

Windows MultiPoint Server 2012 Deployment Guide

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Built on Windows Server 2012 technology, Windows® MultiPoint® Server 2012 enables you to connect multiple local stations to one computer so that users can share the computer for independent or group activities. This guide describes how to deploy and configure MultiPoint Server, create user accounts, and begin basic server management.

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**Contents**

[Copyright Notice 2](#_Toc374459351)

[Deploying Windows MultiPoint Server 2012 6](#_Toc374459352)

[About Windows MultiPoint Server 2012 6](#_Toc374459353)

[OEM vs. Site Licensing setup experience 7](#_Toc374459354)

[In this guide 7](#_Toc374459355)

[Additional resources 8](#_Toc374459356)

[Deploy a new Windows MultiPoint Server 2012 system 9](#_Toc374459357)

[In this section 9](#_Toc374459358)

[Collect hardware and device drivers needed for the installation 9](#_Toc374459359)

[Set up the physical computer and primary station 10](#_Toc374459360)

[Install Windows MultiPoint Server 2012 12](#_Toc374459361)

[Install MultiPoint Server from a DVD 12](#_Toc374459362)

[Complete an OEM installation 14](#_Toc374459363)

[Update and install device drivers if needed 15](#_Toc374459364)

[Set the date, time, and time zone 16](#_Toc374459365)

[Join the MultiPoint Server computer to a domain (optional) 16](#_Toc374459366)

[Install updates 17](#_Toc374459367)

[Attach additional stations to your Windows MultiPoint Server 2012 computer 17](#_Toc374459368)

[Set up a direct-video-connected station in Windows MultiPoint Server 2012 18](#_Toc374459369)

[Set up a USB zero client-connected station in Windows MultiPoint Server 2012 21](#_Toc374459370)

[Set up an RDP-over-LAN connected station in Windows MultiPoint Server 2012 22](#_Toc374459371)

[Activate Windows MultiPoint Server 2012 and add CALs 23](#_Toc374459372)

[Activate an evaluation version of Windows MultiPoint Server 2012 23](#_Toc374459373)

[Add a client access license (CAL) for each station 23](#_Toc374459374)

[Install software on your Windows MultiPoint Server 2012 system 24](#_Toc374459375)

[Optional configuration tasks for a Windows MultiPoint Server 2012 deployment 25](#_Toc374459376)

[In this section 25](#_Toc374459377)

[Set up a split-screen station in Windows MultiPoint Server 2012 25](#_Toc374459378)

[About split-screen stations 25](#_Toc374459379)

[Requirements for a split screen station 26](#_Toc374459380)

[Setting up a split-screen station 26](#_Toc374459381)

[Add printers in Windows MultiPoint Server 2012 28](#_Toc374459382)

[Enable access over a wireless LAN in Windows MultiPoint Server 2012 28](#_Toc374459383)

[Create Windows 7 or Windows 8 Enterprise virtual desktops for stations 29](#_Toc374459384)

[Prerequisites 29](#_Toc374459385)

[Procedures 30](#_Toc374459386)

[Create a template for virtual desktops 30](#_Toc374459387)

[Create virtual machine desktops from the template 32](#_Toc374459388)

[Copy an existing virtual desktop template 33](#_Toc374459389)

[See Also 33](#_Toc374459390)

[Change the display language in Windows MultiPoint Server 2012 33](#_Toc374459391)

[Setting the display language 34](#_Toc374459392)

[Prepare your Windows MultiPoint Server 2012 system for users 35](#_Toc374459393)

[In this section 35](#_Toc374459394)

[Plan user accounts for your Windows MultiPoint Server 2012 environment 36](#_Toc374459395)

[Planning local user accounts 36](#_Toc374459396)

[Use individual local user accounts 36](#_Toc374459397)

[Use generic local user accounts 38](#_Toc374459398)

[Example scenarios: Windows MultiPoint Server 2012 user accounts 39](#_Toc374459399)

[Single MultiPoint Server computer in a stand-alone environment (no network) 39](#_Toc374459400)

[Multiple MultiPoint Server computers on a network, but with no domain 40](#_Toc374459401)

[One or more MultiPoint Server computers in a domain network environment 41](#_Toc374459402)

[Create local user accounts in Windows MultiPoint Server 2012 41](#_Toc374459403)

[Limit users' access to the server in MultiPoint Server 2012 42](#_Toc374459404)

[Configure stations for automatic logon 43](#_Toc374459405)

[Allow one account to have multiple sessions 43](#_Toc374459406)

[Enable file sharing in Windows MultiPoint Server 2012 44](#_Toc374459407)

[System administration in Windows MultiPoint Server 2012 44](#_Toc374459408)

[In this section 44](#_Toc374459409)

[Configure Disk Protection in Windows MultiPoint Server 2012 45](#_Toc374459410)

[Enable Disk Protection 45](#_Toc374459411)

[Schedule software updates 46](#_Toc374459412)

[Temporarily disable Disk Protection 46](#_Toc374459413)

[Uninstall Disk Protection 47](#_Toc374459414)

[Install Server Backup on your Windows MultiPoint Server 2012 computer 47](#_Toc374459415)

[Configure MultiPoint Server Backup 47](#_Toc374459416)

[Configure sleep settings in Windows MultiPoint Server 2012 49](#_Toc374459417)

[Configure sleep settings on the Windows MultiPoint Server 2012 computer 49](#_Toc374459418)

[Allow the computer to enter sleep mode when idle 49](#_Toc374459419)

[Turn off the logon requirement when the computer wakes up 49](#_Toc374459420)

[Enable the computer to hibernate 50](#_Toc374459421)

[Configure a session time-out for idle user sessions 51](#_Toc374459422)

[Configure group policies for a domain deployment 52](#_Toc374459423)

[Update group policies for the WMSshell user account 52](#_Toc374459424)

[Update the Registry 53](#_Toc374459425)

[Appendixes: Deploying Windows MultiPoint Server 2012 55](#_Toc374459426)

[In the appendixes 55](#_Toc374459427)

[Task Lists: Deploying Windows MultiPoint Server 2012 56](#_Toc374459428)

[Task list: Deploy the server 56](#_Toc374459429)

[Task list: Optional configurations 56](#_Toc374459430)

[Task list: Prepare your system for users 57](#_Toc374459431)

[Task list: Server administration 57](#_Toc374459432)

[Display language scenarios for Windows MultiPoint Server 2012 58](#_Toc374459433)

[Which languages can I use? 58](#_Toc374459434)

[Display language scenarios 59](#_Toc374459435)

[Simple Scenarios 59](#_Toc374459436)

[Apply a language pack that is one of the 18 MultiPoint Server languages 59](#_Toc374459437)

[Apply a language pack that is not one of the 18 MultiPoint Server languages 59](#_Toc374459438)

[Complex Scenarios 59](#_Toc374459439)

[Set a fully localized display language 59](#_Toc374459440)

[Set a display language that is not fully localized 59](#_Toc374459441)

[Glossary 61](#_Toc374459442)

# Deploying Windows MultiPoint Server 2012

Welcome to the Windows MultiPoint Server 2012 Deployment Guide. This guide describes how to deploy a MultiPoint Server computer and stations; install and configure your system; set up user accounts; and perform some basic administration tasks, such as turning on Disk Protection and setting up backups, before you start using your system.

You can use this guide to deploy Windows® MultiPoint® Server 2012 Standard or Windows® MultiPoint® Server 2012 Premium. Unless otherwise noted, all references to MultiPoint Server refer to both Windows MultiPoint Server 2012 Standard and Windows MultiPoint Server 2012 Premium.

Note

Windows MultiPoint Server 2012 does not support upgrading earlier versions of MultiPoint Server. You must purchase the full product. For purchase information, see [How to Buy MultiPoint Server](http://technet.microsoft.com/library/jj916397.aspx) (http://technet.microsoft.com/library/jj916397.aspx) in [Planning a Windows MultiPoint Server 2012 Deployment](http://technet.microsoft.com/library/jj916408.aspx) (http://technet.microsoft.com/library/jj916408.aspx).

Important

This guide assumes that you have purchased Windows MultiPoint Server 2012, planned your environment, and procured the hardware that you will use. If you have not completed planning, see [Planning a Windows MultiPoint Server 2012 Deployment](http://technet.microsoft.com/library/jj916408.aspx) (http://technet.microsoft.com/library/jj916408.aspx) before you begin your deployment. These topics provide information about purchase and licensing options, options for setting up your MultiPoint Server computer and stations, and basic concepts you will need to know when using MultiPoint Server.

## About Windows MultiPoint Server 2012

Built on Windows Server 2012 technology, MultiPoint Server enables multiple local stations to be connected to one computer. Several users can then share that computer at the same time, which enables each user to perform independent work or participate in a group activity.

Stations can be connected directly to the computer running MultiPoint Server or can be clients on a network with MultiPoint Server. Stations can be as simple as one station hub, monitor, keyboard, and mouse, with no network required, or they can be traditional network clients such as a desktop, laptop, or thin client using the Remote Desktop Protocol (RDP) to connect to the server. For more information about your options for setting up stations, see [MultiPoint Server Stations](http://technet.microsoft.com/library/jj916411.aspx) (http://technet.microsoft.com/library/jj916411.aspx) in [Planning a MultiPoint Server 2012 Deployment](http://technet.microsoft.com/library/jj916408.aspx) (http://technet.microsoft.com/library/jj916408.aspx).

MultiPoint Server is available in the following two versions:

 Standard: Allows up to 10 simultaneously connected stations. Joining a domain is not supported, and it does not support virtualization as a host or guest operating system.

 Premium: Allows up to 20 simultaneously connected stations. Joining a domain is supported. Virtualization is supported as a host or guest operating system with a 1+1 licensing model.

Note

For information about deploying Windows MultiPoint Server 2012 Premium in a virtualized environment, see [MultiPoint Server Virtualization Support](http://technet.microsoft.com/library/jj916396.aspx) (http://technet.microsoft.com/library/jj916396.aspx) in the MultiPoint Server 2012 Planning Guide.

## OEM vs. Site Licensing setup experience

This guide provides instructions for completing the installation of an Original Equipment Manufacturer (OEM) product or performing a full installation of a product purchased under a Site Licensing agreement. There are three main differences between deployment of the OEM version and deployment of the Volume Licensing version of MultiPoint Server:

 The OEM version is pre-installed on the server with which it is sold.

 On OEM products, the drivers for the hardware might already be installed.

 The initial customer setup experiences differ somewhat. Generally, a customer who purchases an OEM solution will connect the required peripheral devices, turn on the server, and follow instructions on-screen or in the accompanying documentation to complete the setup. This requires fewer deployment tasks to be completed than when MultiPoint Server is purchased through Volume Licensing. By contrast, Volume Licensing customers generally must consider capacity planning, choose their own hardware, and install the server software (either manually or using Windows deployment tools).

## In this guide

The Deployment Guide is organized in the following way. At a minimum, you need to complete the tasks for deploying your system and preparing your environment for users. Other tasks might or might not apply to your environment. For a summary of all deployment tasks, see [Task Lists: Deploying Windows MultiPoint Server 2012](#ze08c57845b3e402886c196deaee41f09) in the appendixes.

[Deploy a new Windows MultiPoint Server 2012 system](#z4bac9d1bbd214bc88f720dd9bb2b3f5d)

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| Set up your Windows MultiPoint Server 2012 computer and stations. Install and configure MultiPoint Server; set up your stations; install drivers, updates, and software; optionally join a domain; activate MultiPoint Server; and add client licenses (CALs) for each station. |

[Optional configuration tasks for a Windows MultiPoint Server 2012 deployment](#z76ed6fa32efb4ebda734f3f9440523f0)

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| Perform optional configuration tasks. Set up a split-screen station; add printers; enable access over a wireless LAN; create virtual desktops for stations with the Windows® 7 or Windows® 8 Enterprise operating system; change the display language for the system or for individual users.  |

[Prepare your Windows MultiPoint Server 2012 system for users](#ze392f423a64b482591ab334058721c4d)

|  |
| --- |
| Plan and create user accounts; restrict users’ access to the server; for open access, configure stations for automatic logon; allow multiple sessions for shared user accounts; implement file sharing for users.  |

[System administration in Windows MultiPoint Server 2012](#z8fce1bcf545943a2957ec1bc1749bca2)

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| Perform some basic server administration tasks before you start using the server. Turn on Disk Protection; install Server Backup; to save power, configure sleep settings; configure group policies and the Registry for a domain deployment.  |

[Appendixes: Deploying Windows MultiPoint Server 2012](#z0f1354e1ef17461ab4e2f8e512441725)

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| View or print task lists for all deployment tasks. Find out the meaning of terms used with MultiPoint Server. If basic language display setups do not meet your needs, find out how to handle complex scenarios.  |

## Additional resources

 [Windows MultiPoint Server 2012](http://technet.microsoft.com/library/jj916259.aspx) (http://technet.microsoft.com/library/jj916259.aspx)

 [Planning a MultiPoint Server 2012 Deployment](http://technet.microsoft.com/library/jj916408.aspx) (http://technet.microsoft.com/library/jj916408.aspx)

 [Windows MultiPoint Server Forum](http://social.technet.microsoft.com/Forums/windowsserver/en-US/home?forum=windowsmultipointserver&filter=alltypes&sort=lastpostdesc) (http://social.technet.microsoft.com/Forums/windowsserver/en-US/home?forum=windowsmultipointserver&filter=alltypes&sort=lastpostdesc)

 [Support for MultiPoint Server](http://support.microsoft.com/gp/gp_multipoint_main/en-us) (http://support.microsoft.com/gp/gp\_multipoint\_main/en-us)

 MultiPoint Server Help and Support – Click F1 from MultiPoint Manager or the MultiPoint Server Dashboard to get help with administrative tasks performed after MultiPoint Server is deployed.

