



## **Cisco FindIT Network Manager & Probe Installation Guide for VMWare, Version 2.x**

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## CHAPTER 1

# Cisco FindIT Network Management Overview

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This chapter contains the following sections:

- [About Cisco FindIT Network Management](#) , on page 1
- [Audience](#), on page 1
- [Related Documents](#), on page 2
- [Terminology](#), on page 2
- [System Requirements for Cisco FindIT Network Manager](#), on page 3
- [System Requirements for Cisco FindIT Network Probe](#), on page 4

## About Cisco FindIT Network Management

Cisco FindIT Network Management provides tools that help you monitor and manage your Cisco 100 to 500 Series network. FindIT Network Management automatically discovers your network, and allows you to configure and monitor all supported Cisco 100 to 500 Series devices such as Cisco switches, routers, and wireless access points. It also notifies you the availability of firmware updates, and about any devices that are no longer under warranty or covered by a support contract.

FindIT Network Manager is a distributed application which is comprised of two separate components or applications: one or more Probes referred to as FindIT Network Probe and a single Manager called FindIT Network Manager.

An instance of FindIT Network Probe is installed at each site in the network, performs network discovery and communicates directly with each Cisco device. A single instance of FindIT Network Manager is installed at a convenient location in the network and each Probe is associated with the Manager. From the Manager interface, you can get a high-level view of the status of all the sites in your network, or concentrate on a single site or device to see information specific to that site or device.

## Audience

This guide is primarily intended for network administrators who are responsible for Cisco FindIT Network Management software installation and management.

## Related Documents

The documentation for Cisco FindIT Network Manager & Probe is comprised of a number of separate guides. These include:

- **Installation Guides**

The following table lists all the installation guides of FindIT software that can be deployed on different platforms. Refer the path provided in the location column for details:

Supported Platforms	Location
VMWare vSphere, Workstation and Fusion	This document
Ubuntu Linux (Manager and Probe) and Raspbian Linux (Probe only)	<a href="#">Cisco FindIT Network Manager &amp; Probe Installation Guide for Linux</a>
Amazon Web Services	<a href="#">Cisco FindIT Network Manager &amp; Probe Installation Guide for Amazon Web Services</a>
Oracle VirtualBox	<a href="#">Cisco FindIT Network Manager &amp; Probe Installation Guide for Oracle VirtualBox</a>
Microsoft Hyper-V	<a href="#">Cisco FindIT Network Manager &amp; Probe Installation Guide for Microsoft Hyper-V</a>

- **Quick Start Guide**—This provides details on performing the initial setup for FindIT Network Manager & Probe using the most commonly selected options. Refer to [Cisco FindIT Network Manager and Probe Quick Start Guide](#).
- **Administration Guide**—This is a reference guide that provides details about all the features and options provided by the software and how they may be configured and used. Refer to [Cisco FindIT Network Manager and Probe Administration Guide](#).

## Terminology

Term	Description
Hyper-V	A virtualization platform provided by Microsoft Corporation.
Open Virtualization Format (OVF)	A TAR archive containing one or more virtual machines in OVF format. It is a platform-independent method of packaging and distributing Virtual Machines (VMs).



Term	Description
Open Virtual Appliance or Application (OVA) file	Package that contains the following files used to describe a virtual machine and saved in a single archive using .TAR packaging: <ul style="list-style-type: none"> <li>• Descriptor file (.OVF)</li> <li>• Manifest (.MF) and certificate files (optional)</li> </ul>
Raspberry Pi	A very low cost, single board computer developed by the Raspberry Pi Foundation. For more information, see <a href="https://www.raspberrypi.org/">https://www.raspberrypi.org/</a> .
Raspbian	A Debian-based linux distribution optimized for the Raspberry Pi. For more information, see <a href="https://www.raspbian.org/">https://www.raspbian.org/</a> .
VirtualBox	A virtualization platform provided by Oracle Corporation.
Virtual Hard Disk (VHD)	Virtual hard disk is a disk image file format for storing the complete contents of a hard drive.
Virtual Machine (VM)	A virtual computing environment in which a guest operating system and associated application software can run. Multiple VMs can operate on the same host system concurrently.
<ul style="list-style-type: none"> <li>• VMWare ESXi</li> <li>• VMWare Fusion</li> <li>• vSphere Server</li> <li>• VMWare Workstation</li> </ul>	A virtualization platform provided by VMWare Inc.
vSphere Client	User interface that enables users to connect remotely to vCenter Server or ESXi from any Windows PC. You can use the primary interface for vSphere Client to create, manage, and monitor VMs, their resources, and the hosts. It also provides console access to VMs.

