Install and Configure FindIT Network Manager and FindIT Network Probe on Microsoft Hyper-V Manager

Objective

The Cisco FindIT Network Management provides tools that help you easily monitor, manage, and configure your Cisco 100 to 500 Series network devices such as switches, routers, and wireless access points (WAPs) using your web browser. It also notifies you about device and Cisco Support notifications such as the availability of new firmware, device status, network settings updates, and any connected Cisco-devices that are no longer under warranty or covered by a support contract.

FindIT Network Management is a distributed application which is comprised of two separate components or interfaces: one or more Probes referred to as FindIT Network Probe and a single Manager called FindIT Network Manager.

An instance of FindIT Network Probe installed at each site in the network performs network discovery, and communicates directly with each Cisco device. In a single site network, you may choose to run a standalone instance of FindIT Network Probe. However, if your network is composed of multiple sites, you may install FindIT Network Manager at a convenient location and associate each Probe with the Manager. From the Manager interface, you can get a high-level view of the status of all the sites in your network, and connect to the Probe installed at a particular site when you wish to view a detailed information for that site.

This article provides instructions on how to install and configure FindIT Network Manager and FindIT Network Probe on Microsoft Hyper-V Manager.

Install FindIT Network Manager on Microsoft Hyper-V Manager

Install Virtual Switch on Microsoft Hyper-V Manager

Follow these steps to deploy the Virtual Hard Disk (VHD) Virtual Machine (VM) image to Microsoft Hyper-V Manager.

Step 1. Launch the Hyper-V Manager on your Windows Server or computer.



Note: In this example, Windows 10 is used.

Step 2. Choose Virtual Switch Manager.



Step 3. Under the Virtual Switches area, click **New virtual network switch** to add a virtual switch.

🚰 Virtual Switch Manager for CISCO



Step 4. On the left side of the window, enter the name of the virtual switch in the Name field.

🚣 Virtual Switch Prop	perties
Name:	
Intel Virtual Switch	
Notes:	
	^
	×

Note: In this example, Intel Virtual Switch is used.

Step 5. Click External network then choose an adapter from the drop-down list.

Connection type What do you want to connect this virtual switch to?	
External network:	
Intel(R) 82579LM Gigabit Network Connection	~
Allow management operating system to share this network adapter	_
○ Internal network	
O Private network	

Note: In this example, Intel(R) 82579LM Gigabit Network Connection is chosen.

Step 6. Make sure the **Allow management operating system to share this network adapter** check box is checked. This means that the management operating system will have access to the chosen physical network adapter.



Step 7. Click Apply then click OK.

🚜 Virtual Switch Properties —	
Name:	
Intel(R) 82579LM - Virtual Switch	
Notes:	
	~
	¥
Connection type What do you want to connect this virtual switch to?	
External network:	
Intel/P) 82579I M Gigabit Network Connection	~
	- The second sec
Allow management operating system to share this network add	apter
Internal network	
VLAN ID	
Enable virtual LAN identification for management operating system	n
The VLAN identifier specifies the virtual LAN that the management ope	rating
system will use for all network communications through this network ac setting does not affect virtual machine networking.	dapter. This
2	
	Remove
OK Cancel	Apply

The new virtual switch should be displayed under the Virtual Switches area.

🚰 Virtual Switch Manager for CISCO

*	Virtual Switches	
	💒 New virtual network switch	
Intel Virtual Switch Intel(R) 82579LM Gigabit Net		
	🚣 Extensions	
*	Global Network Settings	

Install FindIT Network Manager using Microsoft Hyper-V Manager

Follow these steps to deploy the Virtual Hard Disk (VHD) Virtual Machine (VM) image to Microsoft Hyper-V Manager.

Step 1. Download the FindIT Network Manager VHD VM image from the <u>Cisco Small</u> <u>Business Site</u>, then extract on your preferred location.

Step 2. On your Hyper-V Manager, click **Action > Import Virtual Machine**.

E H	lypei	r-V Manager	
File	Ac	tion View Help	
(New	>
H		Import Virtual Machine	
		Stop Service Remove Server Refresh Help	

Step 3. Click **Browse** and locate the downloaded VHD file in Step 1.

Specify the folder containing the virtual machine to import.			
Folder:		Browse	

Step 4. Browse through the FindITNetworkManager folder then click **Select Folder**.

