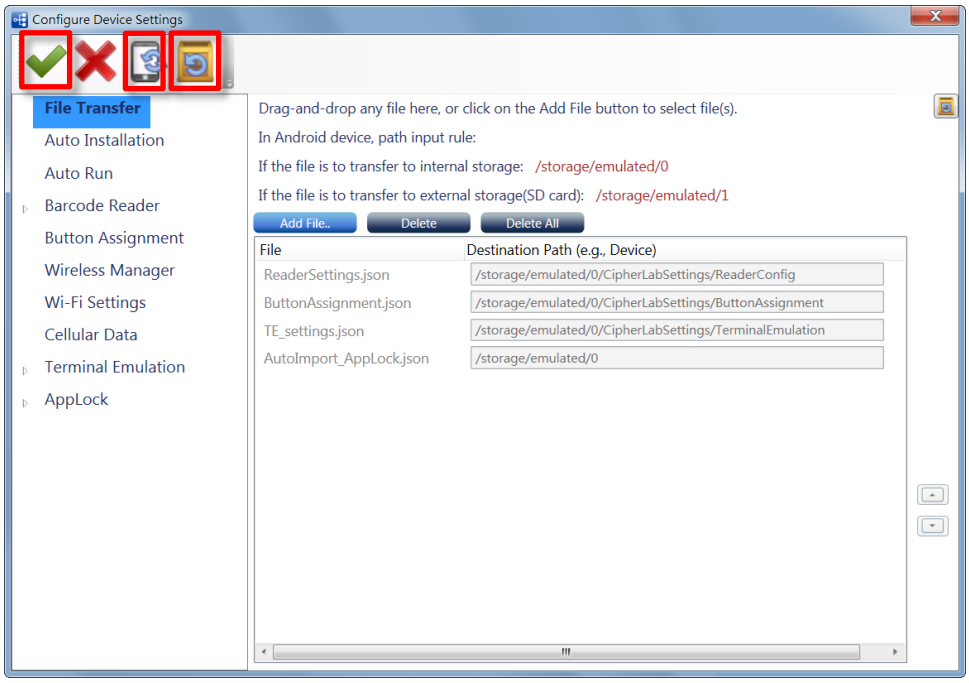


CONFIGURABLE SETTINGS

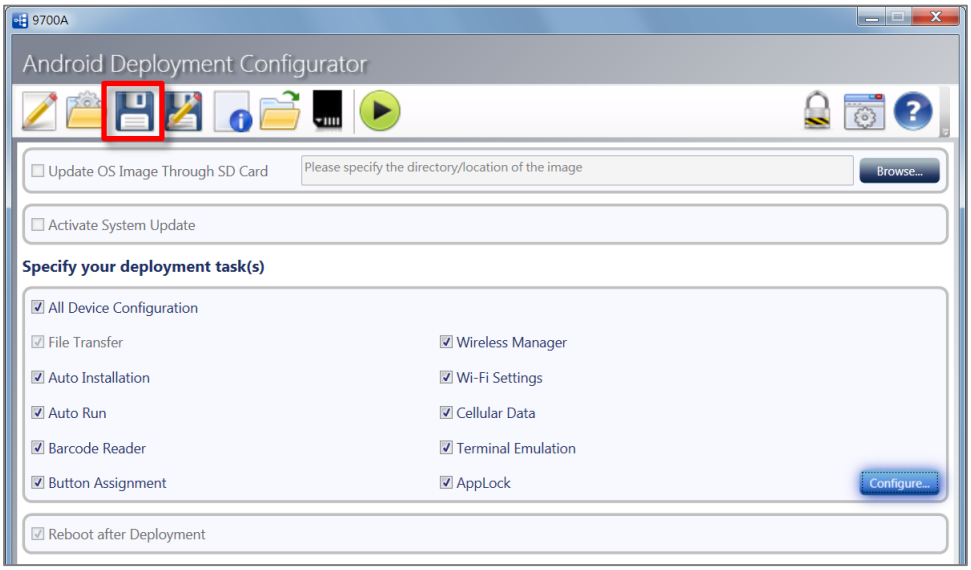
Item	Description
All Device Configuration	Click to select or deselect all device settings
File Transfer	When the check box is selected with files specified in the configuration, the files will be copied to device while deploying.
Auto Installation	When the check box is selected with install files (.APK) specified in the configuration, the files will be copied to device while deploying and programs will be installed automatically upon completion of deployment.
Auto Run	When the check box is selected with executable files specified in the configuration, the programs will be executed automatically when the device restarts.
Barcode Reader	When the check box is selected with changes made to its configuration, the Barcode Reader settings will be updated to device while deploying.
Button Assignment	When the check box is selected with changes made to its configuration, the Button Assignment settings will be updated to device while deploying.
Wireless Manager	When the check box is selected with changes made to its configuration, the Wireless Manager settings will be updated to device while deploying.
Wi-Fi Settings	When the check box is selected with changes made to its configuration, the Wi-Fi settings will be updated to device while deploying.
Cellular Data	When the check box is selected with changes made to its configuration, the cellular data settings will be updated to device while deploying.
Terminal Emulation	When the check box is selected with changes made to its configuration, the Terminal Emulation settings will be updated to device, via file transfer, while deploying. (When you select the Terminal Emulation Settings task, it will have the File Transfer task selected as well.)
AppLock	When the check box is selected with changes made to its configuration, the AppLock settings will be updated to device, via file transfer, while deploying. (When you select the AppLock Settings task, it will have the File Transfer task selected as well.)

On Configure Device Settings window:

- Instead of working on the device configurations from scratch, you may fetch the current configurations (of application list, Barcode Reader, Button Assignment, Wireless Manager, Terminal Emulation and AppLock) from device by connecting your device to PC via USB connection and clicking on "**Synchronize with all settings with Device** ". You may also click on "**Reset all settings to default** " to reset **ALL** settings if necessary. Please note that, for this synchronization to be carried out successfully, make sure the USB debugging mode on your device is already enabled (refer to How Do I Enable Debugging Mode on My Device?).
- Always remember to click on **Apply** before you close the **Configure Device Settings** window.



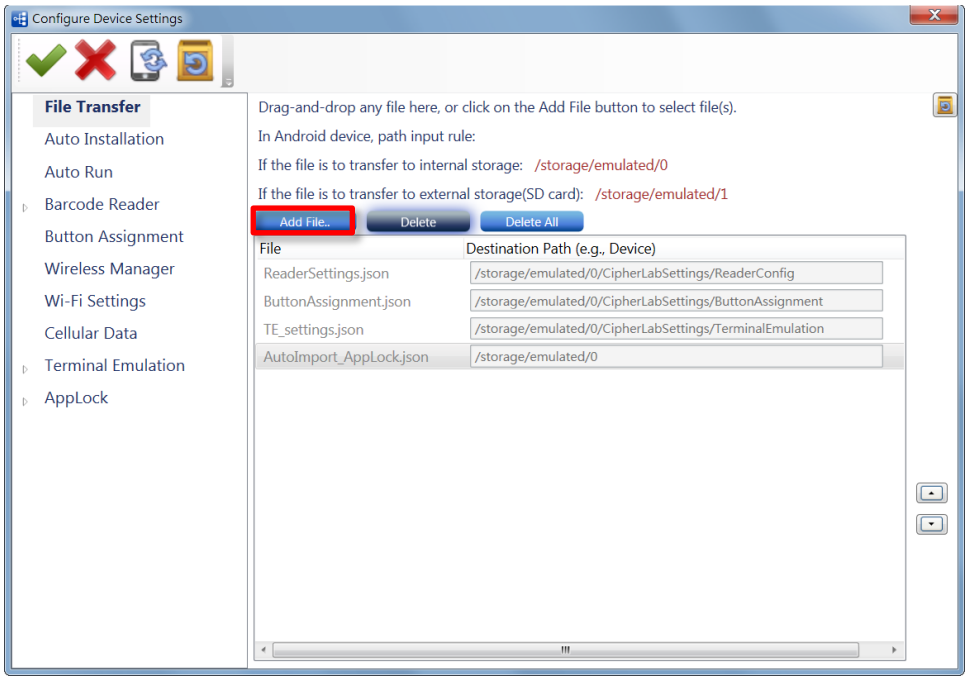
- After completing configuring the settings details, remember to click on "**Save Project** " on Main Screen before exiting this program.



