



Cisco FindIT Network Manager & Probe Installation Guide for Linux, Version 2.x

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CHAPTER 1

Cisco FindIT Network Management Overview

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
Ubuntu Linux (Manager and Probe) and Raspbian Linux (Probe only)	This document
Amazon Web Services	Cisco FindIT Network Manager & Probe Installation Guide for Amazon Web Services
Oracle VirtualBox	Cisco FindIT Network Manager & Probe Installation Guide for Oracle VirtualBox
Microsoft Hyper-V	Cisco FindIT Network Manager & Probe Installation Guide for Microsoft Hyper-V
VMWare vSphere, Workstation and Fusion	Cisco FindIT Network Manager & Probe Installation Guide for VMWare

- **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"> • Descriptor file (.OVF) • Manifest (.MF) and certificate files (optional)
Raspberry Pi	A very low cost, single board computer developed by the Raspberry Pi Foundation. For more information, see https://www.raspberrypi.org/ .
Raspbian	A Debian-based linux distribution optimized for the Raspberry Pi. For more information, see https://www.raspbian.org/ .
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"> • VMWare ESXi • VMWare Fusion • vSphere Server • VMWare Workstation 	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 an installer for use with the Ubuntu Linux distribution. To run FindIT Network Manager under Ubuntu Linux, your environment must be running Ubuntu version 16.04.x (Xenial Xerus) on a 64-bit Intel architecture platform. Cisco recommends using the Ubuntu server distribution and only installing packages required by FindIT Network Manager.

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, and as installers for use with the following operating systems:

- Ubuntu Linux distribution running on a PC
- Raspbian Linux distribution running on a Raspberry Pi

To run FindIT Network Manager under Ubuntu Linux operating system, your environment must meet the following requirements:

- Ubuntu version 16.04.x (Xenial Xerus)
- CPU: 1x 64-bit Intel architecture
- Memory: 512MB
- Disk space: 5GB

To run the FindIT Network Probe on a Raspberry Pi, your environment must meet the following requirements:

- Hardware: Raspberry Pi 3 Model B/B+ or Raspberry Pi 4 Model B
- Disk space: 5GB

- OS: Raspbian Stretch or Raspbian Buster

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 Ubuntu Linux, on page 7](#)
- [Removing Cisco FindIT Network Manager from Ubuntu Linux, on page 8](#)

Obtaining and Verifying FindIT Network Manager Software

Cisco FindIT Network Manager is distributed as an installer for use with the Ubuntu Linux distribution. To obtain the Linux installer, navigate to <https://www.cisco.com/go/findit-sw>.

The Linux installer has been signed by Cisco to ensure that the software has not been tampered with. The Linux installer automatically verifies the cryptographic signature of the package during execution and prior to installation. If the signature verification fails, an error is reported and the installation process aborts. Signature verification is also performed if an upgrade is being performed automatically by the FindIT Network Manager application.

Installing Cisco FindIT Network Manager with Ubuntu Linux

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

1. Ensure you have a working Ubuntu Linux environment available to host the application. For assistance in setting up Ubuntu Linux, consult the Ubuntu Linux documentation (<https://help.ubuntu.com/>). The tutorial at <https://tutorials.ubuntu.com/tutorial/tutorial-install-ubuntu-server-1604> may provide a useful starting point.
2. Copy the installer file to the Ubuntu Linux PC.
3. Execute the installer using the command `sh <filename of installer>`. For example, `sh finditmanager-1.1.0-ubuntu-xenial-amd64.sh`. If necessary, enter your password at the `sudo` prompt.

After the installation process completes, the FindIT Network Manager application will start automatically. Refer to the [Cisco FindIT Network Manager and Probe Quick Start Guide](#) for details of how to access the application and perform initial setup.

Removing Cisco FindIT Network Manager from Ubuntu Linux

To remove FindIT Network Manager and all its dependencies from an Ubuntu system but retain the Manager's configuration, do the following:

1. Log on to the operating system using either the console or SSH.
2. Enter the command `sudo apt-get autoremove findit-manager` and follow the prompts.

To completely remove FindIT Network Manager, its dependencies and configuration from an Ubuntu system, do the following:

1. Log on to the operating system using either the console or SSH.
2. Enter the command `sudo apt-get --purge autoremove findit-manager` and follow the prompts.



CHAPTER 3

Installing 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 FindIT Network Probe with Ubuntu Linux, on page 9](#)
- [Installing on a Raspberry Pi, on page 10](#)
- [Removing FindIT Network Probe from Ubuntu or Raspbian, on page 10](#)

Obtaining and Verifying FindIT Network Probe Software

FindIT Network Probe is provided as a virtual machine image, and as installers for use with the following operating systems:

- Ubuntu Linux distribution running on a PC
- Raspbian Linux distribution running on a Raspberry Pi

To obtain the Linux installers, navigate to <https://www.cisco.com/go/findit-sw>.

The Linux installers have been signed by Cisco to ensure that the software has not been tampered with. The Linux installer automatically verifies the cryptographic signature of the package during execution and prior to installation. If the signature verification fails, an error is reported and the installation process aborts. Signature verification is also performed if an upgrade is being performed automatically by the FindIT Network Probe application.

Installing FindIT Network Probe with Ubuntu Linux

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

1. Ensure you have a working Ubuntu Linux environment available to host the application. For assistance in setting up Ubuntu Linux, consult the Ubuntu Linux documentation (<https://help.ubuntu.com/>). The tutorial at <https://tutorials.ubuntu.com/tutorial/tutorial-install-ubuntu-server-1604> may provide a useful starting point.
2. Copy the installer file to the Ubuntu Linux PC.

The network interface of the Linux system 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.

3. Execute the installer using the command `sh <filename of installer>`. For example `sh finditprobe-1.1.0-ubuntu-xenial-amd64.sh`. If necessary, enter your password at the `sudo` prompt.

After the installation process completes, the FindIT Network Probe application will start automatically. 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.

Installing on a Raspberry Pi

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

1. Download the Raspbian Stretch OS image available at <https://www.raspberrypi.org/downloads/raspbian/>. The 'lite' image is recommended to maximize the performance of the Probe.
2. Prepare the Raspberry Pi using the installation guide at <https://www.raspberrypi.org/documentation/installation/installing-images/README.md>.
3. Copy the FindIT Network Probe Raspbian Linux installer file to the Raspberry Pi.

The network interface of the Raspberry Pi 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.

4. Execute the installer using the command `sh <filename of installer>`. For example, `sh finditprobe-1.1.1-raspbian-stretch-armhf.sh`. If necessary, enter your password at the `sudo` prompt.

After the installation process completes, the FindIT Network Probe application will start automatically. Refer to the [Cisco FindIT Network Manager and Probe Quick Start Guide](#) for details of how to access the application and perform initial setup.

Removing FindIT Network Probe from Ubuntu or Raspbian

To remove FindIT Network Probe and all its dependencies from an Ubuntu or Raspbian system and retain the Probe's configuration, do the following:

1. Log on to the operating system using either the console or SSH.
2. Enter the command `sudo apt-get autoremove findit-probe` and follow the prompts

To completely remove FindIT Network Probe, its dependencies and configuration from an Ubuntu or Raspbian system, do the following:

1. Log on to the operating system using either the console or SSH.
2. Enter the command `sudo apt-get --purge autoremove findit-probe` and follow the prompts.