dialog DA16600 Provisioning the Mobile App for Android/iOS User Manual

User Manual
DA16600 Provisioning
the Mobile App for Android/iOS
UM-WI-044

Contents

Abstract

This document describes the use of Dialog's Wi-Fi provisioning mobile app for Android/iOS.

Terms and Definitions

AP	Access Point
IDE	Integrated Development Environment
SDK	Software Development Kit
UUID	Universally Unique Identifier

Overview

This document describes how to configure the DA16600 Wi-Fi profile information used by Dialog's Wi-Fi provisioning mobile app for Android/iOS.

System Requirements

Table 1: DA16600

Supported SDK Version	2.3.3.2 or higher

You can check the SDK version using the **ver** command in the serial console.

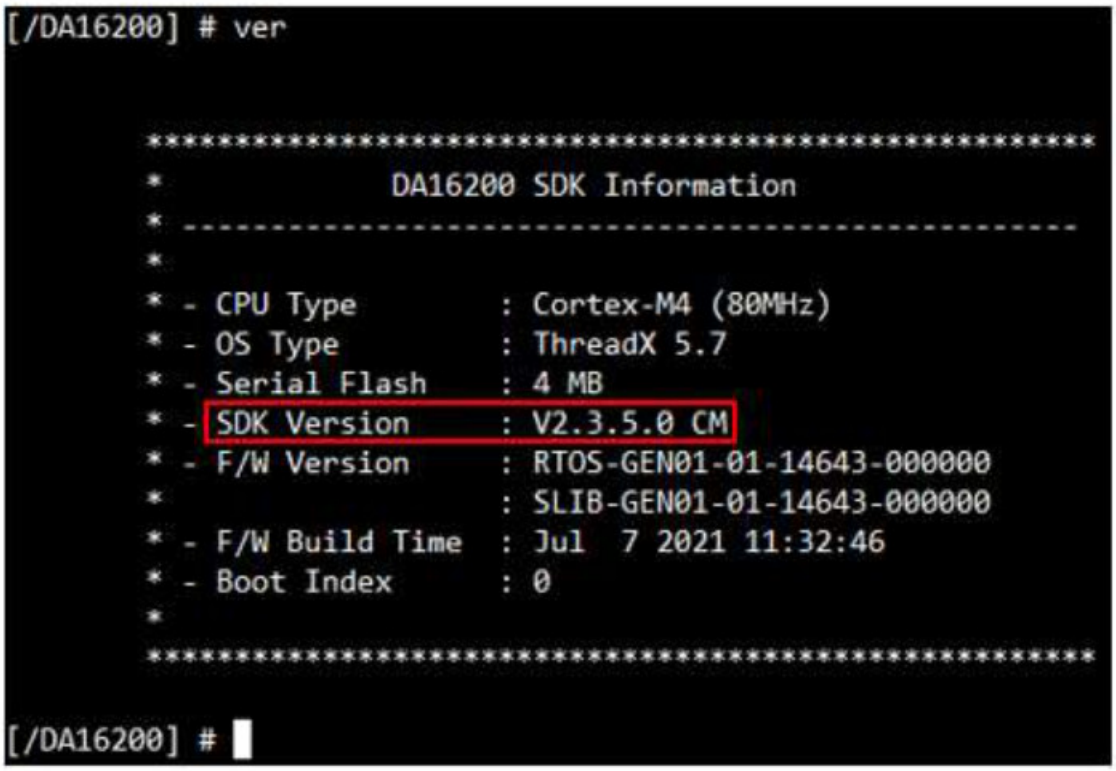


Figure 1: Check the SDK Version

Table 2: Android

Android OS Version	5.0 (Lollipop) and higher
IDE	Android Studio 4.1.2
Compile SDK Version	30
Language	Java
Gradle Version	4.0.0

Table 3: iOS

Deployment Version	iOS 12.0 and higher
IDE	Xcode 12.4
Swift Language Version	Swift 5