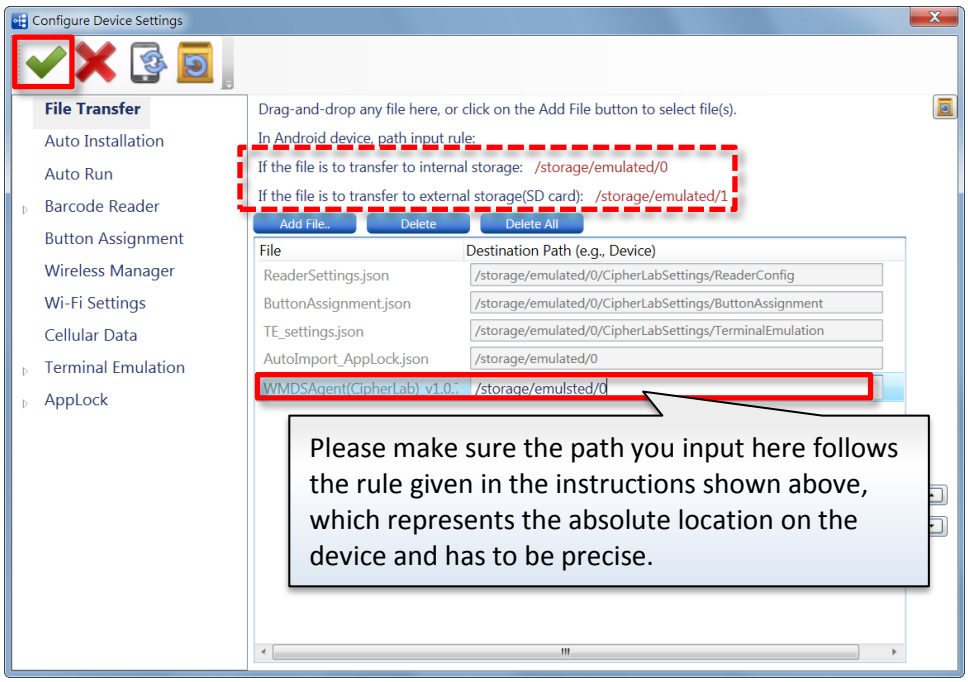
FILE TRANSFER

The specified files will then be copied to device while deploying.

1) Drag-and-drop any file(s) to the file list or click **Add File** to browse your computer to locate the file.



2) Click on the Destination Path field to fill in the path to where the file shall be located. Please make sure the path you manually input is valid.



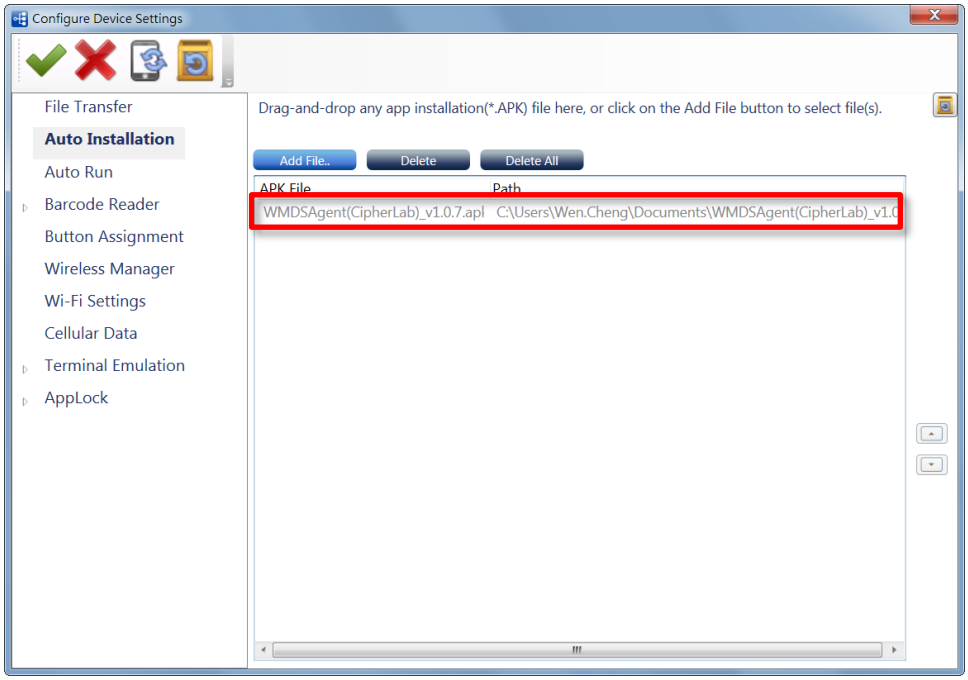
3) Click on **Apply** before you close the Configure Device Settings window.

AUTO INSTALLATION

With this configuration, the specified files will be copied to device while deploying and the programs will be automatically installed upon completion of deployment.

Before an auto installation takes place on the device, please make sure to exit all the running programs. Otherwise, your programs may not function correctly.

1) Drag-and-drop any file(s) to the file list or click **Add File** to browse your computer to locate the file.



2) Click on **Apply** before you close the Configure Device Settings window.

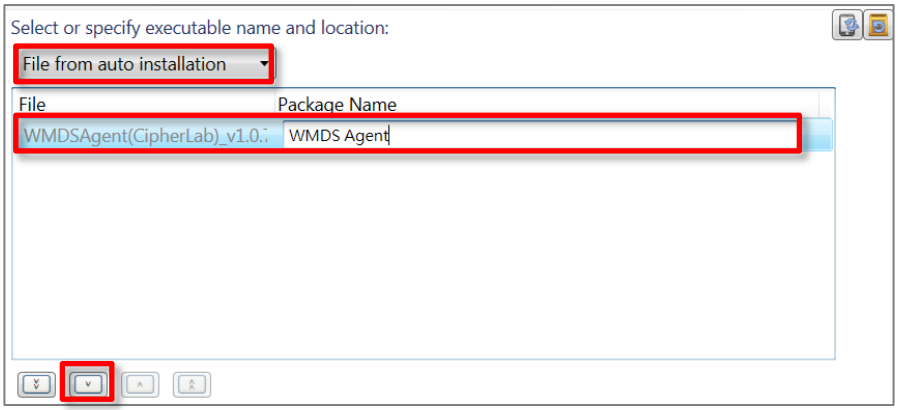
AUTO RUN

With this configuration, the specified programs will be executed automatically when the device restarts. During deployment, the new Auto Run app lit will overwrite the previous one. Therefore, if you check "**Auto Run**" item on the **Specify your deployment task(s)** on Main screen, DO remember to configure the Auto Run app list here; otherwise, the previous Auto Run app list on your device will be overwritten by a blank list.

