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```
C:\Windows\System32\cmd.exe - C:\Windows\system32\sconfig.cmd
Enter subnet mask (Blank = Default 255.255.255.0):
Enter default gateway: 192.168.0.1
Setting NIC to static IP...

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Network Adapter Settings
-----

NIC Index          12
Description        Realtek PCIe GBE Family Controller
IP Address         192.168.0.255  f881:258d:c43a:5c61:f1f
Subnet Mask        255.255.255.0
DHCP enabled       True
Default Gateway    192.168.0.1
Preferred DNS Server
Alternate DNS Server

1) Set Network Adapter Address
2) Set DNS Server
3) Clear DNS Server Settings
4) Return to Main Menu

Select option:
```

Hyper-V Standalone Installation

For the free video please see
<http://itfreetraining.com/hyperv#/install-standalone>

This video looks at how to install the free standalone version of Hyper-V from Microsoft. The video looks at the complete process from download from Microsoft to configuring the server and adding it to the domain.

Demonstration

Demonstration downloading Hyper-V

00:32 To download Hyper-V open Internet Explorer by selecting the shortcut in the quick launch bar.

00:36 From Internet Explorer, go to the address <http://technet.com> This download is not available from Microsoft Download center.

00:48 From the Technet website, select the menu option downloads at the top of the page.

00:56 On the download page select the option "Windows Server 2012 R2".

01:08 Expand the section Hyper-V Server 2012 R2

01:15 Before you can download Hyper-V Server 2012 R2 you will need to sign in to Technet. If you do not have a login for Technet you can create one for free.

01:26 From the downloads, press the button "register to continue" under the section "Hyper-V Server 2012 R2"

01:33 Change any details here that are not correct. You will need to select the language that you want to download. In this case the language English was chosen.

01:50 At the bottom of the screen press the continue button to start the download.

01:58 Technet uses its own downloader to perform downloads. Once the option "download the installer" is selected, press the button run to run the download installer.

02:11 From the download manager select "I Agree" to agree to the license and then press next.

02:13 When prompted save the download to the desktop.

02:22 You may receive a Windows security alert asking for changes to be made to the local firewall. Press allow access if this appears.

02:36 To see the process of the download, scroll to the top of the web page and look for a black bar indicating how much has been downloaded.

Demonstration downloading and using Rufus

02:52 You will now use the ISO downloaded to install the Hyper-V server by transferring the ISO to a USB drive.

3:13 Navigate to '<https://rufus.akeo.ie>' in the address bar.

3:25 Scroll down to the bottom and select the Download link

3:30 You do not need to install Rufus, you can merely Run it.

3:38 Rufus will first ask to check for updates, click No.

3:48 If you need a different language, click the World icon at the top of the screen.

3:58 Select the USB device you'd like to use under Device dropdown list

4:06 Select the icon that looks like a CD drive and browse to the ISO file you downloaded earlier and click 'Open'

4:20 Leave the rest of the options as is and press 'Start' to create the bootable flash drive

4:22 Click 'OK' on the warning message that all USB data will be erased to begin the creation

4:38 Rufus will erase all the data on the flash drive and create the boot device. This process will take several minutes to complete.

Demonstration Installing Hyper-V

4:50 Close Rufus and remove the USB drive

4:58 Insert the UBS drive into the server you want to install Hyper-V server on.

5:10 The computer will boot off the USB drive since no operating system is installed. If another operating system has been previously installed, you may need to update the BIOS to boot from the USB drive.

5:14 The process for installing Hyper-V is the same as Server 2012.

5:30 Click on 'Install Now' to begin the installation

5:34 Click the checkbox to accept the license agreement and the click 'Next'

5:40 Click on 'Custom: Install the newer version of Hyper-V Server only' to install a fresh copy of Windows

5:53 Select the drive to install Hyper-V on and click 'Next'. You can select the default if you only have one drive.

6:00 The operating system will now be installed. Note that it does not ask you for a product key like Windows Server 2012 since Hyper-V is free.

6:24 After the server restarts, enter a password for the Administrator account

Demonstration configuring Hyper-V

6:30 Click 'OK' to complete logging into the server after the password has been set

6:32 A command prompt and the script SCconfig will be run after login
6:38 SConfig allows for some basic configuration of the server to be performed
6:46 Press '2' to change the computer name and enter in the computer name.
5:54 Press 'No' to reboot the server at a later time.
7:00 Press '8' to configure the network adapter
7:06 Enter the index number of the network adapter you want to change
7:20 Press '1' to configure the IP address