Sequence Diagram for Wi-Fi Provisioning

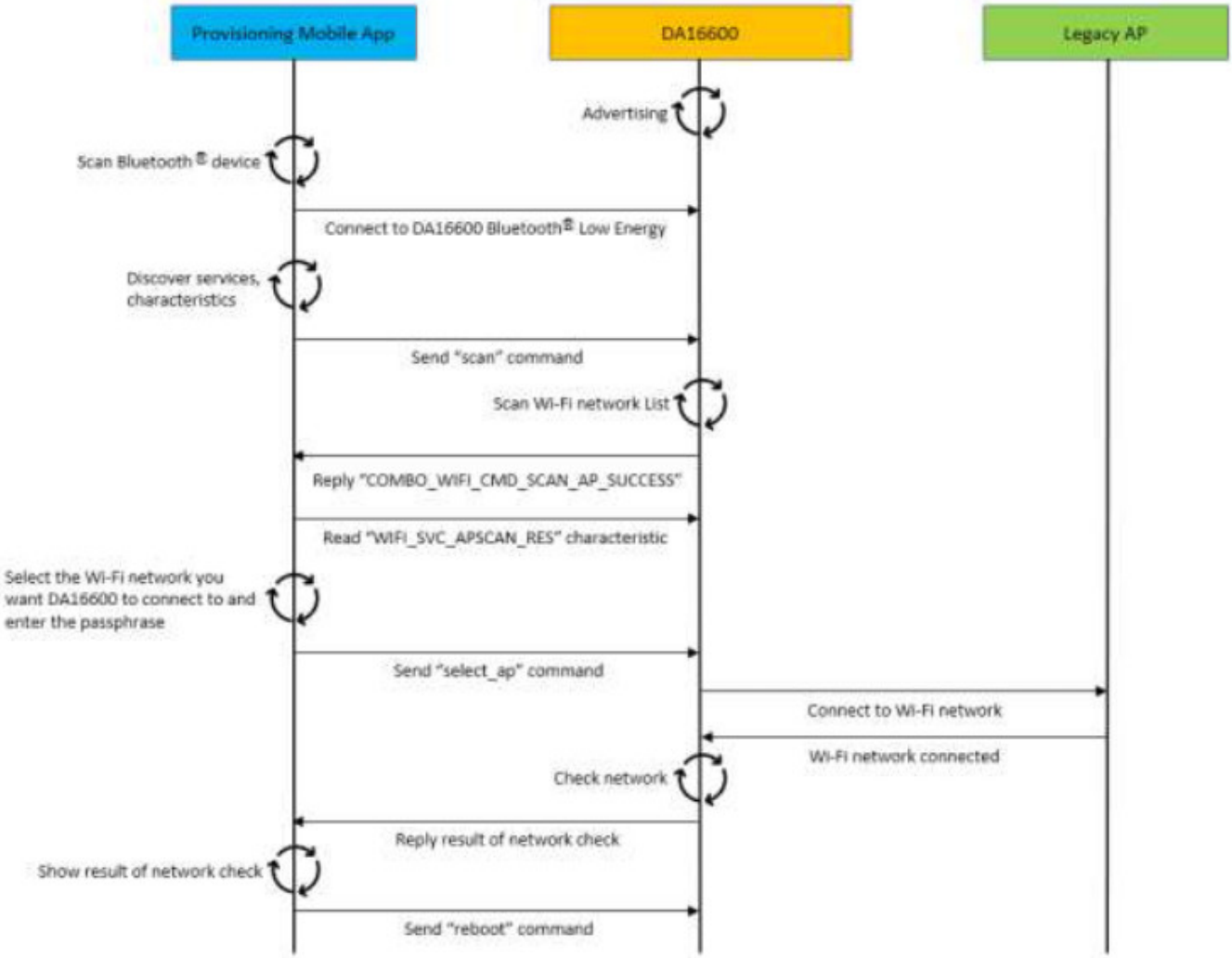


Figure 2: Sequence Diagram for Wi-Fi Provisioning

Install Mobile App

Android

You can find and install **Dialog WiFiProvisioning** app on **Google Play Store** by searching for keyword “da16600”.

Figure 3: Dialog WiFiProvisioning on Play Store

iOS

You can find and install the **Dialog WiFiProvisioning** app on the **Apple App Store** by searching for the keyword “da16600”.

Figure 4: Dialog WiFiProvisioning on App Store

Test Provisioning

Use the Factory Reset or Switch button (depends on the device option) to switch the DA16600 to advertising Mode of Bluetooth Low Energy.

