



FortiClient (Android) - Administration Guide

Version 6.4



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January 12, 2021 FortiClient (Android) 6.4 Administration Guide 04-640-642471-20210112

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Introduction

FortiClient (Android) 6.4 includes support for IPsec VPN, SSL VPN, Web Security, Endpoint Control, and FortiClient Endpoint Management Server (EMS).

FortiClient (Android) must connect to EMS to activate its license and become provisioned by the endpoint profile that the administrator configured in EMS. You cannot use any FortiClient (Android) features until FortiClient (Android) is connected to EMS and licensed. See Launching FortiClient (Android) for the first time on page 7.

FortiClient (Android) supports integration with Microsoft Intune for enterprise mobility management. Integration with Microsoft Intune allows the administrator to configure FortiClient (Android) endpoints to connect to EMS. See Configuring Microsoft IntuneFortiClient (Android) integration on page 32.

You can also download a VPN-only FortiClient (Android) that is available on the Google Play store. The VPN-only client does not require a license or connection to EMS, but only provides the SSL and IPsec VPN features.

Features

The following table lists and describes features supported in FortiClient (Android) 6.4.

Feature	Description
IPsec VPN	 Configure IPsec VPN connections. IKE main mode and aggressive mode support. Client X.509 certificates and pre-shared key support. Enable always up and auto connect options. Disable auto start.
SSL VPN	 Configure tunnel mode SSL VPN connections. Client and server X.509 certificates support. Enable always up and auto connect options. Disable auto start.
Web security	 Allow or deny web browsing based on FortiGuard groups and categories. Monitor web browsing violations Client Web Filtering when On-Net.
Endpoint control	 Connection to FortiClient EMS Connection to FortiClient Cloud Provision of web filtering profile Provision of VPN connections Deployment of CA certificate Disable disconnection from FortiClient EMS User profile picture (avatar)

Introduction 5

Downloading FortiClient (Android) 6.4

You can download the FortiClient (Android) 6.4 application from the Google Play store or at https://play.google.com/store.

Product integration and support

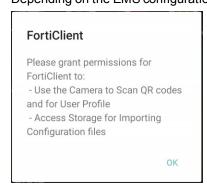
The following table lists FortiClient (Android) 6.4 product integration and support information.

Android operating systems	 10 (API 29) 9 Pie (API 28) 8.1.0 Oreo (API 27) 8.0.0 Oreo (API 26) 7.1 Nougat (API 25) 7.0.0 Nougat (API 24) 6.0.0 Marshmallow (API 23) 5.1.1 Lollipop (API 22) 5.0.1 Lollipop (API 21)
FortiOS	 6.2.0 and later 6.0.0 and later 5.6.0 and later 5.4.0 and later 5.2.0 and later
FortiToken Mobile	4.0.0 and later See the FortiToken Mobile User Guide for Android.
FortiClient EMS	• 6.2.0 and later

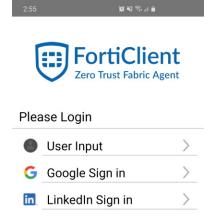
Launching FortiClient (Android) for the first time

To launch FortiClient (Android) for the first time:

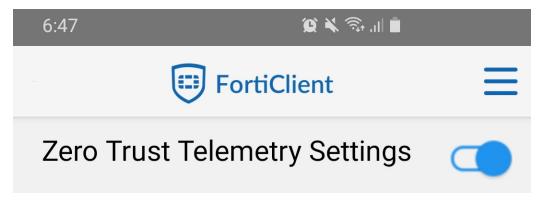
 When you launch FortiClient (Android) for the first time, FortiClient (Android) requests permissions to use the camera and access storage. Select OK and grant permissions as required.
 Depending on the EMS configuration, there may be additional permission requests.



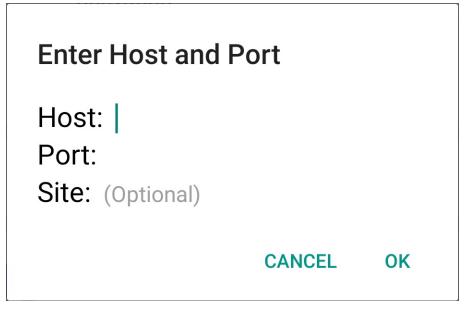
2. Log in to FortiClient (Android). You can log in by manually entering your user profile (name, email address, phone number, and avatar) or by logging in to your Google or LinkedIn account.



