



## **Cisco Business Dashboard Installation Guide for Microsoft Azure**

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## CONTENTS

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### CHAPTER 1

#### **Cisco Business Dashboard Overview 1**

About Cisco Business Dashboard 1

Device Management Mode 2

Audience 2

Related Documents 2

Terminology 3

System Requirements for Cisco Business Dashboard 4

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### CHAPTER 2

#### **Installing Cisco Business Dashboard with Microsoft Azure 7**





# CHAPTER 1

## Cisco Business Dashboard Overview

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This chapter contains the following sections:

- [About Cisco Business Dashboard](#) , on page 1
- [Device Management Mode](#), on page 2
- [Audience](#), on page 2
- [Related Documents](#), on page 2
- [Terminology](#), on page 3
- [System Requirements for Cisco Business Dashboard](#), on page 4

### About Cisco Business Dashboard

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

You can view the application by clicking [Request a Demo](#)

Cisco Business Dashboard is a distributed application which is comprised of two separate components or applications as described below:

#### The Dashboard

Cisco Business Dashboard also referred to as *the Dashboard*, is installed at a convenient location in the network. From the Dashboard user 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.

#### The Probe

Cisco Business Dashboard Probe also referred to as *the Probe* is installed at each site in the network and associated with the Dashboard. The probe performs network discovery and communicates directly with each managed device on behalf of the Dashboard.



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**Note** Certain network devices support being directly associated with the Dashboard and managed without a probe being present. When network devices are being managed directly in this way, all management functions are available for the device, but the network discovery process may not be as comprehensive as when a probe is present.

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## Device Management Mode

### Direct Managed

Certain devices can support direct association with the Dashboard and managed without a probe being present in the network.

In a direct managed network, you will need to connect the first device to the Cisco Business Dashboard manually. Then, this device reports information such as CDP, LLDP, and mDNS (aka Bonjour) to Dashboard. This information is used to identify additional devices in the network, Dashboard then connects these devices to itself automatically hence those devices become manageable, and the process repeats until all devices have been discovered. Depending on the size of your network, this process may take tens of minutes. You may optionally have the dashboard explicitly search the IP address ranges to discover network devices, which can be in other VLANs or subnets.

*Direct managed network is recommended if all your devices support direct management.*

### Probe Managed

Probe is installed at each site in the network and associated with the Dashboard. The Probe performs network discovery and communicates directly with each managed device on behalf of the Dashboard.

A software Probe is a probe running in a virtual machine or on a Linux host. A software Probe can generally manage up to 50 network devices. Certain devices include the Probe application embedded in the device firmware. An embedded Probe can manage up to 15 network devices.

*In one network you should only enable one Probe.*

## Audience

This guide is primarily intended for network administrators who are responsible for Cisco Business Dashboard software installation and management.

## Related Documents

The documentation for Cisco Business Dashboard is comprised of a number of separate guides. These include:

### Installation Guides

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



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

**Quick Start Guide**—This provides details on performing the initial setup for Cisco Business Dashboard using the most commonly selected options. Refer to [Cisco Business Dashboard 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 Business Dashboard Administration Guide](#).

**Device Support List**—This list provides details of the devices supported by Cisco Business Dashboard and the features available for each device type. For a list of all the devices supported by Cisco Business Dashboard, refer to [Cisco Business Dashboard - Device Support List](#).

## 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).
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 <b>.TAR</b> 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> .
Raspberry Pi OS	Formally known as Raspbian, the Raspberry Pi OS is a Debian-based linux distribution optimized for the Raspberry Pi. For more information, see <a href="https://www.raspberrypi.org/software/">https://www.raspberrypi.org/software/</a> .

Term	Description
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.
Hypervisor	Also known as a virtual machine monitor or VMM, is software that creates and runs virtual machines (VMs). A hypervisor allows one host computer to support multiple guest VMs by virtually sharing its resources, such as memory and processing.
Amazon Web Services (AWS)	An on-demand cloud computing platform.
Microsoft Azure Active Directory	A cloud-based identity and access management service that provides single sign-on and multi-factor authentication to help protect users from 99.9 percent of cybersecurity attacks.