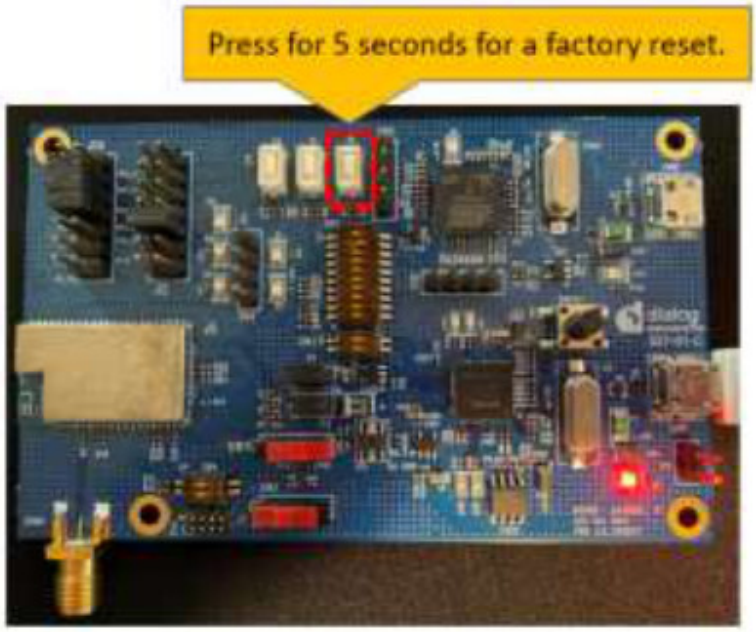
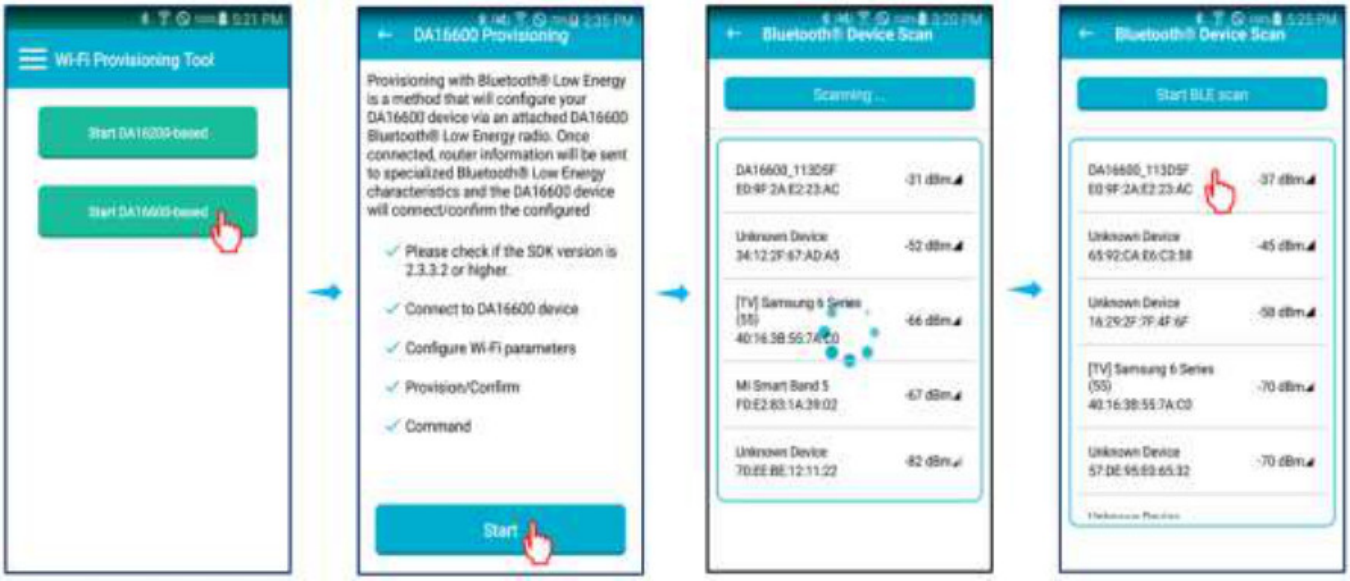