## System Requirements for Cisco FindIT Network Manager

Cisco FindIT Network Manager is distributed as a virtual machine image in compressed OVF format suitable for import into a hypervisor from the VMWare product family. The VMWare hypervisors supported by FindIT Network Manager include:

- ESXi version 5.5 or above
- Fusion version 7 or above
- Workstation version 12 or above

The following table lists the compute resources required for FindIT Network Manager based on the number of devices under management:

Table 1: FindIT Network Manager Compute Resource Requirements

#Device Supported	# vCPU	RAM	Disk Space
Up to 300	2	4GB	60GB
Up to 2500	12	24GB	60GB

FindIT Network Manager is administered through a web user interface. To use this interface, your browser must be one of the following:

- Apple Safari version 11 (macOS only) or above
- Google Chrome version 72 (Recommended) or above
- Microsoft Edge version 42 or above
- Mozilla Firefox version 65 or above



**Note** When using Safari, check that the certificate from FindIT Network Probe is set to **Always Trust**. Otherwise, certain functions that depend on the use of secure websockets are expected to fail. This is a limitation of the Safari web browser.

Your network must allow all instances of FindIT Network Probe to establish TCP connectivity with FindIT Network Manager. For more details on the ports and protocols used, see *Frequently Asked Questions* in the [Cisco FindIT Network Manager and Probe Quick Start Guide](#).

## System Requirements for Cisco FindIT Network Probe

Cisco FindIT Network Probe is distributed as a virtual machine image in compressed OVF format suitable for import into a hypervisor from the VMWare product family. The VMWare hypervisors supported by FindIT Network Manager include:

- ESXi version 5.5 or above
- Fusion version 7 or above
- Workstation version 12 or above

The compute resources required for FindIT Network Probe are as follows:

- CPU: 1x 64-bit Intel architecture
- Memory: 512MB
- Disk space: 5GB

FindIT Network Probe is administered through a web user interface. To use this interface, your browser must be one of the following:

- Apple Safari version 11 (macOS only) or above
- Google Chrome version 72 (Recommended) or above

- Microsoft Edge version 42 or above
- Mozilla Firefox version 65 or above

FindIT Network Probe monitors and accesses the network devices that meet the following requirements:

- Must be in the same subnet as the PC that is running the FindIT Network Probe, or be directly attached to a managed device and reachable via TCP/IP
- Must be a Cisco 100 to 500 Series device with the Bonjour service enabled





## CHAPTER 2

# Installing Cisco FindIT Network Manager

This chapter contains the following sections:

- [Obtaining and Verifying FindIT Network Manager Software, on page 7](#)
- [Installing Cisco FindIT Network Manager with VMWare, on page 7](#)

## Obtaining and Verifying FindIT Network Manager Software

Cisco FindIT Network Manager is distributed as a virtual machine image packaged in the Distributed Management Task Force's **Open Virtualization Format (OVF)**, suitable for import into a hypervisor from the VMWare product family. The virtual machine image also contains the FindIT Network Probe application, allowing a single VM to act as both Manager and Probe for a particular site. To obtain the virtual machine image, navigate to <https://www.cisco.com/go/findit-sw>.

The virtual machine image has been cryptographically signed by Cisco to ensure that the software has not been tampered with. Open Virtualization Format images have a well-defined mechanism for cryptographic signing, and the majority of hypervisors will validate the signature as part of the import process. If the signature is not valid, an error will be generated and the import will fail.

To manually validate the signature before importing, you can use a tool such as the **VMWare OVF Tool**. The OVF Tool is available as a free download from the VMWare website. More information including a download link can be found at <https://www.vmware.com/support/developer/ovf/>. To validate the image with the **OVF Tool**, use the command `ovftool image_filename`. The tool will generate an error if the signature is not valid.

