Hyper-V How To Guide

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Overview

The Swivel virtual appliance is available as a Hyper-V and a Hyper-V R2 appliance. This document is to aid in the initial deployment of the virtual appliance on the Hyper-V platform. For information on VMware see VMWare How To Guide.

Hyper-V Technical Note

If you are deploying a Swivel Hyper-V appliance, it is recommended that you observer the time on the system and if it is running too fast (should be noticeable over several hours), that you apply the following Time runs too fast.

Downloading the VM Appliance

After purchasing the appliance via a reseller or channel partner, you will receive a download email containing the Hyper-V and Hyper-V R2 download. The download method is FTP and we recommend that you use a web browser to download the files by pasting the links into your browser address bar. We recommend this because the FTP directory in which the PINsafe software resides is not viewable and will appear empty in an FTP client.

Virtual Machine Specification

Compatible with: Server 2008, 2008 R2 and 2012 R2

Hyper-V and Hyper-V R2 are available as seperate images.

General Specification (applies to all VM formats)

These figures apply to the Single Appliance:

40GB Hard Disk (The standalone appliance initially consumes 2.5GB disk space)

• 4GB RAM

Hyper-V Requirements

- We recommend that you avoid the use of dynamically expanding storage by allocating the required disk space given above at the deployment
- stage
- Verify that ETH0 and ETH1 are available. If the machine definition is imported then these network interfaces will be predefined. Once installed, you can configure the network interfaces through the CMI. It is recommend that the network interfaces (configurable within Hyper-V itself) are set to Legacy mode.

Deployment Methods

Begin by unzipping the download(s) and running the self extraction tool:

🐺 WinRAR self-ex	tracting archive
	Extracting SWVM-SINGLE-v2.0.12\config.xml Extracting SWVM-SINGLE-v2.0.12\Virtual Hard Disks\SWVM-SINGLE- v2.0.12.vhd
	Destination folder C:\Users\Administrator\Desktop\SWVM-SINGLE-v2.0.12 Browse Installation progress
	Install

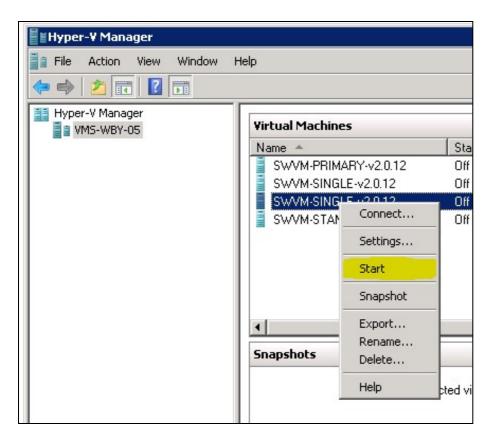
Run Hyper-V Manager, select a host in the left hand column that you'd like to import the VM to.

Then select Action -> Import Virtual Machine.

Ensure that you have the 'Copy...' Radio Button selected. Then point to the folder you extracted previously which contains the 'Snapshots', 'Virtual Hard Disks' and 'Virtual Machines' directories contained within. Once you've selected the directory, click 'Import' to start the import process.

ocation:		Browse	
Settings Import settings: Move or restore the virtual machine (us Copy the virtual machine (create a new Duplicate all files so the same virtual machine The same virtual machine cannot be have backed them up to another loca	unique ID) achine can be imported again imported again if you do not copy	Organize Vew folde Desktop Downloads Completes Cibraries Documents Music Pictures Videos Videos Network Network Lisclient	A-SINGL ✓ SWVM-SINGLE- er Name ^ Snapshots Virtual Hard Disk Virtual Machines Virtual Machines Virtual Machines SWVM-SINGLE-v2.

You may or may not receive a warning at this point. To start the machine right click on it and select 'Start'.



You can also use the same right click menu to select 'Connect' to gain console access to the machine:

📭 SWYM-SINGLE-y2.0.12 on localhost - Virtual Machine Connection					
File Action Media Clipboard View Help					
Press 'I' to enter interactive startup.					
Setting clock (localtime): Wed Jul 27 15:33:08 BST 2011	Ε	OK]		
Starting udev:]		
Initializing hardware storage network audio done]		
Configuring kernel parameters:]		
Loading default keymap (uk):]		
Setting hostname appliance.swivel.local:]		
Checking root filesystem					
/: clean, 64372/1573728 files, 474966/3146731 blocks					
	Ε	OK]		
Remounting root filesystem in read-write mode:		OK]		
No RAID disks					
Setting up Logical Volume Management:]		
Checking filesystems					
/backups: clean, 1496/524288 files, 35595/1048241 blocks					
/boot: clean, 40/32128 files, 16102/128488 blocks					
/tmp: clean, 17/262144 files, 17214/524112 blocks					
	Ε	OK OK]		
Mounting local filesystems:]		
Enabling local filesystem quotas:		OK]		
Enabling swap space:		OK]		
INIT: Entering runlevel: 3					
Entering non-interactive startup					
Applying Intel Microcode update:		OK]		
Status: Running				= MA	

Next Steps - Configuring Swivel

Having successfully installed the virtual machine, the next step is to login to the CMI though the virtual machine console or by SSH to the default IP address to configure the appliance.

When the Networking has been configured and Tomcat restarted/started, then Swivel can be configured through the PINsafe Administration Console, see How to initially configure PINsafe

Troubleshooting

Cannot download Hyper-V Image

Swivel appliance download directory appears empty. The directory cannot be viewed. The URL must be directly accessed. This can be done though IE by clicking on the Appliance URL or pasting the URL into the URL bar.

