

# FileWave Network Imaging / IVS Overview

## Network Imaging

Network imaging is supported over ethernet using the FileWave Imaging Virtual Server (IVS). It uses the PXEboot system for Windows computers.

For a complete guide on how to fully set up a FileWave Imaging Virtual Server (IVS):

- [Network Imaging Guide](#)

For more information about commands you can run on the IVS check out this article:

- [Imaging Control Commands \(IVS\)](#)

The imaging process has been greatly improved since FileWave 9. A new client process (imaging-fwclnd) runs on the IVS, reporting back to the FileWave Server and Admin. Images are now Filesets and these Filesets can be delivered to the IVS directly from the Server or through a Booster. The imaging configuration is completely integrated into FileWave Admin.

As FileWave Imaging is unicast you can image on multiple subnets by adding an IVS on any desired subnet you like, at no additional cost. Alternatively, you can also have more centralized imaging servers and just have IPhelpers to help point the traffic across subnets.

The last option is to change options 66 and 67 in DHCP but keep in mind if you do this you will only be able to image Windows and not macOS. You will also only be allowed to image the boot-mode you select for option 67.

- Option 66 - IP of the IVS
- Option 67 -
  - UEFI - grub-custom.efi
  - Legacy - pxelinux.0

## How does it work?

The process for sending out an image with FileWave follows the same flow as if you would send out any other Fileset in FileWave. Before anything else you need to be sure you have the device(s) you would like to pull an image from or push an image out to in FileWave. So either having the device already enrolled and checking in or as a placeholder in FileWave. Either way, the device has to be in FileWave with a Serial number for macOS or a MAC Address for Windows. Then the image Fileset is assigned to a device so that an association is made, you update the model, the IVS checks in to see new updates (just as a client would check in for new files), and then you PXE/Netboot.

When the devices are imaged FileWave names them automatically based on the name provided by the FileWave Client in FileWave. For Windows devices we also support driver injections so that you can have one base image sent out to different models with the drivers pushed out along side.

\*Important Note: If there are no associations between a device and an image in FileWave, and propagated to the IVS, then when that device PXE/Netboot's it will see no image assigned to it and then boot straight into the OS.

## Upgrading an IVS

Instructions on how to upgrade a FileWave Imaging Virtual Server can be found on the downloads page for the IVS: [Imaging Server downloads page](#)

## Process to image a Windows machine

For a complete walk through on how to create/deploy Windows images with FileWave and how to create/send out drivers please follow these guides:

- [Windows Network Imaging - PXE](#)
- [Creating Windows Driver Filesets](#)

Things to consider when imaging Windows devices with FileWave:

- Know whether your devices are Legacy or UEFI and make separate images accordingly
- At this time we do not support secure boot
- Your image can be smaller than the target drive but not larger
- Make sure the FileWave Custom Client is installed on the machine before the image is captured: [Custom MSI](#)

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