# Deploy a new Windows MultiPoint Server 2012 system

The topics in this section explain how to set up your Windows MultiPoint Server 2012 computer and stations. You will install and configure MultiPoint Server; set up your stations; install drivers, updates, and software; optionally join a domain; activate MultiPoint Server; and add client access licenses (CALs) for each station.

Important

If you have not yet planned your Windows MultiPoint Server 2012 deployment, see [Planning a Windows MultiPoint Server 2012 Deployment](http://technet.microsoft.com/library/jj916408.aspx) (http://technet.microsoft.com/library/jj916408.aspx).

## In this section

For the initial installation, we recommend that you perform the tasks in the order in which they are presented.

1. [Collect hardware and device drivers needed for the installation](#z4cf5fdbeb8714360b003d65ac43b491e)

2. [Set up the physical computer and primary station](#z4e83b126ce9a4cd7a0bd6627c9e0f81b)

3. [Install Windows MultiPoint Server 2012](#zf6f8970bde3f4255b2a15472a16ed02f)

4. [Update and install device drivers if needed](#z16be3ef9a05b4621a4315806b567e997)

5. [Set the date, time, and time zone](#z22a87c5f3bfc4da1990524f768ede959)

6. [Join the MultiPoint Server computer to a domain (optional)](#z623b7c21dcbb402e8b5a8e434cd225bd)

7. [Install updates](#zb201be28b2d9403ca5e9739d64c1b296)

8. [Attach additional stations to your Windows MultiPoint Server 2012 computer](#zd78ebf4e096840149a429f75cc50cb52)

9. [Activate Windows MultiPoint Server 2012 and add CALs](#z97b358e6d8fd498daede5a50559b2146)

10. [Install software on your Windows MultiPoint Server 2012 system](#zd4fb5b8b2d5740bbafc77cfefc2ae232)

# Collect hardware and device drivers needed for the installation

Before you start your MultiPoint Server 2012 system installation, you will need:

 Hardware components for the server - Install any additional video cards or other system components at this time.

 Hardware components for the stations - For information about planning stations for your environment, see [Selecting Hardware for Your MultiPoint Server System](http://technet.microsoft.com/library/jj916407.aspx) (http://technet.microsoft.com/library/jj916407.aspx).

 The latest drivers for your video cards - If your OEM or device manufacturer did not supply these, you will need to download them from the device manufacturer’s website.

 The latest USB zero client drivers - If you are using USB zero client stations, you must install the latest USB zero client drivers.

Important

For a MultiPoint Server installation, you must install the 64-bit version of these and other drivers.

Tip

If you are installing Windows MultiPoint Server on a computer with a different version of Windows already installed, you should find out the video card make and model in Device Manager before you start the MultiPoint Server installation. To open Device Manager, open Computer Management from the Start screen. Then, in the console tree, click Device Manager.

# Set up the physical computer and primary station

Before you install Windows MultiPoint Server 2012, you need to set up the primary station for your MultiPoint Server system and, if you will use a local area network (LAN) with MultiPoint Server, connect the computer to the LAN.

A station is an endpoint by which the MultiPoint Server computer is accessed. The primary station is the first station to start when MultiPoint Server is started. Administrators can use it to access startup menus and settings. The primary station provides access to system configuration and troubleshooting information that is only available during startup and before the MultiPoint Server operating system is running. After startup, you can use the primary station as you would any other station.

The primary station must be a direct-video-connected station. The following procedure describes how to connect the needed hardware to your MultiPoint Server computer.

For more information about stations, see [MultiPoint Server Stations](http://technet.microsoft.com/library/jj916411.aspx) (http://technet.microsoft.com/library/jj916411.aspx). For help with making hardware selections, see [Selecting Hardware for Your MultiPoint Server System](http://technet.microsoft.com/library/jj916407.aspx) (http://technet.microsoft.com/library/jj916407.aspx). For information about connecting other stations types to the MultiPoint Server computer, see [Attach additional stations to your Windows MultiPoint Server 2012 computer](#zd78ebf4e096840149a429f75cc50cb52).

Note

To create a video-connected station, you must use a Latin keyboard (such as an English- or Spanish-language keyboard).

To set up your primary station

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| 1. Ensure that the computer running Windows MultiPoint Server 2012 is turned off and unplugged.2. Connect the power cord of the monitor to a power outlet, and connect the monitor cable to the video display port on the computer, as shown below.3. If the station will use a USB keyboard and mouse, complete the following steps:a. Connect an external USB hub to an open USB port on the computer, as shown below.b. Connect the USB keyboard and mouse to the USB hub.Note If your MultiPoint Server computer has PS/2 ports, you can, if needed, use a PS/2 keyboard and mouse plugged directly into the computer. However, this setup has significant limitations. Users cannot use audio devices, web cams, and flash drives on PS/2 stations.c. If you are using an externally powered hub, connect the power cable of the hub to a power outlet.Important We strongly recommend the use of a powered hub. Erratic system behavior can result from under-current conditions. Users should not attach mice and keyboards directly to the USB ports of the computer. Doing so is likely to cause the incorrect association of multiple keyboards and mice to the same station, or to no station at all.Note The host audio device on the system’s motherboard is only available while Windows MultiPoint Server is in console mode. To ensure uninterrupted audio for a station that uses an external USB hub, you must use a USB audio device plugged into the hub. |

To connect the computer to the LAN

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|  If you have a LAN, connect your computer to your network with a network cable. |

# Install Windows MultiPoint Server 2012

Use the first procedure if you are installing a Windows MultiPoint Server 2012 operating system from scratch. If you purchased a preinstalled MultiPoint Server computer from an OEM, use the second procedure to complete the system installation.

Important

During the Windows MultiPoint Server 2012 installation, the computer will restart several times to complete configurations and update the Registry. It is important that you not turn off the computer during this process.

## Install MultiPoint Server from a DVD

Use the following procedure if you are installing Windows MultiPoint Server 2012 on your own computer.

To install Windows MultiPoint Server 2012 (DVD installation)

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| 1. Turn on your computer, and insert the MultiPoint Server installation DVD in the DVD drive.2. Restart your computer. When the message Press any key to boot from CD or DVD appears, press any key.Note If your computer does not start from the DVD, ensure that the DVD-ROM drive is listed first in the BIOS boot sequence. For more information about the BIOS boot sequence, see the documentation from the computer manufacturer.3. Select the Language that you want to install, Time and currency format, and Keyboard or input method, and then click Next.4. Click Install now.5. When prompted, enter the product key that came with the product. (The product key format is XXXXX-XXXXX-XXXXX-XXXXX-XXXXX, where “X” is a letter or number.)6. Read the license terms. If you accept them, select the I accept the license terms check box, and then click Next.Note If you do not accept the license terms, the installation does not continue.7. Click Custom (advanced).8. Select the hard drive and partition that you want to install the operating system on, and then click Next. This process takes about 30 minutes and the computer will restart several times.9. Type a new password into the New password and Confirm password text boxes, and then press ENTER. Then click OK to confirm that the password was changed. 10. On the Personalize page, type a name for the computer, and then click Next.11. On the Settings page, make your choices for the following services or programs, and then click Submit: Install updates automatically (recommended) Participate in the Customer Experience Improvement Program (CEIP) Enable Windows Error Reporting (WER)The computer restarts again.12. Log on as Administrator.13. Install drivers for your video cards:a. When you receive notification that you need to install graphics (video) drivers, press any key. The computer restarts in console mode.Note MutliPoint Server operates in two modes. Console mode is used to install, update, and configure software. In console mode, all monitors are treated as a single extended desktop for the console session of the computer system. In contrast, in station mode, each station attached to the MultiPoint Server computer behaves as if it were a separate computer, which allows users to have their own sessions. You can change modes by using commands in MultiPoint Manager.b. Log on as Administrator, and follow the instructions in the wizard to install the video drivers.After the drivers are installed, the computer restarts in station mode.c. Log on as Administrator.Important If the correct display adapter drivers are not installed on the computer, you will not be able to map each station to the computer.14. Configure your primary station:a. On the Create a MultiPoint Server Station page, type the specified letter from the keyboard for that monitor. The correct key entry associates the keyboard and mouse for that station.b. Log on as Administrator. |

## Complete an OEM installation

If you purchased a preinstalled computer from an OEM, use the following procedure to complete the installation.

Important

If the OEM provided installation instructions with your MultiPoint Server, follow the OEM’s installation instructions instead of this procedure. The OEM might have made customizations that will change the steps below.

To complete the Windows MultiPoint Server 2012 installation on your OEM-preinstalled computer

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| 1. Turn on your computer.2. Select the Language that you want to install, Time and currency format, and Keyboard or input method, and then click Next.3. Read the license terms. If you accept them, select the I accept the license terms check box, and then click Next.Note If you do not accept the license terms, the installation does not continue.4. If you are not prompted to change your password, log on as Administrator with a blank password.5. Type a new password into the New password and Confirm password text boxes, and press Enter. Click OK to acknowledge the message that the password has been changed. 6. On the Personalize page, type a name for the computer, and then click Next.7. On the Settings page, make your choices for the following services or programs, and then click Submit: Install updates automatically (recommended) Participate in the Customer Experience Improvement Program (CEIP) Enable Windows Error Reporting (WER)The computer restarts again.8. Log on as Administrator.9. Configure your primary station:a. On the Create a MultiPoint Server Station page, type the specified letter from the keyboard for that monitor. The correct key entry associates the keyboard and mouse for that station.b. Log on as Administrator. |

# Update and install device drivers if needed

If you are using USB zero clients or peripherals that require drivers, you should install the drivers at this time. It’s a good idea also to check Device Manager for any driver alerts, and install drivers for those devices.

Generally, the most current drivers are required for following types of devices:

 USB zero clients

 USB-over-Ethernet zero clients

 Disk controllers

 Network adapters

 Sound controllers

 USB host controllers

Tip

If you are new to Windows Server 2012 (or Windows 8), see [Common Management Tasks and Navigation in Windows Server 2012 R2 Preview and Windows Server 2012](http://technet.microsoft.com/en-us/library/hh831491.aspx) (http://technet.microsoft.com/en-us/library/hh831491.aspx) to find out how to open the Start screen and perform other common tasks.

To check for driver alerts in Device Manager

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| 1. [Open the Start screen](http://technet.microsoft.com/en-us/library/hh831491.aspx#BKMK_start).2. Type computer management, and then click Computer Management in the results.3. In the Computer Management console tree, click Device Manager.4. In the system devices on the right, check for driver alerts that might affect MultiPoint Server. |

To install device drivers in MultiPoint Manager

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| 1. To open MultiPoint Manager, [open the Start screen](http://technet.microsoft.com/en-us/library/hh831491.aspx#BKMK_start), type MultiPoint Manager, and then click MultiPoint Manager in the results.2. In MultiPoint Manager, click the Home tab, and then click Switch to console mode.3. To install a device driver, double click the driver file, and follow the instructions to install the driver.4. Repeat the preceding step to install all required drivers. Note If an installation requires a computer restart, you will need to switch back to console mode before you install the next driver. MultiPoint Server always starts in station mode. To switch to console mode, on the Home tab, click Switch to console mode. |

# Set the date, time, and time zone

After you finish installing device drivers, set the date, time, and time zone for Windows MultiPoint Server 2012.