If that does not work try entering the username and password as part of the URL:

ftp://username:password@URL

Can you ping fs.swivelsecure.com

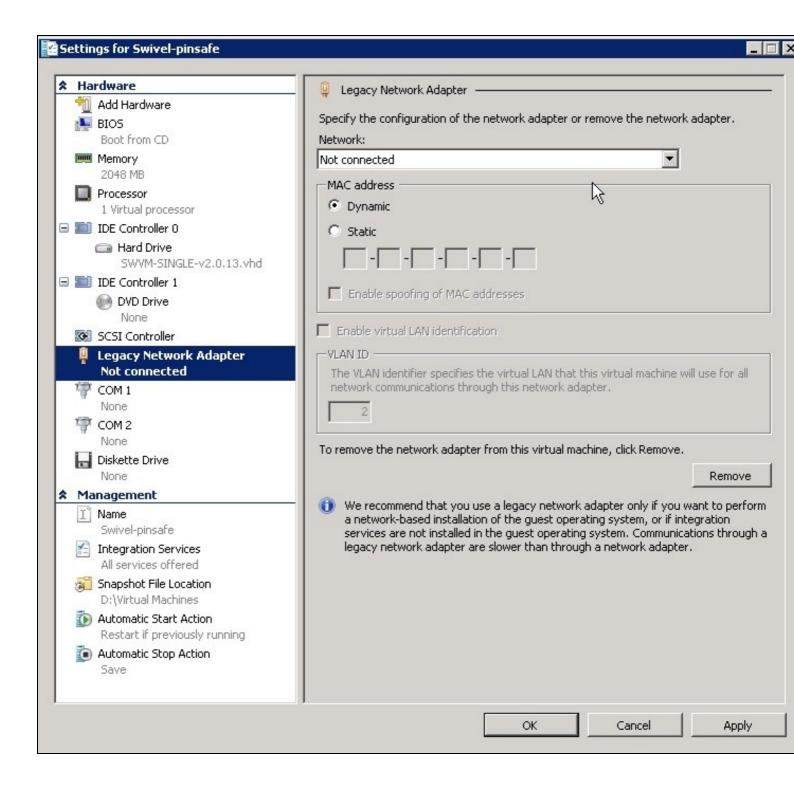
If you ftp fs.swivelsecure.com is there a login prompt (You will noot be able to see the file but it will test that FTP access is available)

Is there a proxy server blocking connectivity?

Network Interface is absent

ifup: Cannot get current device settings: Operation not supported

On the Hyper-V select settings for the Swivel VM and remove the network Interface, then select Add Hardware and select Add Legacy Network Interface. The Legacy Network Adapater should now appear in the list.



Time runs too fast

If the time on the server is running too fast there are two possible solutions:

- Firstly set the Hyper-V Swivel VM to run on a single core CPU per VM
- · Secondly edit the grub.conf as below

Backup then edit the /boot/grub/grub.conf, the below line

clock=pmtmr divider=10 hpnet=disable

should be added at the end of the following lines:

kernel /vmlinuz-2.6.9-89.ELsmp ro root=LABEL=/ rhgb quiet

kernel /vmlinuz-2.6.9-89.EL ro root=LABEL=/ rhgb quiet

kernel /vmlinuz-2.6.9-89.EL ro root=LABEL=/ rhgb quiet

Example:

```
title PINsafe Primary Appliance (2.6.9-89.ELsmp)
    root (hd0,0)
    kernel /vmlinuz-2.6.9-89.ELsmp ro root=LABEL=/ rhgb quiet clock=pmtmr divider=10 hpnet=disable
    initrd /initrd-2.6.9-89.ELsmp.img
title PINsafe Primary Appliance (2.6.9-89.EL)
    root (hd0,0)
    kernel /vmlinuz-2.6.9-89.EL ro root=LABEL=/ rhgb quiet clock=pmtmr divider=10 hpnet=disable
    initrd /initrd-2.6.9-89.EL.img
title PINsafe Primary Appliance-up (2.6.9-89.EL)
    root (hd0,0)
    kernel /vmlinuz-2.6.9-89.EL ro root=LABEL=/ rhgb quiet clock=pmtmr divider=10 hpnet=disable
    initrd /initrd-2.6.9-89.EL ro root=LABEL=/ rhgb quiet clock=pmtmr divider=10 hpnet=disable
    initrd /initrd-2.6.9-89.EL ro root=LABEL=/ rhgb quiet clock=pmtmr divider=10 hpnet=disable
    initrd /initrd-2.6.9-89.EL ro root=LABEL=/ rhgb quiet clock=pmtmr divider=10 hpnet=disable
    initrd /initrd-2.6.9-89.EL ro root=LABEL=/ rhgb quiet clock=pmtmr divider=10 hpnet=disable
    initrd /initrd-2.6.9-89.EL ro root=LABEL=/ rhgb quiet clock=pmtmr divider=10 hpnet=disable
    initrd /initrd-2.6.9-89.EL ro root=LABEL=/ rhgb quiet clock=pmtmr divider=10 hpnet=disable
    initrd /initrd-2.6.9-89.EL ro root=LABEL=/ rhgb quiet clock=pmtmr divider=10 hpnet=disable
    initrd /initrd-2.6.9-89.EL.img
Reboot for the changes to take effect
```

Hyper-V loses its IP address

Hyper-V should not be set to be using a Dynamic MAC Address for the network interface, but a static MAC address.