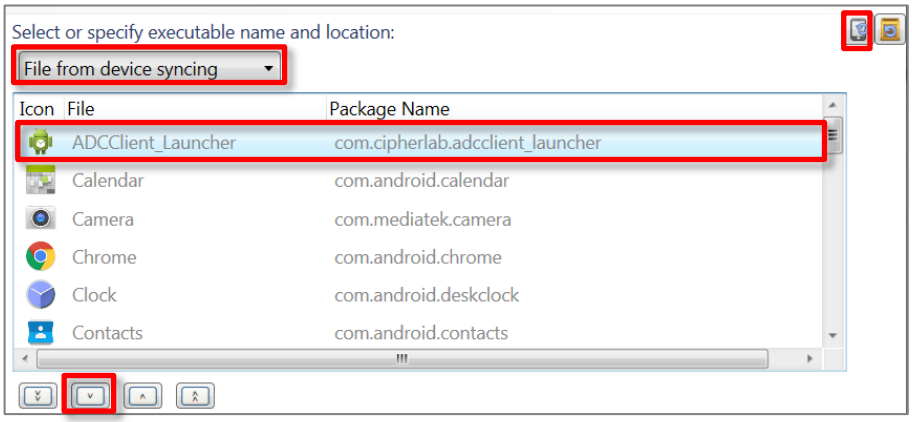
1) Select the source of the application from the drop-down menu:

   (a) File from auto installation
   (b) File from device syncing
   (c) Customer Defined app

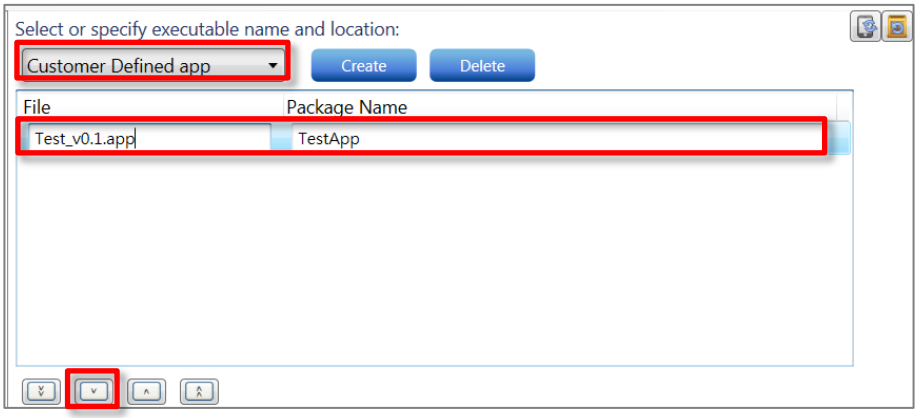
- If the source is "**File from Auto Installation**" and the source list is blank, you must configure Auto Installation first. Click on an entry and fill in the package name (please acquire the package name from the application developer). Once you finish, select the File name and click the **Move Down** button.



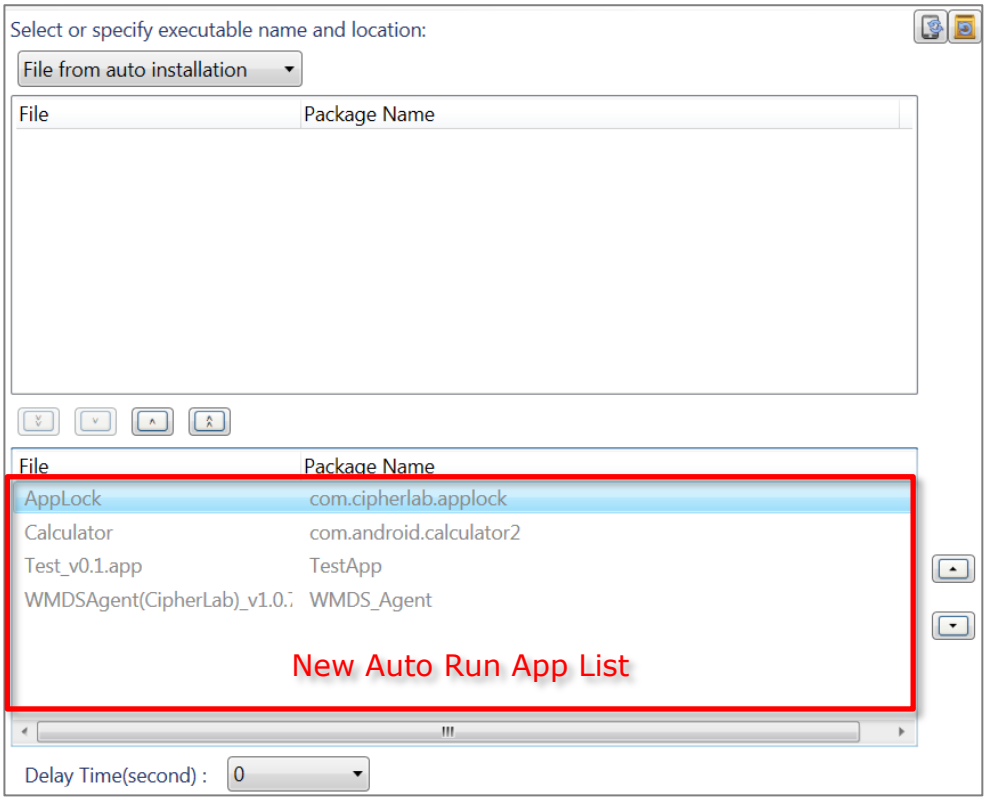
- If your source is "**File from device syncing**" and the source list is blank, you must click on to sync with your device first. The small **Sync** button on the right is to synchronize with device for available executable files. Once you finish, select the File name and click the **Move Down** button.



- If your source is "**Customer-defined app**", then you must click **Create**. In the File column, type the filename of the program. In the Package Name column, type the full name of this package (please acquire the package name from the application developer). Once you finish, click on the **Move Down** button.



2) Make sure you have selected the desired items and move them to the **Selected Package List** below using **Move Down** button. Only the selected items will be saved to this project and deployed to devices.

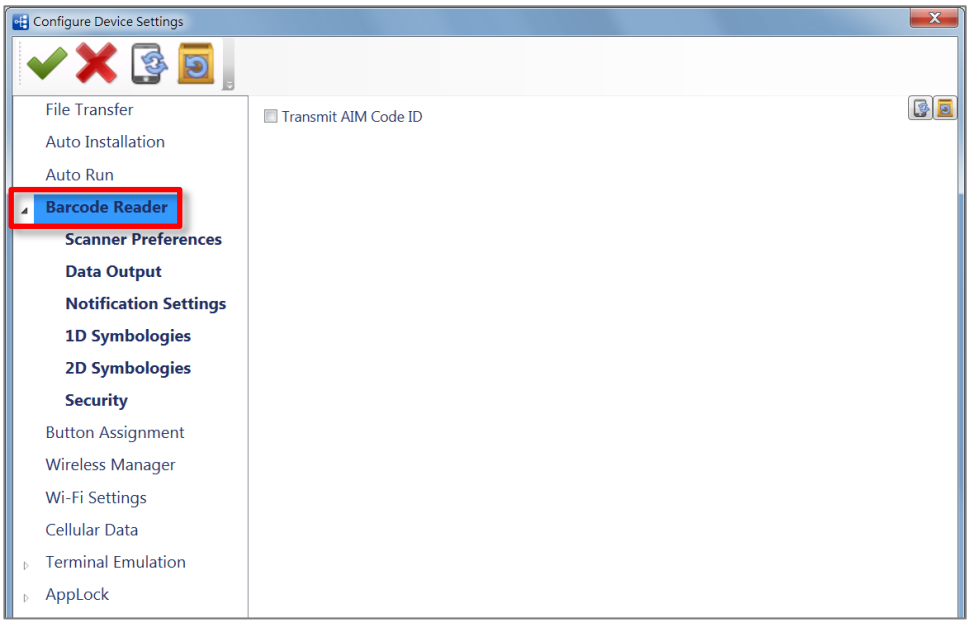


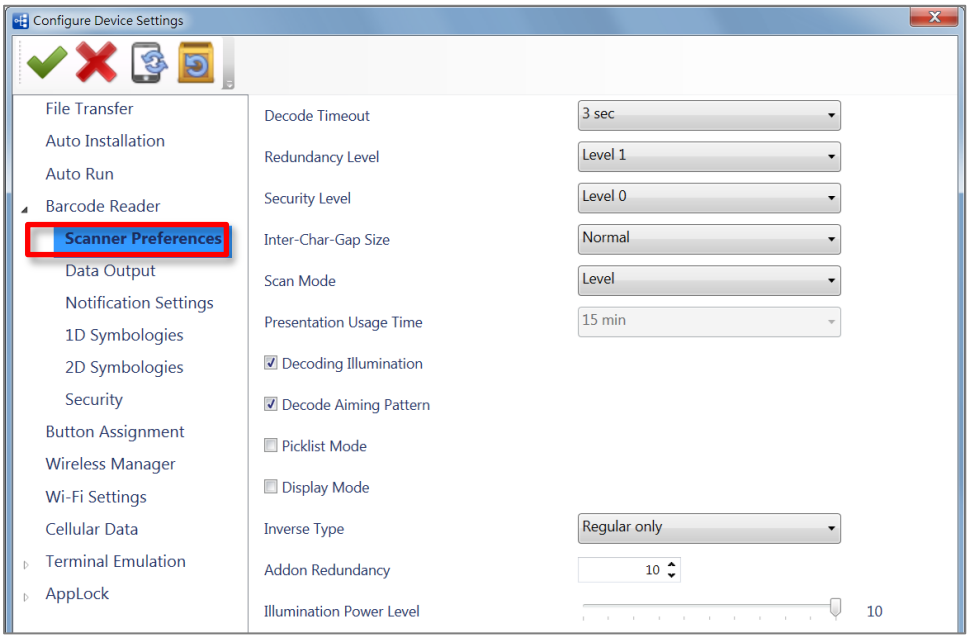
3) Define the interval of each autorun application in **Delay Time (second)** if necessary.