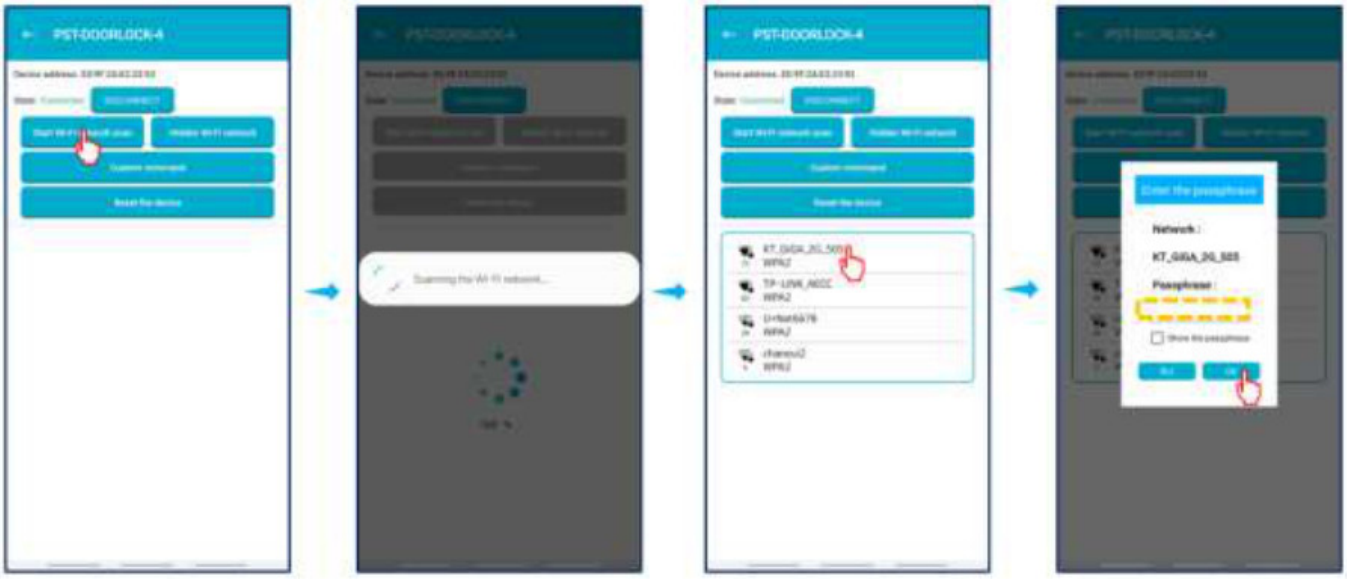
Figure 5: DA16600 Factory Reset or Switch Button

Test Provisioning on Android Phone

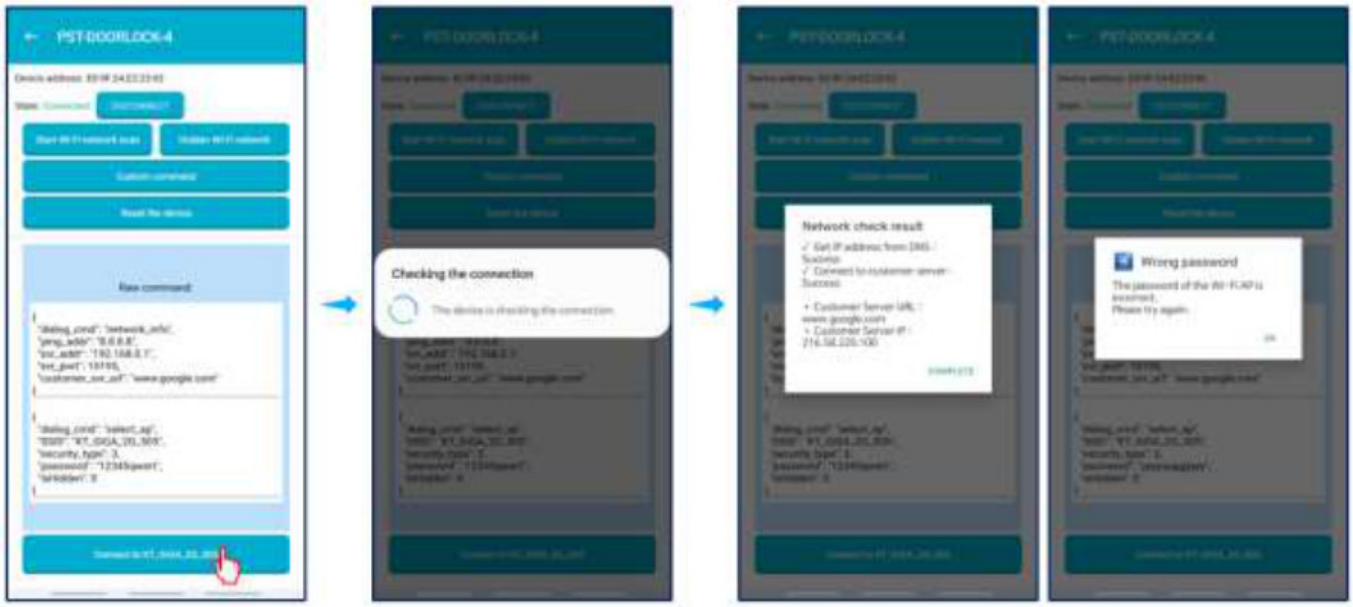
Start the Dialog Provisioning Tool for Android and find DA16600, and do the following on your Android device:



1. Click the **Start DA16600-based** button.	2. Click the **Start** button.	3. Scanning Bluetooth Low Energy devices.	4. Cl devi



5. After discovering the services and characteristics of DA16600 Bluetooth Low Energy, click the Start **Wi-Fi network** scan button.	6. The app receives WiFi network information from DA16600, and a list appears.	7. Click the name of the Wi-Fi network you want to connect to in the list.