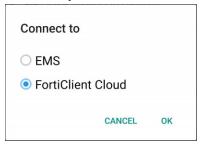
- 3. Connect FortiClient (Android) to EMS to license FortiClient (Android) and enable features. Do one of the following:
 - **a.** Enable *Zero Trust Telemetry Settings*. When FortiClient (Android) detects a Telemetry server, a confirmation popup appears to connect to EMS.



b. To manually connect to an on-premise EMS instance, select *Specify EMS IP*. Enter the EMS IP address and port to manually connect to EMS. If the EMS administrator has enabled multitenancy, you can also enter the EMS site name.



- c. To connect to an on-premise EMS instance or FortiClient Cloud using a QR code, select Scan QR Code from the right-side dropdown list. Scan the QR code with the device camera. You must allow FortiClient (Android) permissions to access the device camera. FortiClient (Android) automatically connects to the EMS server or FortiClient Cloud based on the scanned QR code.
- d. To manually connect to FortiClient Cloud, select Connect to, then select FortiClient Cloud. Select OK.

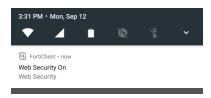


Select Enter Invitation Code. Enter the FortiClient Cloud invitation code, then select OK.



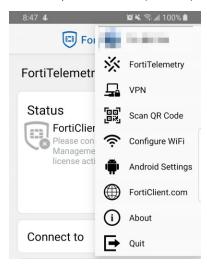
Launching FortiClient (Android) from the notification bar

FortiClient (Android) 6.4 allows you to launch the application from the notification bar.



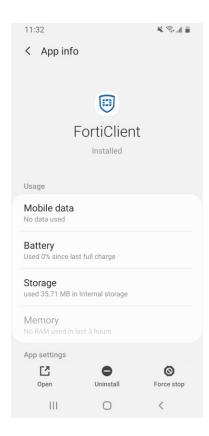
Quitting FortiClient (Android) from the app menu

You can quit FortiClient (Android) from the in-app menu.



Force stopping FortiClient (Android) from the Apps page

When the web security feature is enabled, FortiClient (Android) runs in the background to provide the web security service. To quit the application, go to the Android OS Settings page, then select *Apps > FortiClient > Force stop*. On this page you can also clear data and uninstall FortiClient (Android).



FortiClient (Android) 6.4 includes a web security feature to allow you to control web browsing on your Android device. You can allow or deny sites based on the FortiGuard site rating. The following table lists the web security groups and categories.

You can get up-to-date groups and categories from FortiGuard (http://www.fortiguard.com/static/webfiltering.html).

Groups	Categories
Security Risk	Malicious Websites, Phishing, Spam URLs
Potentially Liable	Drug Abuse, Hacking, Illegal or Unethical, Discrimination, Explicit Violence, Extremist Groups, Proxy Avoidance, Plagiarism, Child Abuse
Adult/Mature Content	Alternative Beliefs, Abortion, Other Adult Materials, Advocacy Organizations, Gambling, Nudity and Risque, Pornography, Dating, Weapons (Sales), Marijuana, Sex Education, Alcohol, Tobacco, Lingerie and Swimsuit, Sports Hunting and War Games
Bandwidth Consuming	Freeware and Software Downloads, File Sharing and Storage, Streaming Media and Download, Peer-to-peer File Sharing, Internet Radio and TV, Internet Telephony
General Interest - Business	Finance and Banking, Search Engines and Portals, General Organizations, Business, Information and Computer Security, Government and Legal Organizations, Information Technology, Armed Forces, Web Hosting, Secure Websites, Web-based Applications
General Interest - Personal	Advertising, Brokerage and Trading, Games, Web-based Email, Entertainment, Arts and Culture, Education, Health and Wellness, Job Search, Medicine, News and Media, Social Networking, Political Organizations, Reference, Global Religion, Shopping and Auction, Society and Lifestyles, Sports, Travel, Personal Vehicles, Dynamic Content, Meaningless Content, Folklore, Web Chat, Instant Messaging, Newsgroups and Message Boards, Digital Postcards, Child Education, Real Estate, Restaurant and Dining, Personal Websites and Blogs, Content Servers, Domain Parking, Personal Privacy
Unrated	Unrated



The web security module is only available in the full FortiClient (Android) app.



