Install AirWave to Hyper-V Feb15-MHC

I just installed AirWave successfully to a Windows Server 2012 R2 Hyper-V. So I document the installation with a few notes so you can avoid frustration of instalation hang or crash or application not runing at all.

This tutorial is for AMP 8.0.6.3 ISO, Windows Server 2012 or 2012R2.

lime	8 : 50 : 14
64-bit	Yes
Core Speed	2.50
Bus Speed	1333
Execute Disable	Enab
Number of Cores per Processor	4 Cor
Virtualization Technology	Enabi
Adjacent Cache Line Prefetch	Enabl
Hardware Prefetcher	Enabl
Demand-Based Power Management	Disab
Processor 1 Family-Model-Stepping	06-17
[Intel(R) Xeon(R) CPU E5420 @ 2.50GH	z]

Figure 1: Before you can install Hyper-V service, you must enable Virtual Technology in the BIOS, which is disable by default.

	Add Roles and Features Wizard		_ D X
Select server roles Before You Begin Installation Type Server Selection Server Roles Features Hyper-V Virtual Switches Migration Default Stores Confirmation Results	Select one or more roles to install on the selected server. Roles Application Server DHCP Server DNS Server Fax Server Fax Server Fax Server Network Policy and Access Services Print and Document Services Remote Access Remote Desktop Services Volume Activation Services Web Server (IIS) Windows Deployment Services		DESTINATION SERVER WIN-BJQFTBPRT63
	 Windows Server Essentials Experience Windows Server Update Services 	~	
	< Previous	Next >	Install Cancel

Figure 2: Add Hyper-V role to Windows 2012 R2 server

	Add Role	s and Features Wizard 📃 🗖 🗙				
Before You Begin Installation Type Server Selection	Witches Virtual machines require v role, you can create virtua One virtual switch will be at least one virtual switch	DESTINATION SERVER WIN-BJQFTBPRT63 I machines and attach them to a virtual switch. created for each network adapter you select. We recommend that you create now to provide virtual machines with connectivity to a physical network. You				
Server Roles Features	can add, remove, and modify your virtual switches later by using the Virtual Switch Manager. Network adapters:					
Hyper-V	Name	Description				
Virtual Switches Migration Default Stores Confirmation Results	 Ethernet 2 We recommend that y network adapter, do recommend that y network adapter. 	Broadcom BCM5708C NetXtreme II GigE (NDIS VBD Client) you reserve one network adapter for remote access to this server. To reserve a not select it for use with a virtual switch.				
		< Previous Next > Install Cancel				

Figure 3: Add Virtual Switch and made this switch connect to the network adapter that carries the network that you want AirWave on

Click next, Hyper-V will install.

After Hyper-V finishes installation and server reboots, run Hyper-V Manager

			Hyper-V Manager
File Action	on View Help		
	Virtual M	lachines	
	New Import Virtual Machine Hyper-V Settings	Virtual Machine Hard Disk Floppy Disk	
	Virtual Switch Manager Virtual SAN Manager Edit Disk	EST GW Runni Runni 2 Off	ing 0% ing 0%
	Inspect Disk		

Figure 4: In Hyper-V Manager, click New, Virtual Machine to create a Virtual Machine

	New Virtual Machine Wizard
Specify Na	ame and Location
Before You Begin Specify Name and Location Specify Generation Assign Memory Configure Networking Connect Virtual Hard Disk Installation Options Summary	Choose a name and location for this virtual machine. The name is displayed in Hyper-V Manager. We recommend that you use a name that helps you easily identify this virtual machine, such as the name of the guest operating system or workload. Name: <u>AIRWAVE</u> You can create a folder or use an existing folder to store the virtual machine. If you don't select a folder, the virtual machine is stored in the default folder configured for this server. Store the virtual machine in a different location Location: C: \ProgramData \Microsoft \Windows \Hyper-V\ Browse If you plan to take checkpoints of this virtual machine, select a location that has enough free space. Checkpoints include virtual machine data and may require a large amount of space.
	< Previous Next > Finish Cancel

Figure 5: Give it a name

%	New Virtual Machine Wizard
Specify Gene	eration
Before You Begin Specify Name and Location Specify Generation Assign Memory Configure Networking Connect Virtual Hard Disk Installation Options Summary	 Choose the generation of this virtual machine. ● Generation 1 This virtual machine generation provides the same virtual hardware to the virtual machine as in previous versions of Hyper-V. O Generation 2 This virtual machine generation provides support for features such as Secure Boot, SCSI boot, and PXE boot using a standard network adapter. Guest operating systems must be running at least Windows Server 2012 or 64-bit versions of Windows 8. Once a virtual machine has been created, you cannot change its generation.
	< Previous Next > Finish Cancel

Figure 6: "Specify Generation" check Generation 1. This is new for 2012 R2, if you are running 2012 Hyper-V, you don't see this screen.

