



FortiClient iOS - Administration Guide

Version 6.2



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Introduction

FortiClient is an all-in-one comprehensive endpoint security solution that extends the power of Fortinet's Advanced Threat Protection (ATP) to end user devices. As the endpoint is the ultimate destination for malware that is seeking credentials, network access, and sensitive information, ensuring that your endpoint security combines strong prevention with detection and mitigation is critical.

You must license FortiClient iOS for use. You can license FortiClient iOS by applying the license to EMS, then connecting Telemetry from FortiClient iOS to EMS. See Fabric Telemetry on page 13.

This guide describes how to install and set up FortiClient iOS for the first time.

Features

Feature	Description
SSL VPN (tunnel mode)	 SSL VPN in tunnel mode supports the following: IPv4 Example: https://24.1.20.17 IPv6 Example: https://[1002:470:71f1:63::2] Full tunnel and split tunnel (IP address and subnet-based) SSL realm, custom DNS server, DNS suffix Username and password authentication PKI user with a personal certificate, FortiToken & Client Certificate FortiClient iOS does not support SSL VPN resiliency.
Web Filter	FortiClient iOS supports all browser traffic.
FortiTelemetry	Connect to FortiGate and EMS for central management.
mobileconfig	Use the mobileconfig file to preconfigure a FortiClient Telemetry preferred host. Once FortiClient starts, it uses this preferred host to connect.
FortiAnalyzer support	Send logs to FortiAnalyzer when configured from FortiClient EMS. See the FortiClient EMS Administration Guide.

SSL DNS server for split tunnel

To use the SSL DNS server for split tunnel, you must configure the DNS suffix on the FortiGate side. Following is an example of configuring SSL DNS server for split tunnel using FortiOS:

```
config vpn ssl settings
  set dns-suffix
```

[&]quot;domain1.com; domain2.com; domain3.com; domain4.com; domain5.com; domain6.com; domain7.com; domain8.com

```
set dns-server1 10.10.10.10
set dns-server2 10.10.10.11
end
config vpn ssl web portal
edit "full-access"
set dns-server1 10.10.10.10
set dns-server2 10.10.10.11
set split-tunneling enable
next
end
```



If you configure the split tunnel, only DNS requests that match DNS suffixes use the DNS servers configured in the VPN. Due to iOS limitations, the DNS suffixes are not used for search as in Windows. Using short (not fully qualified domain name (FQDN)) names may not be possible.

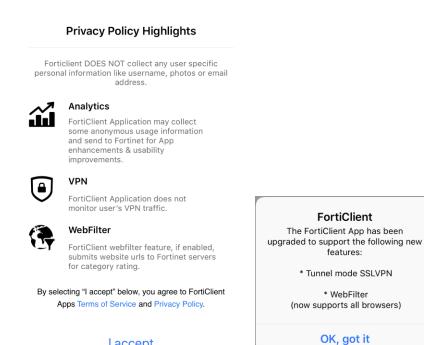
Supported platforms

FortiClient iOS is supported by iOS versions 9, 10, 11, and 12.

Initial configuration

Running FortiClient iOS

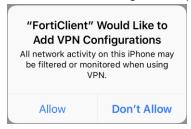
After downloading the FortiClient installer and running the application for the first time, you must acknowledge some popups before continuing to add a VPN configuration. Acknowledge the notifications shown below.



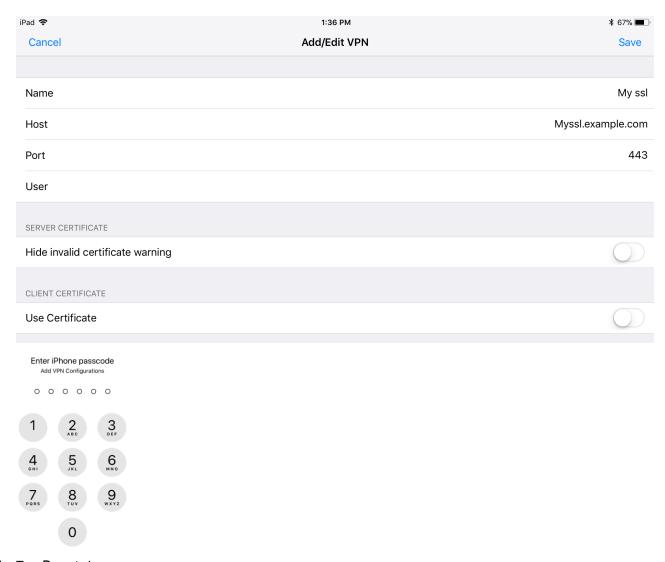
To add a VPN connection:

1. In the Add VPN Configurations popup, tap Allow.

Laccept



- 2. Tap the VPN icon at the bottom of the screen to switch to the VPN page.
- 3. Tap Connections > Edit > Add Configuration, then configure the following. Enter your passcode to confirm adding the VPN.