To set the date, time, and time zone in MultiPoint Server

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| 1. From the Start screen of the MultiPoint Server computer, open Control Panel.2. Under Clock, Language, and Region, click Set the time and date.3. On the Date and Time tab, verify the date and time. If they are not correct, click Change date and time, update the date and time, and then click OK.4. Under Time zone, verify the time zone. If it is not correct, click Change time zone, select the correct time zone, and then click OK.5. Click OK again to save your settings and close the dialog box. |

# Join the MultiPoint Server computer to a domain (optional)

If you will access your Windows MultiPoint Server 2012 computer over an Active Directory domain, your next step is to add the computer to the domain. Only Windows® MultiPoint® Server 2012 Premium can be added to an Active Directory domain. Windows® MultiPoint® Server 2012 Standard supports joining a workgroup only.

Important

You must verify your time zone before you join the computer to a domain. For instructions, see [Set the date, time, and time zone](#z22a87c5f3bfc4da1990524f768ede959).

To join the Windows MultiPoint Server 2012 computer to a domain

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| 1. From the Start screen, open Control Panel. Click System and Security, and then click System.-Or-Open the computer properties in File Explorer. (Right-click Computer, and then click Properties.)2. Under Computer name, domain, and workgroup settings, click Change settings.3. On the Computer name tab, click Change.4. In the Computer Name/Domain Changes dialog box, select Domain, enter the name of the domain, and click OK, and then follow the steps in the wizard to complete the process.5. After the computer restarts, log on as Administrator and wait for MultiPoint Manager to open. |

Important

To ensure that your MultiPoint Server domain deployment works correctly, you will need to configure a couple of group policies and update the Registry. For information, see [Configure group policies for a domain deployment](#z13e5fa90d3304155a6b878eb650cbbfa).

# Install updates

We recommend that you install updates at this time. Installing updates requires an Internet connection.

To install updates

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| 1. From the Start screen, open Control Panel.2. In Control Panel, type updates, and then click Check for updates.3. If the Windows Update website lists any updates that are needed on your computer, install the updates. |

# Attach additional stations to your Windows MultiPoint Server 2012 computer

In your MultiPoint Server environment, your users use stations to connect to the MultiPoint Server computer and do their work. The stations are the user endpoints for connecting to the computer running Windows MultiPoint Server 2012.

MultiPoint Server supports three types of station:

 Direct-video-connected stations

 USB zero client-connected stations (and USB over Ethernet zero client connected stations)

 RDP-over-LAN connected stations

The classifications are based on a station’s hardware and the type of connection that it uses. You can mix and match connection types for your stations. The only requirement is that the primary station (which you installed earlier) must be a direct-video-connected station. For more information about station setups, see [MultiPoint Server Stations](http://technet.microsoft.com/library/jj916411.aspx) (http://technet.microsoft.com/library/jj916411.aspx).

For instructions that explain how to set up each type of station, see the following:

 [Set up a direct-video-connected station in Windows MultiPoint Server 2012](#z82ba351797434cde8eea63a17edb016f)

 [Set up a USB zero client-connected station in Windows MultiPoint Server 2012](#zd29088656be3474d88f1995f40bb61d0)

 [Set up an RDP-over-LAN connected station in Windows MultiPoint Server 2012](#z60e1a025c2fb4708a3ffc44c223a3224)

For a detailed comparison of station types, see Station type comparison in [MultiPoint Server Stations](http://technet.microsoft.com/library/jj916411.aspx) (http://technet.microsoft.com/library/jj916411.aspx).

Notes

 The procedures for attaching stations do not describe how to set up intermediate hubs or downstream hubs. For information about where to install these hubs, see [MultiPoint Server Stations](http://technet.microsoft.com/library/jj916411.aspx).

 In some cases, you might need to create station virtual desktops, which run in virtual machines. For example, you use applications that cannot be installed on Windows Server or applications that will not run multiple instances on the same host computer. For more information, see [Create Windows 7 or Windows 8 Enterprise virtual desktops for stations](#z63f08b5bc73541f4b6c8411eff85a4ab).

Tip

It is useful to create your stations in the order of their physical locations so that they are identified sequentially in MultiPoint Server. If you later want to change the name of a station, you can do that in MultiPoint Manager. For more information, see **Remap all stations** in MultiPoint Server Help and Support.

## Set up a direct-video-connected station in Windows MultiPoint Server 2012

On a direct-video-connected station, the monitor is connected directly to a video port on the MultiPoint Server computer. A keyboard and mouse are then connected to a USB hub, and are associated with the monitor.

The following illustration shows a MultiPoint Server environment that has a single MultiPoint Server computer and four direct video-connected stations. For more information, see [MultiPoint Server Stations](http://technet.microsoft.com/library/jj916411.aspx).

MultiPoint Server system with four direct video connections



Note

To configure a direct-video-connected station, you must use a Latin keyboard (such as an English- or Spanish-language keyboard).

To set up a direct video-connected station

|  |
| --- |
| 1. Connect the monitor cable to the video display port on the computer, as shown below.2. Connect the power cord of the video monitor to a power outlet.3. Connect a USB hub to an open USB port on the computer, as shown below.4. Connect a keyboard and mouse to the USB station hub.5. Connect any additional peripherals, such as headphones, to the USB hub.6. If you are using an externally powered hub, connect the power cable of the hub to a power outlet.Important We strongly recommend the use of a powered hub. Erratic system behavior can result from under-current conditions.Users should not attach mice and keyboards directly to the USB ports of the computer. Doing so is likely to cause the incorrect association of multiple keyboards and mice to the same station, or to no station at all.7. Follow the instructions that appear on the monitor to create the station. |

If you add more than one direct video-connected station to your MultiPoint Server environment, the primary station might change. You can easily find out which direct video connected station is your primary station.

To find out which direct-video-connected station is the primary station

|  |
| --- |
| 1. Turn on all monitors that are connected directly to the computer’s display adapters.2. Start (or re-start) the MultiPoint Server computer, and see which monitor displays the startup screens. That station is the primary station.Note In some cases, BIOS startup information is displayed on multiple monitors simultaneously. In that case, any of the monitors can be considered the “primary station” for the purpose of accessing the BIOS. |

## Set up a USB zero client-connected station in Windows MultiPoint Server 2012

When you use USB zero clients to create MultiPoint Server stations, the monitor for each station is connected to the video port on the USB zero client, as shown in the following illustration. For more information about this and other station types, see [MultiPoint Server Stations](http://technet.microsoft.com/library/jj916411.aspx) (http://technet.microsoft.com/library/jj916411.aspx).

MultiPoint Server system with one direct-video-connected station and two USB zero client-connected stations



Important

Before you set up USB zero client-connected stations, be sure to install the latest drivers for your video cards and the USB zero client. Outdated drivers can prevent the MultiPoint Server configuration from completing successfully. For instructions, see [Update and install device drivers if needed](#z16be3ef9a05b4621a4315806b567e997).

Important

If you are using a USB-over-Ethernet zero client, follow the instructions from your vendor, instead of this procedure, to use the Ethernet connection to set up the device on the network.

To set up a USB zero client-connected station

|  |
| --- |
| 1. Connect the video monitor cable to the DVI or VGA video display port on the USB zero client, as shown in the following illustration.2. Connect the USB zero client to an open USB port on the computer.3. Connect a keyboard and mouse to the USB zero client.4. If you are using an externally powered USB zero client, connect the power cord of the USB zero client to a power outlet.5. Connect the power cord of the video monitor to a power outlet.6. If you are prompted to associate devices with the station, follow the instructions on the monitor to complete the setup. (Generally, USB zero client-connected stations are associated with stations automatically as you add them to the server.) |

## Set up an RDP-over-LAN connected station in Windows MultiPoint Server 2012

An RDP-over-LAN connected station is a thin client, traditional desktop, or laptop computer that connects to MultiPoint Server on a local area network (LAN) by using the Remote Desktop Protocol (RDP). For more information about this and other station types, see [MultiPoint Server Stations](http://technet.microsoft.com/library/jj916411.aspx) (http://technet.microsoft.com/library/jj916411.aspx).

To set up a MultiPoint Server station using a computer or thin client on a LAN

|  |
| --- |
| 1. Turn on the computer that is running Windows MultiPoint Server 2012.2. Ensure that the MultiPoint Server computer is connected to the LAN by a switch, router, or other networking device and has a proper IP address. (An IP address that starts with 169.254 (an APIPA address) might indicate there is an issue with the LAN connection or that the DHCP server can’t be reached or is not functioning correctly.)3. Connect the client computer or thin client to the LAN.4. Turn on the client computer or thin client.5. On the client computer or thin client, start Remote Desktop Connection or an equivalent application, and enter the name or IP address of the computer running MultiPoint Server. |

# Activate Windows MultiPoint Server 2012 and add CALs

To enable users to use stations in Windows MultiPoint Server 2012, you must obtain and install a Client Access License (CAL) for each station. If you're using an evaluation version of Windows MultiPoint Server 2012, you might need to activate MultiPoint Server before proceeding.

## Activate an evaluation version of Windows MultiPoint Server 2012

If you are using an evaluation version of Windows MultiPoint Server 2012, you might need to activate MultiPoint Server before obtaining CALs. You can use your evaluation version for 180 days before activation is required. At that point, you must purchase the released version of Windows MultiPoint Server to continue using your system. After you purchase the released version, you can use the product key from the Volume Licensing Service Center or your reseller to convert your evaluation setup to the full released product.

You can activate your MultiPoint Server system online or by phone.

To activate an evaluation version of MultiPoint Server online

|  |
| --- |
| 1. From the Start screen, type Activation, and then click Windows Activation in the results.2. Click Activate with a new key.3. Enter your new product key as instructed, and click OK. |

For more information about activation, search for What is activation in Windows Help and Support. (To open Windows Help and Support, hold down the Windows key, and press F1.)

## Add a client access license (CAL) for each station

You must obtain a client access license (CAL) for each station that is connected to the computer running Windows MultiPoint Server 2012 and then install the CALs in MultiPoint Server. If you are using station virtual desktops instead of physical stations, you must install a CAL for each station virtual desktop.

To add client access licenses (CALs) in Windows MultiPoint Server 2012

|  |
| --- |
| 1. Purchase a client license for each station that is connected to your Windows MultiPoint 2012 computer. For more information about purchasing CALs, see [How to Buy MultiPoint Server](http://technet.microsoft.com/library/jj916397.aspx) (http://technet.microsoft.com/library/jj916397.aspx). 2. From the Start screen, open MultiPoint Manager.3. Click the Home tab, and then click Add client access licenses.4. Follow the instructions in the wizard to add the CALs. |

For more information about managing CALs, see Add or Remove Client Access Licenses in Windows MultiPoint Manager Help.

# Install software on your Windows MultiPoint Server 2012 system

When you are logged on as an administrative user, you can install new programs either in console mode or, from a station, in station mode. However, we recommend that you install programs in console mode.

You can install new software on the computer running MultiPoint Server so that all users can run the software, or so that only you can use the software, depending on the installation and licensing options of the software.

To install applications in console mode

|  |
| --- |
| 1. Log on to the MultiPoint Server computer as an administrator.2. On the Start page, open MultiPoint Manager.3. Click the Home tab, and then click Switch to console mode.4. Log on as an administrator, and install your applications.5. After you finish installing applications, switch the computer back to station mode. To do this, on the Home tab, click Switch to station mode. |

# Optional configuration tasks for a Windows MultiPoint Server 2012 deployment

Topics in this section explain how to perform optional configuration tasks on your Windows MultiPoint Server 2012 system.

## In this section

[Set up a split-screen station in Windows MultiPoint Server 2012](#z35d1d43479b24e0a835fd94ed8ee6b21)

[Add printers in Windows MultiPoint Server 2012](#ze1f6d3ca8caf4aa0b0ea93cdfd3f3f37)

[Enable access over a wireless LAN in Windows MultiPoint Server 2012](#zd55183ed0b264738aa527aae5cc94a04)

[Create Windows 7 or Windows 8 Enterprise virtual desktops for stations](#z63f08b5bc73541f4b6c8411eff85a4ab)

[Change the display language in Windows MultiPoint Server 2012](#zdd5bb3acdea249edb3464e344e628688)

# Set up a split-screen station in Windows MultiPoint Server 2012

Use the procedures in this topic to set up a split-screen station that two users can use simultaneously in Windows MultiPoint Server 2012 and to return a split-screen station to a single station.

## About split-screen stations

Any monitor that has a resolution greater than 1024x768, when connected to a station that supports the split-screen feature, can be split into two stations in Windows MultiPoint Server 2012. After a station is split, the desktop that the monitor had displayed moves to the left half of the screen, and a new station is displayed on the right half of the screen. To finish creating the new station, you will need to map a keyboard, mouse, and USB hub to the station. After a station is split, a user can log on to the left station while another user logs on to the right station.