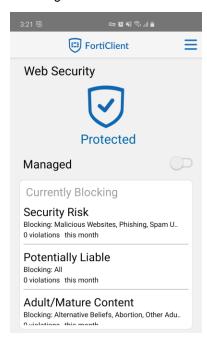
Provisioning of a web filter exclusion list is only available from FortiClient EMS. Exclusion lists can only be applied on the domain name, not the full URL.

For information on FortiGuard groups and categories, see http://www.fortiguard.com/static/webfiltering.html.

Web security status

The EMS administrator can enable or disable Web Filter. When the EMS administrator enables Web Filter, Web Filter options become available from the dropdown list. You can open the Web Filter page to check the categories that the administrator has enabled or blocked.

There are seven top-level categories with subcategories. The EMS administrator can enable, disable, or partially enable subcategories. The EMS administrator can also configure an exception list.

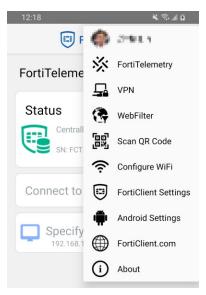


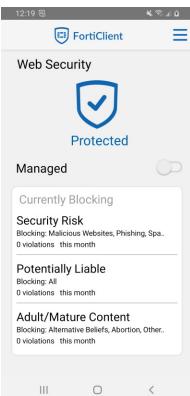
Web security settings

To change web security settings, select Web Security Settings. There are seven top level groups with various categories. When you select a top level group, a dropdown list appears. You can select to *Allow All*, *Deny All*, or allow or deny each category independently.



When FortiGate endpoint control is managing FortiClient, the web security setting is deployed from FortiGate and the user cannot change it.





When browsing to a website which falls into a denied category, you receive a web page blocked page.





FortiClient (Android) 6.4 supports tunnel mode SSL VPN connections. You can configure the SSL VPN in the FortiClient user interface or provision SSL VPN connections in an endpoint profile from FortiClient EMS. FortiClient EMS pushes provisioned SSL VPN configurations to your Android device after the FortiClient (Android) successfully connects with FortiGate for Endpoint Control and with FortiClient EMS for provisioning and monitoring.

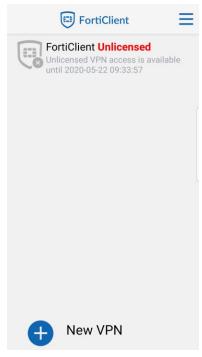
You can configure X.509 certificates, CA server certificates, and check server certificates. You can also configure always up and auto connect for the VPN connection.

For three days after initial FortiClient (Android) installation, you can configure and establish a VPN connection to a FortiGate, allowing the endpoint to reach an EMS behind a FortiGate. This is especially useful for remote users, as it allows them to connect to the corporate network to activate their FortiClient (Android) license.

Creating an SSL VPN connection

To create a new SSL VPN connection:

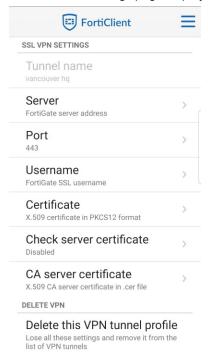
1. Select *New VPN* from the toolbar in the bottom of the page.



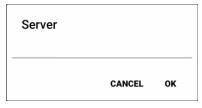
2. Enter a name for the new VPN connection, select SSL VPN under VPN Type, and select Create.



The SSL VPN settings page displays.



3. Select Server, enter the server IP address or domain name, and select OK.



4. Select *Port*, enter the port number, and select *OK*. The default port is 443.



5. Select *Username*, enter a username, and select *OK*.

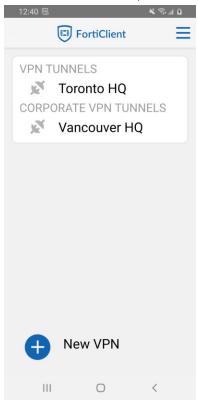


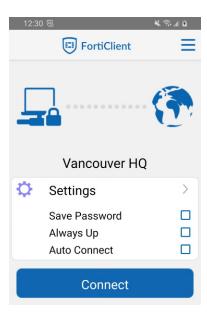
Connecting to the VPN

SSL VPN tunnel mode uses X.509 certificates (PKCS12 format) for authentication. You must configure certificate settings if authentication requires the client certificate. Otherwise, leave the certificate settings at their default values.