4. Tap Done twice.



The *Name*, *Host* and *Port* fields are required. The *User*, *Hide invalid certificate warning*, and *User Certificate* fields are optional.

To enable a VPN connection:

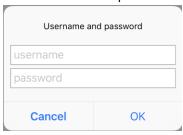
1. Tap a VPN connection. A checkmark appears beside the VPN connection to indicate it is selected.



- 2. Tap the < button.
- **3.** Swipe right to enable the VPN connection.



4. If the username and password are not configured, enter the username and passcode in the popup.



5. Tap *OK*. When connected, the tunnel interface IP, duration, and the bytes sent and received information display.



To install a certificate received via email:

This feature is only available for FortiClient iOS 6.2.3 and later versions.

- 1. Open the email, then download the received certificate. The certificate must have the .fctp12 extension for FortiClient iOS to import it. If the certificate does not have the .fctp12 extension, rename it so that it does.
- 2. After downloading the certificate, select Copy to FortiClient. FortiClient iOS imports the certificate.



- **3.** In FortiClient iOS, go to the *VPN* tab.
- 4. Edit a VPN tunnel and enable Use Certificate.
- 5. Tap File Name.
- **6.** Select the certificate imported earlier.
- 7. On the Add/Edit VPN page, enter a passphrase to initiate the VPN connection.

To disable a VPN connection:

- 1. Select the VPN connection.
- 2. Swipe left to disable the VPN connection.

To edit or delete a VPN connection:

- 1. Select a VPN connection.
- 2. Tap Edit or Delete.
- 3. Tap Done twice.

Creating a Mobileconfig profile

To enable web filtering, the iOS device must be supervised and you must install a Mobileconfig profile with a content filter on the device. Installing a mobileconfig profile requires the following:

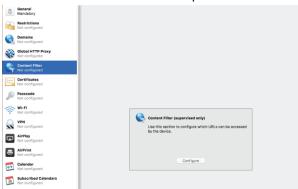
- Apple Configurator 2 (or equivalent mobile device management (MDM) application) installed.
- iOS devices are supervised.

You can find instructions on how to supervise your iOS devices on the Apple Configurator 2 Help (or your MDM application) website.

To create a mobileconfig profile for FortiClient web filtering:

- 1. Launch Apple Configurator 2.
- 2. Go to File > New Profile.
- 3. Enter a Name for the profile.

4. Select Content Filter from the left panel.



- 5. Click Configure.
- 6. Select Plugin (Third Party App) from the Filter Type dropdown list.
- **7.** Configure the following:

Filter Name	FortiClient
Identifier	com.fortinet.forticlient.fabricagent
Service Address	fgd1.fortigate.com
Organization	Fortinet, Inc.
User Name	You can use this field to specify the EMS (IP address or FQDN), port, and connection key (optional). For example, the following string allows FortiClient iOS to connect to the EMS at ems.example.com at port 8013, with key "ConnectionKey": ems.example.com:8013 ConnectionKey
Filter WebKit Traffic	Select the Filter WebKit Traffic checkbox.
Filter Socket Traffic	Deselect the Filter Socket Traffic checkbox.

8. Click Save.



Due to restrictions that Apple set, you must launch FortiClient iOS once before the configuration takes effect. You can use EMS compliance verification rules to ensure users launch FortiClient iOS before browsing the Internet. See the *FortiClient EMS Administration Guide*.