Split-screen stations have several benefits:

 You can reduce cost and space by accommodating more students on a MultiPoint Server system.

 Two students can collaborate together, side by side, on a project.

 A teacher can demonstrate a procedure on one station while a student follows along on the other station.

The following illustration shows a MultiPoint Server system with a split screen station (on the right).



MultiPoint Server system with a split screen station

## Requirements for a split screen station

To create a split-screen station, the monitor and station must meet these requirements:

 The monitor must have a resolution of 1024x768 or higher.

 If you are using a USB-over-Ethernet zero client, check with your hardware vendor to find out whether split-screen stations are supported. Many USB-over-Ethernet zero client devices have limitations that prevent their configuration as split-screen stations.

## Setting up a split-screen station

Use the following procedures to add a second hub for a split-screen station and then split the station in Windows MultiPoint Server 2012. The final procedure explains how to return a split-screen station to a single station.

Note

When you split a station, the active session on the station is suspended. The user must log on to the station again to resume work after the split occurs.

To add a second hub with keyboard and mouse

|  |
| --- |
| 1. Connect a USB hub to an open USB port on the computer, as shown in the following illustration.2. Connect a keyboard and mouse to the USB hub.3. Connect any additional peripherals, such as headphones to the USB hub.4. If you are using an externally powered hub, connect the power cable of the hub to a power outlet. |

To split a station

|  |
| --- |
| 1. In the MultiPoint Manager, click the Stations tab.2. Under Station, click the name of the station you want to split.3. Under Selected Item Tasks, click Split station.The original screen moves to the left half of the monitor, and a new station’s screen is created on the right half of the same monitor.4. Create the new station by pressing the specified letter on the newly added keyboard as indicated when the Create a MultiPoint Server Station screen appears on the right half of the monitor.After a station is split, one user can log on to the left station while another user logs on to the right station. |

To return a split station to a single station

|  |
| --- |
| 1. In the MultiPoint Manager, click the Stations tab.2. Under Station, click the name of the station you want to unsplit.3. Under Selected Item Tasks, click Unsplit station. |

# Add printers in Windows MultiPoint Server 2012

Use the procedures in this topic to make a local printer available to all users on a Windows MultiPoint Server 2012.

Note

If you are using domain accounts in Windows MultiPoint Server 2012, users can use any network printer from their stations.

To make a local printer available to all users on a Windows MultiPoint Server 2012 system

|  |
| --- |
| 1. Connect the printer to the Windows MultiPoint Server 2012 computer.2. Configure the printer as a shared printer:a. Log on to the MultiPoint Server computer as an administrator.b. From the Start screen, open Control Panel.c. In Control Panel, click Hardware, and then click Devices and Printers.d. Under Printers and Faxes, right-click the printer, and then click Printer Properties.e. Click the Sharing tab.f. Click Share this printer, specify a share name for the printer, and then click OK.Users logged on to any station that is connected to the Windows MultiPoint Server 2012 computer will be able to see and use the printer. |

# Enable access over a wireless LAN in Windows MultiPoint Server 2012

If you want users to be able to access your Windows MultiPoint Server 2012 system over a wireless local area network (LAN), you must install and enable the Wireless LAN Service. Wireless network adapters are disabled by default in MultiPoint Server. For information about installing and enabling the Wireless LAN Service, see [Wireless LAN Service Overview](http://technet.microsoft.com/library/hh994698.aspx) (http://technet.microsoft.com/library/hh994698.aspx).

# Create Windows 7 or Windows 8 Enterprise virtual desktops for stations

This optional configuration in Windows MultiPoint Server 2012 Premium is primarily intended for situations where an essential application requires its own instance of a client operating system for each user. Examples include applications that cannot be installed on Windows Server and applications that will not run multiple instances on the same host computer.

Note

These Virtual Desktops, also known as VDI, are much more resource intensive than the default MultiPoint Server desktop sessions, so we recommend that you use default MultiPoint Server sessions when possible.

## Prerequisites

To prepare to create station virtual desktops, ensure that your MultiPoint Server system meets the following requirements:

 Operating system requirements – The Windows MultiPoint Server 2012 Premium operating system is required.

 Hardware requirements for the MultiPoint Server computer - Windows MultiPoint Server 2012 is installed on a computer with the following minimum hardware.

|  |  |
| --- | --- |
| Hardware | Requirements |
| CPU (multimedia) | 1 core or thread per virtual machine |
| Solid State Drive (SSD) | Capacity >= 20GB per station + 40GB for the MultiPoint Server host operating systemRandom Read/Write IOPS >= 3K per station |
| RAM | 2GB per station + 2GB for the Windows MultiPoint Server host operating system |
| Graphics | DX11 |
| BIOS | BIOS CPU setting configured to enable virtualization – Second Level Address Translation (SLAT) |

 Stations - Set up the stations for your MultiPoint Server system. For more information, see [Attach additional stations to your Windows MultiPoint Server 2012 computer](#zd78ebf4e096840149a429f75cc50cb52).

 Domain - In a domain environment, the Windows MultiPoint Server computer has been added to the domain, and a domain user has been added to the local Administrators group on the MultiPoint Server host operating system.

## Procedures

Use the following procedures to:

 [Create a template for virtual desktops](#z1)

 [Create virtual machine desktops from the template](#z2)

 [Copy an existing virtual desktop template](#z3)

### Create a template for virtual desktops

Before you can create a template for your virtual desktops, you must enable the Virtual Desktop feature in MultiPoint Server.

To enable the Virtual Desktop feature

|  |
| --- |
| 1. Log on to the MultiPoint Server host operating system with a local administrator account or, in a domain, with a domain account that is a member of the local Administrators group.2. From the Start screen, open MultiPoint Manager.3. Click the Virtual Desktops tab, click Enable virtual desktops, and then click OK, and wait for the system to restart. |

Your next step is to create a Virtual Desktop template. You are literally creating a virtual hard disk (VHD) file that you can use as a template to create station virtual desktops for MultiPoint Manager. You can either use the physical installation media for Windows or an .ISO image file to as source for the template. You can also use a .VHD of the Windows installation. Note that to use a physical installation disc, you must insert the disc before you start the wizard.

To create a Virtual Desktop template

|  |
| --- |
| 1. Log on to the MultiPoint Server host operating system with a local Administrator account or, in domain, a domain account that is a member of the local Administrators group.2. From the Start screen, open MultiPoint Manager.3. Click the Virtual Desktops tab.4. Insert a Windows 8 or Windows 7 Enterprise DVD in the DVD drive.-Or-Copy a Windows 8 or Windows 7 Enterprise .iso file to the local SSD.5. On the Virtual Desktops tab, click Create virtual desktop template.6. If you’re installing from a DVD, the dialog box automatically finds the Windows 8 or Windows 7 Enterprise .wim file on the DVD. If you’re using an .iso image file that you copied to a drive, use Browse to find the .iso file.7. In Prefix, enter a prefix to use to identify the template and the virtual desktops created with the template. The default prefix is the host computer name.The prefix is used to name the template and the virtual desktop stations. The template will be <prefix>-t. The virtual desktop stations will be named <prefix>-n, where n is the station identifier. 8. Enter a username and password to use for the local Administrator account for the template. In a domain, enter the credentials for a domain account that will be added to the local Administrators group. This account can be used to log on to the template and all virtual desktop stations created from the template.9. Click OK, and wait for template creation to complete.10. The new template will be listed on the Virtual Desktops tab. The template will be turned off. |

Your next step is to configure the template with the software and setting that you want on the virtual desktops. You must do this before you create any virtual desktops from the template.

To customize a virtual desktop template

|  |
| --- |
| 1. Log on to the MultiPoint Server host operating system with a local administrator account or, in a domain, with a domain account in the local Administrators group.2. From the Start screen, open MultiPoint Manager.3. Click the Virtual Desktops tab.4. Select the template that you want to customize, click Customize template, and then click OK.Note Only the templates that have not been used to create virtual desktop stations are available. If you want to update a template that is already in use, you must make a copy of the template by using the Import template task, described later, in [Copy an existing virtual desktop template](#z3).The template opens in a Hyper-V VM Connect window, and auto-logon is performed using the built-in Administrator account.5. At this point you can install applications and software updates, change settings, and update the administrator profile. All changes made to the template’s built-in administrator profile will be copied to the default user profile in the virtual desktop stations that are created from the template.If you are connecting your stations over a domain, we recommend that you create a local user account and add it to the local Administrators group during customization.Note If the system restarts while a template is being customized, auto-logon using the built-in Administrator account might fail after the system restarts. To get around this problem, manually log on using the local Administrator account that you created, change the password of the built-in Administrator account, log off, and then log back on using the built-in Administrator account and the new password. (You will need to delete the profile that was created when you logged on using the local Administrator account.) 6. After you finish configuring your system, double-click the CompleteCustomization shortcut on the administrator’s desktop to run Sysprep and then shut down the template. During customization, the Sysprep tool removes all unique system information to prepare the Windows installation to be imaged. |

### Create virtual machine desktops from the template

With your virtual desktop template configured the way you want your desktops to be, you are ready to begin creating virtual desktops. A virtual desktop will be created for each station that is attached to the MultiPoint Server computer. The next time a user logs on to a station, they will see the virtual desktop instead of the session-based desktop that was displayed before.

Note

This procedure only works when MultiPoint Server is in station mode. If the system is in console mode, you can switch to station mode from MultiPoint Manager. If you are using default MultiPoint settings, you can also start station mode by restarting the computer. By default, the MultiPoint Server computer always starts in station mode

To create virtual desktops for your stations

|  |
| --- |
| 1. Log on to the Windows MultiPoint Server 2012 host operating system from a remote station (for example, from a Windows computer by using Remote Desktop Connection) using a local administrator account or, in a domain, a domain account in the local Administrators group.Note Alternatively, you can log on to the host operating system using a local station. However, when you create a station virtual desktop, you will have to log off the station that you used to create the virtual desktop in order to connect the other station to the new virtual desktop.2. From the Start screen, open MultiPoint Manager.3. If the computer is in console mode, switch to station mode:a. On the Home tab, click Switch to station mode.b. When the computer restarts, log on as Administrator.4. Click the Virtual Desktops tab.5. Select the virtual desktop template that you want to use with the stations, click Create virtual desktop stations, and then click OK.When the task completes, each local station will connect to a virtual machine-based virtual desktop. |

Note

If a user account is logged on to any of the local stations, you will need to log out of the session to get the station to connect to one of the newly created station virtual desktops.

### Copy an existing virtual desktop template

Use the following procedure to create a copy of an existing virtual desktop template that you can customize and use. This can be useful in the following situations:

 To copy a master template from a network share onto a MultiPoint Server host computer so that virtual desktop stations can be created from the master template.

 To create a copy of a template that is currently in use so that you can make additional customizations.

To import a virtual desktop template

|  |
| --- |
| 1. Log on to the MultiPiont Server 2012 host operating system as an administrator.2. From the Start screen, open MultiPoint Manager.3. Click the Virtual Desktops tab.4. Click Import virtual desktop template, and use Browse to select the .vhd file (template) that you want to import. When you import a template, a copy is made of the original .vhd. By default, MultiPoint Server stores .vhd files in the C:\Users\Public\Documents\Hyper-V\Virtual hard disks\ folder.5. Enter a prefix for the new template, and then click OK.6. If you are making further customizations to a local template, you might change the prefix name by incrementing a version number at the end of the prefix. Or, if you are importing a master template, you might want to add the version of the master template to the end of the default prefix name.7. When the task completes, you can customize the template or use it as it is to create stations. |

## See Also

[Windows Multipoint Server 2012 - Creating Virtual Desktop Stations – Part 1](http://blogs.technet.com/b/multipointserver/archive/2012/10/23/windows-multipoint-server-2012-creating-virtual-desktop-stations-part-1.aspx)

[Windows Multipoint Server 2012 - Creating Virtual Desktop Stations – Part 2](http://blogs.technet.com/b/multipointserver/archive/2013/01/22/windows-multipoint-server-2012-customizing-virtual-desktop-template-part-2.aspx)

# Change the display language in Windows MultiPoint Server 2012

Windows MultiPoint Server 2012 supports multi-language installations. Each user can choose their preferred desktop language, and they can see that language on any station that they log on to, even if that station is shared by more than one user. By default, new users pick up the language and location of MultiPoint Server.

MultiPoint Server is fully localized in 18 languages, and supports all language packs that are available for Windows Server 2012, although the level of support is more limited for languages for which MultiPoint Server is not fully localized. For a list of available languages, and information about the interplay between fully localized language packs and supported language packs in various display language scenarios, see [Display language scenarios for Windows MultiPoint Server 2012](#zed56d41f7cf8481bb749b01be6060c1e).