4) Click on **Apply** before you close the Configure Device Settings window.

BARCODE READER

1) Go through **Scanner Preferences**, **Notification**, **Data Output**, **1D Symbologies** and **2D Symbologies**. Make changes if necessary.



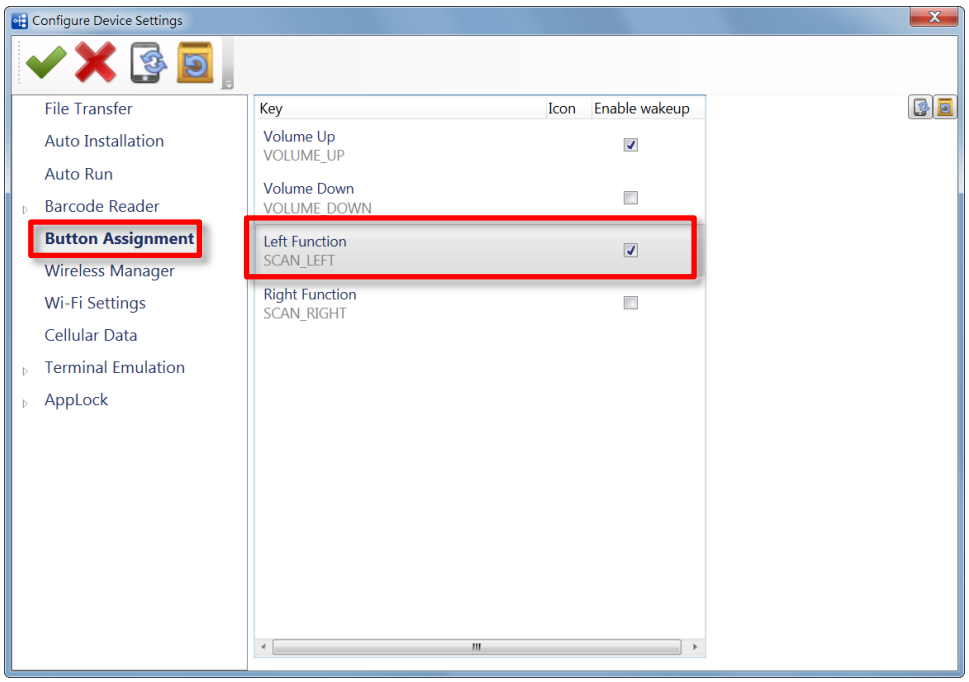


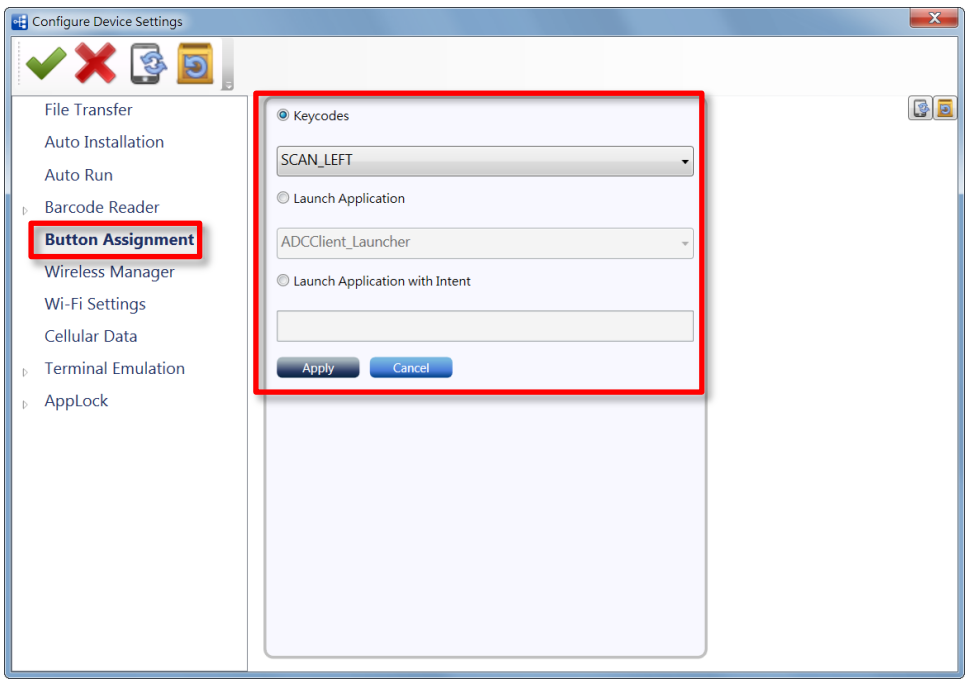
2) Click on "**Apply** ✔" before you close the Configure Device Settings window

BUTTON ASSIGNMENT

With this configuration, you can define the function of the physical keys of your device. The settings will vary by device model.

1) Double-click on the Key name to enter more detailed settings.



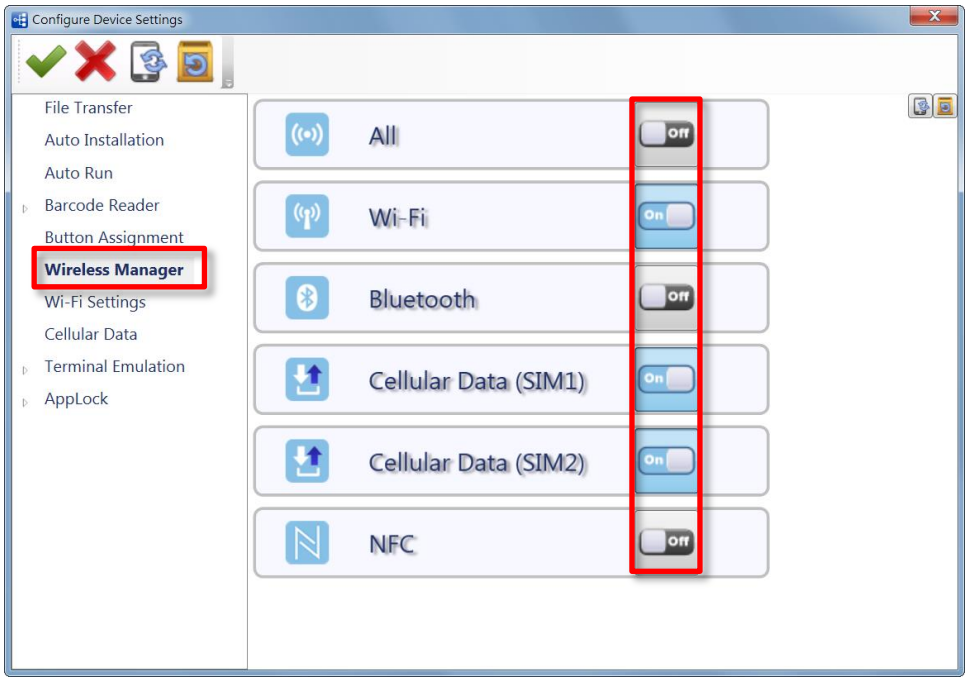


2) If you make any changes on this screen, remember to click on "**Apply**".