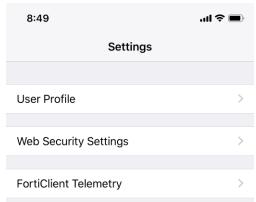
Web Filtering



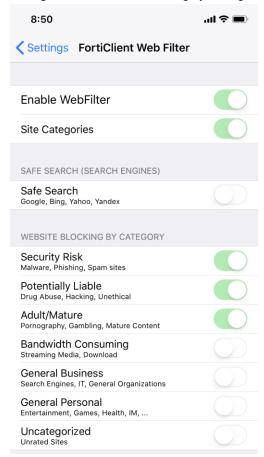
By default, FortiClient iOS disables Web Filtering. To enable Web Filtering, the iOS device must be supervised and you must install a Mobileconfig profile with a content filter on the device. See Creating a Mobileconfig profile.

To configure the Web Filtering settings:

- 1. Tap Settings.
- 2. Tap Web Security Settings.



- **3.** Enter the passcode in the *FortiClient Authentication* popup.
- 4. Enable the Web Filter by swiping right.
- 5. Configure the Website Blocking by Categories to suit requirements.



Enter iPhone passcode for "FortiClient"

FortiClient needs authentication

0 0 0 0 0

1 2 3 DEF

4 5 6 MNO

7 8 9 WXYZ

Cancel



When FortiClient iOS blocks a website, a restricted website error page appears.

Fabric Telemetry

To connect Telemetry to an on-premise EMS:

- **1.** Tap *Settings* at the bottom of the screen.
- 2. Tap Fabric Telemetry.



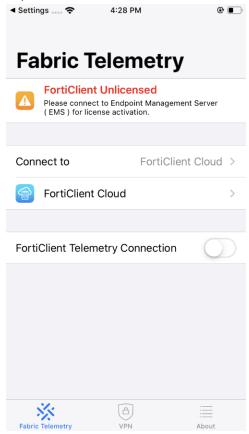
3. Enable *FortiClient Telemetry Connection* by swiping right. When FortiClient detects a Telemetry server, a confirmation popup appears.



4. Tap Send FortiClient Telemetry Data to connect to the FortiTelemetry server.

To connect Telemetry to FortiClient Cloud:

- 1. Tap Settings at the bottom of the screen.
- 2. Tap Fabric Telemetry.
- **3.** Tap Connect to, then select FortiClient Cloud.



4. Tap FortiClient Cloud. In the Invitation Code field, enter the FortiClient Cloud invitation code. Tap Done.

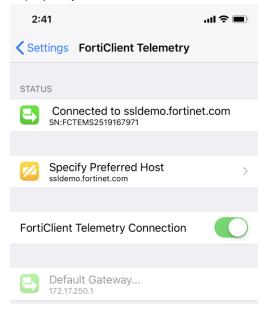


When FortiClient iOS achieves connection to FortiClient Cloud, it becomes managed by FortiClient Cloud and receives a license.

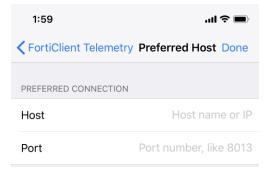


To specify a FortiTelemetry server:

1. Tap Specify Preferred Host.



2. Enter Host and Port.



3. Tap Done.



You can use the mobileconfig file to preconfigure a FortiClient Telemetry preferred host. Once FortiClient starts, it uses this preferred host to register. See Creating a Mobileconfig profile on page 9.

User profile

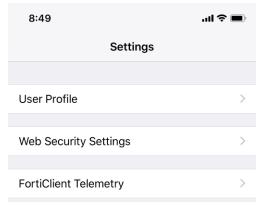
You can direct FortiClient to retrieve information about you from one of the following cloud applications, if you have an account:

- LinkedIn
- Google
- Facebook

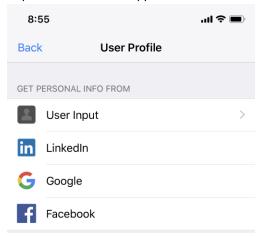
You can also manually add or edit a name, phone number, and email address in FortiClient. FortiClient iOS sends this user data to FortiClient EMS, where it displays on the *Endpoints* content pane.

To retrieve user details from a cloud application:

- **1.** Tap *Settings* at the bottom of the screen.
- 2. Tap User Profile.



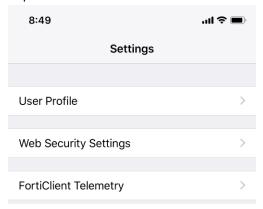
3. Tap the desired cloud application.



