

Add Profile


What

Profiles allow you to control settings, features, and capabilities for Apple devices; iOS, macOS, iPadOS, tvOS

When/Why

Devices may need profiles for initial configuration (like to allow them to join a network), in reaction to a request (like please disable the camera on the devices), or to configure settings at anytime.

How

Selecting the plus () in the top right will open a the profile editor for a new profile.



Basic Profile Properties

Every configuration profile has a few required properties, regardless of the profile type. Every time we create a profile we must specify these basic properties before we can save the profile. At minimum, we must set a profile name and add at least one payload (configuration) to the profile.

How

The three most common elements to set (or change from the default value) are highlighted below:

In order, those elements are:

- Name: Must be unique, should be descriptive, and can not be left blank
- Security: Specifies when this profile can be removed by the user
- Installation scope: Defines whether the profile installs for the system, or for the user of the device

The highlighted warning above is reminding us that we have to add at least one payload to the profile before we can save it.

Navigating an Apple Profile

Configuration profiles aren't hard. In fact they are quite simple generally. Finding the right setting can be bothersome though, so FileWave provides some user interface options to make this easier. We'll use filtering and search options in the profile editor to help us narrow down our search for payload items.

How

Let's assume that we want to set the wallpaper for an iOS device. We can narrow down the options first by specifying the platform for our setting in the upper left (iOS in this case):

FileWave Admin

Model Number: 77 Search for Devices TonyK

Frog Hill Wi-Fi Config

Search profile ...

Cancel Save

The profile must contain one or more payload categories

All platforms

All platforms

macOS

iOS

tvOS

Not configured

AD Certificate Not configured

APN Not configured

AirPlay Mirroring Not configured

AirPlay Security Not configured

AirPrint Not configured

Calendar Not configured

Cellular Not configured

Certificate Transparency Not configured

Certificates Not configured

Command Policy Not configured

Conference Room Display Not configured

Contacts Not configured

Content Caching Not configured

General

Name

Frog Hill Wi-Fi Config

Display name of the profile (shown on device)

Organization

FileWave

Name of the organization for the profile

Description

Brief explanation of the contents or purpose of the profile

Consent

Consent Text Description

Security

Never

Controls when the profile can be removed

Automatically Remove Profile

Never

Settings for automatic profile removal

Installation Scope

System User

Controls the installation scope of the Payload

Once the platform is set, the list of profile categories becomes smaller (but still long). If we know specifically what version of iOS a setting is for, then we can specify that to further refine the list. (Not used frequently)

But, with our filter in place above, we can also search for "wallpaper" to further refine the payloads. Notice that when we enter the search term below, the payloads refine to just two sections, and in that section "wallpaper" is highlighted as well:

FileWave Admin

Model Number: 77 Search for Devices TonyK

Frog Hill Wi-Fi Config

Search profile ...

Cancel Save

wallpaper

IOS

All versions

Configured

Command Policy Configured

Not configured

Restrictions Not configured

Command Policy

Voice Roaming (iPhone devices only)

Don't change Voice Roaming

The voice roaming setting is only available on certain carriers. Disabling voice roaming also disables data roaming.

Data Roaming (iOS devices only)

Don't change Data Roaming

Enabling data roaming also enables voice roaming.

Wallpaper (iOS devices only)

Don't change Wallpaper

Set Wallpaper (supervised devices only). Wallpaper will be reset once a day.

Lock Screen Grace Period (Shared iPad only)

0

This setting defines the number of seconds the screen must be locked before unlock attempts will require the device passcode. The command is valid for Shared iPad only. Any changes to a less restrictive value will not take effect until the user logs out.

Data Roaming (iOS devices only)

Don't change Bluetooth

Enabling data roaming also enables voice roaming.

Remote Desktop (macOS 10.14.4+)

Don't change Remote Desktop

Command to enable or disable Remote Desktop is sent when the profile is deployed.

Disable Remote Desktop when fileset is removed

Refresh Cellular Plan (iOS 13.0+)

http://example.server.com

The carrier's eSIM server URL to query.

Setting Profile Payloads

The intended result of the creation of a configuration profile is always to make some change to configuration of endpoints. What those changes are, and how they are made differs profile by profile.

Profiles tend to fall into two categories:

- Stuff we've done before

- New stuff we haven't touched before

The first is no trouble, because we know what we are doing. For instance, after we have already created a wi-fi config profile for 41 of our 42 locations, the 42nd one isn't going to be too much trouble.