9. Click the **Connect to (Wi-Fi network name)** button.	10. DA16600 is checking network.	10-1. The provisioning has ended successfully.	1(

When provisioning is completed successfully, DA16600 is successfully assigned an IP address as shown in the console log.

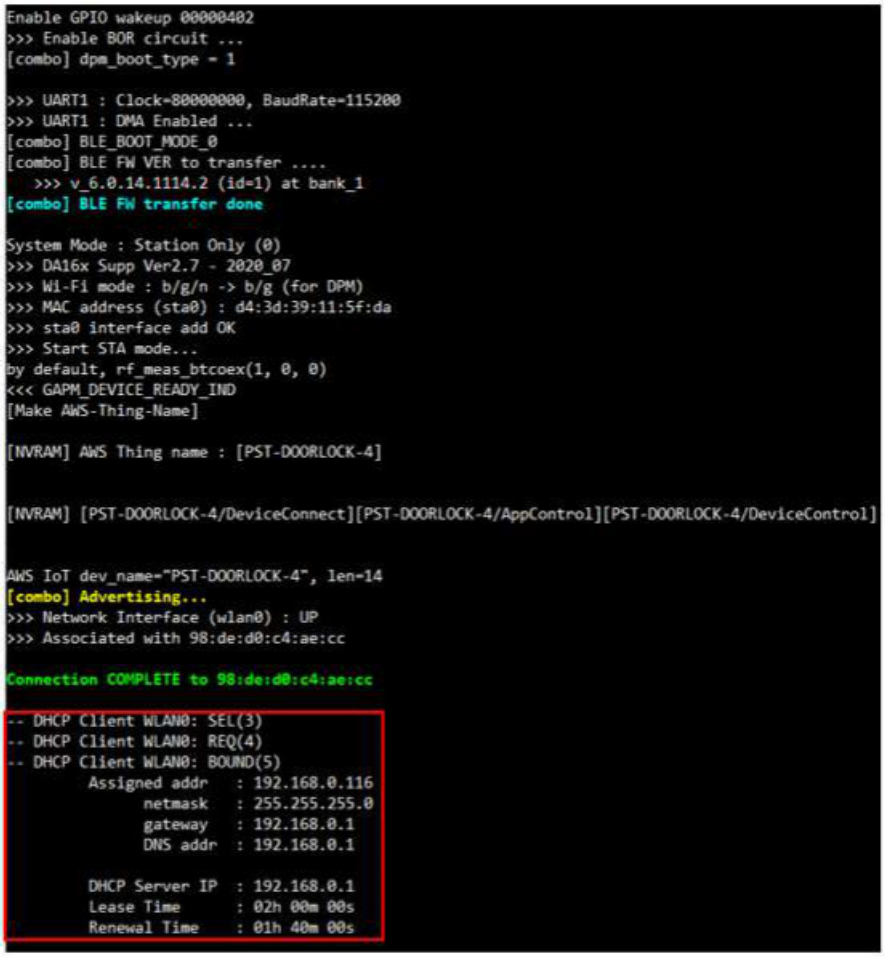
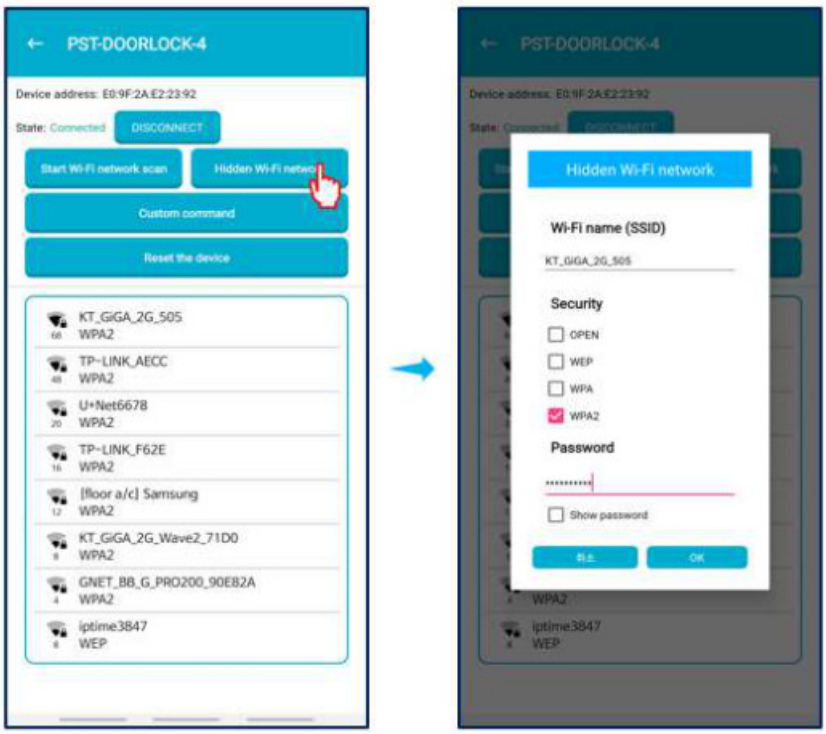


Figure 6: Console Log with IP Address Assigned

Provisioning to Hidden Wi-Fi Network

You can connect the DA16200 to a hidden Wi-Fi network by directly entering the SSID and password of Wi-Fi network.