3) Click on "**Apply** ✔" before you close the Configure Device Settings window.

WIRELESS MANAGER

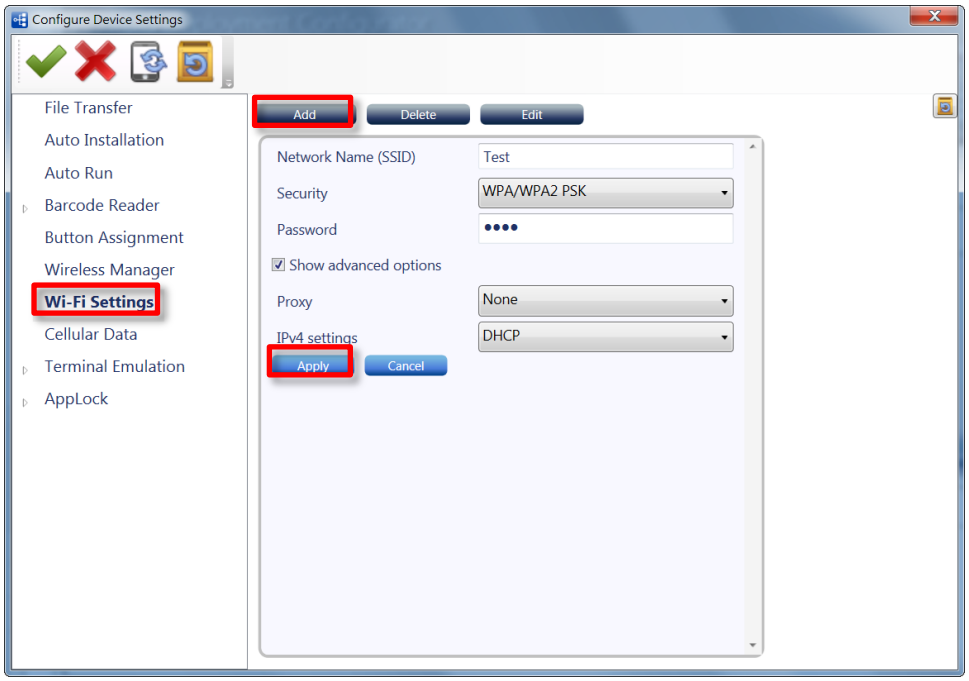
1) Make changes if necessary. Click on the switch to turn on (or turn off) one or all wireless signals.



2) Click on "**Apply** ✔" before you close the Configure Device Settings window.

WI-FI SETTINGS

1) Click on "**Add**" to add a new wireless profile and fill in the necessary fields. Click on "**Apply**" to save the settings.

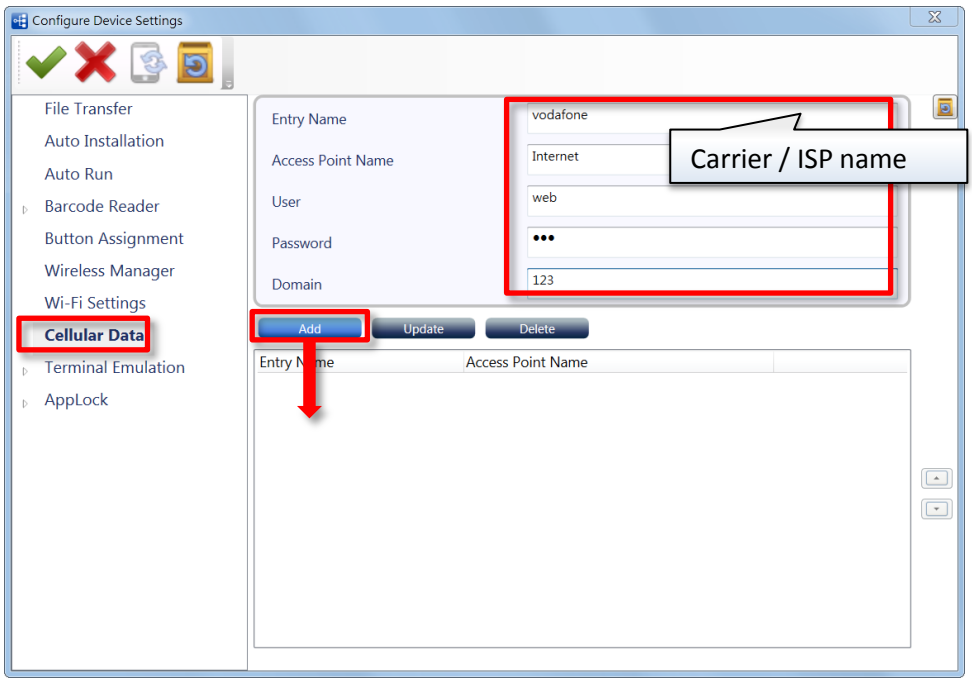


For **IPv4 settings**, you can choose for the device to obtain an IP address via DHCP. Your device IP addresses may be automatically assigned if DHCP is enabled on the adapter.

2) Click on "**Apply** ✔" before you close the Configure Device Settings window.

CELLULAR DATA

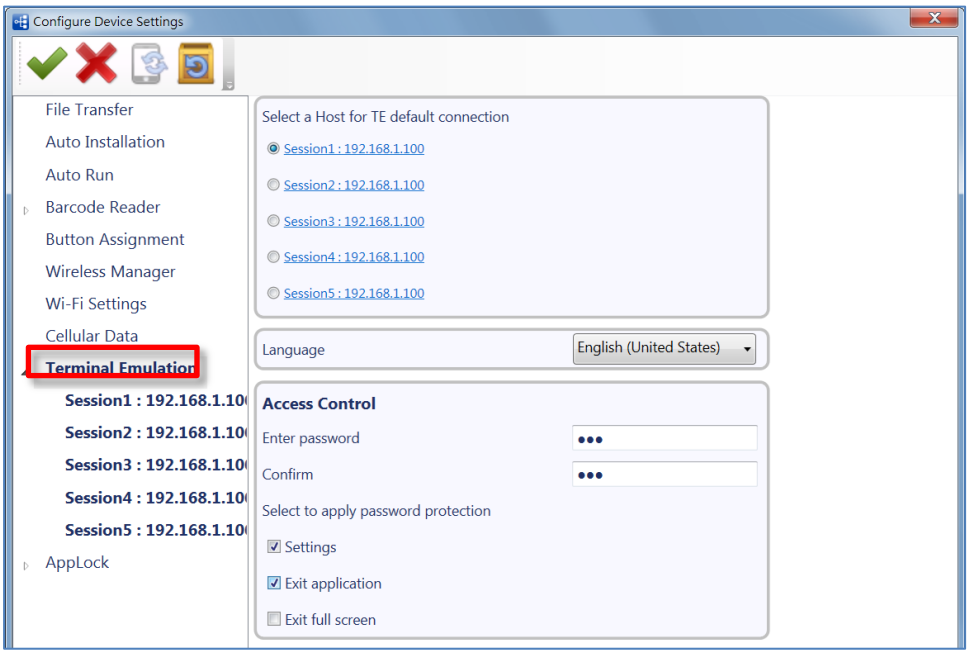
1) Type a name and configure your cellular data network.
2) Click on "**Add**". Please note that if you have more than one entry, **ONLY the one at the top** of the list will be activated. Make sure you move the desired APN settings to the top.