But, what if we have something new to do that we haven't done before? There are two answers to this:

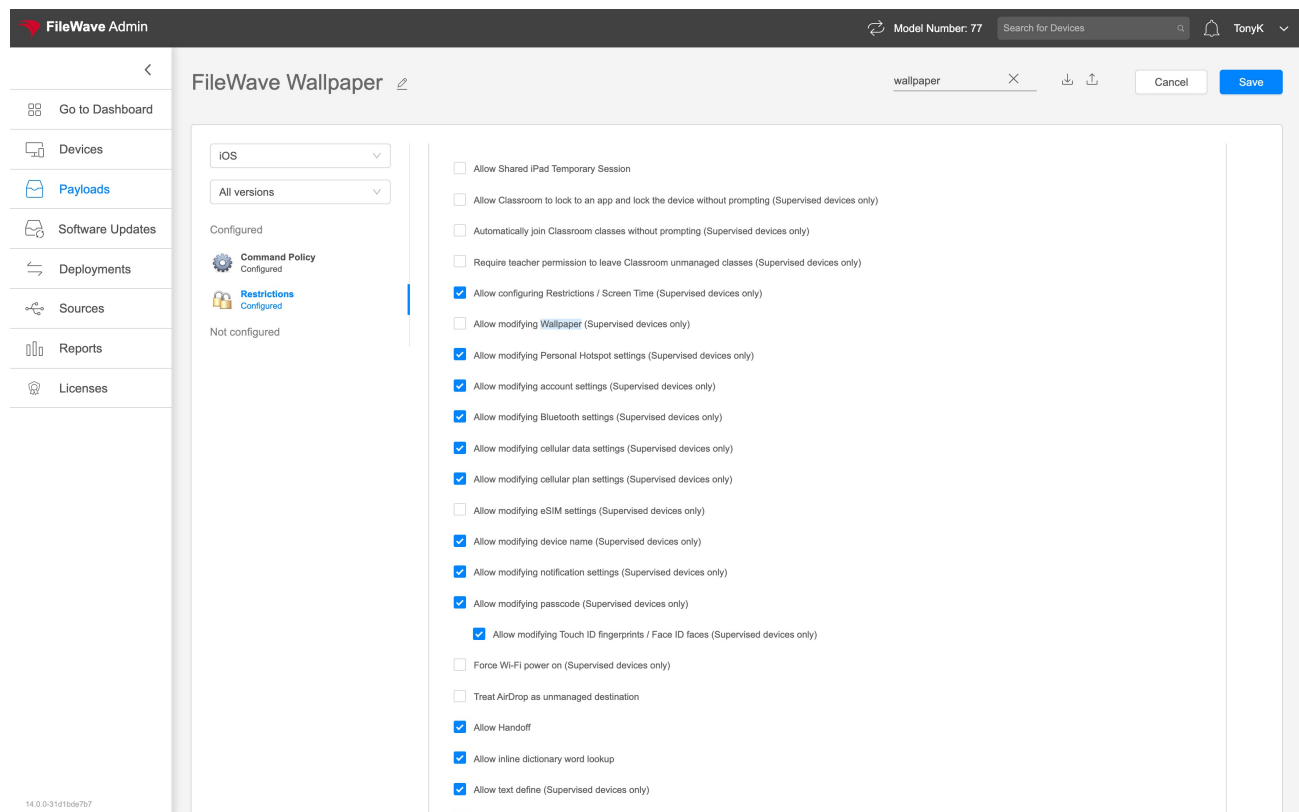
1. Experiment and test (no better teacher than experience with a device in hand)
2. Read the documentation (yes, seriously):
 1. <https://support.apple.com/guide/mdm/welcome/web#/mdmf0ec4d860>
 2. FileWave (nor any other MDM provider) defines what the elements in profiles are or what they mean. The above reference explains them all
 3. For third-party settings, reference the Vendor's documentation

How

Defining MDM elements is out of scope for our Knowledge Base, but we can give best-practice guidance on building and testing profiles:

- Build profiles (especially restrictions) as small as possible...do not intermix settings if at all possible
 - This prevents having to split profiles later when you have the inevitable exceptions to deal with
- Test, test, and then test again against a device in your hands
- Never create and deploy a profile to production without testing
- Be especially careful with edits to already assigned profiles (especially wi-fi or anything else where a mistake could cause catastrophic consequences)

Here is a simple example of setting a Wallpaper and preventing it from being changed (notice two payloads, but related):



🔄Revision #2

★Created 10 July 2023 22:44:58 by Josh Levitsky

✎Updated 24 July 2023 14:01:31 by Josh Levitsky