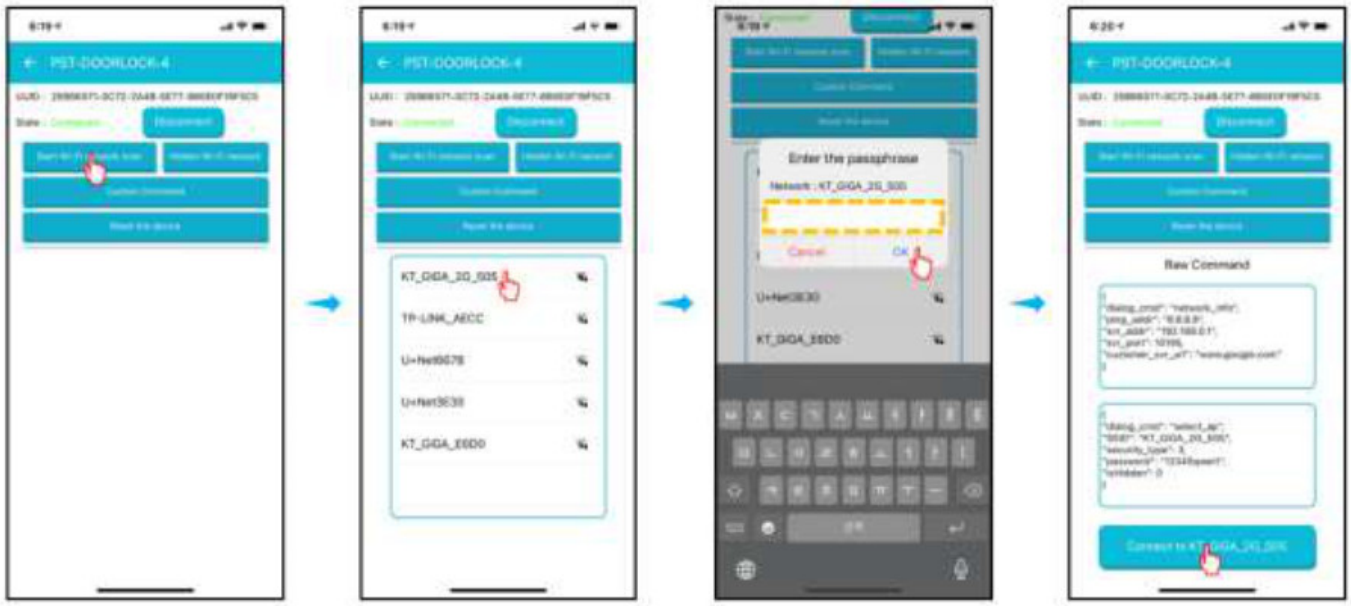


1. When the app is connected to the DA16600 Bluetooth Low Energy, click the Hi**dden Wi-Fi network button.**	2. Enter the SSID, security type, and pa click **OK** button.