## Setting the display language

After MultiPoint Server is installed, you can change the display language for MultiPoint Server and for individual users. By default, new users pick up the language and location of MultiPoint Server. After you install a language pack for one user, it is available to all users.

The language for the MultiPoint Server system and for an individual user is determined by different settings in Control Panel:

 System display language - Update Region settings on the server to set the display language for the Welcome screen and logon screens, and the default language for new user accounts.

 User’s primary language - To change the display language of the menus and dialog boxes that a specific user sees, log on as that user, and update Languages settings.

To change the system display language for Windows MultiPoint Server 2012

|  |
| --- |
| 1. If disk protection is enabled, disable it before you make these changes:a. From the Start screen, open MultiPoint Manager.b. On the Home tab, click Disable disk protection, and then click OK.c. When the computer restarts, log on as Administrator.Important If you make these changes when disk protection is enabled, your changes will be discarded the next time the computer restarts.2. On the Start screen, type Region. On the Search pane, click Settings. Then click Region in the search results on the left side of the page.3. Click the Administrative tab, and then click Copy Settings.4. In the Region dialog box, confirm that the display language, input language (for the keyboard), and location under Current user are the ones that you want to apply to the system.5. To apply your settings to the MultiPoint Server system, select the Check the Welcome screen and system accounts check box6. To make your settings the default settings for new user accounts, select the New user accounts check box.7. Click OK. 8. Turn disk protection back on (recommended). On the Home tab of MultiPoint Manager, click Enable disk protection. The computer restarts automatically, and the updates are applied.-Or-If you do not want to enable disk protection, restart the computer to apply the updates. |

To change a user’s primary language

|  |
| --- |
| 1. Log on to a station with the account that the person uses in MultiPoint Server.2. On the Start screen, type Language. Under Search, click Settings In the Settings results on the left, click Language.3. Use Add a language to add the language that the user needs to use.4. To make the language the user’s primary language, move it to the top of the list. |

# Prepare your Windows MultiPoint Server 2012 system for users

After you install and configure Windows MultiPoint Server 2012, and perform any additional configuration and hardware setups, you are ready to give users access to the system. You will need to plan and create user accounts. In some environments, you also need to configure stations for auto-logon and allow multiple sessions for your shared user accounts. And you need to decide how to set up file sharing for your users. All of these topics are covered in this section.

Note

After you create your user accounts and make the other configuration updates to prepare for users, we recommend that you turn on Disk Protection so that no user can inadvertently make changes to system files and settings. For more information, see [Configure Disk Protection in Windows MultiPoint Server 2012](#zbd9bf5b9e481499b9c157ee5a4f470c4).

## In this section

[Plan user accounts for your Windows MultiPoint Server 2012 environment](#zd47be540e89147bd85da6df4bbf93b2f)

[Example scenarios: Windows MultiPoint Server 2012 user accounts](#z7f3c6ce59b7c45a083c53f9b9f5f48d4)

[Create local user accounts in Windows MultiPoint Server 2012](#z333219324266496199242cb4620bfcb4)

[Limit users' access to the server in MultiPoint Server 2012](#z4cabd4f1a7644be6bc6e0a5f5566390c)

[Configure stations for automatic logon](#z52fcfac9d5004f1d819fb2ffc795e435)

[Allow one account to have multiple sessions](#zf14cf1bdf1764de4b27df3d8e6334158)

[Enable file sharing in Windows MultiPoint Server 2012](#z508ad0568e0c4d59a4fa05775a54125d)

# Plan user accounts for your Windows MultiPoint Server 2012 environment

The best way to implement user accounts in Windows MultiPoint Server 2012 depends on the size and complexity of your deployment:

 Local user accounts - For a small deployment with only a few computers running Windows MultiPoint Server 2012 and few users, you might find it most convenient to use local user accounts that are created on the MultiPoint Server computer. You can create an individual account for each person who will use the system, or create a generic account for each station, which anyone can use to log on. MultiPoint Server administrators create and manage local user accounts by using MultiPoint Manager. The local accounts can be administrators, have limited administrative rights, or be regular users with no access to the MultiPoint Server Desktop or MultiPoint Manager.

 Domain accounts - If your environment has many computers running MultiPoint Server and many users, you probably will find it more useful to set up an Active Directory Domain Services (AD DS) domain and use domain user accounts, which enable a user to access her own user profile and settings from any station in the domain. Domain user accounts must be created on the domain controller by a domain administrator.

Note

The following sections discuss scenarios that you might implement for local user accounts in Windows MultiPoint Server 2012. If you are using domain user accounts, see the “One or more MultiPoint Server computers in a domain network environment” scenario in [Example scenarios: Windows MultiPoint Server 2012 user accounts](#z7f3c6ce59b7c45a083c53f9b9f5f48d4). For information about setting up domain user accounts in Active Directory Domain Services (AD DS), see [Create a New User Account](http://technet.microsoft.com/library/dd861308.aspx) (http://technet.microsoft.com/library/dd861308.aspx).

## Planning local user accounts

The following sections consider the advantages, disadvantages, and requirements for several ways to implement individual or shared local user accounts in your Windows MultiPoint Server 2012 environment.

### Use individual local user accounts

When creating local user accounts, you have the option of assigning each student to a particular computer running MultiPoint Server and creating a single account for each student. Alternatively, you might want to create an individual account for each student on every available computer running MultiPoint Server. A key advantage of implementing individual user accounts is that each user has his or her own Windows desktop experience that includes private folders for storing data. There are two approaches to creating individual local user accounts with MultiPoint Server: assign each user to a specific computer running MultiPoint Server, and then create an individual account for each user only on the computer to which they have been assigned; or, create local user accounts for all users on every computer running MultiPoint Server.

From a system management perspective, assigning users to a specific MultiPoint Server computer might be more convenient. For example, if you have two computers running MultiPoint Server with five stations each, you might create local user accounts as illustrated in the following table.

Table 1: Assigning local user accounts to specific computers running MultiPoint Server

|  |  |
| --- | --- |
| Computer A | Computer B |
| UserAccount\_01 | UserAccount\_06 |
| UserAccount\_02 | UserAccount\_07 |
| UserAccount\_03 | UserAccount\_08 |
| UserAccount\_04 | UserAccount\_09 |
| UserAccount\_05 | UserAccount\_10 |

In this scenario, each user has a single account on a particular computer. Therefore, everyone who has a local account on Computer A can log on to her or his account from any station associated with Computer A. However, these users cannot access their accounts if they use a station associated with Computer B, and vice versa. An advantage to this approach is that, by always connecting to the same computer, users can always find and access their files.

In contrast, it is also possible to replicate individual user accounts on all computers running MultiPoint Server, as illustrated in the following table.

Table 2: Replicating user accounts on all computers running MultiPoint Server

|  |  |
| --- | --- |
| Computer A | Computer B |
| UserAccount\_01 | UserAccount\_01 |
| UserAccount\_02 | UserAccount\_02 |
| UserAccount\_03 | UserAccount\_03 |
| UserAccount\_04 | UserAccount\_04 |
| UserAccount\_05 | UserAccount\_05 |

An advantage of this approach is that users have a local user account on every available computer running MultiPoint Server. However, the disadvantages might outweigh this advantage. For example, even if the user name and password for a particular person are the same on both computers, the accounts are not linked to each other. Therefore, if a user logs on to his or her account on Computer A on Monday, saves a file, and then logs on to his or her account on Computer B on Tuesday, he or she will not be able to access the file previously saved on Computer A. Additionally, replicating user accounts on multiple computers increases the administrative overhead and storage requirements.

### Use generic local user accounts

If your MultiPoint Server system is not connected to a domain, and you do not want to create an individual account for each user, you can create generic accounts for each station. For example, if you have two computers running MultiPoint Server, and five stations are associated with each computer, you might decide to create user accounts similar to those shown in the following table.

Table 3: Creating generic user accounts, one account per station

|  |  |
| --- | --- |
| Computer A | Computer B |
| Computer\_A-Station\_01 | Computer\_B-Station\_01 |
| Computer\_A-Station\_02 | Computer\_B-Station\_02 |
| Computer\_A-Station\_03 | Computer\_B-Station\_03 |
| Computer\_A-Station\_04 | Computer\_B-Station\_04 |
| Computer\_A-Station\_05 | Computer\_B-Station\_05 |

In this scenario, every station account has the same password, and both the passwords and generic user account names are available to all users. An advantage to this approach is that the overhead of managing user accounts is likely to be less than if using individual accounts, because there typically are fewer stations than users. Additionally, the overhead caused by replicating user accounts on every server is eliminated.

Another option is to create generic accounts on each server. Every user logs on to a server as the same account. To allow this, you must enable multiple sessions per account. You can further simplify by using the same account name and password on all servers. This simplifies logon for the users, who need only know one account name and password to use any station on any server. It should be noted that in this scenario all users can see any change that any user makes. For example, if a file is saved to the desktop, all users can see the file.

Important

It is important to understand that when users share a user account, either one per server or one per station, files saved on the server – even files saved in My Documents - are not private. Any user who logs on with the account has access to those files. When you use one account per station, if a user saves files to My Documents on one station, the user does not have access to those files on a different station. The same occurs when logging on to different MultiPoint Server computers.

To enable users to access their files from any station, you can use a file server, create a file share for each user account, or let users store their personal documents on a USB flash drive or other private storage device. Individual USB flash drives enable individual users to store private documents even if they are sharing a user account in MultiPoint Server.

# Example scenarios: Windows MultiPoint Server 2012 user accounts

What do you need to do to implement the user account scenario that you chose for your Windows MultiPoint Server 2012 environment? The following tables describe each task to perform to configure user accounts and prepare stations for shared or individual user accounts on a stand-alone MultiPoint Server computer or on networked servers in a workgroup or an Active Directory domain. Choose the scenario that applies to your environment. Then follow the links in the table to complete each required configuration task.

Note

If you have not yet decided how to set up your user accounts, see [Plan user accounts for your Windows MultiPoint Server 2012 environment](#zd47be540e89147bd85da6df4bbf93b2f) for more information about how each choice affects users.

## Single MultiPoint Server computer in a stand-alone environment (no network)

|  |  |
| --- | --- |
| My users do not need to log on. The stations can be available to anyone who walks up to them. They do not need an individual Windows desktop experience that includes private folders for storing data or personalized desktops. | 1. Create a single local user account (For instructions, see [Create local user accounts in Windows MultiPoint Server 2012](#z333219324266496199242cb4620bfcb4).)2. [Allow one account to have multiple sessions](#zf14cf1bdf1764de4b27df3d8e6334158)3. [Configure stations for automatic logon](#z52fcfac9d5004f1d819fb2ffc795e435) |
| My users can all share the same user logon. They do not need an individual Windows desktop experience that includes private folders for storing data or personalized desktops. | 1. Create a single local user account (For instructions, see [Create local user accounts in Windows MultiPoint Server 2012](#z333219324266496199242cb4620bfcb4).)2. [Allow one account to have multiple sessions](#zf14cf1bdf1764de4b27df3d8e6334158) |
| My users must have their own individual Windows desktop experience. | Create a local user account for each user (For instructions, see [Create local user accounts in Windows MultiPoint Server 2012](#z333219324266496199242cb4620bfcb4).) |

## Multiple MultiPoint Server computers on a network, but with no domain

|  |  |
| --- | --- |
| My users do not need to log on. The stations can be available to anyone who walks up to them. They do not need an individual Windows desktop experience that includes private folders for storing data or personalized desktops. | 1. Create a single local user account on each server. (For instructions, see [Create local user accounts in Windows MultiPoint Server 2012](#z333219324266496199242cb4620bfcb4).)2. [Allow one account to have multiple sessions](#zf14cf1bdf1764de4b27df3d8e6334158) on each server3. [Configure stations for automatic logon](#z52fcfac9d5004f1d819fb2ffc795e435) on each server |
| My users can all share the same user logon. They do not need an individual Windows desktop experience that includes private folders for storing data or personalized desktops. | 1. Create a single local user account on each server. (For instructions, see [Create local user accounts in Windows MultiPoint Server 2012](#z333219324266496199242cb4620bfcb4).)2. [Allow one account to have multiple sessions](#zf14cf1bdf1764de4b27df3d8e6334158) on each server. |
| My users must have their own individual Windows desktop experience.****** Option A - My users will always use local stations connected to the same MultiPoint Server computer.****** Option B - My users will use local stations on more than one MultiPoint Server computer.****** Option C - My users will use remote clients on the LAN. | ****** Option A - Create a single local user account on each server for the users of that server. (For instructions, see [Create local user accounts in Windows MultiPoint Server 2012](#z333219324266496199242cb4620bfcb4).)****** Option B - Create local user accounts for every user on every server. Note: This means that each user will have a profile on each server. In other words, if they save a file in My Documents while logged onto Server A’s station, they will not see the file when logging onto Server B’s station. (For instructions, see [Create local user accounts in Windows MultiPoint Server 2012](#z333219324266496199242cb4620bfcb4).)****** Option C - Assign each user to a specific MultiPoint Server computer. Create local user accounts for the assigned users on each server. (For instructions, see [Create local user accounts in Windows MultiPoint Server 2012](#z333219324266496199242cb4620bfcb4).) |

