

# Cloudpath End-User Experience for Windows Phones

## Supporting Software Release 5.2

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# Overview

The Cloudpath Enrollment System (ES) automates WPA2-Enterprise configuration on any device that connects to the network and automatically connects the device to a secure SSID. This Automated Device Enablement (ADE) means authorized devices onboard simply and securely, with the appropriate level of access.

Cloudpath supports all operating systems including Windows, Mac OS X, iOS, Android, Linux, Chromebooks, and more.

This document provides an example of the end-user process for using Cloudpath to migrate a Windows Phone to the secure network.

## Supported Versions

Cloudpath supports Windows Phone version 8.1 TLS and PEAP configurations.

Cloudpath supports Windows Phone version 8.0 for PEAP configurations.

### NOTE

Windows Phone 8.0 does not support TLS.

This document provides an example of the prompts a user might see when using the Cloudpath application. Depending on the configuration set up by the network administrator, the device manufacturer, and operating system, the user prompts can vary.

Additionally, Cloudpath is a highly customizable application. Screen icons, color schemes, and messaging can all be customized by the network administrator. This guide provides examples with generic screens and messaging, which might be different than what is displayed on the device.

## Cloudpath User Experience

Cloudpath provides the prompts that guide the user through the sequence of steps that make up the enrollment workflow.

During this process, the user enters information as requested, and makes selections about user type, device type, among others.

## User Prompts

This section displays the user prompts for a typical enrollment workflow.

The sequence of steps for the enrollment differ, depending on the selection that is made.

### *Welcome Screen With AUP*

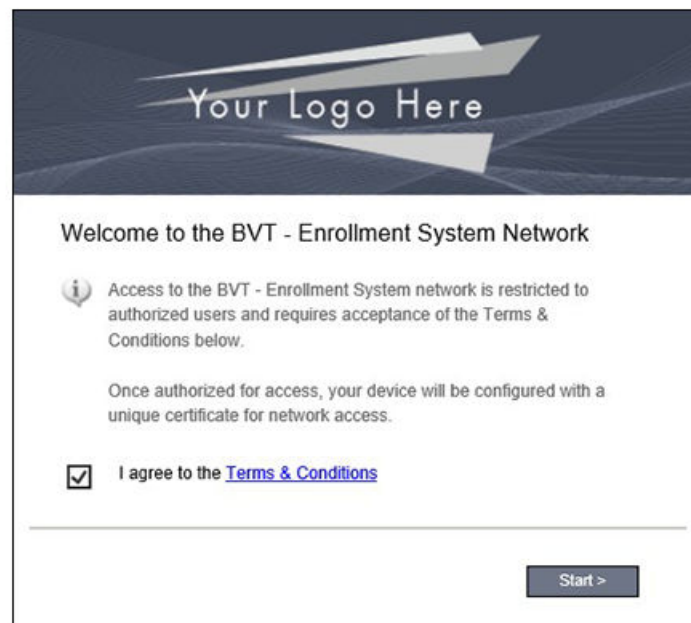
When you enter the enrollment URL on your device, the login (or welcome) screen displays.

The login screen is typically customized with the logo, colors, and text for the organization or institution. The screens in this example use the default look and feel of the application.

### NOTE

If you have set up a captive portal, the user connects to onboarding SSID and is redirected to the Cloudpath Welcome page to start the enrollment process.

FIGURE 1 Welcome Screen



An acceptable use policy (AUP) prompt displays a message and requires that the user signal acceptance to continue. The Welcome text and Start button can be customized.

Tap **Start** to continue.

## User Type

If required by the network, the user might receive a User Type prompt. For example, an employee might be required to enter domain credentials, and a Guest or Partner might be required to enroll using their social media credentials.

FIGURE 2 User Type Prompt

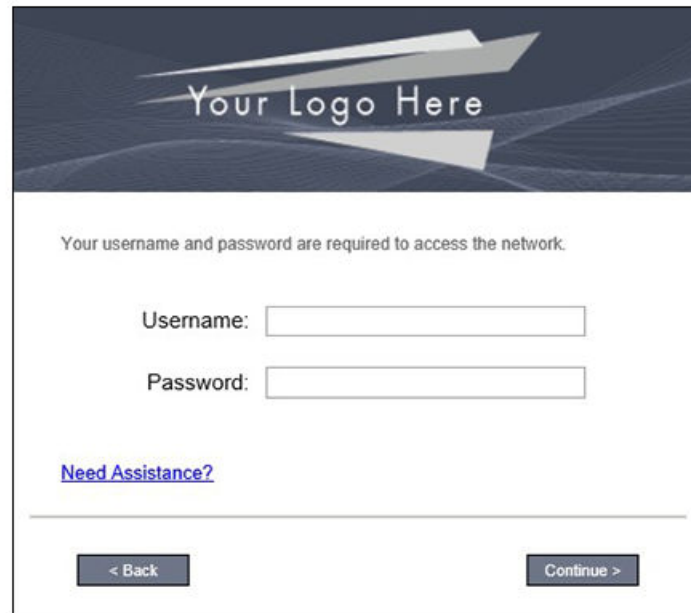


Select the user type to continue. This example follows the *Employee* workflow branch.

## User Credentials

If required by the network, a prompt appears for you to enter network credentials.

**FIGURE 3** User Credential Prompt



The image shows a user credential prompt screen. At the top, there is a dark blue header with the text "Your Logo Here" in white. Below the header, the main content area is white and contains the following elements: a message "Your username and password are required to access the network.", a "Username:" label followed by a text input field, a "Password:" label followed by a text input field, a blue underlined link "Need Assistance?", and a horizontal line. At the bottom, there are two buttons: "< Back" on the left and "Continue >" on the right.