7:24 Press 'S' for a static IP address
7:26 Enter in the IP address you'd like to use and press Enter
7:30 Enter in the subnet mask and press Enter
7:34 Enter in the default gateway and press Enter
7:40 Press '2' to configure the DNS server
7:46 Enter in the preferred DNS server and press Enter
7:54 Press '4' to go back to the main menu
8:00 Press '7' from the main menu to configure Remote Desktop to make managing the server easier.
8:12 Press 'E' to enable Remote Desktop capability
8:18 Press '1' to select Network level authentication for more secure remote desktop sessions.
8:20 Click 'OK' on the dialog box that pops up
8:26 Select the command prompt window and run Powershell using the following commands 'cd \' and then 'Powershell'
8:38 Run the command 'Get-WindowsFeature | more' to see which Windows features and roles are installed on this server
8:48 You should be able to see that the Hyper-V role is installed and that several other roles and features are also installed, but not as many as a full Server 2012 installation.
9:14 Run the command 'Install-WindowsFeature Hyper-V'
9:16 Command output is 'NoChangeNeeded' because Hyper-V is already installed.
9:30 Press '12' to reboot the server after our changes.
9:34 Press 'Yes' on the confirmation dialog box.

Demonstration administrative Hyper-V from Windows 8.1

9:45 Switch back to my Windows machine to manage the server
9:55 The server is in a workgroup and the PC is in a domain. Since this is the case, we will have to make several changes in order for the PC to communicate and manage the server. If both PC and server are in the same domain, you will not need the hvremote script.
10:04 Open IE and go to Google.com Google 'hvremote'
10:10 Open the first result, the Microsoft MSDN page
10:13 Link to HVRemote <http://code.msdn.microsoft.com/windowsapps/hyper-v-remote-management-26d127c6>

10:20 Click to download the script and save it to a USB flash drive

10:30 In order to connect to the Hyper-V server, it must be resolvable from the PC by name and not just by IP address.

10:40 On your network, you can create a host entry on your DNS server. This is the preferred method so that others will be able to resolve the host as well instead of creating host entries on each PC.

10:44 For this example, we will modify the local host file of the machine instead using DNS. In order to do so, right click on the Start Menu and click Run.

10:50 In the Run box, type 'Notepad' and press 'OK'

10:52 Select File and then Open

10:54 Navigate to C:\Windows\System32\drivers\etc\

11:12 No files will appear because they are not text files, enter *.* in the File Name field or change the File Type dropdown from Text Documents to All Files to see everything in the directory.

11:26 Select the hosts file and open it.

11:34 Enter in the IP address of the server and then the name of the server as shown in the examples

11:44 Close notepad and save the changes.

11:55 Right click on the Start Menu and select Search

11:58 In the search box, type in 'Remote' and select Remote Desktop Connection from the choices

12:10 Enter in the name of the server and press 'Connect'

12:15 Enter in Other for the user and type in 'Administrator' for the username and the password.

12:28 Click on 'Yes' to ignore the certificate warning since we are not using signed certificates in this environment.

12:40 Place the USB drive you saved hvremote to in the Hyper-V server

12:48 To run the script, run 'cscript hvremote.wsf /add:administrator' to add the administrator account as having the ability to remotely administer the server

13:18 Minimize Remote Desktop

13:28 Place the USB drive back into the Windows PC

13:40 In order to administer the server, we need to add the administrator account to the local credential manager

13:48 Right click on the Start Menu and select Command Prompt

13:52 Run the command 'cmdkey /add:<servername> /user:administrator /pass'

14:28 Enter the password for the administrator and press Enter

14:32 Right click on the Start Menu and select Search

14:36 Type in 'Hyper' and select the Hyper-V Manager

14:40 If Hyper-V Manager does not appear, you will need to select the option "Turn Windows features on or off" in the control panel and then add the feature "Hyper-V Management Tools"

14:52 Right click Hyper-V Manager and select Connect to Server

14:58 Enter in the name of the Hyper-V server and it will be added to Hyper-V Manager
15:30 'Access is denied' because the server is in a Workgroup and the PC is in a domain. Go back to the command prompt and use the hvremote script to make changes to the DCOM Manager
15:42 Run cscript hvremote.swf /anoncom:grant to allow anonymous access to DCOM.
16:02 Right click the server in Hyper-V Manager and select 'Refresh'
16:10 You will now be able to access the machine and features, add new virtual machines and more on the new 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

"Windows Server Evaluations" <http://technet.microsoft.com/en-US/evalcenter/dn205299.aspx>

"Rufus" <http://rufus.akeo.ie/>

"Hyper-V Remote Management Configuration"

<http://code.msdn.microsoft.com/windowsapps/hyper-v-remote-management-26d127c6>