## One or more MultiPoint Server computers in a domain network environment

|  |  |
| --- | --- |
| My users do not need to log on. The stations can be available to anyone who walks up to them. They do not need an individual Windows desktop experience that includes private folders for storing data or personalized desktops. | 1. Create a domain account to log onto the servers.2. [Allow one account to have multiple sessions](#zf14cf1bdf1764de4b27df3d8e6334158) on each server.3. [Configure stations for automatic logon](#z52fcfac9d5004f1d819fb2ffc795e435) on each server. |
| My users can all share the same user logon. They do not need an individual Windows desktop experience that includes private folders for storing data or personalized desktops. | 1. Create a domain account for a group or for each user.2. [Allow one account to have multiple sessions](#zf14cf1bdf1764de4b27df3d8e6334158) on each server. |
| My users must have their own individual Windows desktop experience.****** Option A - Any user with a domain account can use the MultiPoint Server computer.****** Option B - I want to limit which domain accounts can access the server. | ****** Option A - No setup is required. By default, all domain users have access to any MultiPoint Server computer on the network.****** Option B - Limit the access of domain user accounts to the MultiPoint Server computer. For instructions, see [LINK TK]. |
| I want to use local user accounts and manage them separately from my domain accounts. For example, you want someone to manage the MultiPoint server but not the domain or you do not want to give domain accounts to all MultiPoint Server users. | Create one or more local user accounts on each server. (For instructions, see [Create local user accounts in Windows MultiPoint Server 2012](#z333219324266496199242cb4620bfcb4).)Note: This means that each user account will have a profile on each server. In other words, if they save a file in My Documents while logged onto Server A’s station, they will not see the file when logging onto Server B’s station. |

# Create local user accounts in Windows MultiPoint Server 2012

Three levels of local user accounts can be created in Windows MultiPoint Server 2012: Standard User accounts; MultiPoint Dashboard users, who have limited administrative rights; and full Administrative User accounts.

Use the following procedure to create a local user account on a MultiPoint Server computer. If your environment includes multiple MultiPoint Server computers, and you want the user to be able to log on to any station on any server, you need to create a local user account on each of your servers. That setup has some limitations. In a domain environment, you can also let users use their domain accounts. For an overview of your options, see [Plan user accounts for your Windows MultiPoint Server 2012 environment](#zd47be540e89147bd85da6df4bbf93b2f).

To create a local user account in Windows MultiPoint Server 2012

|  |
| --- |
| 1. Log on to the server as an administrator, and open MultiPoint Manager.2. Click the Users tab, and then click Add user account.The Add User Account Wizard opens.3. Enter an account name and password for the new user account, and then click Next.4. Select the type of user account that you want to create: Standard User - Can log on to a station and perform user tasks, but has no access to MultiPoint Manager or the MultiPoint Server Dashboard, and cannot shut down the system. MultiPoint Dashboard User - Has limited administrative rights. A Dashboard user can open the Dashboard and perform tasks such as logging users off the system or shutting down the MultiPoint Server computer, but the user does not have access to MultiPoint Manager. Administrative User Has full administrative rights in MultiPoint Server. For example, an administrative user can run MultiPoint Manager, add and delete users, modify system settings, and update drivers.5. Click Next, and then click Finish to create the user account. |

# Limit users' access to the server in MultiPoint Server 2012

Whether you join the MultiPoint Server computer to an Active Directory domain or you use local user accounts, all users have access to MultiPoint Server by default. Before you allow users to log on to stations in your MultiPoint Server environment, you should restrict access to the server.

Any user in the Remote Desktop Users group can log on to MultiPoint Server. By default, the user group Everyone is a member of the Remote Desktop Users group, and therefore every local user and domain user can log on to the MultiPoint Server. To restrict access to MultiPoint Server, remove the Everyone user group from the Remote Desktop Users group, and then add specific users or groups to the Remote Desktop Users group.

To add or remove users or groups from the Remote Desktop Users group

|  |
| --- |
| 1. From the Start screen, open Computer Management.2. In the console tree, under Local Users and Groups, click Groups.3. Double click Remote Desktop Users, and follow the instructions to add or remove users. To restrict general access to the server, remove the Everyone group. To give your MultiPoint Server users access to stations, add each local account or each domain user or group account to the Remote Desktop Users group. |

# Configure stations for automatic logon

If you want your stations to be available to anyone – and your users do not need private folders to store their personal data or personalized desktops – you can configure the stations for automatic logon. Auto-logon automatically logs on a user account that has been specified in the auto-logon settings when the MultiPoint Server starts.

To configure a station for automatic log-on

|  |
| --- |
| 1. From the Start screen, open MultiPoint Manager.2. Click the Stations tab, and then click the name of the station that you want to configure for auto-logon.3. In the right pane, click Configure auto-logon. The Configure Auto-Logon page opens.4. Select the Auto-logon using the following information check box, and then enter the user account and password to use for auto-logon. Click OK.Note The user account that you use for auto-logon must have a password. |

Note

To temporarily log on to a station that is set up for automatic logon with a different user account, hover over the top right corner of the screen to display a vertical menu, click the Settings charm, click the Power icon, and then hold the SHIFT key and click Disconnect. Hold down the SHIFT key until a logon prompt appears.

# Allow one account to have multiple sessions

To enable a group of users use a shared account on multiple stations at the same time, configure the Windows MultiPoint Server 2012 computer to allow one account to be logged on to multiple stations simultaneously. By default, if a user logs on to a second station with a shared user account, the user account is logged off the first station.

To configure the server to allow multiple session per account

|  |
| --- |
| 1. From the Start screen, open MultiPoint Manager.2. Click the Home tab.3. In the Computer column, click the name of the MultiPoint Server computer, and then, in the right pane, click Edit server settings.4. Select the Allow one account to have multiple sessions check box, and then click OK. |

# Enable file sharing in Windows MultiPoint Server 2012

You can allow users on your Windows MultiPoint Server 2012 stations to share files in two ways:

 If you have a file server on the network, it is recommended that you create a shared folder on the file server.

 If you have a small network of 2-3 MultiPoint Server computers, with no dedicated file server, one of the MultiPoint Server computers can act as the file server for all the MultiPoint Server computers. Create a shared folder on that computer, and then create local user accounts for all users on that computer. The shared folder can be on the original internal drive, or you can attach additional internal or external drives to the computer.

# System administration in Windows MultiPoint Server 2012

Before you start using your Windows MultiPoint Server 2012 system, it’s a good idea to do some basic system administration.

Note

For additional information about administering your system, see Help and Support for MultiPoint Manager. To open Help and Support, press F1 while working in MultiPoint Manager, or click the Help button in the top right corner of the window.

## In this section

[Configure Disk Protection in Windows MultiPoint Server 2012](#zbd9bf5b9e481499b9c157ee5a4f470c4)

[Install Server Backup on your Windows MultiPoint Server 2012 computer](#ze4331370ba07452992abdb14a41bfc3b)

[Configure sleep settings in Windows MultiPoint Server 2012](#z0279767e265741f39e246ec2e4cbaa38)

[Configure group policies for a domain deployment](#z13e5fa90d3304155a6b878eb650cbbfa)

# Configure Disk Protection in Windows MultiPoint Server 2012

Use the procedures in this topic to enable Disk Protection in Windows MultiPoint Server 2012 to protect your system volume from unintended updates, to schedule Windows Updates to be retained while Disk Protection is active, to temporarily disable Disk Protection, and to uninstall Disk Protection.

By enabling Disk Protection in Windows MultiPoint Server 2012, you can protect the system volume (the drive where Windows is installed—usually C:) from unwanted changes. When Disk Protection is enabled, changes made to the system volume are stored in a temporary location so that simply restarting the computer discards them and automatically returns the system to the previous known-good state.

The administrator can easily install software or make configuration changes by temporarily disabling disk protection. In order to keep the system current with Windows Updates and anti-malware definitions, Disk Protection schedules a maintenance window to download and install updates. The administrator can also provide a custom script to run during the maintenance window to accommodate any maintenance needs beyond Windows Update.

## Enable Disk Protection

Before you enable Disk Protection, make sure all applications and drivers are installed and up to date, and move your user profiles to a volume that will not be protected. If you need to make manual updates after you enable Disk Protection, you can temporarily disable Disk Protection. However, it's easiest to get the system into an ideal state before Disk Protection is turned on.

To enable Disk Protection in Windows MultiPoint Server 2012

|  |
| --- |
| 1. Log on to Windows MultiPoint Server 2012 as an administrator.2. Before you enable Disk Protection: Ensure the MultiPoint Server system is in exactly the state in which you want it to remain. For example, ensure that installed software, system settings, and updates are correct. Move user profiles to a volume that is not protected, or set up a shared file location off the system volume as described in [Enable file sharing in Windows MultiPoint Server 2012](#z508ad0568e0c4d59a4fa05775a54125d).3. From the Start screen, open MultiPoint Manager.4. Click the Home tab, click Enable disk protection, and then click OK. |

When Disk Protection is enabled for the first time, the system is prepared by installing a driver and creating a cache file on the system volume. The cache file will temporarily store any changes made to the system volume while Disk Protection is active. Because system updates are stored in the cache file, they do not alter the protected contents of the volume outside the cache file. Each time the system starts, the cache file is reset, which discards any changes stored there since the previous system start. Thus, the system always starts in the same state as when Disk Protection was enabled.

Windows needs to update a few system files – including the system pagefile, crash dump location, and event logs. Those files are not discarded when Disk Protection is enabled. To accomplish this, a new volume named DpReserved is created when Disk Protection is enabled for the first time, and those files are moved to that volume. The DpReserved partition is not protected, so writes to those files persist through restarts, even when Disk Protection is enabled.

## Schedule software updates

If Windows is configured to automatically install Windows Updates, Disk Protection allows these updates at the configured time, and does not discard the updates. For example, if Windows updates are scheduled for 3:00 a.m., Disk Protection checks for updates each day at 3:00 a.m. If any updates are found, MultiPoint Server temporarily disables Disk Protection, applies the updates, and then re-enables Disk Protection.

To schedule software updates in Windows MultiPoint Server 2012

|  |
| --- |
| 1. In MultiPoint Manager, display the Home tab, and then click Schedule software updates.2. In the Schedule Software Updates dialog box, click Update at, and select a time for updates - for example, 3:00 AM.3. Select the Run Windows Update check box. 4. If your organization runs its own update script, select the Run the following program check box, and specify the location of your organization’s update script.5. Select a maximum time to allow updates to run.6. Under When finished, choose whether to have the system return to its previous power state or shut down after applying updates. 7. Click OK. |

## Temporarily disable Disk Protection

If an administrator needs to install software, change system settings, or perform other maintenance tasks that involve system updates, they can temporarily disable Disk Protection. After the changes are made, re-enable Disk Protection. During system restarts, the system will retain its state when Disk Protection was enabled.

To disable disk protection

|  |
| --- |
| 1. In MultiPoint Manager, click the Home tab.2. On the Home tab, click Disable disk protection, and then click OK. |

Note

Remember to re-enable Disk Protection after maintenance is complete. The system will not be protected again until the administrator explicitly re-enables Disk Protection.

## Uninstall Disk Protection

Uninstalling Disk Protection removes the driver and the cache file, so you should only do this if you want to stop using Disk Protection long-term. If you simply want to perform maintenance or stop protection temporarily, use the Disable disk protection task instead.

You can uninstall Disk Protection whether it is enabled or disabled.

To uninstall Disk Protection

|  |
| --- |
| 1. In MultiPoint Manager, click the Home tab.2. On the Home tab, and click Uninstall disk protection, and then click OK.After you click **OK**, the computer restarts. The uninstallation process requires several restarts, during which the driver and cache file are removed. The DpReserved partition remains, and the pagefile, crash dump location, and event log files remain configured to use the DpReserved partition. |

# Install Server Backup on your Windows MultiPoint Server 2012 computer

It is recommended that you consider a backup and recovery plan for your MultiPoint Server. For more information on the backup and recovery tools available on MultiPoint Server, see [Windows Server Backup Feature Overview](http://technet.microsoft.com/library/jj614621.aspx) (http://technet.microsoft.com/library/jj614621.aspx).