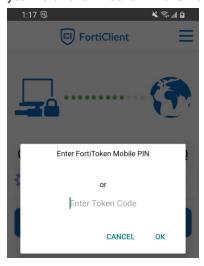
To connect to the SSL VPN:

1. Select an available VPN, then select *Connect*.

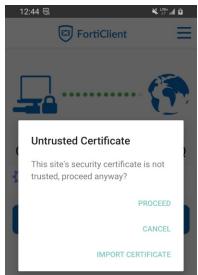




2. Enter your username and password then select Login.
If the SSL VPN you are connecting to requires you to enter a FortiToken Mobile token, you are prompted to enter your FortiToken Mobile PIN or six-digit token.



3. You receive an *Untrusted Certificate* warning, and you have the option to *Proceed*, *Cancel*, or *Import certificate*.



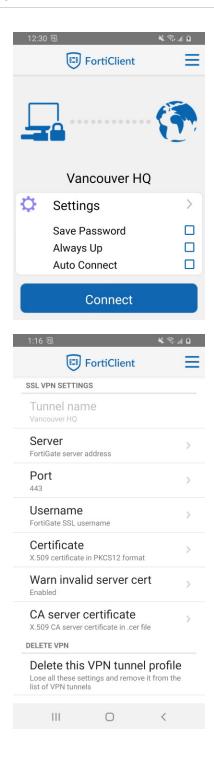
- **4.** Select *Import certificate*, browse for the certificate file, and edit the name if required.
- **5.** Select *OK* to load and install the certificate. The certificate is now installed on the device. Use the device's back button to return to the connection screen.
- 6. Select an available VPN to connect to.



For some devices, it may be necessary to change the TCP-MSS configuration to allow Telemetry connection after establishing an SSL VPN connection.

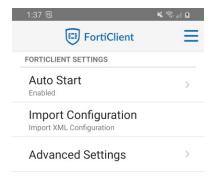
Editing SSL VPN settings or deleting a SSL VPN configuration

Select the SSL VPN, then Settings.



Enabling/disabling auto start

You can enable or disable auto start. To enable or disable auto start, select the menu icon, then *Settings* in the dropdown list. In the *FortiClient settings* page, select *Auto Start*, then *Enabled* or *Disabled*. By default, auto start is enabled.



FortiClient (Android) 6.4 supports IPsec VPN connections. You can configure the IPsec VPN in the FortiClient user interface or provision IPsec VPN connections in an endpoint profile from FortiClient EMS. FortiClient EMS pushes provisioned IPsec VPN configurations to your Android device after the FortiClient (Android) successfully connects with FortiGate for endpoint control and with FortiClient EMS for provisioning and monitoring.

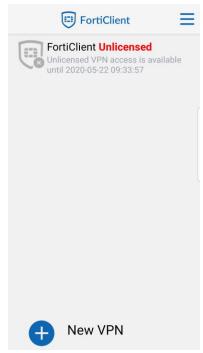
You can configure server, phase 1, phase 2, and XAuth settings.

For three days after initial FortiClient (Android) installation, you can configure and establish a VPN connection to a FortiGate, allowing the endpoint to reach an EMS behind a FortiGate. This is especially useful for remote users, as it allows them to connect to the corporate network to activate their FortiClient (Android) license.

Creating an IPsec VPN connection

To create a new IPsec VPN connection:

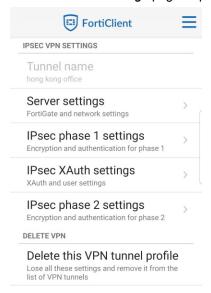
- 1. Create the new IPsec VPN connection:
 - **a.** Select *New VPN* from the toolbar at the bottom of the page.



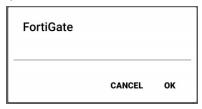
b. Enter a name for the new VPN connection, select *IPsec VPN* under *VPN Type*, then select *Create*.