Name	Date modified	Туре
Snapshots	8/28/2016 7:33	PM File folder
Virtual Hard Disks	10/7/2016 11:5	2 AM File folder
Virtual Machines	10/7/2016 11:5	3 AM File folder
<		
er: FindlTNetworkManager		
	Select Folder	Cancel

Step 5. Click Next.

Specify the folder containing the virtual machine to import.				
Folder: SHOTS\FindIT\CentOS68-FindITManager-1.0.0.20161021\	Browse			
< Previous Next > Finish	Cancel			

Step 6. Click Next again.

Select the virtual machine to import:

Name			Date Created	
FindITNetworkManager			8/26/2016 3:28	: 19 PM
	< Previous	Next >	Finish	Cancel

Step 7. Click Copy the virtual machine (create a new unique ID) then click Next.

Choose the type of import to perform:
 Register the virtual machine in-place (use the existing unique ID)
O Restore the virtual machine (use the existing unique ID)
Ocopy the virtual machine (create a new unique ID)
< Previous Next > Finish Cancel

Step 8. Click **Next** to store the VM in the specified location.

Note: Alternatively, you can check the **Store the virtual machine in a different location** check box to change the specified location.

You can specify new or existing folders to store the virtual machine files. Otherwise, the wizard imports the files to default Hyper-V folders on this computer, or to folders specified in the virtual machine configuration.

Store the virtual machine in a different location	
Virtual machine configuration folder:	
C:\ProgramData\Microsoft\Windows\Hyper-V\	Browse
Checkpoint store:	
C:\ProgramData\Microsoft\Windows\Hyper-V\	Browse
Smart Paging folder:	
C:\ProgramData\Microsoft\Windows\Hyper-V\	Browse
< Previous Next > Finish	Cancel

Step 9. Click Next again.

Where do you want to store the imported virtual hard disks for this virtual machine?					
Location:	C:\Users\Public\Docume	nts\Hyper-V\Virtua	Hard Disks\		Browse
		< Previous	Next >	Finish	Cancel

Step 10. Review the Description then click Finish.

You are about to perform the following operation.

-		
Dec	crip	tion
	uip	uon.

Virtual Machine:	FindITNetworkManager			
Import file:	C:\Users\CISCO\Documents\FindIT\CentOS68-FindITManager-:			
Import Type:	Copy (generate new ID)			
Virtual machine configuration folder:	C:\ProgramData\Microsoft\Windows\Hyper-V\			
Checkpoint folder:	C:\ProgramData\Microsoft\Windows\Hyper-V\			
Smart Paging file store:	C:\ProgramData\Microsoft\Windows\Hyper-V\			
Virtual hard disk destination folder:	C:\Users\Public\Documents\Hyper-V\Virtual Hard Disks\			
<		>		
Fo complete the import and close this v	wizard, dick Finish.			

Note: The FindIT Network Manager will be displayed in the list of virtual machines once it has been successfully deployed.

Step 11. Right-click on the VM, then click **Connect** to open the VM console.

Hyper-V Manager				
File Action View	Help			
🗢 🔿 🖄 📰 🛛				
Hyper-V Manager	Virtual Machines			
	Name	State	CPU Usage	Assigned
	FindIT Network Manager	Off (Connect	
			Settings	
			Start	
			Checkpoint	
			Move	
			Export	
	<		Rename	
	Checkpoints		Delete	
		The	Help	

Step 12. Click on the new VM, then click **Action > Start** to power the VM on.



You should now have deployed the FindIT Network Manager VM on the Microsoft Hyper-V Manager.

Configure the Deployed FindIT Network Manager

Once deployment of the FindIT Network Manager is completed using your preferred virtual

machine, follow the steps below to configure the VM.

Step 1. Log in to the console using the default username and password: cisco/cisco.

FindITManager login: **cisco** Password: **cisco**

Step 2. Once you are prompted to change the password for the cisco account, enter the current password.

CentOS release 6.8 (Final) Kernel 2.6.32-642.3.1.el6.x86_64 on an x86_64 FindITManager login: cisco Password: You are required to change your password immediately (root enforced) Changing password for cisco. (current) UNIX password:

Step 3. Enter and retype the new password for the cisco account.

```
CentOS release 6.8 (Final)
Kernel 2.6.32-642.3.1.el6.x86_64 on an x86_64
FindITManager login: cisco
Password:
You are required to change your password immediately (root enforced)
Changing password for cisco.
(current) UNIX password:
New password:
Retype new password:
```

The DHCP IP Address and Administration GUI address will be displayed.

