

dialog UM-WI-042 DA16200 Provisioning the Mobile App for **Android/iOS User Manual**

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Terms and Definitions

• TCP:

Transmission Control Protocol

• TLS:

Transport Layer Security

AP:

Access Point

• IDE:

Integrated Development Environment

· SDK:

Software Development Kit

· AWS:

Amazon Web Service

IoT:

Internet of Things

Overview

This document describes how to configure the DA16200 Wi-Fi profile information using the Dialog's Wi-Fi provisioning mobile app for Android/iOS.

System Requirement

DA16200

Supported SDK Version: 2.3.4.1 or higher

Android

• Android OS Version: 5.0 (Lollipop) and higher

IDE: Android Studio 4.1.2Compile SDK Version: 30

Language: JavaGradle Version: 4.0.0

iOS

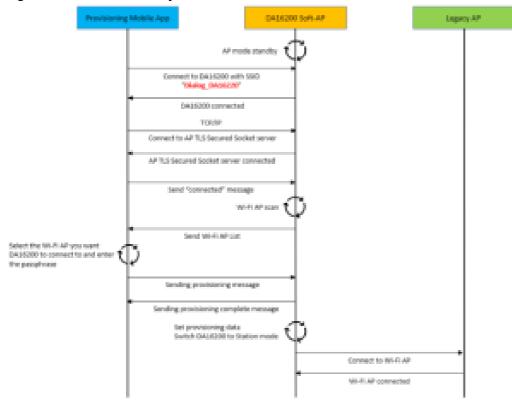
• Deployment Version: iOS 12.0 and higher

• IDE: Xcode 12.4

• Swift Language Version: Swift 5

Sequence Diagram for Wi-Fi Provisioning

Figure 2: DA16200 Factory Reset or Switch Button



How to Test Provisioning

Use the Factory Reset or Switch button (depends on the device option) to switch the DA16200 to AP Mode.

Figure 2: DA16200 Factory Reset or Switch Button



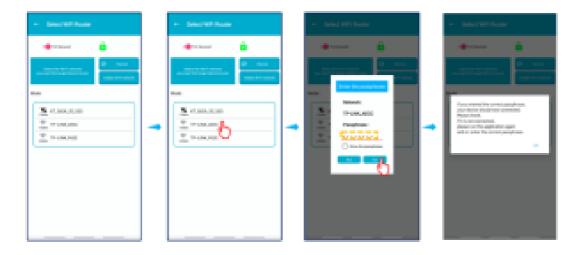
Test Provisioning on Android Phone

Start the Dialog Provisioning Tool for Android and find the DA16200, and then do the following steps on your Android device:

- 1. Click the Start DA16200-based button.
- 2. Click the I'm ready button.
- 3. DA16200 with "Dialog_DA16200" SSID automatically connects to app.
- 4. When the DA16200 and the phone are connected, click the NEXT button.



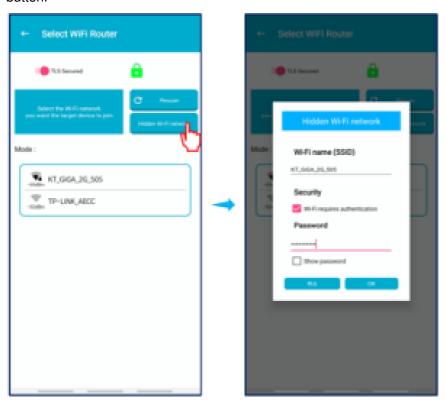
- 5. When the DA16200 and the phone socket are connected, the app receives Wi-Fi network information from the DA16200, and a list appears.
- 6. Click the name of the Wi-Fi network you want to connect to in the list.
- 7. Enter the password and click the Go! button. Wi-Fi provisioning is completed.



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.

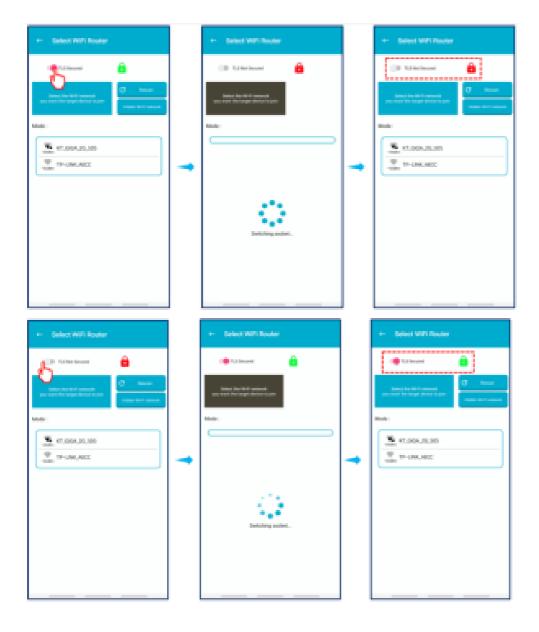
- 1. After the app is connected to the DA16200 Wi-Fi, click the Hidden Wi-Fi network button.
- 2. Enter the SSID and the password of Wi-Fi network, select security option if needed, and then click the OK button.