4. If you are not logged into the cloud application already on this device, you must log in. Grant FortiClient iOS permission to use your information.

To add user details manually:

- 1. Tap Settings at the bottom of the screen.
- 2. Tap User Profile.



3. Tap User Input.



4. Tap to edit the photo, name, email, and phone number as desired.



	· ·	
Initial	contial	iration
пппа	configu	панон

5. Tap Save.

Enterprise mobility management

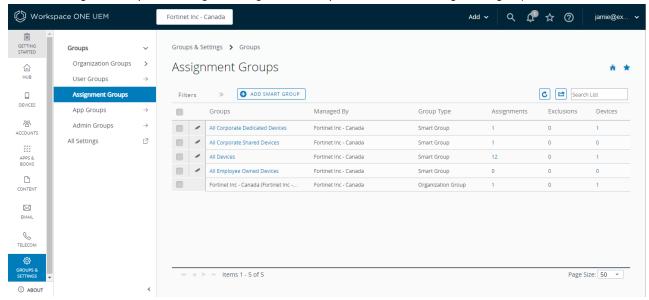
FortiClient iOS supports integration with enterprise mobility management software. Integration with enterprise mobility management software allows FortiClient iOS endpoints to connect to EMS.

Configuring AirWatch integration

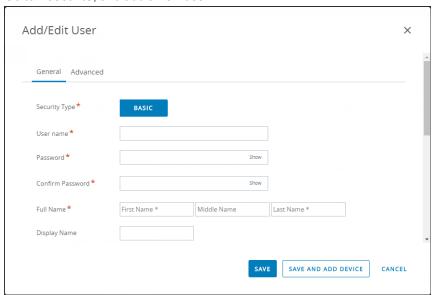
AirWatch integration allows FortiClient iOS endpoints to connect to EMS.

To configure integration between AirWatch and FortiClient iOS:

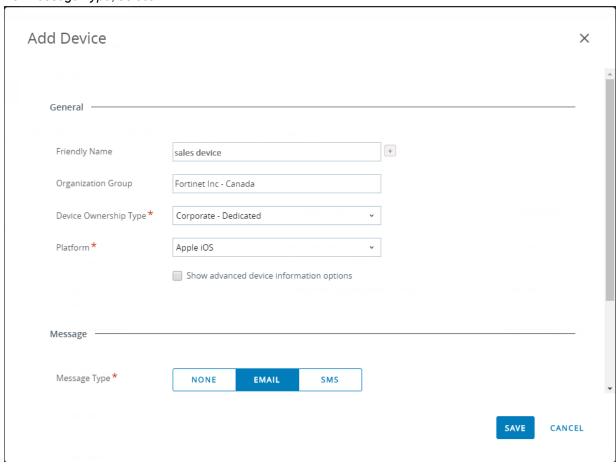
1. In AirWatch, go to Groups & Settings > Assignment Groups. Create a new assignment group.



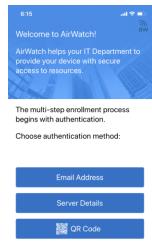
2. Go to Accounts, and add a new user.



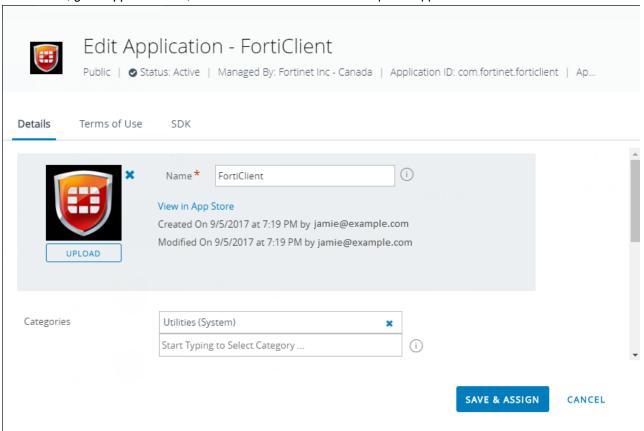
- **3.** Add a new device for the user:
 - a. From the Device Ownership Type dropdown list, select Corporate Dedicated.
 - **b.** From the *Platform* dropdown list, select *Apple iOS*.
 - c. For Message Type, select EMAIL.