## Configure MultiPoint Server Backup

A good backup and recovery plan is important for any size environment. Windows Server Backup is a feature in Windows Server 2012 that provides a set of wizards and other tools for you to perform basic backup and recovery tasks for the server on which it is installed. You can use Windows Server Backup to back up a full server (all volumes), selected volumes, the system state, or specific files or folders, and to create a backup that you can use to rebuild your system.

You can recover volumes, folders, files, certain applications, and the system state. And, for disasters like hard disk failures, you can rebuild a system either from scratch or by using alternate hardware. To do this, you must have a backup of the full server or just the volumes that contain operating system files and the Windows Recovery Environment. This restores your complete system onto your old system or onto a new hard disk.

A key feature of Windows Server Backup is the ability to schedule backups to run automatically.

Use the following procedures to set up the type of backup you require.

To install backup and recovery tools

|  |
| --- |
| 1. From the Start screen, open Server Manager.2. Click Add Roles and Features to start the Add Roles Wizard. Then click Next after you review the Before you begin notes.3. Select the Role based or feature based installation option, and then click Next.4. Select the local computer that you are managing, and click Next.The Add Features Wizard opens.5. On the Select Features page, expand Windows Server Backup Features, select the check boxes for Windows Server Backup and Command-line Tools, and then click Next.Note Or, if you just want to install the snap-in and the Wbadmin command-line tool, expand Windows Server Backup Features, and then select the Windows Server Backup check box only—make sure the Command-line Tools check box is clear.6. On the Confirm Installation Selections page, review your choices, and then click Install.If any errors occur during the installation, the Installation Results page will note the errors.7. After the installation completes successfully, you should be able to access these backup and recovery tools: To open the Windows Server Backup snap-in, on the Start screen, type backup, and then click Windows Server Backup in the results. To start the Wbadmin tool and view syntax for its commands: On the Start screen, type command. In the results, right-click Command Prompt, click Run as administrator at the bottom of the page, and then click Yes at the confirmation prompt. At the command prompt, type wbadmin /? and press ENTER. You should see command syntax and descriptions for the tool. |

To configure backups using Windows Server Backup

|  |
| --- |
|  Follow the instructions in [Backing Up Your Server](http://technet.microsoft.com/library/cc753528.aspx). |

# Configure sleep settings in Windows MultiPoint Server 2012

To save energy on your Windows MultiPoint Server 2012 system, you can configure the server to hibernate or enter sleep mode when user sessions time out. You will need to configure several sleep settings on the MultiPoint Server computer, and update the Registry to configure the session timeout.

## Configure sleep settings on the Windows MultiPoint Server 2012 computer

Update settings in power management to allow sleep mode:

 [Allow the computer to enter sleep mode when idle](#z4)

 [Turn off the logon requirement when the computer wakes up](#z5)

 [Enable the computer to hibernate](#z6)

### Allow the computer to enter sleep mode when idle

If you want the MultiPoint Server to go into sleep mode after it has been idle for a certain length of time, turn on the power management setting, as described in the following procedure.

To allow the computer to go to sleep

|  |
| --- |
| 1. Log on to the MultiPoint Server computer as an administrator.2. From the Start screen, open Control Panel.3. In Control Panel, display Power Options. (Type power in the search box.)4. In Power Options, click Change when the computer sleeps.5. Under Put the computer to sleep, select the amount of time to allow the computer to remain idle before entering sleep mode, and then click Save Changes.If this setting is not available, click Change settings that are currently unavailable, and then update the setting. This overrides the current setting in your preferred power plan. |

### Turn off the logon requirement when the computer wakes up

If you turn on the power management setting to allow the computer to go to sleep, and the computer requires a password to wake it from sleep, your computer might not work and you might lose unsaved data. If this happens, you must restart the computer. To avoid this issue, turn off the requirement for a password when the computer wakes from sleep by completing the following procedure. If you have configured a screen saver, you might need to update the screen saver settings also.

To turn off the password requirement to wake the computer from sleep

|  |
| --- |
| 1. In Control Panel, display Power Options, and then click Require a password on wakeup.2. On the Define power buttons and turn on password protection page, in the Password protection on wakeup section, select Don’t require a password, and then click Save changes.If this option is not available, click Change settings that are currently unavailable, and then change the setting. This overrides the default setting in your preferred power plan. |

If you have configured a screen saver for the computer, use the following procedure to verify that the screen saver will not require a logon when the computer wakes from sleep.

To turn off the password-on-wakeup for a screen saver

|  |
| --- |
| 1. In Control Panel, click Appearance and Personalization.2. Under Personalization, click Change screen saver.3. In the Screen Saver Settings dialog box, ensure that the On resume, display logon screen check box is not selected. Then click OK. |

### Enable the computer to hibernate

By default, hibernate is disabled in Windows MultiPoint Server 2012. If you want to be able to turn on hibernation using the power button, after you enable hibernation, configure the power button to hibernate the computer when pressed.

To enable hibernation

|  |
| --- |
| 1. Log on to the MultiPoint Server computer as an administrator.2. Open a command prompt. (Hold down the Windows key, and press R to open the Run dialog box. Then type cmd, and press ENTER.)3. At the command prompt, type: powercfg.exe –h on |

To configure the power button on the computer to go to hibernate when pressed

|  |
| --- |
| 1. In Control Panel, display Power Options, and then click Choose what the power buttons do.2. Beside When I press the power button, select Hibernate. Note On some computers, you might see different options. For example, some computers allow different Hibernate settings when a computer is plugged in and when it is running off a battery. 3. Click Save changes. |

## Configure a session time-out for idle user sessions

By default, the MultiPoint Server computer does not go to sleep if a user is logged on to any station, even if the user’s session has been idle for a while. MultiPoint Server does not automatically disconnect an idle session, which prevents the computer from entering sleep mode.

To enable sleep mode on a MultiPoint Server computer, update the registry to set a session idle time out interval.

Important

Directly editing the registry could make your MultiPoint Server computer inoperable. We strongly recommend that you back up the registry before you make any changes to it. You should only change values in the registry that you understand or are instructed to change by a source that you trust.

To set the SessionIdleTimeout registry key

|  |
| --- |
| 1. To open the Registry Editor with elevated permissions:a. On the Start screen, type cmd.b. In the results, right click Command Prompt, and then click Run as an administrator at the bottom of the screen.c. At the User Account Control prompt, click Yes.d. At the command prompt, type Regedit, and press ENTER.2. In the Registry Editor, navigate to HKEY\_LOCAL\_MACHINE\Software\Microsoft\Windows MultiPoint Server, and select the SessionIdleTimeout registry key.If you do not see a SessionIdleTimeout registry key, add the registry key:a. In the left pane, right-click Windows MultiPoint Server, click New, and then click DWORD (32-bit) Value.b. In the key name, type SessionIdleTimeout, and then press ENTER.3. Right-click the SessionIdleTimeout registry key, and then click Modify.4. In the Edit dialog box, enter the amount of time, in milliseconds, to allow a user session to remain idle before the session is disconnected by MultiPoint Server, and then click OK. 5. Restart the computer to apply the changes. |

# Configure group policies for a domain deployment

To ensure that your domain deployment of MultiPoint Server works properly, apply the following group policy settings to the WMSshell user account on a MultiPoint Server system.

Important

Some group policy settings can prevent required configuration settings from being applied to MultiPoint Server. Be sure that you understand and define your group policy settings so that they work correctly on MultiPoint Server. For example, a Group Policy setting that prevents Autologon could present problems with MultiPoint Server logon behavior.

## Update group policies for the WMSshell user account

Note

To find out how to update group policies, see [Local Group Policy Editor](http://technet.microsoft.com/library/dn265982.aspx) (http://technet.microsoft.com/library/dn265982.aspx).

POLICY: User Configuration > Administrative templates > Control Panel > Personalization

Assign the following values:

|  |  |
| --- | --- |
| Setting | Values |
| Enable screen saver | Disabled |
| Screen saver timeout | DisabledSeconds: xxx |
| Password protect the screen saver | Disabled |

POLICY: Computer Configuration >Windows Settings >Security Settings >Local Policies >User Rights Assignment > Allow log on locally

|  |  |
| --- | --- |
| Setting | Values |
| Allow log on locally | Ensure that the list of accounts includes the WMSshell account.Note: By default, the WMSshell account is a member of the Users group. If the Users group is in the list, and WMSshell is a member of the Users group, you do not need to add the WMSshell account to the list. |

Important

When you set any group policies, make sure that the policies do not interfere with automatic updates and error Windows error reporting on the MultiPoint Server computer. These are set by the Install updates automatically and Automatic Windows Error Reporting settings that were selected during Windows MultiPoint Server installation, configured in MultiPoint Manager using Edit server settings, or configured in scheduled updates for Disk Protection.

## Update the Registry

For a domain deployment of Windows MultiPoint Server 2012, you should update the following registry subkeys.

Important

Incorrectly editing the registry may severely damage your system. Before making changes to the registry, you should back up any valued data on the computer.

To update Registry subkeys for a domain deployment of Windows MultiPoint Server 2012

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 1. Open Registry editor. (At a command prompt, type regedit.exe, and press ENTER.) 2. In the left pane, locate and then select the following registry subkey:HKEY\_USERS\<SIDofWMSshell>\Software\Policies\Microsoft\Windows\Control Panel\Desktopwhere <SIDofWMSshell> is the security identifier (SID) for the WMSshell account. To find out how to identify the SID, see [How to Associate a Username with a Security Identifier (SID)](http://support.microsoft.com/kb/154599) (http://support.microsoft.com/kb/154599). 3. In the list on the right, update the following subkeys.

|  |  |  |
| --- | --- | --- |
| Subkey | Value name | Value data |
| ScreenSaveActive | REG\_SZ | 0 (zero) |
| ScreenSaveTimeout | REG\_SZ | 120 |
| ScreenSaverIsSecure | REG\_SZ | 0 (zero) |

To update a Registry subkey:a. With the Registry key selected in the left pane, right-click the subkey in the right pane, and then click Modify.b. In the Edit String dialog box, type a new value in Value data, and then click OK.4. After you finish updating Registry subkeys, restart the computer to activate the changes. |

# Appendixes: Deploying Windows MultiPoint Server 2012

The appendixes provide additional resources to help with your Windows MultiPoint Server 2012 deployment.

## In the appendixes

[Task Lists: Deploying Windows MultiPoint Server 2012](#ze08c57845b3e402886c196deaee41f09)

[Display language scenarios for Windows MultiPoint Server 2012](#zed56d41f7cf8481bb749b01be6060c1e)

[Glossary](#z807bce1db99349c69783b01a3c55846c)

# Task Lists: Deploying Windows MultiPoint Server 2012

Use the task lists in this topic to help you’re the deployment of your Windows MultiPoint Server 2012 system and keep track of completed tasks. Not all tasks apply to every environment. For example, some tasks are performed only if you deploy MultiPoint Serer on an Active Directory domain. Others, such as creating split-screen stations or deploying virtual desktops for stations, are optional. For procedures that explain how to perform these tasks, see [Deploying Windows MultiPoint Server 2012](#z75f16a5be82941d295c21be93718b614).