## System Requirements for Cisco Business Dashboard

Cisco Business Dashboard is available for Microsoft Azure (<https://azuremarketplace.microsoft.com>). To run Cisco Business Dashboard in Azure, you will need an Azure account. The following Azure Virtual Machine sizes are supported:

- Standard\_F2s\_v2 — up to 300 devices under management.
- Standard\_F4s\_v2 — up to 300 devices and integrated with external applications.
- Standard\_F16s\_v2 — up to 3000 devices under management.

Cisco Business Dashboard is administered through a web user interface. To use this interface, your browser must be one of the following:

- Apple Safari (macOS only) — 2 most recent major versions

- Google Chrome — Latest version
- Microsoft Edge — 2 most recent major versions
- Mozilla Firefox — Latest version



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**Note** When using Safari, check that the certificate from Cisco Business Dashboard 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.

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





## CHAPTER 2

# Installing Cisco Business Dashboard with Microsoft Azure

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Cisco Business Dashboard is available for Microsoft Azure through the Azure Marketplace (<https://azuremarketplace.microsoft.com>). Navigate to the Azure Marketplace and search for "Cisco Business Dashboard" to locate the product listing.

With Microsoft Azure, licensing for Cisco Business Dashboard is provided through a Bring Your Own License (BYOL) model, where device licenses are managed using **Cisco Smart Licensing** in exactly the same way that they would be if the Dashboard was deployed on your own hardware. Device licenses may be purchased through your Cisco reseller.

Prior to deploying Cisco Business Dashboard with Azure, you must have an Azure account. For help in getting started with Azure, see <https://azure.microsoft.com/en.us/get-started/>.

To deploy Cisco Business Dashboard from the Azure Marketplace, use the following steps:

1. Navigate to the Azure Marketplace at <https://azuremarketplace.microsoft.com/> and log in to your Azure account.
2. Enter Cisco Business Dashboard into the search box. Select the listing and click the **Get It Now** button.
3. Confirm the plan you are using and click **Continue**.
4. Click **Create** to open the **Create a virtual machine** page with the Cisco Business Dashboard image selected.
5. Fill out the rest of the form, choosing settings that are appropriate for your environment.



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**Note** The username you create here will become the account used to log on to the operating systems for this instance. For other Cisco Business Dashboard deployments, the default username is cisco and that username is used in the Cisco Business Dashboard documentation. If the documentation says to log on to the operating system with username cisco, you should substitute the username you create here instead.

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6. Click through each of the settings pages to customize the virtual machine configuration, or click **Review** + **Create** to accept the defaults and skip to the end of the setup process.
7. Click **Create** to create the virtual machine instance. Once created, the instance may be managed through the Azure portal.

Alternatively, you can deploy Cisco Business Dashboard directly from the Azure portal using the following steps:

1. Log in to the Azure portal at <https://portal.azure.com>.
2. Open the Virtual Machines page and click **Create** to create a new virtual machine.
3. Enter a name for the virtual machine, and in the drop-down menu under the Image click **See all images**.
4. Enter Cisco Business Dashboard into the Marketplace search box, and select the plan from the listings that are displayed.
5. Fill out the rest of the form, choosing settings that are appropriate for your environment.



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**Note** The username you create here will become the account used to log on to the operating systems for this instance. For other Cisco Business Dashboard deployments, the default username is cisco and that username is used in the Cisco Business Dashboard documentation. If the documentation says to log on to the operating system with username cisco, you should substitute the username you create here instead.

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6. Click through each of the settings pages to customize the virtual machine configuration, or click **Review + Create** to accept the defaults and skip to the end of the setup process.
7. Click **Create** to create the virtual machine instance. Once created, the instance may be managed through the Azure portal.

After the instance has launched, the Cisco Business Dashboard application will start automatically. Refer to the [Cisco%20Business%20Dashboard%20and%20Probe%20Quick%20Start%20Guide](#) for details of how to access the application and perform initial setup.