CentOS release 6.8 (Final) Kernel 2.6.32-642.3.1.el6.x86_64 on an x86_64
FindITManager login: cisco Password: You are required to change your password immediately (root enforced) Changing password for cisco. (current) UNIX password: New password: Retype new password:
FindIT Manager (1.0.0.20160928-beta) Powered by CentOS release 6.8 (Final)
Enter 'sudo config_vm' to change platform settings and set a static IP a
[cisco@FindITManager ~]\$ _

Note: In this example, the IP Address of FindIT Network Manager is 192.168.1.101 and the Administration GUI address is https://192.168.1.101.

Step 4. Enter the **sudo config_vm** command to start the initial setup wizard.

[cisco@FindITManager cisco]\$ sudo config_vm

Step 5. Enter the password for sudo. The default password is cisco. If you changed it, enter the new password.

[cisco@FindITManager ~1\$ cd /opt/cisco [cisco@FindITManager cisco]\$ sudo config_vm [sudo] password for cisco:

Step 6. Enter **y** for Yes or **n** for No in the setup wizard to configure the Hostname, Network, NTP server, and Time Zone.

Config a hostname ? (y/n) : y

Step 7. (Optional) If DHCP is specified when configuring network, enter the **ifconfig** command to check the assigned IP address and remember it. A static IP can also be configured.

```
[cisco@FindITManager cisco]$ ifconfig
```

You should now have completed the FindIT Network Manager installation on your VM.

To learn how to access and configure the initial settings of the FindIT Network Manager, click <u>here</u> for instructions.

Install FindIT Network Probe on Microsoft Hyper-V Manager

Install FindIT Network Probe

Follow these steps to deploy the VHD VM image to Microsoft Hyper-V Manager.

Step 1. Download the FindIT Network Probe VHD VM image from the <u>Cisco Small Business</u> <u>Site</u>.

Step 2. Start the Hyper-V Manager on your Windows Server or computer.



Note: In this example, Windows 10 is used.

Step 3. On your Hyper-V Manager, click Action > Import Virtual Machine.



Step 4. Click Browse and locate the downloaded VHD file in Step 1.

Specify the folder containing the virtual machine to import.		
Folder:		Browse

Step 5. Browse through the FindITNetworkProb folder then click **Select Folder**.

Name	Date modified	Туре
Snapshots	8/28/2016 7:33 PM	File folder
📙 Virtual Hard Disks	10/7/2016 4:25 PM	File folder
Virtual Machines	10/7/2016 4:26 PM	File folder

<		
r: FindITNetworkProb		
	Select Folder	Cancel

Step 6. Click Next.

Specify	Specify the folder containing the virtual machine to import.				
Folder:	FindIT\CentOS68-FindITManager-1.0.0.201610210.S68\FindITNetworkProb	Browse			
	< Previous Next > Finish	Cancel			

Step 7. Click Next again.

Select the virtual machine to import:

Name	<u>.</u>	Date Created
FindITNetworkProb		8/29/2016 10:32:54 AM
	< Previous Next >	Finish Cancel

Step 8. Click Copy the virtual machine (create a new unique ID) then click Next.

Choose the type of import to perform:
O Register the virtual machine in-place (use the existing unique ID)
O Restore the virtual machine (use the existing unique ID)
Ocopy the virtual machine (create a new unique ID)
< Previous Next > Finish Cancel

Step 9. Click **Next** to store the VM in the specified location.

Note: Alternatively, you can check the **Store the virtual machine in a different location** check box to change the specified location.

You can specify new or existing folders to store the virtual machine files. Otherwise, the wizard imports the files to default Hyper-V folders on this computer, or to folders specified in the virtual machine configuration.

Store the virtual machine in a different location	
Virtual machine configuration folder:	
C:\ProgramData\Microsoft\Windows\Hyper-V\	Browse
Checkpoint store:	
C:\ProgramData\Microsoft\Windows\Hyper-V\	Browse
Smart Paging folder:	
C:\ProgramData\Microsoft\Windows\Hyper-V\	Browse
< Previous Next > Finish	Cancel

Step 10. Click Next again.

Where do you want to store the imported virtual hard disks for this virtual machine?					
Location:	tion: C:\Users\Public\Documents\Hyper-V\Virtual Hard Disks\				
		< Previous	Next >	Finish	Cancel

Step 11. Review the Description then click **Finish**.

You are about to perform the following operation.

-			
Dec	crin	tion	•
	uiip	uoi.	