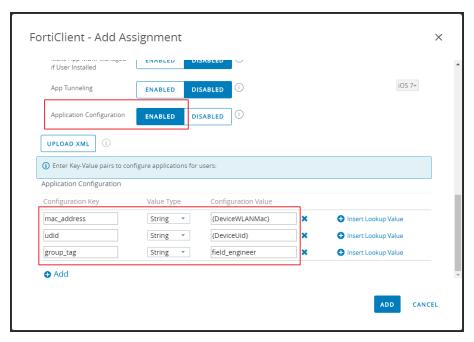
- d. Save. This sends an AirWatch device activation email to the user.
- 4. The user installs AirWatch agent on the device and scans the QR code in the activation email to enroll the device.



5. In AirWatch, go to Apps & Books, and add FortiClient iOS from the public app store.

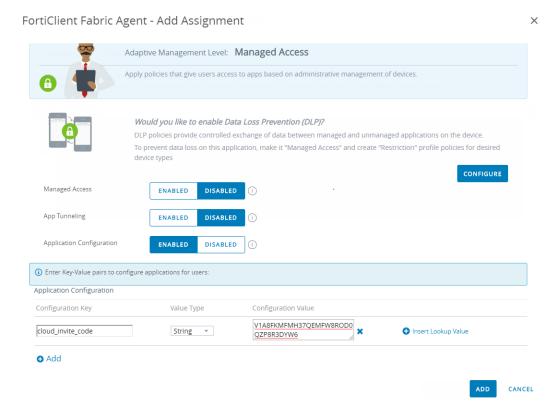


6. When adding an assignment, scroll to the bottom and enable *Application Configuration*. Optionally, you can add key-value pairs as shown.



This enables FortiClient iOS to read the MAC address and UDID from the iOS device. FortiClient sends this information to EMS.

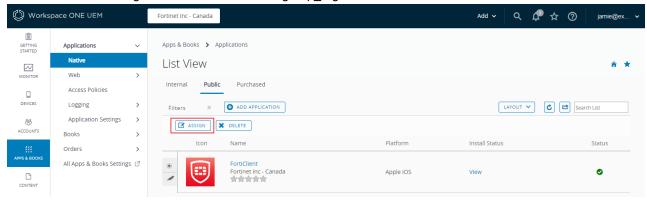
The following shows the configuration for a FortiClient iOS device that will connect Telemetry to FortiClient Cloud:



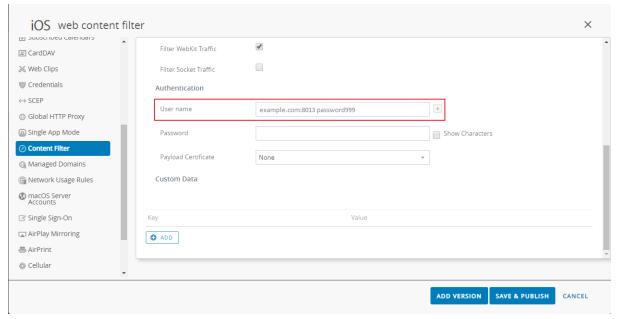
Supported keys include the following:

Key	Description
mac_address	The iOS device's MAC address.
udid	The iOS device's UDID.
group_tag	This value is used as a group tag for configuration in EMS. In the example below, the string "field_engineer" is used as a group tag, which is used when FortiClient iOS initially connects to EMS. See <i>Group assignment rules</i> in the <i>FortiClient EMS Administration Guide</i> .
cloud_invite_code	This value is used for connecting FortiClient iOS to FortiClient Cloud. Enter the invite code received from FortiClient Cloud.

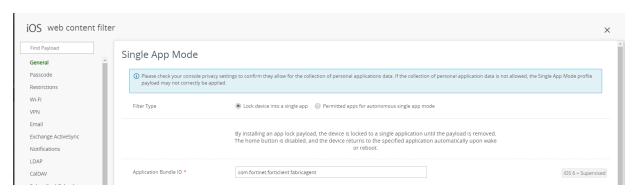
7. You can add more assignments and use different group tag values.



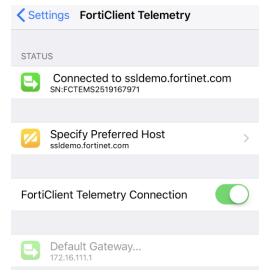
- 8. Go to Devices, and add a profile:
 - a. Go to the Content Filter section. In the User name field, enter the EMS URL.