а.	New Virtual Machine Wizard
Assign Memo	эг у
Before You Begin Specify Name and Location Specify Generation Assign Memory Configure Networking Connect Virtual Hard Disk Installation Options Summary	 Specify the amount of memory to allocate to this virtual machine. You can specify an amount from 32 MB through 21320 MB. To improve performance, specify more than the minimum amount recommended for the operating system. Startup memory: 1024 MB ✓ Use Dynamic Memory for this virtual machine. (i) When you decide how much memory to assign to a virtual machine, consider how you intend to use the virtual machine and the operating system that it will run.
	< Previous Next > Finish Cancel

Figure 7: Assign 1024 Mb memory and check "Use Dynamic Memory for this virtual machine." 1024 MB startup will help machine boot faster.

the	New Virtual Machine Wizard
Configure N	letworking
Before You Begin Specify Name and Location Specify Generation Assign Memory	Each new virtual machine includes a network adapter. You can configure the network adapter to use a virtual switch, or it can remain disconnected. Connection: Broadcom BCM5708C NetXtreme II GigE (NDIS VBD Client) #47 - Virtual S v
Configure Networking Connect Virtual Hard Disk Installation Options Summary	
	< Previous Next > Finish Cancel

Figure 8: Connect this machine to the Virtual switch that was created earlier in Figure 3. This is where your AMP connects to your network.

3.	New Virtual Machine Wizard	x
Connect Virt	ual Hard Disk	
Before You Begin Specify Name and Location Specify Generation Assign Memory Configure Networking Connect Virtual Hard Disk Installation Options Summary	A virtual machine requires storage so that you can install an operating system. You can specify the storage now or configure it later by modifying the virtual machine's properties. Create a virtual hard disk Use this option to create a VHDX dynamically expanding virtual hard disk. Name: AIRWAVE Location: F:\VHD\ Browse Size: 100 GB (Maximum: 64 TB) Use this option to attach an existing virtual hard disk, either VHD or VHDX format. Location: F:\VHD\ Browse O Use an existing virtual hard disk Use this option to attach an existing virtual hard disk, either VHD or VHDX format. Location: F:\VHD\ Browse 	e
	< Previous Next > Finish Canc	el

Figure 9: Create a Virtual Hard Disk (VHD). Size of VHD depends on your environment. You cannot change this after it creates, so choose the size carefully.

	Options
Before You Begin Specify Name and Location Specify Generation Assign Memory Configure Networking Connect Virtual Hard Disk Installation Options Summary	You can install an operating system now if you have access to the setup media, or you can install it later. Install an operating system later Install an operating system from a bootable CD/DVD-ROM Media Physical CD/DVD drive: D: Image file (.iso): D: Install an operating system from a bootable floppy disk
	Media Virtual floppy disk (.vfd): Browse O Install an operating system from a network-based installation server

Figure 10: Point your Virtual Machine to an iso image (or physical DVD)

When you click Finish, Hyper-V builds the Virtual Machine.



Figure 11: After Hype-V builds the machine, you can start it.



Figure 12: type "install" at the boot prompt, CentOS will start to install

In few minutes installation stops and lets you know that "eth0 is not available". Go back to Hyper-V Manager, click Settings, you need to modify the network settings. All Linux virtual machines are not working with normal Hyper-V NIC, you need to change it to "Legacy Network Adapter"

N HITH		Hyper-V Manage	er		x
File Action View Help					
🗢 🄿 🙋 📰 🚺					
Hyper-V Manager				Actions	
ENG-LAB	Virtual Machines			ENG-LAB	•
	Name	State CPU Usage	Assign	New	•
		Nurining 5%	1040 1	🕞 Import Virtual Machine	
				Hyper-V Settings	
				💱 Virtual Switch Manager	
				🛃 Virtual SAN Manager	
	<			💋 Edit Disk	
	Charlensints			Inspect Disk	
	спескроппся			Stop Service	
	The selected virtual machine has no checkpoi			🗙 Remove Server	
				🔉 Refresh	=
				View	•
				2 Help	
				AIRWAVE	
				🖏 Connect	
	AIRWAVE		(🛐 Settings	
				Turn Off	
	Created:	2/9/2015 1:32:30 PM	Clust	Shut Down	
	version:	5.0	near	O Save	
	Generatio	on: 1	Inter Servi	Pause	
	Notes:	None		Reset	
				by Checkpoint	
	Summary Memory Networkin	ng Replication		P Move	
	< 111		>	Export	~

Figure 13: In this screen you can do all settings for your machine. We are going to change Network settings



Figure 14: Remove Network Adapter.



Figure 15: Add "Legacy Network Adapter"



Figure 16: Give AirWave at least 2 proc, check hardware requirement for your environment. <u>You must give this machine</u> <u>2 proc or more or **AMP will fail to install**.</u>

This setting can be changed after installation if you require more than 2 proc.

After done with Settings, start AirWave, give 30 minutes for CentOS to install.

After CentOS finishes installation, reboot, and login as "root", with password "admin" and run ./amp-install

It is a big lie in AMP installation step 3 as it states "This will take a few minutes." Give it a few hours for installation. When AMP installation completes, if it hang, just reboot and continue to step 4.

If you watch the installation in details (CTRL-ALT-F9,) you will see errors, warnings, pauses, just be patient and let it works through.

I hope I did not leave out any crucial step that causes the installation to fail.

Let me know if you have any questions or problems. And don't forget to KUDOS!