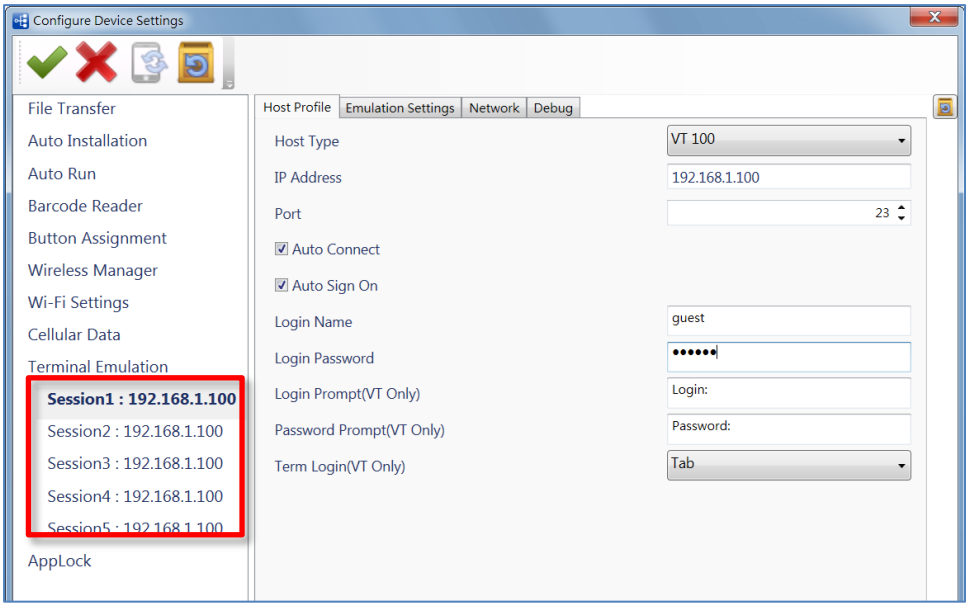


3) Click on "**Apply** ✔" before you close the Configure Device Settings window.

TERMINAL EUMLATION

1) Choose one host profile to set as an active profile. You can double-click on a host to enter the settings page of that specific host profile.



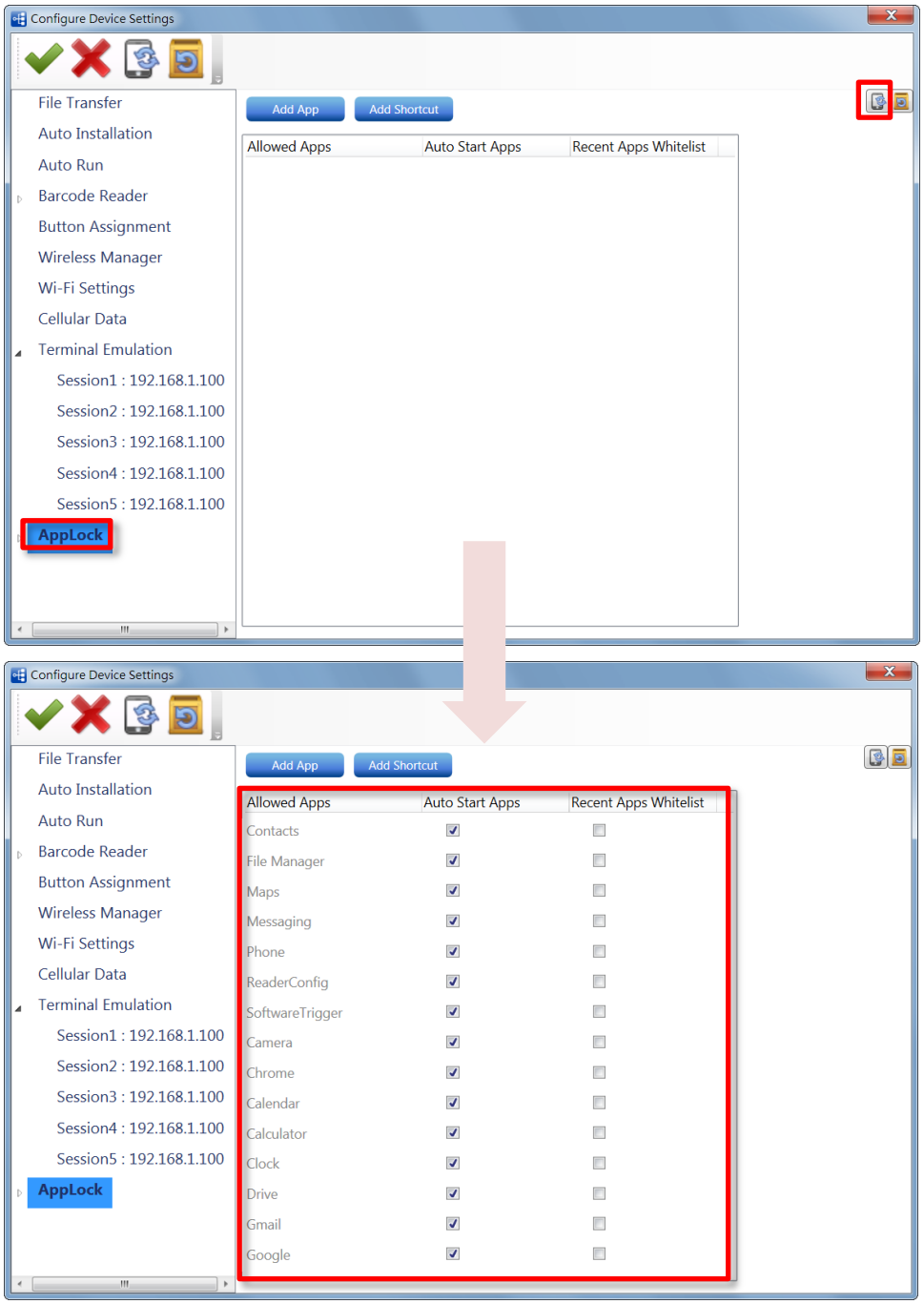


Emulation Settings involve key mapping with the physical keys of the device, thus the settings will vary by device model.

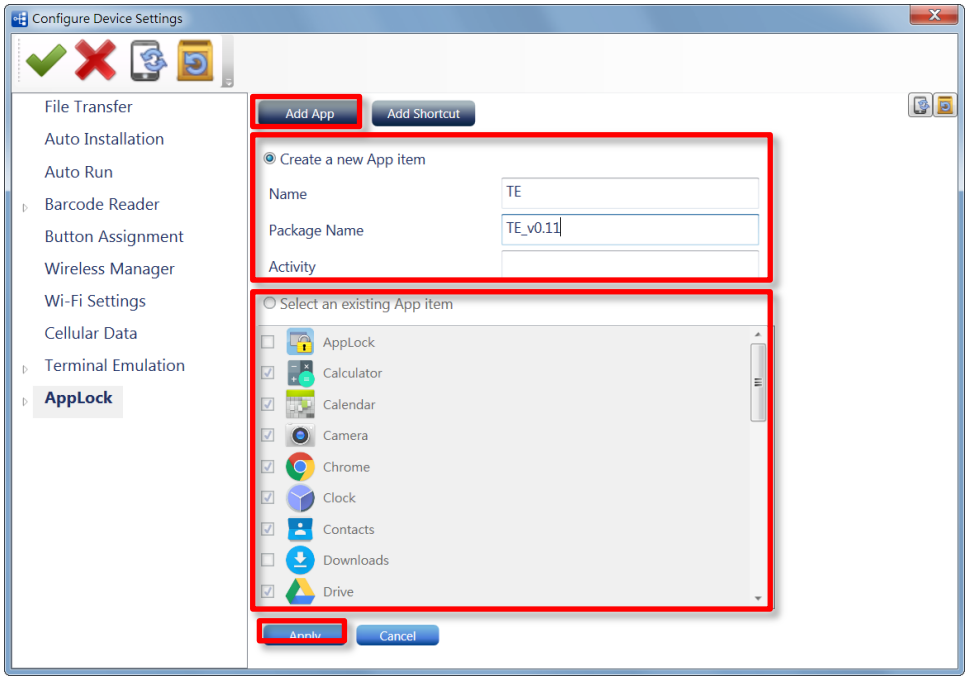
2) Click on "**Apply** ✔" before you close the Configure Device Settings window.