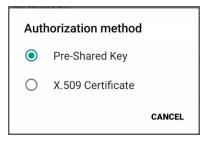
The IPsec VPN settings page displays.



2. Select Server settings > Network settings > FortiGate. Enter the server IP address or domain name, then select OK.



- **3.** Configure authentication settings:
 - a. Under Authentication settings, select Authorization method, and select Pre-Shared Key or X.509 Certificate.



b. If desired, select *Pre-shared Key* to enter the pre-shared key value.



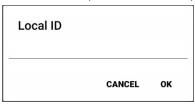
The simplest way to authenticate with the FortiGate unit is by means of a pre-shared key. This is less secure than using certificates, especially if it is used alone, without requiring peer IDs or extended authentication (XAuth).

The pre-shared key must contain at least six characters. For optimum protection against currently known attacks, the key must consist of a minimum of 16 randomly chosen alphanumeric characters.



The pre-shared key configured on the client must match the pre-shared key configured on the FortiGate. Contact your network administrator for the key.

c. Select *Local ID*, enter the local ID, and select *OK*.

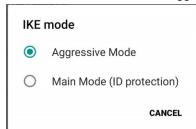


d. For X.509 certificate select *Certificate*, then browse for the certificate file on your device. To authenticate with the FortiGate unit using digital certificates, you must have the required certificates installed on the Android device (peer) and the FortiGate unit (server).



Contact your network administrator for the correct X.509 certificate file.

e. Select *IKE mode*, and select *Aggressive Mode* or *Main Mode (ID protection)*.



In *Aggressive Mode*, the phase 1 parameters are exchanged in a single message with unencrypted authentication information.

In *Main Mode*, the phase 1 parameters are exchanged in multiple rounds with encrypted authentication information.



The *IKE Mode* selected on the client must match the mode selected on the server. Contact your network administrator for the correct setting.

- **4.** Select *Go Back* to return to the *IPsec VPN settings* page.
- **5.** Select *IPsec phase 1 settings* to view or edit the phase 1 proposal encryption and authentication settings. You can choose to use the default settings.

Select the encryption and authentication algorithms that will be used to generate keys for protecting negotiations. You can select any of the following symmetric-key algorithms:

- DES: Digital Encryption Standard, a 64-bit block algorithm that uses a 56-bit key.
- 3DES: Triple-DES, in which plain text is encrypted three times by three keys.
- AES128: A 128-bit block algorithm that uses a 128-bit key.

You can select one of the following message digests to check the authenticity of messages during phase 1 negotiations:

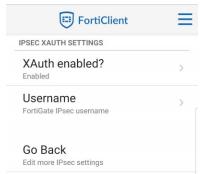
- MD5: Message Digest 5, the hash algorithm developed by RSA Data Security.
- SHA-1: Secure Hash Algorithm 1, which produces a 160-bit message digest.

Select one or more Diffie-Hellman (DH) groups from DH group 1, 2, 5, and 14. When using aggressive mode, DH groups cannot be negotiated.



Contact your network administrator for the correct phase 1 encryption and authentication algorithms, and DH group.

- **6.** Select *Go Back* to return to the *IPsec VPN settings* page.
- 7. Select IPsec XAuth settings to view or edit the XAuth and user settings. XAuth is enabled by default. Select Username to enter the FortiGate IPsec username. Select Password to enter the password value. To use XAuth, you must first configure the user's credentials on your FortiGate, and external RADIUS or LDAP server. Extended authentication (XAuth) increases security by requiring the remote dialup client user to authenticate in a separate exchange at the end of phase 1. XAuth draws on existing FortiGate user group definitions and uses established authentication mechanisms such as PAP, CHAP, RADIUS and LDAP to authenticate dialup clients.



8. Select Go Back to return to the IPsec VPN settings page.

9. Select *IPsec phase 2 settings* to view or edit the phase 2 encryption and authentication settings. You can choose to use the default settings.

Select the encryption and authentication algorithms that will be used to generate keys for protecting negotiations. You can select any of the following symmetric-key algorithms:

- DES: Digital Encryption Standard, a 64-bit block algorithm that uses a 56-bit key.
- 3DES: Triple-DES, in which plain text is encrypted three times by three keys.
- AES128: A 128-bit block algorithm that uses a 128-bit key.