## Task list: Deploy the server

|  |  |
| --- | --- |
| Task | Description |
| 1 | [Plan a Windows MultiPoint Server 2012 Deployment](http://technet.microsoft.com/library/jj916408.aspx) (http://technet.microsoft.com/library/jj916408.aspx) |
| 2 | [Collect hardware and device drivers needed for the installation](#z4cf5fdbeb8714360b003d65ac43b491e) |
| 3 | [Set up the physical computer and primary station](#z4e83b126ce9a4cd7a0bd6627c9e0f81b) |
| 4 | [Install Windows MultiPoint Server 2012](#zf6f8970bde3f4255b2a15472a16ed02f) |
| 5 | [Update and install device drivers if needed](#z16be3ef9a05b4621a4315806b567e997) |
| 6 | [Set the date, time, and time zone](#z22a87c5f3bfc4da1990524f768ede959) |
| 7 | [Join the MultiPoint Server computer to a domain (optional)](#z623b7c21dcbb402e8b5a8e434cd225bd) (MultiPoint Server 2012 Premium only) |
| 8 | [Install updates](#zb201be28b2d9403ca5e9739d64c1b296) |
| 9 | [Attach additional stations to your Windows MultiPoint Server 2012 computer](#zd78ebf4e096840149a429f75cc50cb52) |
| 10 | [Activate Windows MultiPoint Server 2012 and add CALs](#z97b358e6d8fd498daede5a50559b2146) |
| 11 | [Install software on your Windows MultiPoint Server 2012 system](#zd4fb5b8b2d5740bbafc77cfefc2ae232) |

## Task list: Optional configurations

|  |
| --- |
| Task |
| [Set up a split-screen station in Windows MultiPoint Server 2012](#z35d1d43479b24e0a835fd94ed8ee6b21) |
| [Add printers in Windows MultiPoint Server 2012](#ze1f6d3ca8caf4aa0b0ea93cdfd3f3f37) |
| [Enable access over a wireless LAN in Windows MultiPoint Server 2012](#zd55183ed0b264738aa527aae5cc94a04) |
| [Create Windows 7 or Windows 8 Enterprise virtual desktops for stations](#z63f08b5bc73541f4b6c8411eff85a4ab) |
| [Change the display language in Windows MultiPoint Server 2012](#zdd5bb3acdea249edb3464e344e628688) |

## Task list: Prepare your system for users

|  |
| --- |
| Task |
| [Plan user accounts for your Windows MultiPoint Server 2012 environment](#zd47be540e89147bd85da6df4bbf93b2f) |
| [Create local user accounts in Windows MultiPoint Server 2012](#z333219324266496199242cb4620bfcb4) |
| [Limit users' access to the server in MultiPoint Server 2012](#z4cabd4f1a7644be6bc6e0a5f5566390c) |
| [Configure stations for automatic logon](#z52fcfac9d5004f1d819fb2ffc795e435) |
| [Allow one account to have multiple sessions](#zf14cf1bdf1764de4b27df3d8e6334158) |
| [Enable file sharing in Windows MultiPoint Server 2012](#z508ad0568e0c4d59a4fa05775a54125d) |

## Task list: Server administration

|  |
| --- |
| Task |
| [Configure Disk Protection in Windows MultiPoint Server 2012](#zbd9bf5b9e481499b9c157ee5a4f470c4) |
| [Install Server Backup on your Windows MultiPoint Server 2012 computer](#ze4331370ba07452992abdb14a41bfc3b) |
| [Configure sleep settings in Windows MultiPoint Server 2012](#z0279767e265741f39e246ec2e4cbaa38) |
| [Configure group policies for a domain deployment](#z13e5fa90d3304155a6b878eb650cbbfa) |

# Display language scenarios for Windows MultiPoint Server 2012

This appendix describes how to mix languages in a multi-language installation of Windows MultiPoint Server 2012. Find out which language packs are fully localized, which are supported, and what to expect when the default system language or a user’s display language is not fully localized.

Note

To find out how to change the default system language or a user’s display language, see [Change the display language in Windows MultiPoint Server 2012](#zdd5bb3acdea249edb3464e344e628688).

## Which languages can I use?

Fully localized language packs - MultiPoint Server is available fully localized in the following languages. If you apply one of those language packs to the server, the MultiPoint Server Dashboard, MultiPoint Manager, and the desktop display the selected language.

Table: The 18 languages in which MultiPoint Server is fully localized

|  |  |  |
| --- | --- | --- |
| Arabic | German | Polish |
| Chinese Traditional | Hebrew | Portuguese (Brazil) |
| Chinese (Hong Kong SAR) | Hungarian | Portuguese (Portugal) |
| Chinese (Simplified) | Italian | Russian |
| English | Japanese | Spanish |
| French | Korean | Turkish |

Important

Arabic and Hebrew are only available by applying a Windows Server 2012 Language Pack to another DVD language such as English. Complete DVD images of MultiPoint Server 2012 are available for all of the other languages.

Other supported language packs - Windows MultiPoint Server supports all the language packs that are available for Windows Server 2012. However, if you apply a language pack for which MultiPoint Server is not fully localized, the desktop displays the selected language, but the MultiPoint Server Dashboard and MultiPoint Manager display the default language for the MultiPoint Server system. For a list of available language packs, see [Windows Server 2012 language packs](http://www.microsoft.com/oem/en/installation/downloads/Pages/Windows-Server-2012-Language-Packs.aspx?mtag=TW-P-S12#fbid=25o0epAptQN) (http://www.microsoft.com/oem/en/installation/downloads/Pages/Windows-Server-2012-Language-Packs.aspx?mtag=TW-P-S12#fbid=25o0epAptQN) in Microsoft’s OEM Partner Center.

## Display language scenarios

When you change the language pack used by the MultiPoint Server system or a user account, the language displayed in different areas of the product depends on whether MultiPoint Server is fully localized in the selected language.

### Simple Scenarios

#### Apply a language pack that is one of the 18 MultiPoint Server languages

If you start with any language of Windows MultiPoint Server and apply a different language pack from the MultiPoint Server list of 18, MultiPoint Manager, the Multipoint Server Dashboard, and the desktop all display the new language.

#### Apply a language pack that is not one of the 18 MultiPoint Server languages

If you start with any language of MultiPoint Server and apply a language pack that is not one of the 18 MultiPoint Server languages, the desktop displays the new language, and MultiPoint Manager and the MultiPoint Server Dashboard display English.

### Complex Scenarios

#### Set a fully localized display language

If you install one of the 18 language packs for which MultiPoint Server is fully localized, and you set the MultiPoint Server system to use that language (that is, as the display language for a user account and also as the language of the Welcome screen and system accounts), as described in [Change the display language in Windows MultiPoint Server 2012](#zdd5bb3acdea249edb3464e344e628688), MultiPoint Manager, the MultiPoint Dashboard, and the MultiPoint Server setup screens display the language that you installed and set.

#### Set a display language that is not fully localized

If you install a language pack for which MultiPoint Server is not fully localized, the language displayed in MultiPoint Manager and the MultiPoint Server setup screens might be English, depending on how you set the display language for the system. The following two scenarios describe this behavior:

 Set the display language for the user account, and do not set the language for the Welcome screen and system accounts

If you set the display language for the user account to a language that is not one of the fully localized languages, but you do not set the language for the Welcome screen and system accounts, MultiPoint Manager and the MultiPoint Dashboard display English, and the MultiPoint Server setup screens display the language of the fully localized version of MultiPoint Server that you installed.

For example, if you installed the German version of MultiPoint Server and the Polish language pack, MultiPoint Manager and the MultiPoint Dashboard display English, and the MultiPoint Server setup screens display German.

 Set the language for the Welcome screen and system accounts, and do not set the display language for the user account

If you set the language for the Welcome screen and system accounts to a language in which MultiPoint Server is not fully localized, but you do not set the display language for the user account, MultiPoint Manager displays the language of the fully localized version of MultiPoint Server that you installed, and the MultiPoint Server setup screens display English.

For example, if you installed the German version of MultiPoint Server and the Polish language pack, MultiPoint Manager will displays in German, and the MultiPoint Server setup screens will display in English.

# Glossary

associate a station

|  |
| --- |
| To specify which monitor is used with which station and peripheral devices, such as a keyboard and mouse. For direct video connected stations, this is done by pressing a specified key on the station’s keyboard when prompted to do so. For USB zero client connected stations, this typically happens automatically. |

bus-powered hub

|  |
| --- |
| A hub that draws all of its power from the computer’s USB interface. Bus-powered hubs do not need separate power connections. However, many devices do not work with this type of hub because they require more power than this type of hub provides.  |

console mode

|  |
| --- |
| One of the two MultiPoint Server modes. When the system is in console mode, no stations are available for use. Instead, all of the monitors are treated as a single extended desktop for the console session of the computer system. Console mode is typically used to install, update, or configure software, which cannot be done when the computer is in station mode. See also: station mode.  |

direct-video-connected station

|  |
| --- |
| A MultiPoint Server station that consists of a monitor that is directly connected to a video output on the server, and at a minimum, it includes a keyboard and mouse that are connected to the server through a USB hub.  |

domain user account

|  |
| --- |
| A user account that is hosted on a domain computer. Domain user accounts can be accessed from any computer that is connected to the domain, and they are not tied to any particular computer.  |

downstream hub

|  |
| --- |
| A hub that is connected to a station hub to add more available ports for station devices. A downstream hub must not have a keyboard attached to it.  |

externally powered hub

|  |
| --- |
| Also known as a self-powered hub, this hub takes its power from an external power supply unit; therefore, it can provide full power (up to 500 mA) to every port. Many hubs can operate as bus-powered or externally-powered hubs.  |

HID consumer control device

|  |
| --- |
| A Human Interface Device (HID) is a computer device that interacts directly with humans. It may take input from or deliver output to humans. Examples are keyboard, mouse, trackball, touchpad, pointing stick, graphics table, joystick, fingerprint scanner, gamepad, webcam, headset, and driving simulator devices. A HID consumer control device is a particular class of HID devices that includes audio volume controls and multimedia and browser control keys.  |

intermediate hub

|  |
| --- |
| A hub that is between a root hub on the server and a station hub. Intermediate hubs are typically used to increase the number of available ports for stations hubs or to extend the distance of the stations from the computer.  |

local user account

|  |
| --- |
| A user account on a specific computer. A local user account is available only on the computer where the account is defined.  |

multifunction hub

|  |
| --- |
| See USB zero client.  |

MultiPoint Server system

|  |
| --- |
| A collection of hardware and software that consists of one computer that is running MultiPoint Server and at least one MultiPoint Server station. For more information about system layout options, see [MultiPoint Server Site Planning](http://technet.microsoft.com/library/jj916390.aspx). |

partition

|  |
| --- |
| A section of space on a physical disk that functions as if it is a separate disk.  |

primary station

|  |
| --- |
| The station that is the first to start up when MultiPoint Server is started. The primary station can be used by an administrator to access startup menus and settings. When it is not being used by the administrator, it can be used as a normal station (it does not have to be reserved exclusively for administration). The primary station’s monitor must always be connected directly to a video output on the computer that is running MultiPoint Server. See also: station.  |

RDP-over-LAN-connected station

|  |
| --- |
| A station that is a thin client, traditional desktop, or laptop computer that connects to MultiPoint Server by using Remote Desktop Protocol (RDP) through the local area network (LAN).  |

root hub

|  |
| --- |
| A USB hub that is built-in to the host controller on a computer’s motherboard.  |

split screen

|  |
| --- |
| A station where a single monitor can be used to display two independent user desktops. Two sets of hubs, keyboards, and mice are associated with a single monitor. One set is associated with the left side of the monitor, and the other set is associated with the right side of the monitor.  |

standard station

|  |
| --- |
| In contrast to the primary station, which can be used by an administrator to access startup menus, standard stations will not display startup menus, and they can only be used after MultiPoint Server has completed the startup process. See also: station.  |

station

|  |
| --- |
| User endpoint for connecting to the computer running MultiPoint Server. Three station types are supported: direct-video-connected, USB-zero-client-connected, and RDP-over-LAN-connected stations. For more information about stations, see [MultiPoint Server Stations](http://technet.microsoft.com/library/jj916411.aspx).  |

station hub

|  |
| --- |
| A USB hub that has been associated with a monitor to create a MultiPoint Server station. It connects peripheral USB devices to MultiPoint Server. See also: USB zero client and USB hub.  |

station mode

|  |
| --- |
| One of the two MultiPoint Server modes. Typically, the MultiPoint Server system is in station mode. When in station mode, the MultiPoint Server stations behave as if each station is a separate computer that is running the Windows operating system, and multiple users can use the system at the same time. See also: console mode.  |

USB hub

|  |
| --- |
| A generic multiport USB expansion hub that complies with the universal serial bus (USB) 2.0 or later specifications. Such hubs typically have several USB ports, which allows multiple USB devices to be connected to a single USB port on the computer. USB hubs are typically separate devices that can be externally powered or bus-powered. Some other devices, such as some keyboards and video monitors, may incorporate a USB hub into their design. See also: USB zero client.  |

USB over Ethernet zero client

|  |
| --- |
| A USB zero client that connects to the computer through a LAN connection rather than a USB port. This client appears to the server as a USB device even through the data is sent through the Ethernet connection.  |

USB zero client

|  |
| --- |
| An expansion hub that connects to the computer through a USB port and enables the connection of a variety of non-USB devices to the hub. USB zero clients are produced by specific hardware manufacturers, and they require the installation of a device-specific driver. USB zero clients support connecting a video monitor (through VGA, DVI, and so on), and peripherals (through USB, sometimes PS/2, and analog audio). The USB zero client can be externally powered or bus-powered. See also, USB hubs.  |

USB zero client connected station

|  |
| --- |
| A MultiPoint Server station that consists of (as a minimum) a monitor, keyboard, and mouse, which are connected to the server through a USB zero client.  |