APPLOCK

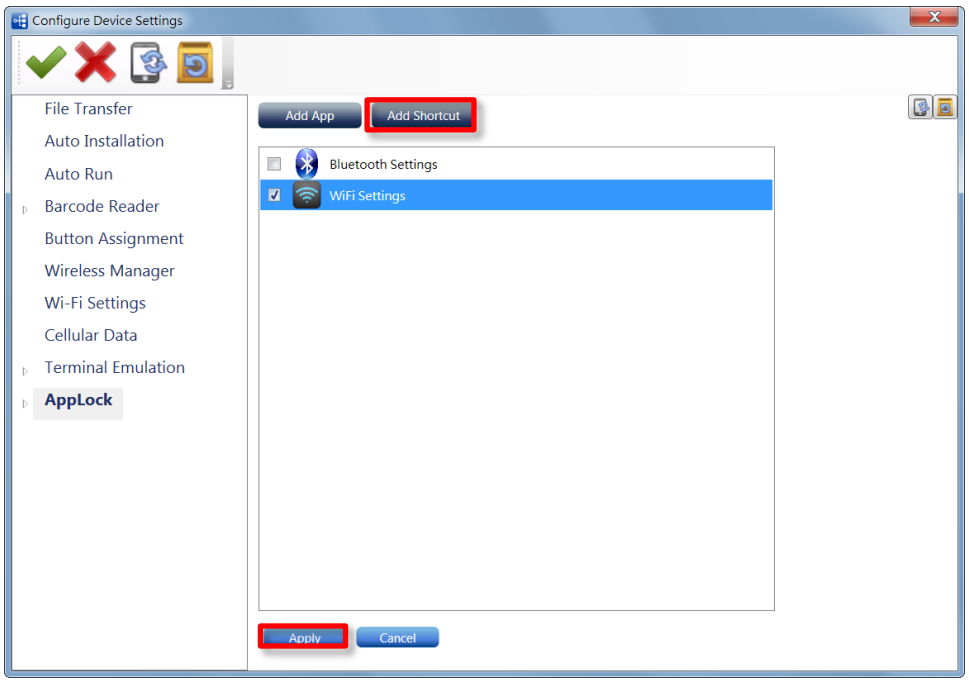
1) For AppLock configuration, synchronize settings with your device first so that the applications and system settings can be imported to the white page. Please make sure AppLock application has been launched on the device for at least one time before you perform the synchronization.



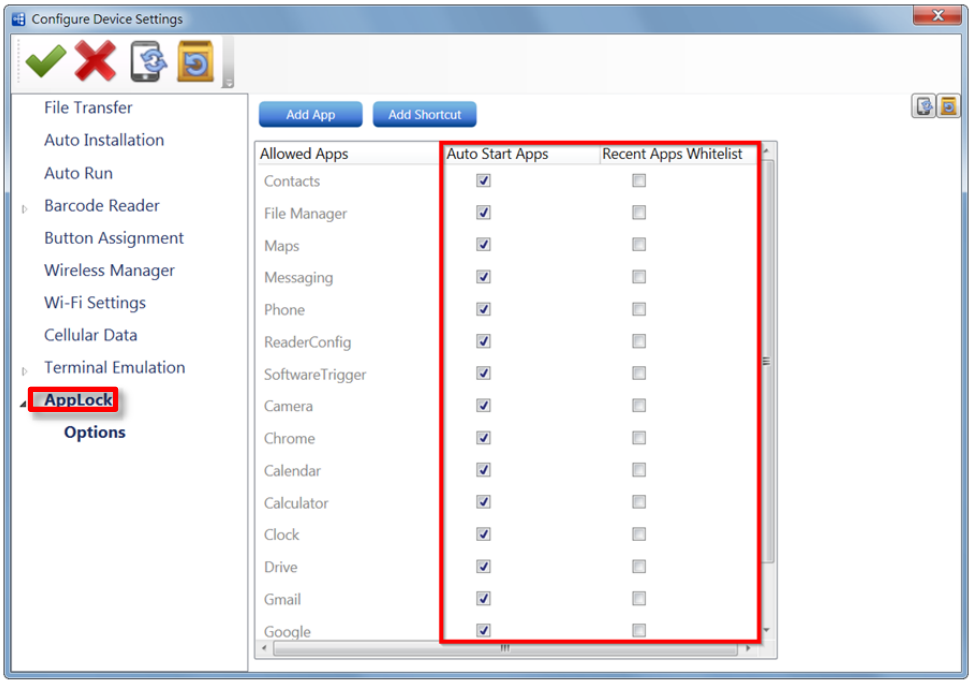
2) Click on "**Add App**", choose "**Create a new App item**" to input app information or choose "**Select an existing app item**" to select from your desired apps. Click on "**Apply**" to save the settings.



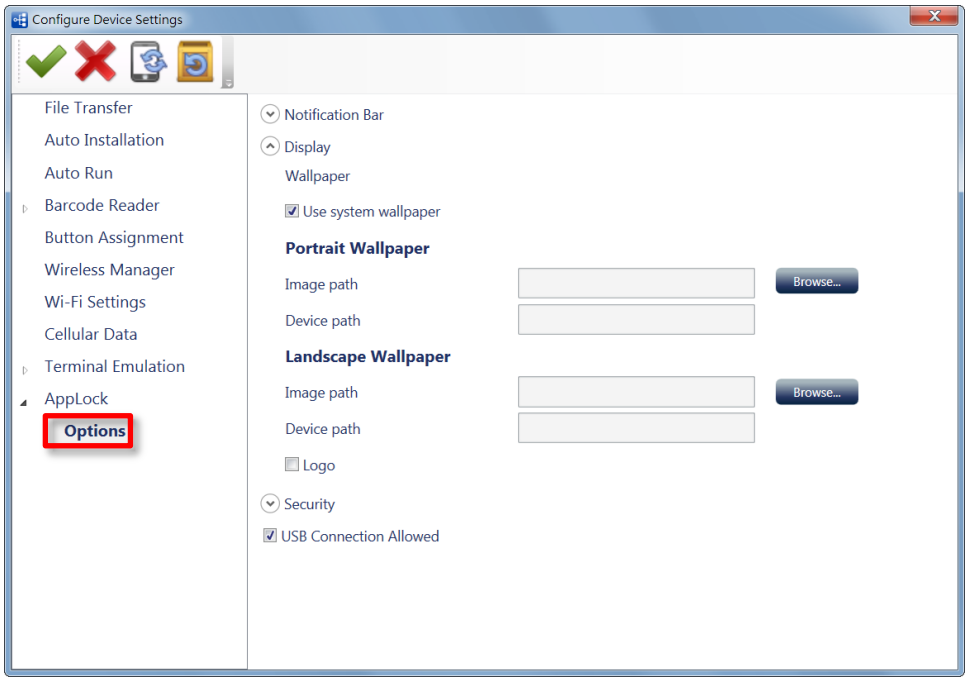
3) To add shortcuts to settings, click on "**Add Shortcut**", select the item and then click on "**Apply**" to save the settings.



4) Back to the previous page, define if the chosen apps are going to be the **Auto Start Apps** or on **Recent Apps Whitelist**.



5) **Continue** to finish advanced settings under **Options** if necessary.



6) Click on "**Apply** ✔" before you close the Configure Device Settings window.

MULTI-LANGUAGE SUPPORT

Other than the default interface languages, you can customize your own language file and apply it to this program.