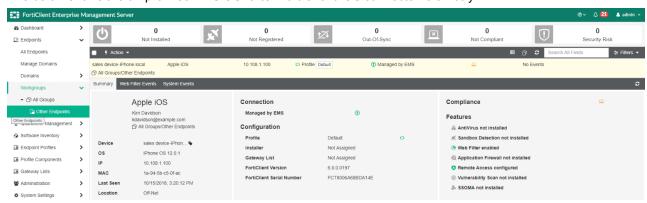
b. Go to *Single App Mode*, and configure as shown below to enable single app mode. This makes FortiClient iOS run.



- c. Assign the profile to the device.
- **9.** When FortiClient starts on the device, it automatically connects to on-premise EMS or FortiClient Cloud, depending on the configuration. Once FortiClient connects to EMS, disable single app mode for the device. Keep the EMS URL in the *Content Filter* section.



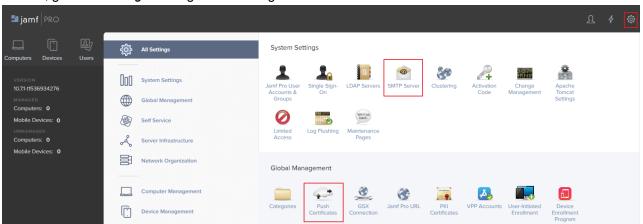
The below shows the on-premise EMS GUI after FortiClient iOS connects Telemetry.



Configuring Jamf integration

To configure integration between Jamf and FortiClient iOS:

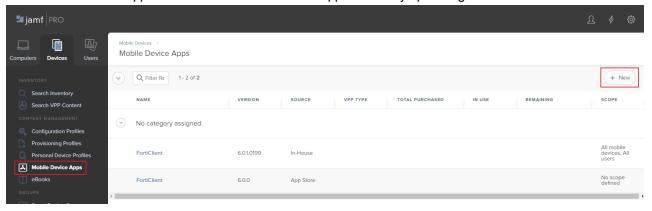
1. In Jamf, go to All Settings. Configure the settings in SMTP Server and Push Certificates.



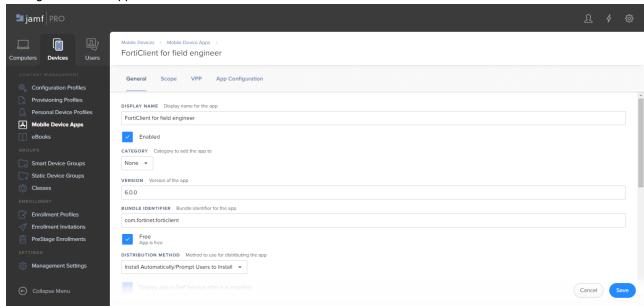
2. Go to Global Management, and enable User-Initiated Enrollment.



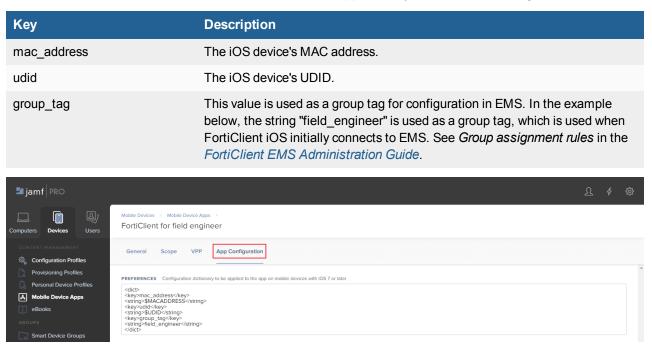
3. Go to Mobile Device Apps and add FortiClient from the App Store or by uploading it.



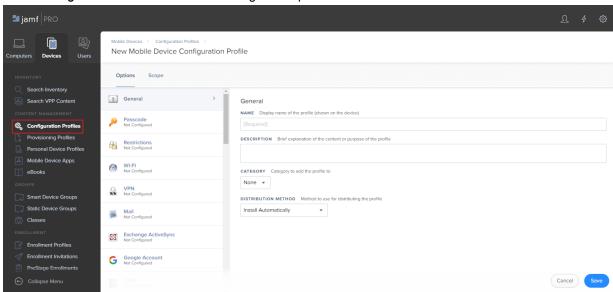
4. Configure how the app is installed.



