

# Installing Windows Server 2012 R2

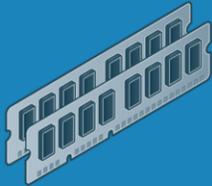
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<http://itfreetraining.com/server#install-2012-r2>

This video will show how to perform a clean install of Windows Server 2012 R2 standard edition.

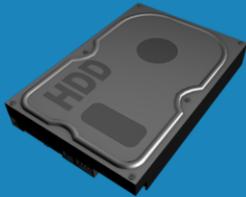
# System Requirements



1.4 GHz 64-bit processor



512 MB



32 GB

## **System Requirements**

In order to install Windows Server 2012, you require a 1.4Ghz 64bit CPU (32bit CPU's are not supported) 512Megabytes of RAM, and 32Gigabytes of free space. This will be enough to install Windows Server, however this is the bare minimum. For any production system you should have 1 Gigabyte or 2 Gigabytes of RAM at a minimum and more free hard space. Usually anywhere from 50-100 Gigabytes of free space is enough for basic Windows Server installs. The amount of RAM and disk space you require will ultimately be determined by what you are planning to use the server for.

# Demonstration

## **Demonstration**

In this demonstration, Windows Server 2012 R2 standard edition will be installed to a virtual machine running on vSphere. This particular virtual machine is configured to use the EFI firmware rather than the BIOS firmware. EFI is a newer boot environment designed for 64bit systems.

Once the DVD containing the install media is in the optical drive, in this case the install media is an ISO file and has been mounted to the virtual machine, the next step is to make sure that the computer is configured to boot from that install media. In vSphere this is done by selecting the VM menu and then selecting edit settings. Once the settings are open, select the tab options and then select "Boot Options". On this screen, tick the option "The next time the virtual machine boots, force entry into the EFI setup screen".

Once the virtual machine starts up it will go straight into the EDI boot screen. To make sure the system boots from the ISO mounted to the optical drive, select the option "Boot Manager" and then select the option for the virtual CDROM drive. If an operating system already exists on the hard disk you will get a message saying "Press any key to boot from CD or DVD". Because the EFI system is being used, this may incorrectly detect any operating system on the drive when none is installed. If you get this message, press any key to start the setup process, otherwise the computer will attempt to boot off the first hard disk in the system.

The computer will load Windows PE from the optical drive into memory. Once this has been loaded it will be run automatically and then the setup will run from the

DVD.

The first screen of the setup will ask which language, time and currency format and keyboard you would like to use.

On the next screen you will need to press the “install now” option to start the Windows Server install. There is also an option on this screen to “Repair your computer”. If the computer experiences problems booting, select this option and you may be able to fix these problems.

The next screen will ask for a product key. The product key entered in here will determine which edition of Windows Server 2012 R2 will be installed. The DVD will need to contain this edition of Windows Server 2012 R2 in order to perform the install. If the DVD does not contain this edition, setup will inform you and the install will not be able to continue.

The next screen will ask which edition you want to install from the DVD and if it is the core or full edition of Windows.

The next screen will ask if you accept the license terms. Once you have read the license terms, tick the tickbox “I accept the license terms” and move on in the wizard.

The next screen asks if an upgrade or clean install is being performed. If you wish to perform an in-place upgrade, setup must be run from the operating system that you want to perform the upgrade from. In this case, a new install of Windows Server 2012 R2 is going to be performed so the second option “Custom: Install Windows only (advanced)” is selected.

On the next screen you can create partitions to install Windows on. Your drive should appear here. If it does not you will need to select the option “Load driver” and load additional device drivers into the system. This is common with hard disks that have been combined together using systems like RAID. In most cases you will select the option for unallocated space and let Windows create the required partitions. If you want to, you can create the partitions manually.

Setup will now install Windows to the drive. The process generally takes about half an hour to complete. Once complete the system will reboot and Windows will start for the first time. During the first boot, a number of performance tests will be run which will determine how Windows will be configured and what features are available.

Once the system has booted for the first time, Windows will prompt for an administrator password and finalize the system settings. Once done, you are free to login for the first time. The first login will take a bit longer than future logins because Windows needs to create a profile for that user on the system.

Once logged in Server Manager will load automatically. You may also get prompts for the network cards on the system. These prompts will configure the local firewall to allow or block traffic on the network for those network cards.

In this case Windows was installed in a virtual machine. To improve the performance of the virtual machine VMWare tools should be installed. To install it, select the menu VM and then select guest followed by “Install/Upgrade VMware Tools”. This will mount the VMWare tools disc image to the optical drive. Once mounted, run the

setup and follow the prompts to install VMWare Tools. Once the install is completed, you will need to reboot the server.

See <http://YouTube.com/ITFreeTraining> or <http://itfreetraining.com> for our always free training videos. This is only one video from the many free courses available on YouTube.

#### References

“System Requirements and Installation Information for Windows Server 2012 R2”  
<http://technet.microsoft.com/en-us/library/dn303418.aspx>