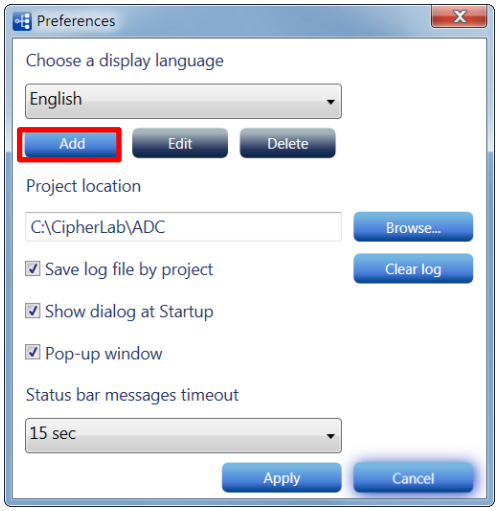
IN THIS CHAPTER

3.1 Create Your Own Language File 45
3.2 Edit Your Own Language File 47

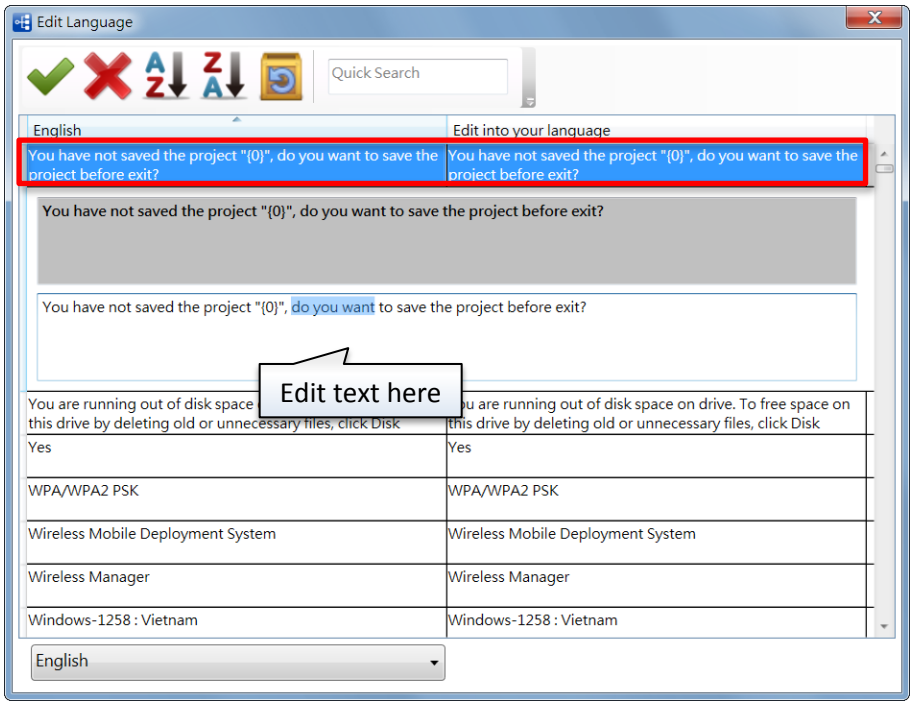
3.1 CREATE YOUR OWN LANGUAGE FILE

1) Click on **Preferences**  on Toolbar,

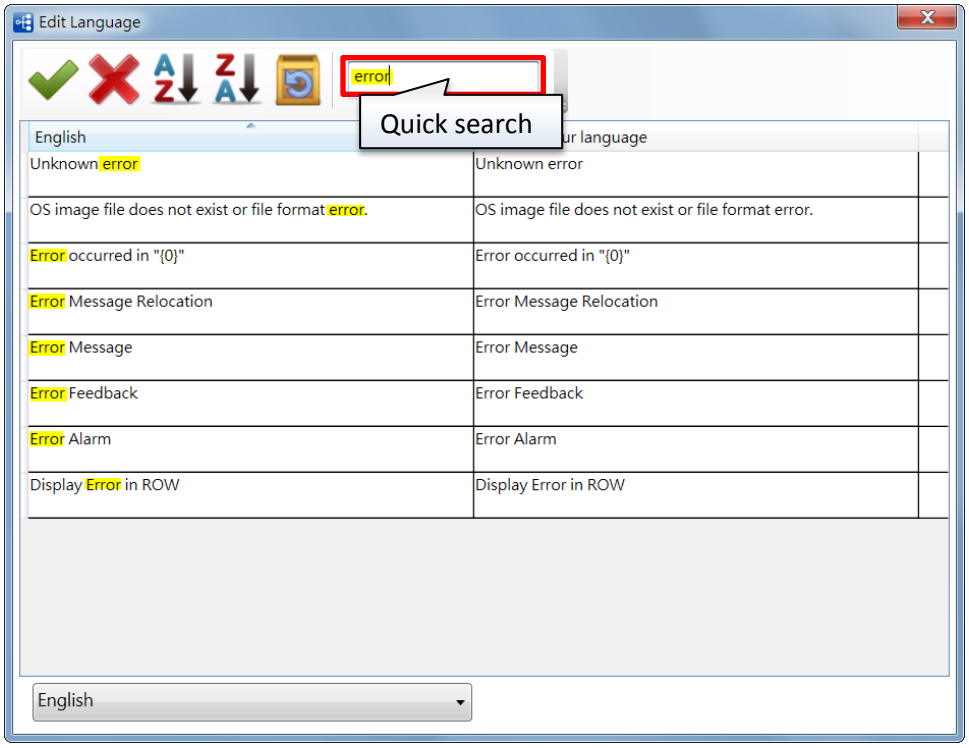
2) Click on "**Add**" to create your own language. **English** and **Japanese** are both system default languages, to which you are not allowed to make modifications.



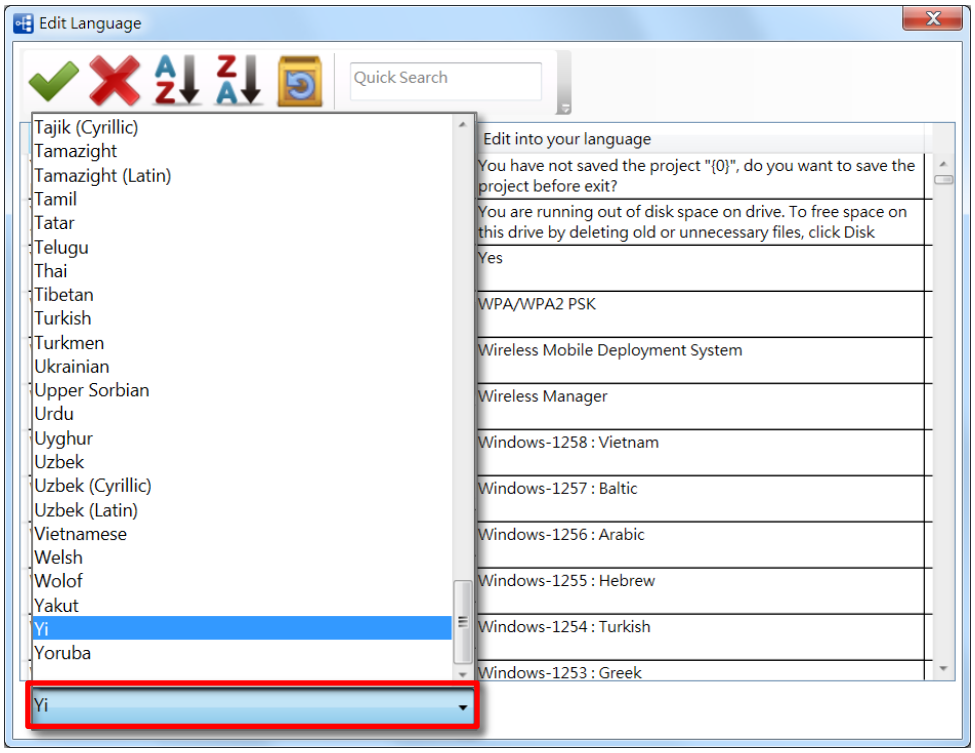
3) On **Edit Language** window, select the item the wording of which you would like to modify. The default wording is shown on the left while the one on the right is for editing into your language. Input the text in edit box.



4) In **order** to locate your desired item, you can change the alphabetical order of the entries or make use of the **Quick Search** box.



5) Select a label for your language from the drop-down menu on the lower-left and click on "**Apply** ", you will have new option(s) for the display language.



3.2 EDIT YOUR OWN LANGUAGE FILE

You can edit and delete a customized language file.

1) Click on "**Preferences** " on Toolbar.
2) Choose the language tag. To delete it, click on "**Delete**" or click on "**Edit**" to modify its content.