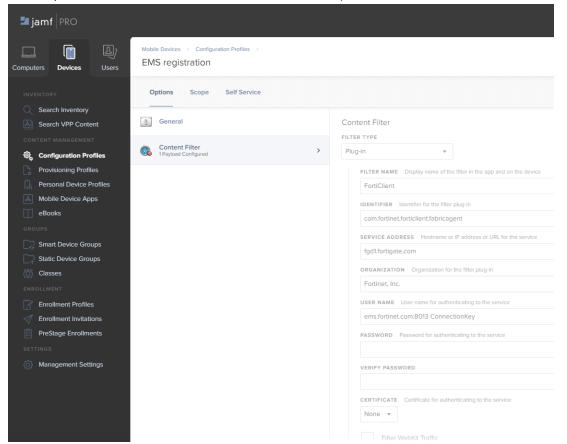
5. Add *App Configuration* for FortiClient iOS. This enables FortiClient iOS to read the MAC address and UDID from the iOS device. FortiClient sends this information to EMS. Supported keys include the following:



- 6. Configure a configuration profile:
 - a. Go to Configuration Profiles and add a configuration profile.

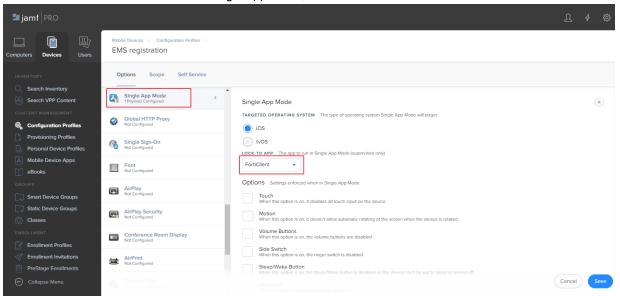


b. Under Options, select Content Filter. Add a content filter to point to the desired EMS.



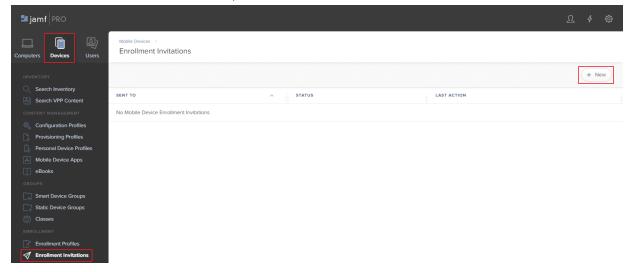
c. Enable Single App Mode for FortiClient. Single app mode launches the FortiClient app and connects it to

EMS. If FortiClient is not launched in single app mode, it does not connect to EMS.

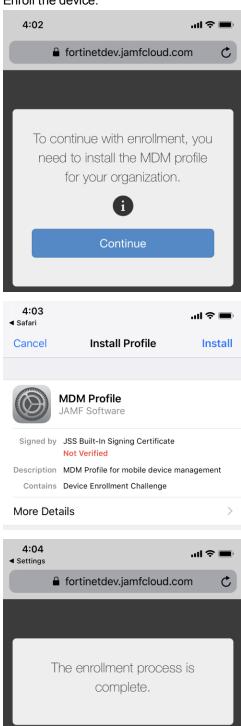


7. Enroll the device:

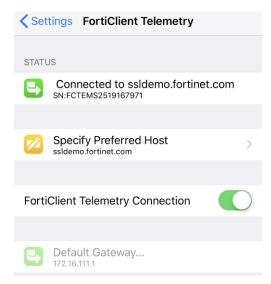
a. Go to Devices > Enrollment Invitations, then send an enrollment invitation to the device.



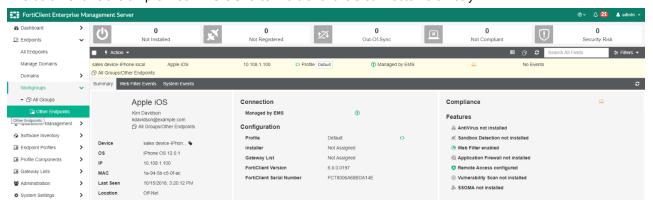
b. Enroll the device.