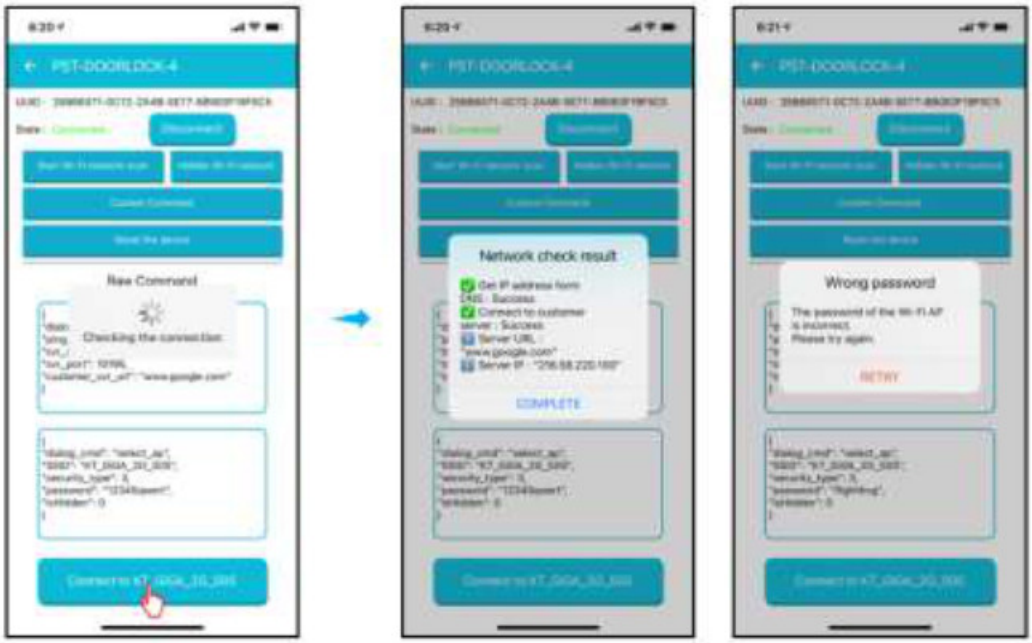
Test Provisioning on iPhone

Start the Dialog Provisioning Tool for iOS and find DA16600, then do the following on your iPhone:

1. Click the **Start DA16600-based** button.	2. Click the **Start** button.	3. If the window for requesting apl for the use of Bluetooth appears, click the **OK** button.



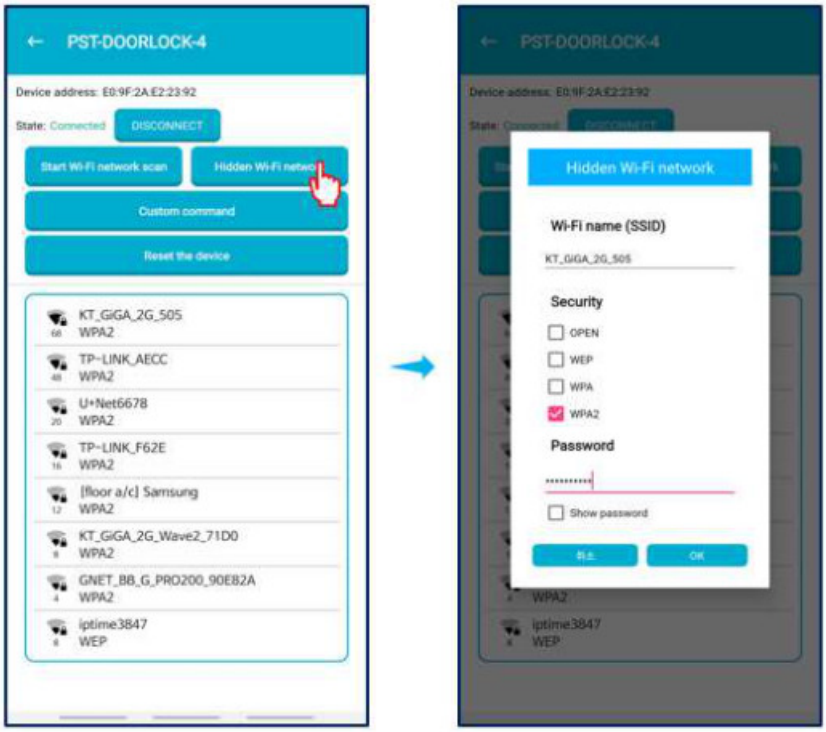
5. When the app is connected to the DA16600 Bluetooth Low Energy, click the **Start Wi-Fi network** scan button.	6. The app receives WiFi network information from DA16600, and a list appears. Click the name of the Wi-Fi network you want to connect to in the list.	7. Enter the passphrase and click **OK** button.



9. DA16600 is checking the network.	10-1. The provisioning has ended successfully.	10-2.

Provisioning to Hidden Wi-Fi Network

You can connect the DA16200 to a hidden Wi-Fi network by directly entering the SSID and password of Wi-Fi network.



1. After the app is connected to the DA16600 Bluetooth Low Energy, click the **Hidden Wi-Fi network button.**	2. Enter the SSID, security type, and **OK** button.

Test AWS IoT on Mobile Phone

If the DA16600 is provisioned using an SDK that supports AWS IoT, you can test AWS IoT with “Thing” pre-

registered by Dialog Semiconductor.

NOTE
Contact Dialog Semiconductor to be assigned a test “Thing” name.