Virtual Machine:	FindITNetworkProb		
Import file:	C:\Users\CISCO\Documents\FindIT\OpenWRT-FindITProbe-1		
Import Type:	Copy (generate new ID)		
Virtual machine configuration folder:	C:\ProgramData\Microsoft\Windows\Hyper-V\		
Checkpoint folder:	C:\ProgramData\Microsoft\Windows\Hyper-V\		
Smart Paging file store:	C:\ProgramData\Microsoft\Windows\Hyper-V\		
Virtual hard disk destination folder:	C: \Users \Public \Documents \Hyper-V \Virtual Hard Disks \		
<	>		
o complete the import and close this v	wizard, dick Finish.		
[< Previous Next > Finish Cancel		

Step 12. Right-click on the VM, then click **Connect** to open the VM console.

Virtual Machines								
Name	State	CPU (CPU Usage Assigned		Memory	Uptime		
FindIT Network Probe	Off		Connect					
Find I Network Manager	Running		Settings			00:05:42		
			Start					
			Checkpoint					
			Move					
			Export					
<			Rename					
Checkpoints			Delete					
	The sel	e	Help		ckpoints.			

Step 13. Click on the new VM, then click **Action > Start** to power the VM on.

🖳 F	🔄 FindIT Network Probe on CISCO - Virtual Machine Connection					
File	Action Media View	Help				
Ba	Ctrl+Alt+Delete	Ctrl+Alt+End				
	Start	Ctrl+S				
	Shut Down	Ctrl+D				
	Save	Ctrl+A				
	Pause	Ctrl+P				
	Reset	Ctrl+R				
	Checkpoint	Ctrl+N				
	Revert	Ctrl+E	ndIT Network Probe'			

Configure the Deployed FindIT Network Probe

Once deployment is finished, follow the steps below to configure the VM.

Step 1. Log in to the console using the default username and password: cisco/cisco.

FindITProbe login: **cisco** Password: **cisco**

You will be prompted to change the password for the cisco account. The DHCP IP Address and Administration GUI address will be displayed.

BusyBox	v1.23.2	(2016-0	9-02 1	7:15:18	CST) b	uilt-in	shell	(ash)
	 _ _ . .				; ;		 `` '`	
Find IT Powere	Probe () d by Open	1.0.1.16 nWrt CHA	301) OS CAL	MER (15.	.05, r4	7955)		
IP Add: Enter	ress: 192 'config_	2.168.1. vм' to c	102 hange	Adminis platfor	stratio M setti	n GUI: } ngs and	nttps:/ set a	//192. stati
Changing New pas:	g passwo sword: _	rd for c	isco					

Note: In this example, the IP Address of FindIT Network Probe is 192.168.1.102.

Step 2. Enter and retype the new password for the cisco account.

```
Changing password for cisco
New password:
Retype password:
Password for cisco changed by cisco
cisco@FindITProbe:~#__
```

Step 3. (Optional) Enter the **ifconfig** command to find the IP address of FindIT Network Probe.

cisco@Find	ITProbe:~# ifconfig
eth0	Link encan:Ethernet HWaddr 00:0C:29:6F:2E:DD
	inet addr:192.168.1.102 Bcast:192.168.1.255 Mask:
	ineto addr. fe0020c.23ff:fe6f:2edd/64 Scope:Link
	inet6 addr: fec0::20c:29ff:fe6f:2edd/64 Scope:Site
	UP BROADCAST RUNNING MULTICAST MTU:1500 Metric:1
	RX packets:149596 errors:0 dropped:0 overruns:0 fra
	TX packets:205206 errors:0 dropped:0 overruns:0 car
	collisions:0 txqueuelen:1000
	RX bytes:26494354 (25.2 MiB) TX bytes:183876308 (1
10	Link encap:Local Loopback
	inet addr:127.0.0.1 Mask:255.0.0.0
	inet6 addr: ::1/128 Scope:Host
	UP LOOPBACK RUNNING MTU:65536 Metric:1
	RX packets:73994 errors:0 dropped:0 overruns:0 fram
	TX mackets:73994 errors:0 dronmed:0 overrums:0 carr
	collisions: A transmelen: A
	BY hutos: 33273411 (31 7 MiR) TY hutos: 33273411 (31
	XX bytes:55275411 (51.7 Hib) IX bytes:55275411 (51

You should now have configured FindIT Network Probe on your machine.

To learn how to access and configure the initial settings of the FindIT Network Probe, click <u>here</u> for instructions. To learn how to associate the FindIT Network Probe to the FindIT Network Manager, click <u>here</u> for instructions.