You can select one of the following message digests to check the authenticity of messages during phase 1 negotiations:

- MD5: Message Digest 5, the hash algorithm developed by RSA Data Security.
- SHA-1: Secure Hash Algorithm 1, which produces a 160-bit message digest.

Select one or more Diffie-Hellman groups from DH groups 1, 2, 5, and 14. When using aggressive mode, DH groups cannot be negotiated.



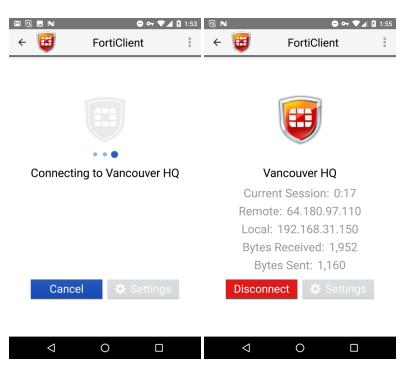


Contact your network administrator for the correct phase 2 encryption and authentication algorithms and DH group.

Connecting to an IPsec VPN

To connect to an IPsec VPN:

- 1. Select an available IPsec VPN connection, then select Connect.
- 1. Enter the username and password, then select Login.

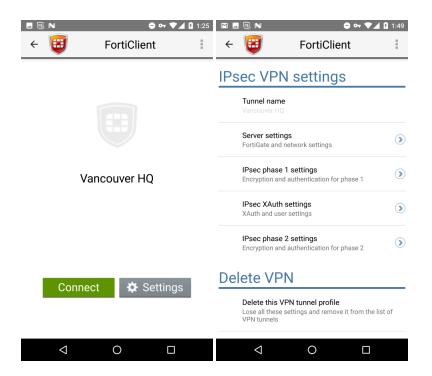


If the IPsec VPN you are connecting to requires you to enter a FortiToken Mobile token, you are prompted to enter your FortiToken Mobile PIN or six-digit token code.



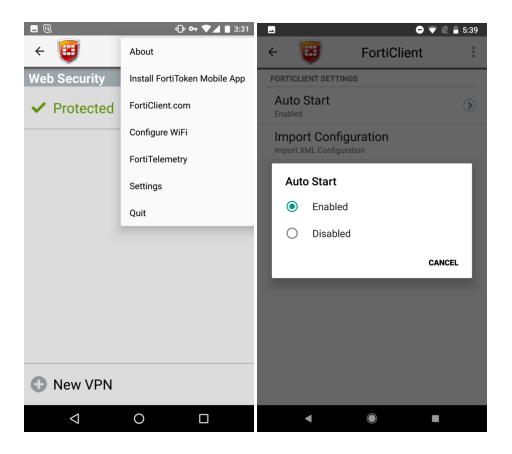
Editing VPN settings or deleting a VPN configuration

Select the IPsec VPN, then the Settings button.



Enabling/disabling auto start

You can enable or disable auto start. To enable or disable auto start, select the menu icon, then *Settings* in the dropdown list. In the *FortiClient settings* page, select *Auto Start*, then *Enabled* or *Disabled*. By default, auto start is enabled.



Endpoint control

FortiClient (Android) 6.4 must register to EMS for all features to function. By default, FortiClient (Android) allows three days of free VPN access to allow you to register to EMS over VPN. The EMS administrator can push VPN configurations and enable or disable Web Filter.

FortiClient EMS

You use can use FortiClient EMS to create an endpoint profile and a gateway IP list.

Configuring FortiClient EMS endpoint profiles

You can create a new endpoint profile or modify the default endpoint profile. The endpoint profile contains configuration information for FortiClient (Android), including VPN settings.

To configure FortiClient EMS endpoint profiles:

- 1. In FortiClient EMS, go to Endpoint Profiles > Manage Profiles > Add.
- 2. Configure the settings on the Web Filter tab.
- **3.** Configure the settings on the *VPN* tab.
- 4. On the System Settings tab, select Install CA Certificate on Client.
- 5. Click Save.

Configuring the user profile

You can manually add a profile picture, name, email, and phone number to your user profile. You can enter this information when first downloading FortiClient (Android) or by going to *User Profile* in the toolbar.