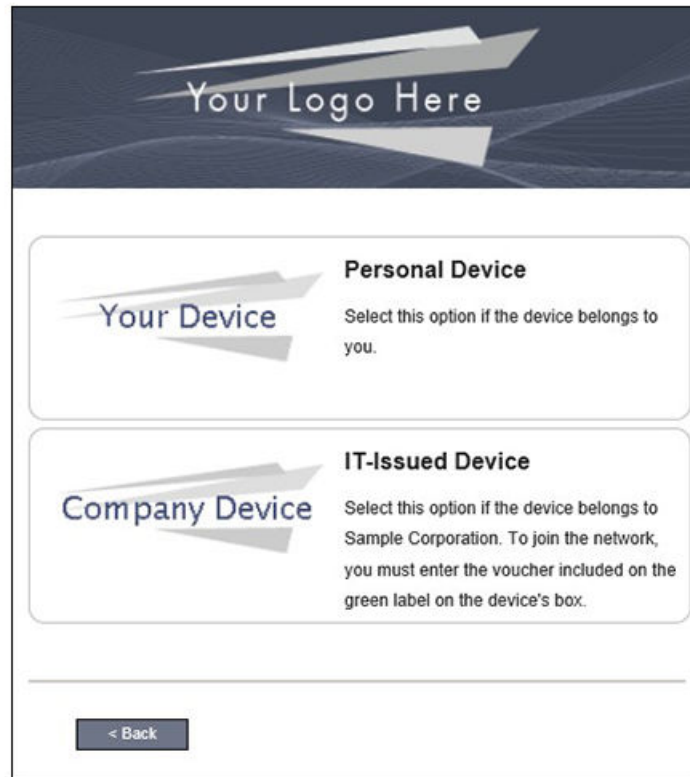
Enter the user credentials and tap **Continue**.

## Device Type

If required by the network, the user might receive a Device Type prompt.

An example is that a personal device selection might add a prompt for a MAC address, and an IT-Issued device would be allowed to bypass the MAC address prompt.

FIGURE 4 Device Type Prompt



Select a device type to continue. This example follows the IT-Issued Device enrollment workflow.

### ***Voucher Code***

Your network might require that you enter a voucher (one-time password) as an additional verification step. Vouchers are typically sent email or SMS from a network sponsor or administrator.



FIGURE 5 Voucher Code Prompt

Your Logo Here

Congratulations on receiving a new device. The box of your device contains a green sticker. The sticker contains a voucher code in a format similar to SC000000. Please enter that voucher code below.

Voucher Code:

[Need Assistance?](#)

< Back      Continue >

Enter the voucher code and tap **Continue**.


### **BYOD Policy**

Typically, you must agree to the terms and policies of the network before you can continue with BYOD configuration.

FIGURE 6 Accept BYOD Policy Prompt

Your Logo Here

To join the network, you must accept the Sample Corporation BYOD Use Policy.

 The Sample Corporation BYOD network is intended for employees who which to have secure wireless access from a personal device.

I have reviewed and agree to abide by the [Sample Corporation BYOD Use Policy](#)

< Back      Start >

Tap **Start** to continue.

### Windows Phone Configuration Instructions

The application detects the user agent for a Windows Phone and provides the correct configuration instructions.

Windows Phone instructions are displayed on the Other Operating Systems tab.

**FIGURE 7** Configuration for Windows Phones

**Other Operating Systems**

**Step 1: Install The CA Certificate**  
Click to Install Anna Test Root CA I

Click the button above to download the certificate file in the most common format. If needed, other formats are available: [PEM](#) [DER](#) [CER](#)

**Step 2: Install Your Certificate**  
Click to Install Your Certificate

Click the button above to download your certificate It will need imported into your device.

**\*\* When prompted for a password while installing the certificate, enter the password you entered on the previous screen.**

**Step 3: Configure Wi-Fi**  
Use The Information Below To Setup Wi-Fi

Wireless Name (SSID): R-DVES-Secure  
Security Type: WPA2-Enterprise  
Encryption Type: AES (CCMP)  
EAP Method: EAP-TLS (or TLS)  
Root CA Certificate(s): Anna Test Root CA I  
Server Name: anna44.cloudpath.net  
Client Certificate: <Download Above>  
Username: <Download Above>

\* Labels on fields will differ based on the operating system.

#### NOTE

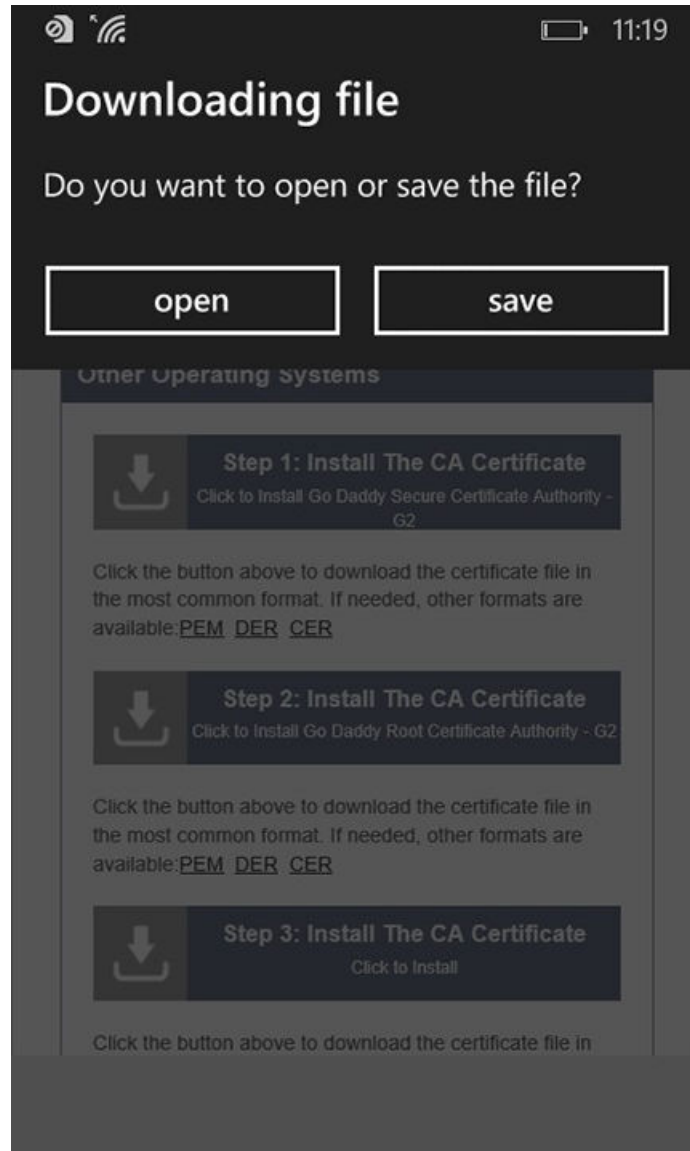
The certificate information is not populated on the configuration step until the certificates have been downloaded.

This screen includes the steps to install the certificates and to configure the device.

## Download CA Certificates

The first step in the instructions prompts you to download the CA certificate.

FIGURE 8 Download File



Tap **Save** to continue.

### *Start CA Certificate Installation*

Tap the certificate installation screen to start the CA certificate installation.