8. When the device is enrolled, FortiClient iOS automatically connects to on-premise EMS or FortiClient Cloud, depending on the configuration. Once FortiClient iOS is connected to EMS, disable single app mode for the device. Keep the EMS URL in the *Content Filter* section.



The below shows the on-premise EMS GUI after FortiClient iOS connects Telemetry.



Configuring Microsoft Intune integration

Intune integration allows FortiClient iOS endpoints to connect to EMS. FortiClient iOS 6.2.2 and later versions support integration with Intune.

To configure Microsoft Intune integration:

- 1. Add FortiClient iOS to Microsoft Intune.
- 2. Add the default instance for iOS using App Config. Supported App Config keys include the following:

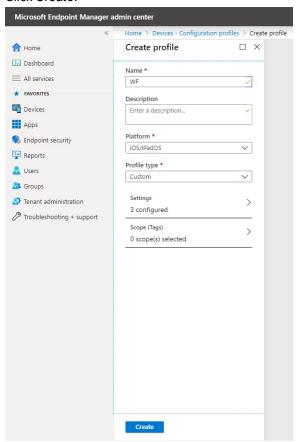
Key	Description
mac_address	iOS device's MAC address.
udid	iOS device's UDID.

Key	Description
group_tag	This value is used as a group tag for configuration in EMS. For example, you can use the string "field_engineer" as a group tag, which is used when FortiClient iOS initially connects to EMS. See <i>Group assignment rules</i> .
cloud_invite_code	This value is used for connecting FortiClient iOS to FortiClient Cloud. Enter the invite code received from FortiClient Cloud.
user_name	FortiClient iOS username.
ems_server	EMS IP address or hostname.
ems_port	Port number for FortiClient iOS to connect Telemetry to EMS. By default, this is 8013.
ems_key	FortiClient Telemetry connection key. The EMS administrator may require FortiClient iOS to provide this key during connection.

3. To enable Web Filter:

- a. Log in to Microsoft Endpoint Manager admin center.
- **b.** Go to Devices Configuration profiles.
- c. Click Create profile.
- **d.** Configure the profile:
 - i. From the *Platform* dropdown list, select *iOS/iPadOS*.
 - ii. From the *Profile type* dropdown list, select *Custom*.
 - iii. From the Custom configuration profile name dropdown list, select the desired profile.
 - **iv.** In the *Configuration profile file* field, select the Web Filter Mobileconfig profile that you created in Creating a Mobileconfig profile on page 9. Click *OK*.

e. Click Create.



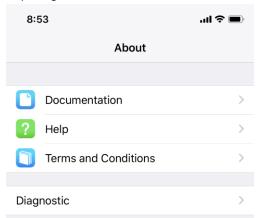
- **f.** Go to *Assignments*, then select the desired groups/users/devices to enable Web Filter for.
- **g.** After enrolling the iOS device to the Intune portal, ensure that the device receives the Web Filter Mobileconfig profile:
 - i. On the device, go to Settings > General > Device Management.
 - ii. In the management profile, go to Restrictions.
 - iii. Verify that the *Plug-In Bundle ID* field contains the following URI: com.fortinet.forticlient.fabricagent.

Logs

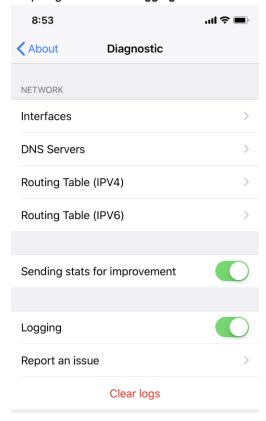
You can email FortiClient iOS logs to Fortinet.

To email logs to Fortinet:

- 1. Tap About.
- 2. Tap Diagnostic.



3. Swipe right to enable *Logging*.



4. Tap Email Logs.

Change log

Date	Change Description
2019-09-23	Initial release.
2019-11-06	Added Configuring Microsoft Intune integration on page 30.
2019-12-05	Updated Creating a Mobileconfig profile on page 9.
2019-12-24	Updated for 6.2.3. Added To install a certificate received via email: on page 8.
2020-03-03	Updated To configure Microsoft Intune integration: on page 30.





current version of the publication shall be applicable.

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