Socket Switching

You can switch between TLS secured socket and unsecured socket.

A green lock icon is displayed when a secure connection is established; a red lock is displayed if the connection is not secure.



Test Provisioning on iPhone

Start the Dialog Provisioning Tool for iOS and find the DA16200, and then do the following steps on your iPhone:

- 1. Click the Start DA16200-based button.
- 2. Click the I'm ready button.
- 3. Click the Join button to connect to the DA16200 with "Dialog_DA16200" SSID.
- 4. When the DA16200 and the phone are connected, click the NEXT button.



- 5. When the DA16200 and the phone socket are connected, the app receives Wi-Fi network information from the DA16200, and a list appears.
- 6. Click the name of the Wi-Fi network you want to connect to in the list.
- 7. Enter the password, and then click the Go! button.

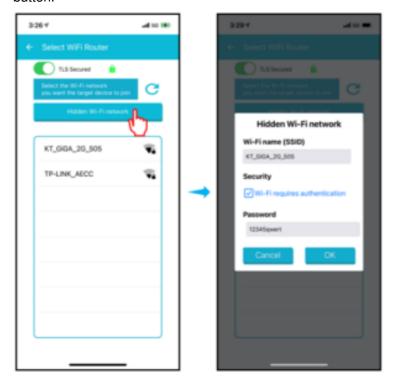
Wi-Fi provisioning is completed.



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.

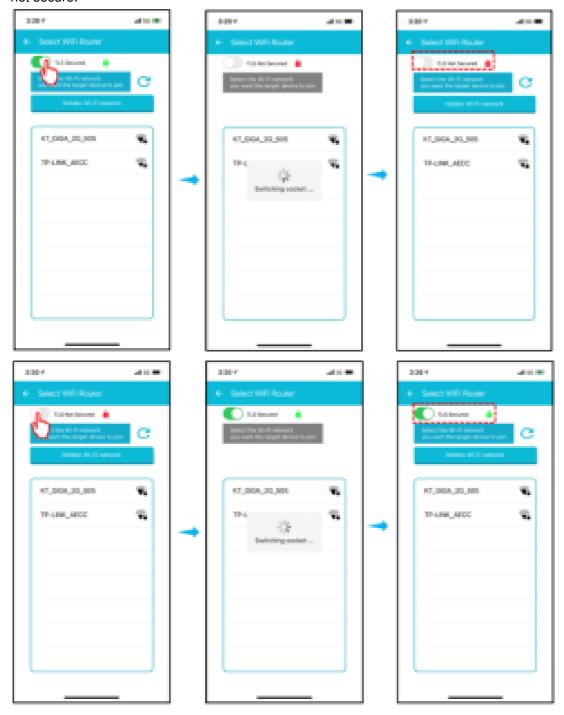
- 1. After the app is connected to the DA16200 Wi-Fi, click the Hidden Wi-Fi network button.
- 2. Enter the SSID and the password of Wi-Fi network, select security option if needed, and then click the OK button.



Socket Switching

You can switch between TLS secured socket and unsecured socket.

A green lock icon is displayed when a secure connection is established; a red lock is displayed if the connection is not secure.



Test AWS IoT on Mobile Phone

If the DA16200 is provisioned using an SDK that supports AWS IoT, you can test AWS IoT with "Thing" preregistered 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 3.

Figure 3: Architecture of AWS for IoT



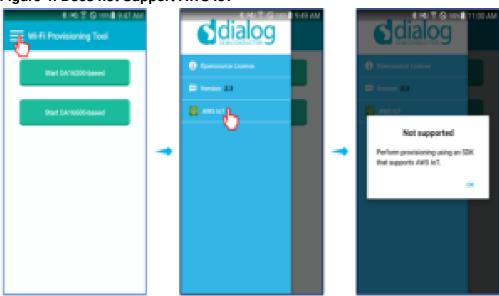
Do the following steps on your mobile phone:

- 1. Click the Menu icon.
- 2. Click the AWS IoT button.
- 3. Click the lock icon to open the closed door.
- 4. The door status changes to open.



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 pop-up window appears as shown in **Figure 4.**

Figure 4: Does not Support AWS IoT



Revision	Date	Description
1.5	14-Jul-2021	Added provisioning to hidden Wi-Fi network.
1.4	13-May-2021	Added AWS IoT application on DA16200.
1.3	21-Apr-2021	Added text to show supported SDK version.
1.2	05-Apr-2021	Changed UI according to operation scenario change.
1.1	24-Mar-2021	Changed UI text.
1.0	05-Mar-2021	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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