**FIGURE 9** Tap Screen to Open

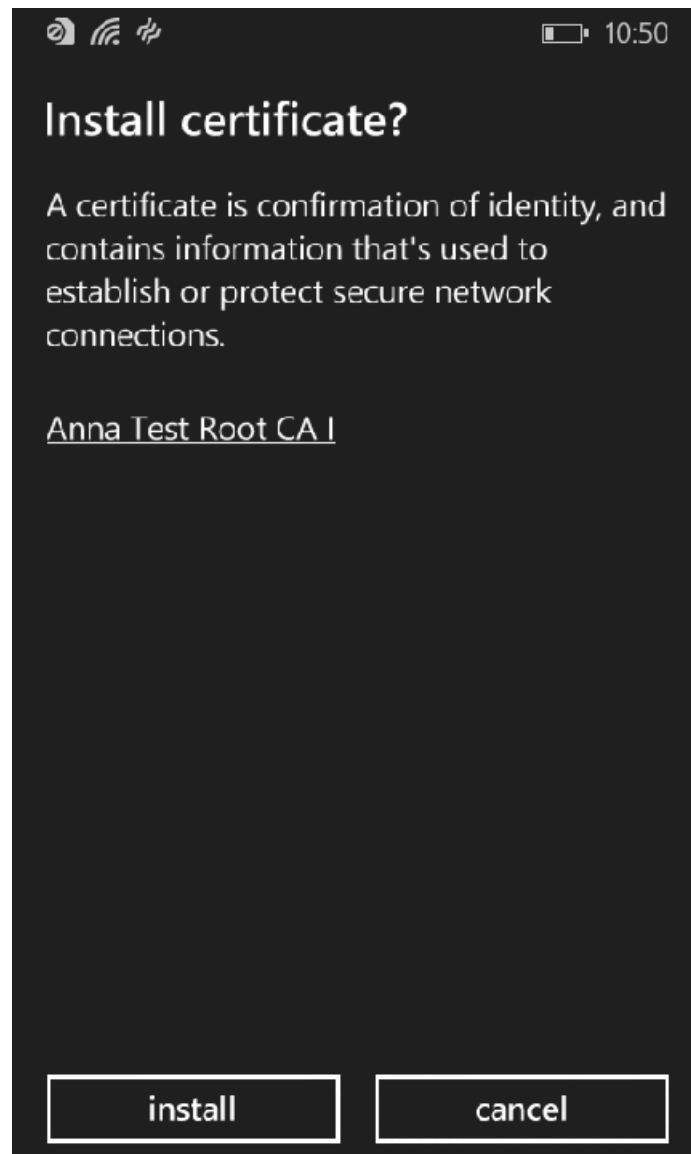


Continue with the certificate installation.

## *Install CA Certificate*

After the CA certificate is downloaded, you are prompted to install the certificate on the device.

**FIGURE 10** Install CA Certificate

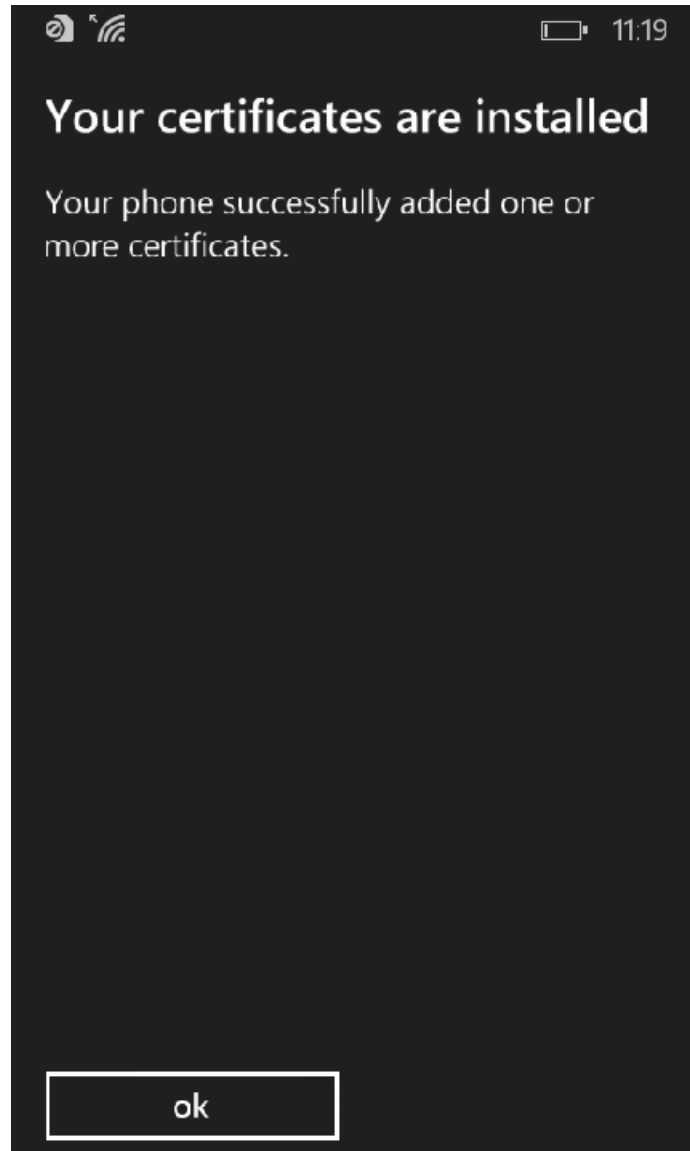


Tap **Install** to continue.

### *CA Certificates installed*

The CA certificate has been downloaded and installed when you receive the confirmation screen.