Endpoint control 31

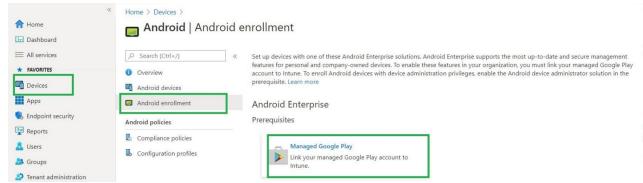


Configuring Microsoft IntuneFortiClient (Android) integration

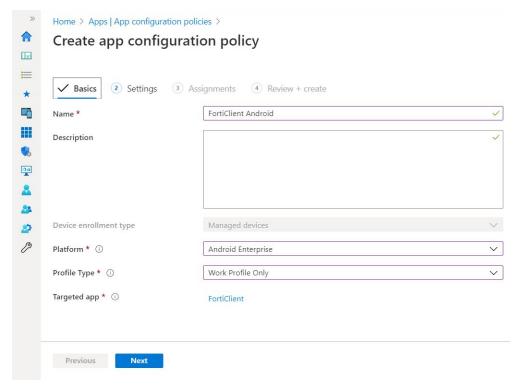
Intune integration allows endpoints to connect to EMS.

To configure Microsoft Intune integration as the administrator:

1. Sign in to the Microsoft Endpoint Manager admin center. Go to *Devices > Android > Android enrollment > Managed Google Play*. Link your Managed Google Play account to your Intune tenant account.



- **2.** Go to *Apps > All apps > Add > Android enrollment > Managed Google Play*. Add and approve FortiClient (Android) from the app store to make it available to the end user.
- 3. Go to App configuration policies > Managed devices. Create a custom profile for the managed device:
 - **a.** On the *Basics* page, configure the fields:
 - i. From the *Platform* dropdown list, select *Android Enterprise*.
 - ii. From the Profile Type dropdown list, select Work Profile Only.
 - iii. For Targeted app, select FortiClient.



- **b.** Click Next.
- c. From the Configuration settings format dropdown list, select Use configuration designer.
- d. Under Use the JSON editor to configure the detailed configuration keys, click Add.
- e. Select the desired configuration keys:
 - i. If FortiClient (Android) will connect to an on-premise EMS, select *Enter EMS Server IP* and Enter *EMS Server Port*. In the configuration value fields, enter the EMS server port and IP address, respectively.
 - **ii.** If FortiClient (Android) will connect to FortiClient Cloud, select *Enter Cloud Invite Code*. In the *Configuration value* field, enter the FortiClient Cloud invite code.
- f. Click Next.
- **g.** From the *Assign to* dropdown list, select the desired devices/users to assign the policy to. Click *Next*. You can view the policy under *Apps > App configuration policies*.

To configure Microsoft Intune integration as the end user:

- 1. Install Intune Company Portal from the Google Play store.
- 2. Log in to the Intune Company Portal app using credentials that your company or administrator provided.
- **3.** After logging in, the app prompts you to set up a work profile. Click *Agree* and allow the necessary permissions to set up the profile.
- **4.** Install FortiClient (Android) and other applications that the administrator has provisioned under the work profile. After FortiClient (Android) installs, it automatically registers to EMS according to the administrator spefications.



FortiClient (Android) does not currently support having the app installed simultaneously for both work and personal profiles.



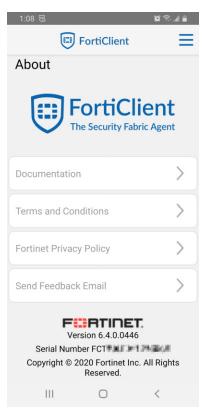
When provisioned through Intune, FortiClient (Android) does not support user login through Google accounts.

About

You can go to the *About* page using the right-side dropdown menu in the FortiClient (Android). The *About* page in FortiClient (Android) provides the following information:

- FortiClient (Android) version
- Copyright
- Privacy statement
- Documentation

You can use the Send Feedback Email option to provide feedback to Fortinet regarding FortiClient (Android).



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Change log

Date	Change Description
2020-06-15	Initial release.
2020-10-07	Updated To launch FortiClient (Android) for the first time: on page 7.
2021-01-12	Updated To launch FortiClient (Android) for the first time: on page 7.





current version of the publication shall be applicable.

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