The AWS IoT application works in an environment as shown in **Figure 7.**

Figure 7: Architecture of AWS for IoT

Do the following steps on your mobile phone:

1. Click the **Menu** icon.	2. Click the **AWS IoT** button.	3. Click the lock icon to open the d door.

DA16600 Provisioning the Mobile App for Android/iOS

If provisioning is not performed in the SDK that supports AWS IoT or if the SDK that does not support AWS IoT is used, a dialog box appears as shown in **Figure 8.**

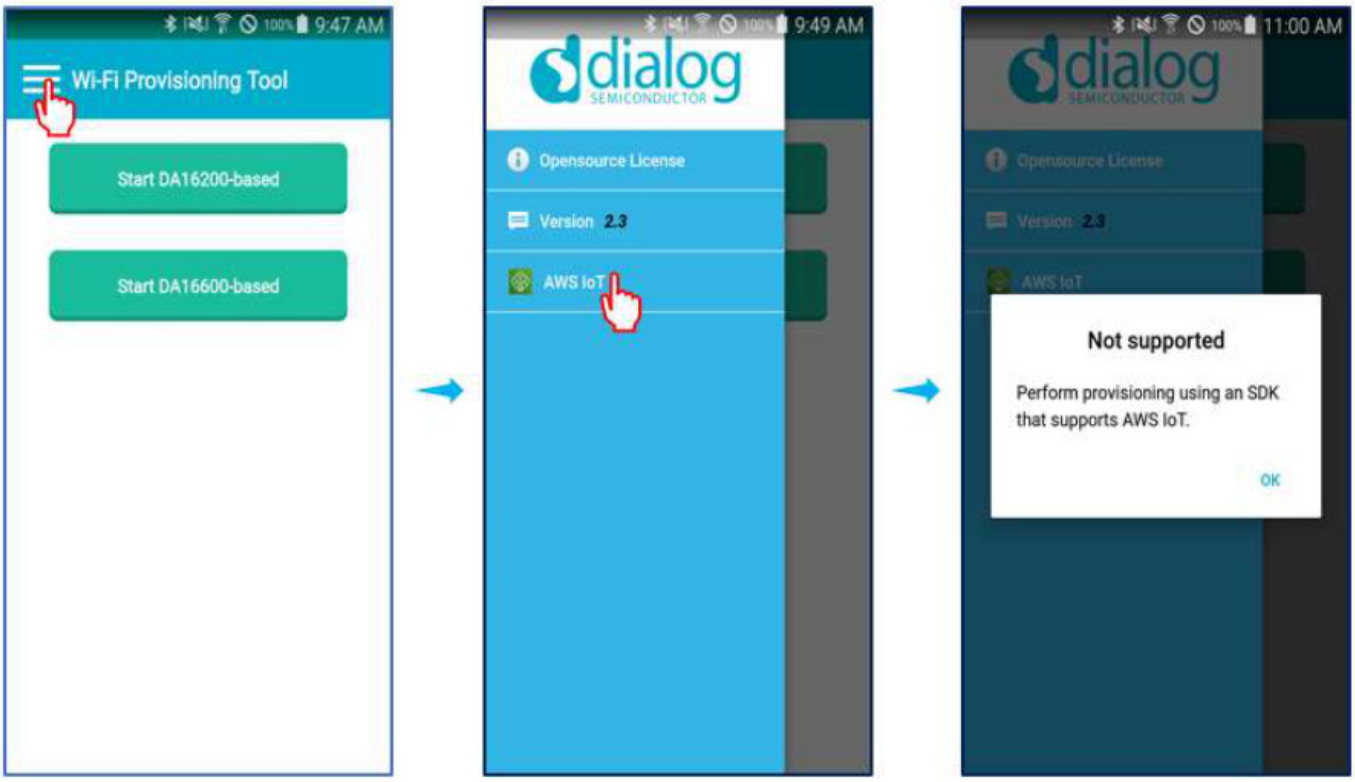


Figure 8: Does not Support AWS IoT

Revision History

Revision	Date	Description
1.4	19-Jul-21	• Added how to check the SDK version • Added information about installation of mobile app • Added console log when provisioning completed successfully
1.3	14-Jul-21	• Added provisioning to hidden Wi-Fi network • Added AWS IoT application on DA16600
1.2	21-Apr-21	**Section 6** • Added text to show supported SDK version • Added “Custom command” function
1.1	05-Apr-21	Changed UI according to operation scenario change.
1	25-Mar-21	First Release.

Status Definitions

Status	Definition
DRAFT	The content of this document is under review and subject to formal approval, which may result in modifications or additions.
APPROVED or unmarked	The content of this document has been approved for publication.

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	**dialog DA16600 Provisioning the Mobile App for Android/iOS** [pdf] User Manual DA16600, Provisioning the Mobile App for Android iOS, DA16600 Provisioning the Mobile App for Android iOS, UM-WI-044