**FIGURE 11** Certificates are Installed



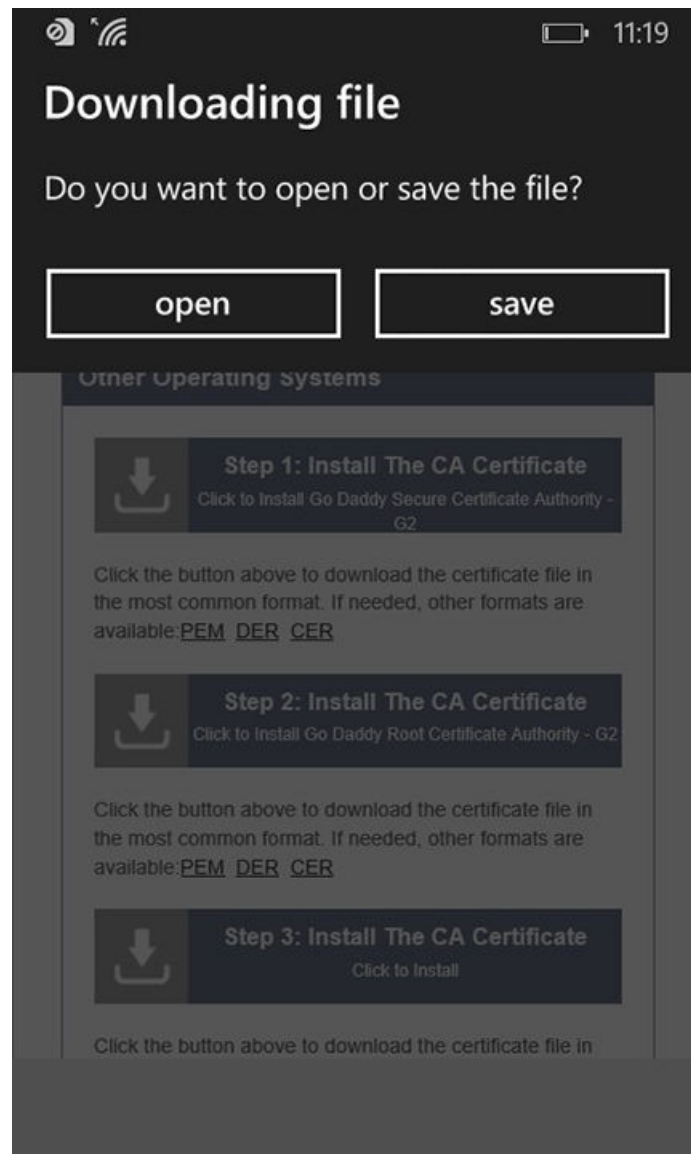
Tap the **ok** button.

Tap the **Back** button (left arrow at the bottom on your phone) to return to the configuration instructions page. If there are more CA certificates, you will repeat the CA certificate installation. Otherwise, continue with the user certificate installation.

## Download Your Certificates

After the CA certificates are installed, you are prompted to download the user certificates.

FIGURE 12 Download File

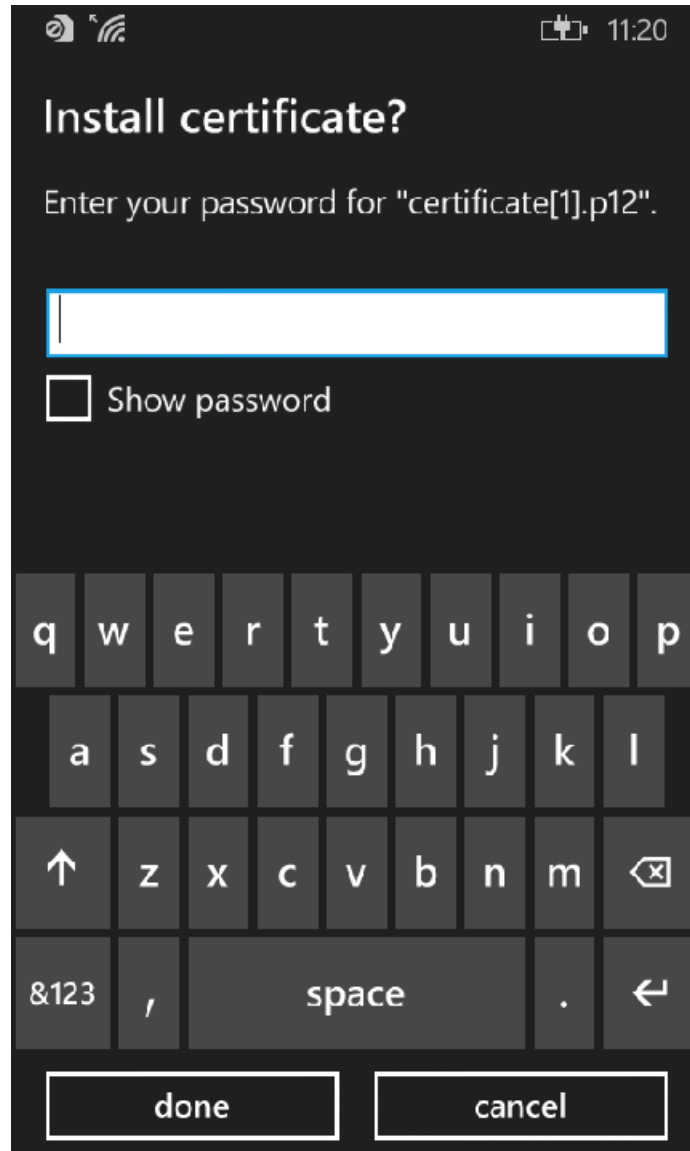


Tap **Save** to continue.

### ***Enter User Certificate Password***

The Windows Phone OS requires that you enter a password to import user certificates.

**FIGURE 13** Enter User Certificate Password



Enter the password from your user credentials. For example, if your user credentials are username=bob and password=bob1, then enter bob1 for the user certificate password.

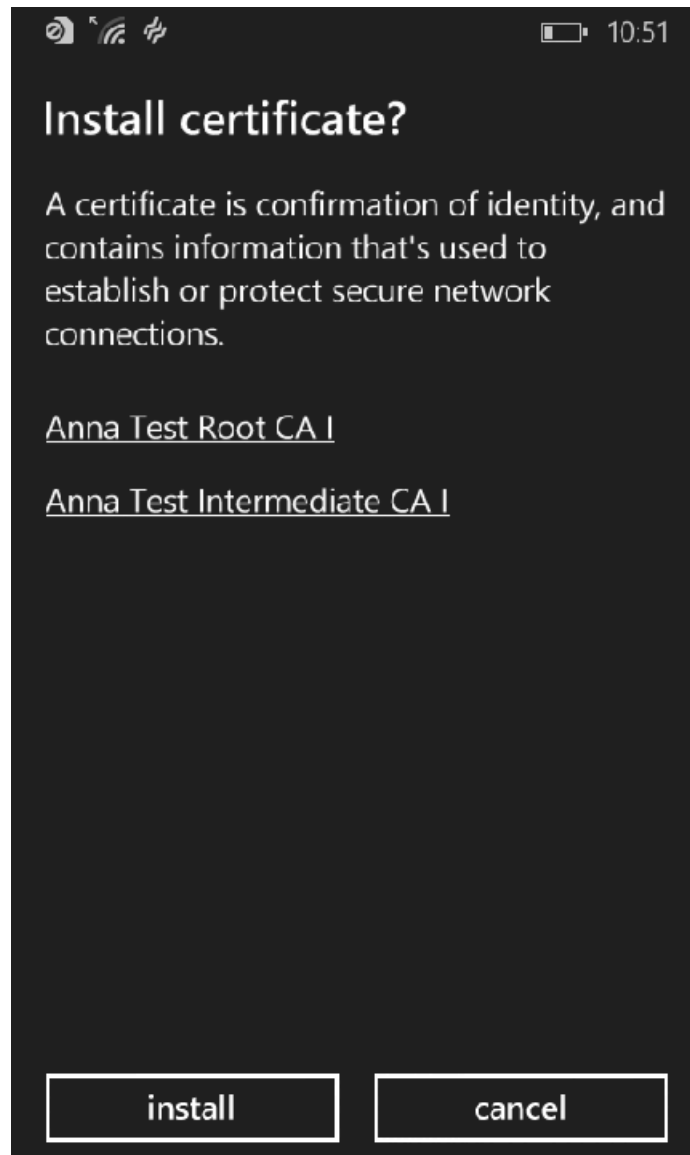
Tap **done** to continue.