## Installing Cisco FindIT Network Manager with VMWare

Once you have obtained and verified the FindIT Network Manager software, you may install it using the following steps:

1. Ensure you have a working VMWare virtualization environment available to host the virtual machine. For assistance in setting up your environment, refer the VMWare documentation for your product. The following links may provide a useful starting point:
  - For VMWare Workstation—<https://docs.vmware.com/en/VMware-Workstation-Pro/index.html>
  - For VMWare Fusion—<https://docs.vmware.com/en/VMware-Fusion/index.html>
  - For VMWare vSphere—<https://docs.vmware.com/en/VMware-vSphere/index.html>

2. Refer to the VMWare documentation for your product to determine the procedure for importing a virtual machine. For example, if you are using VMWare Fusion, you would open the **VMWare Fusion** application and select **File > Import...** and follow the prompts.
3. Select the downloaded ova file from your local directory and continue the import process.
4. Check that the network interface on the newly created virtual machine is connected and bridged to the correct physical interface on the host machine.
5. Start the virtual machine.

The virtual machine will boot and automatically start the FindIT Network Manager application. Refer to the [Cisco FindIT Network Manager and Probe Quick Start Guide](#) for details on how to access the application and perform the initial setup.



## CHAPTER 3

# Installing Cisco FindIT Network Probe

An instance of FindIT Network Probe is required for each site in your network that you want to manage. The Probe discovers the network, collects performance and configuration data from the discovered devices, and reports that information back to the Manager.

This chapter contains the following sections:

- [Obtaining and Verifying FindIT Network Probe Software, on page 9](#)
- [Installing Cisco FindIT Network Probe with VMWare, on page 9](#)

## Obtaining and Verifying FindIT Network Probe Software

FindIT Network Probe is distributed as a virtual machine image packaged in the Distributed Management Task Force's **Open Virtualization Format (OVF)**, suitable for import into a hypervisor from the VMWare product family. The Probe is also included as part of the FindIT Network Manager virtual machine image, allowing a single VM to act as both Manager and Probe for a particular site. To obtain the FindIT Network Probe software, navigate to <https://www.cisco.com/go/findit-sw>.

The virtual machine image has been cryptographically signed by Cisco to ensure that the software has not been tampered with. Open Virtualization Format images have a well-defined mechanism for cryptographic signing, and the majority of hypervisors will validate the signature as part of the import process. If the signature is not valid, an error will be generated and the import will fail.

To manually validate the signature before importing, you can use a tool such as the VMWare OVF Tool. To validate the image with the OVF Tool, use the command `ovftool image_filename`. The tool will generate an error if the signature is not valid.

## Installing Cisco FindIT Network Probe with VMWare

Once you have obtained and verified the FindIT Network Probe software, you may install it using the following steps:

1. Ensure you have a working VMWare virtualization environment available to host the virtual machine. For assistance in setting up your environment, refer the VMWare documentation for your product. The following links may provide a useful starting point:
  - For VMWare Workstation—<https://docs.vmware.com/en/VMware-Workstation-Pro/index.html>
  - For VMWare Fusion—<https://docs.vmware.com/en/VMware-Fusion/index.html>

- For VMWare vSphere—<https://docs.vmware.com/en/VMware-vSphere/index.html>
2. Refer to the VMWare documentation for your product to determine the procedure for importing a virtual machine. For example, if you are using VMWare Fusion, you would open the VMWare Fusion application and select **File > Import...** and follow the prompts.
  3. Select the downloaded ova file from your local directory and continue the import process.
  4. Check that the network interface on the newly created virtual machine is connected and bridged to the correct physical interface on the host machine.

The network interface of the FindIT Network Probe should be connected to a VLAN containing the management interfaces for at least one of the network devices. If the Probe is not directly connected to at least one network device, it may be unable to fully discover the network.

5. Start the virtual machine.

The virtual machine will boot and automatically start the FindIT Network Manager application. Refer to the *Cisco FindIT Network Manager and Probe Quick Start Guide* for details on how to access the application and perform the initial setup.