### ***Install User Certificates***

Install the user certificates provided for this device.



FIGURE 14 Install User Certificates

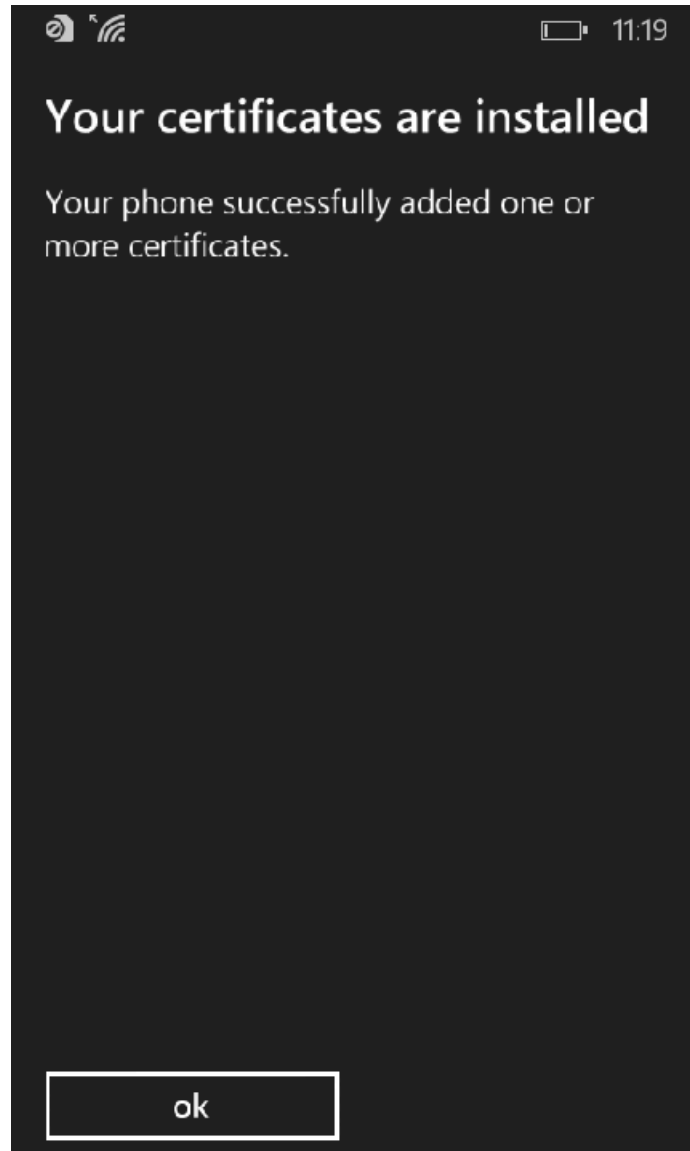


Tap **Install** to continue.

### *Certificates installed*

The user certificate has been downloaded and installed when you receive the confirmation screen.

**FIGURE 15** Certificates are Installed



Tap the **ok** button.

Tap the **Back** button (left arrow at the bottom on your phone) to return to the configuration instructions page. Continue with the Wi-Fi Configuration.

## Wi-Fi Configuration

After you download and install the certificates, make note of the Wireless Network Name, Root CA Certificate, and the Client Certificate. You need this information to connect to the secure network.

FIGURE 16 Wi-Fi Configuration

**Other Operating Systems**

**Step 1: Install The CA Certificate**  
Click to Install Anna Test Root CA I

Click the button above to download the certificate file in the most common format. If needed, other formats are available: [PEM](#) [DER](#) [CER](#)

**Step 2: Install Your Certificate**  
Click to Install Your Certificate

Click the button above to download your certificate It will need imported into your device.

**\*\* When prompted for a password while installing the certificate, enter the password you entered on the previous screen.**

**Step 3: Configure Wi-Fi**  
Use The Information Below To Setup Wi-Fi

Wireless Name (SSID): R-DVES-Secure  
Security Type: WPA2-Enterprise  
Encryption Type: AES (CCMP)  
EAP Method: EAP-TLS (or TLS)

Root CA Certificate(s): Anna Test Root CA I  
Server Name: anna44.cloudpath.net

Client Certificate: bob@test.cloudpath.net  
Username: bob@test.cloudpath.net

\* Labels on fields will differ based on the operating system.

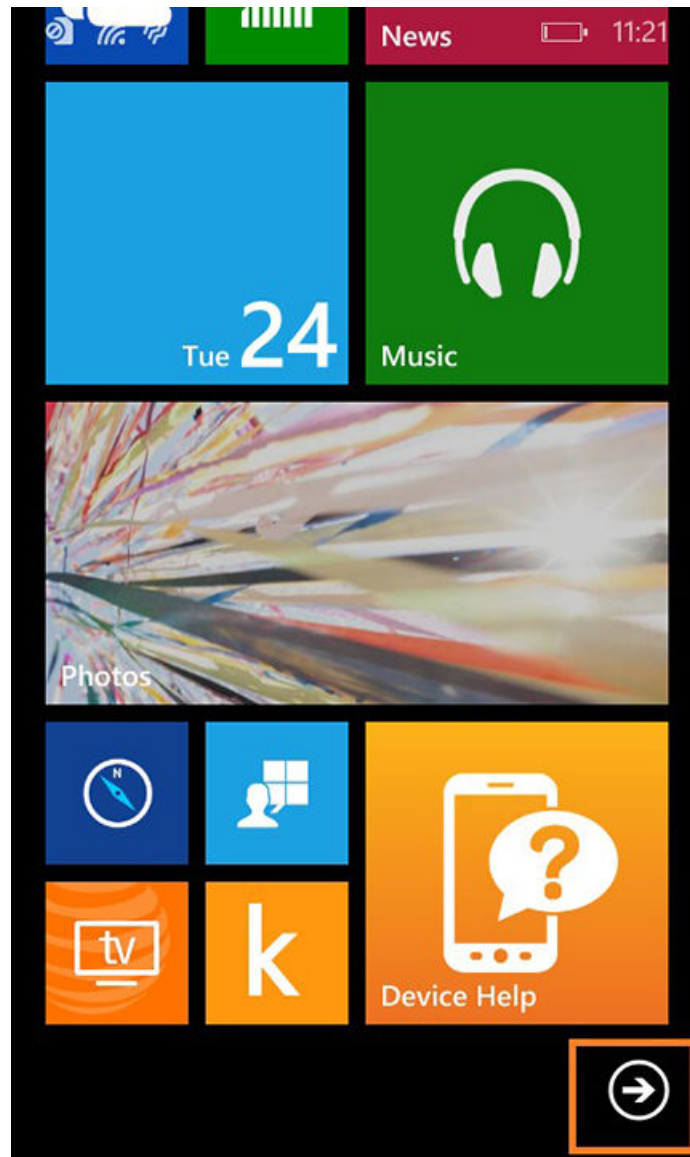
Continue to the next screen to configure Wi-Fi settings on the Windows Phone.

## Access Device Menu

After the Root CA certificate and user certificate have been installed on the device, you return to the home screen.

Swipe to the bottom of the home screen and tap the right-facing arrow.

FIGURE 17 Install From Amazon Market

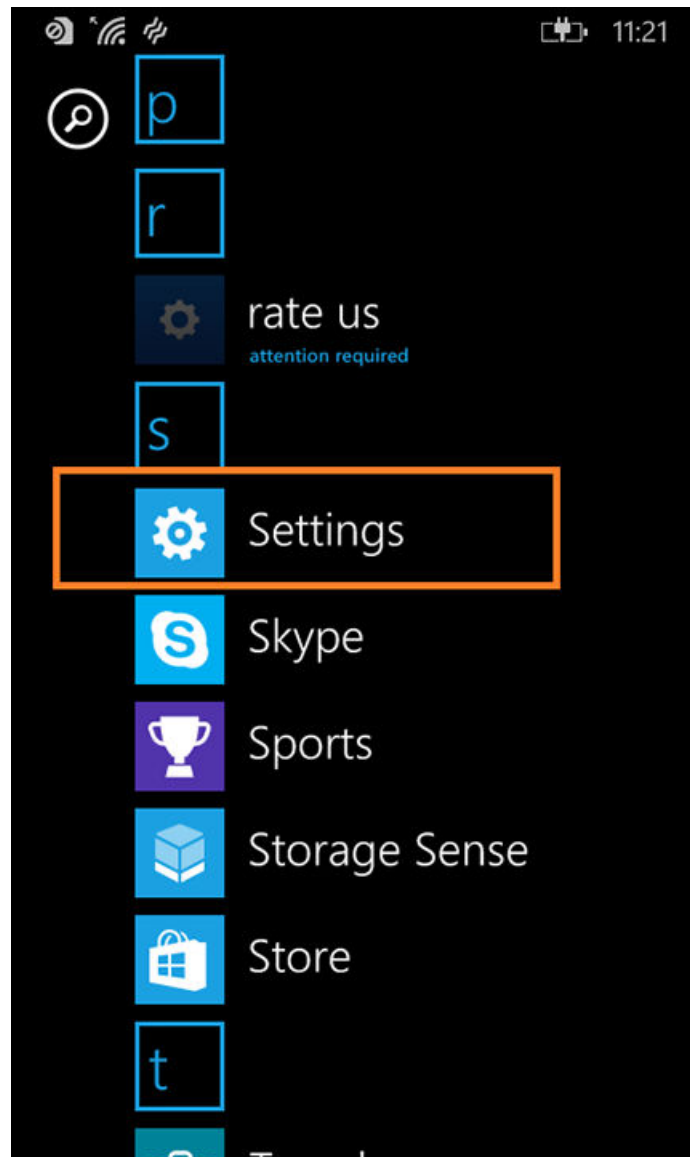


Continue to the next screen to locate the *Settings* on the Windows Phone.

### ***Access Device Settings***

Go to the device *Settings*.

FIGURE 18 Device Settings

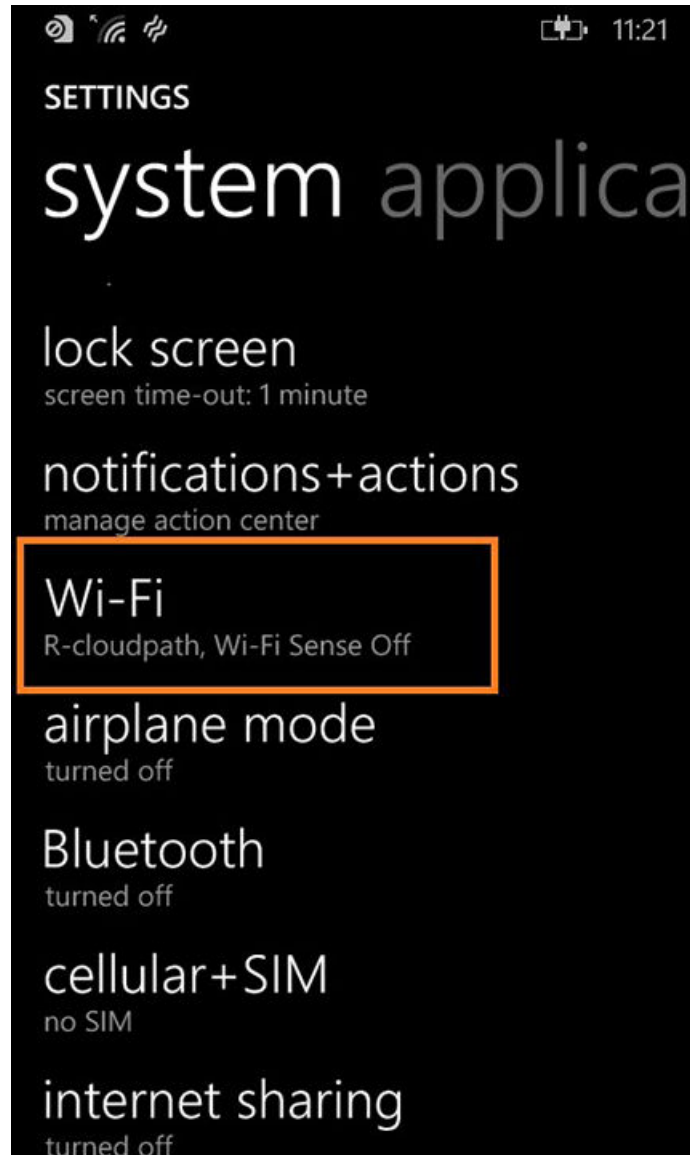


Tap **Settings** to continue.

### ***Locate Wi-Fi Settings***

Go to the *Wi-Fi* setting.

FIGURE 19 Wi-Fi Settings



Tap **Wi-Fi** to continue.

### ***Configure Wi-Fi Settings***

Tap the Wireless Network listed in the configuration instructions.

Configure Wi-Fi for the secure network. Be sure to select the certificate configuration settings to match the configuration instructions:

- Connect using certificate.
- Choose a certificate and select the Client Certificate from the configuration instructions.
- For Server certificate validation, select certificate authority.
- Choose a certificate and select the Root CA Certificate from the configuration instructions.
- For EAP method, select TLS.

FIGURE 20 Configure Wi-Fi Settings

SIGN IN

certificate

bob@test.cloudpath.net

details

Server certificate validation

certificate authority

Anna Test Root CA I, "Sample Comp

details

EAP method

TLS

done cancel

Tap done to continue.

## Connected to Secure Network

FIGURE 21 Secure



You should be connected to the secure network.

## Common Windows Phone Issues

If you encounter certain issues with enrollments on your Windows Phone, you may need to contact the network help desk.



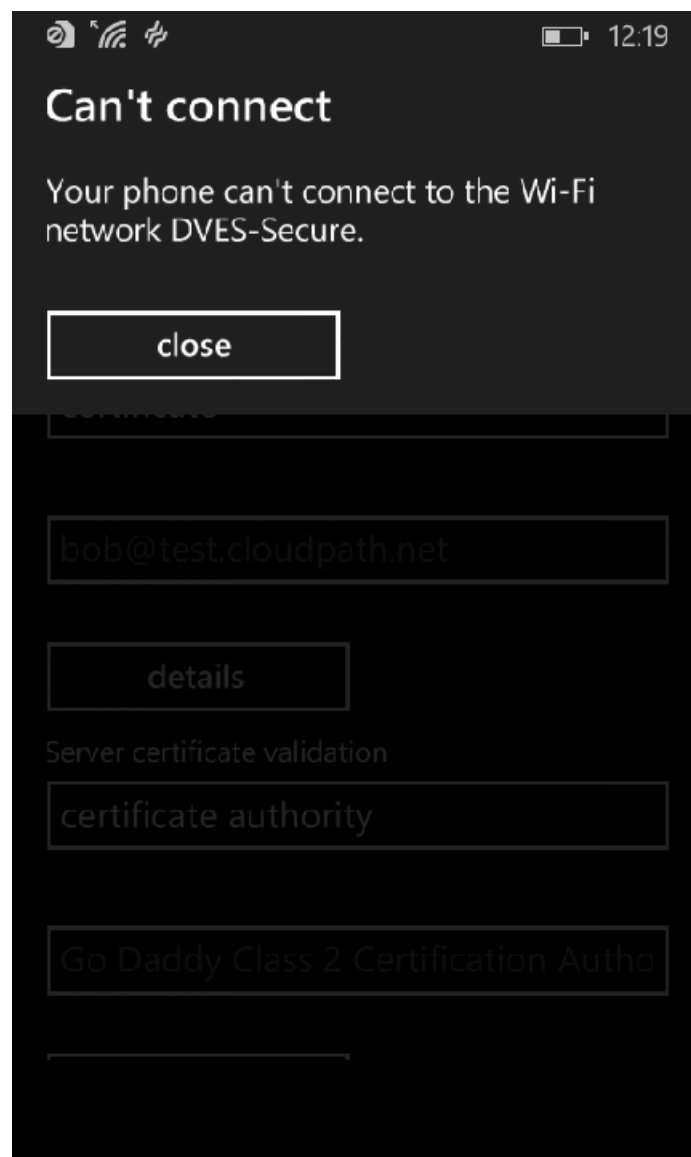
## Delete Network

Sometimes, the SSID retains old settings. You might try deleting the network and reconfiguring it. To delete the network, tap and hold the network name, then tap **delete**.

## Device Can't Connect

If you receive a message that the phone cannot connect the secure network, this typically means that there is a problem with your configuration.

**FIGURE 22** Device Can't Connect



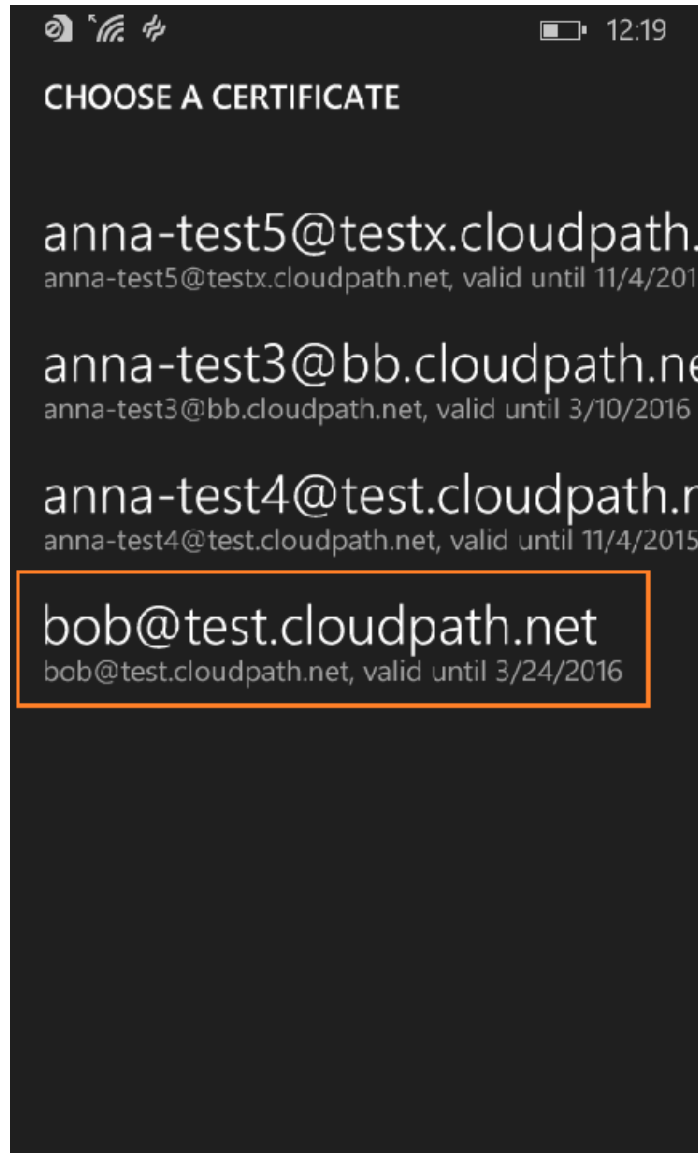
Be sure that your selections on the Wi-Fi configuration page match the settings provided on the Other Operating Systems tab. Refer to [Windows Phone Configuration Instructions](#) on page 10 for more information.

**Common Windows Phone Issues**  
Device Can't Connect

Use these settings:

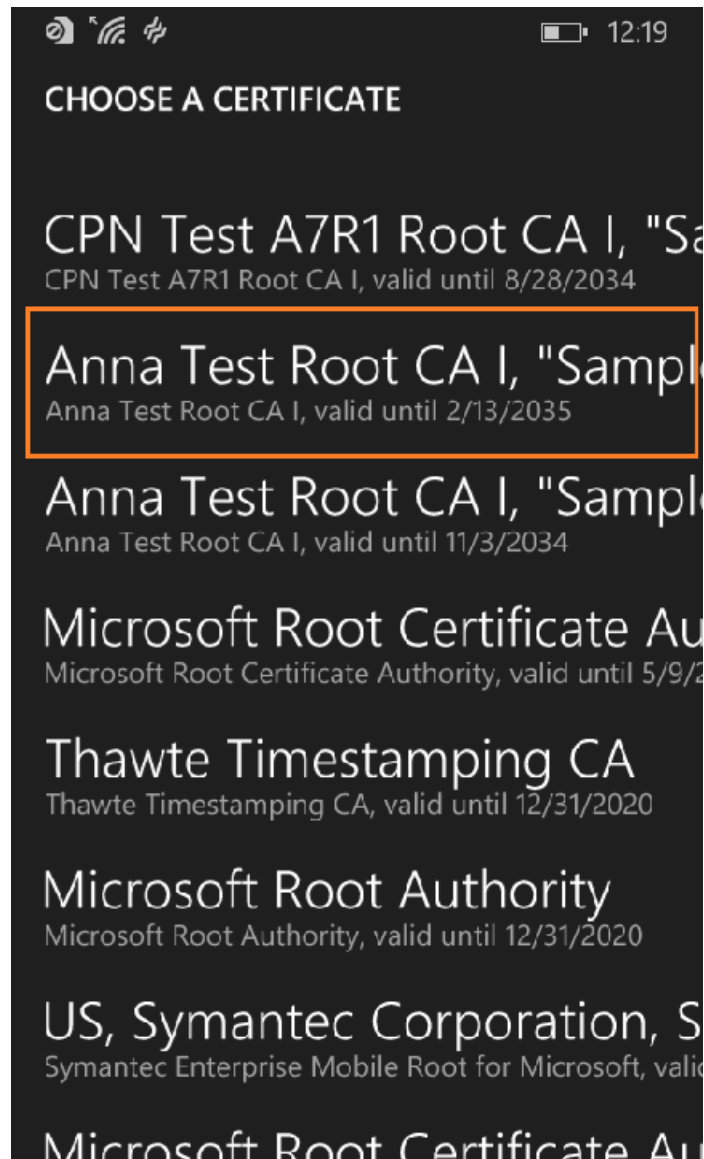
- Connect using **certificate**.
- Choose a certificate to match the **Client Certificate** in the configuration instructions.

**FIGURE 23** Choose A User Certificate



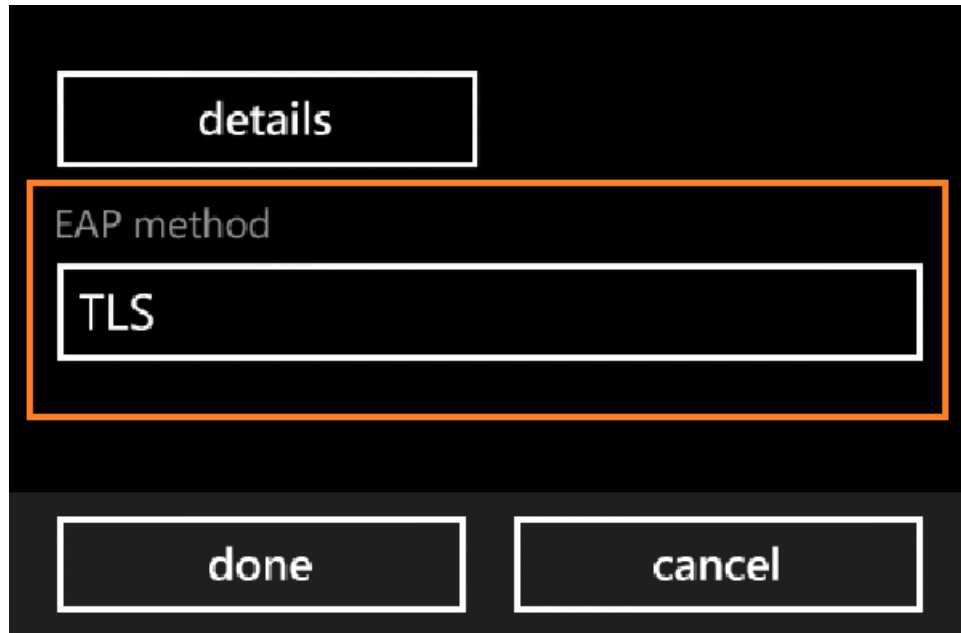
- Server Certificate Validation must be **certificate authority**.
- Choose the **Root CA Certificate** to match the configuration instructions.

FIGURE 24 Choose A Root CA Certificate



- Select **TLS** for the EAP method.

FIGURE 25 EAP Method





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