INDEPTH Network

CiB
Troubleshooting Techniques

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iSHARE2 Support Team

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CiB Hardware

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CiB Hardware

Power, Capabilities, and Performance in Four Inches Square

HIGHLIGHTED FEATURES

1. 5th generation Intel® Core™ i7-5557U processor
2. Two DDR3L SO-DIMM sockets (up to 16 GB, 1333/1600 MHz)
3. M.2 slot with flexible support for a 42, 60, or 80 mm SATA or PCIe[3] SSD
4. 1x SATA port for connection to 2.5" HDD or SSD
5. Intel® Dual Band Wireless-AC and Bluetooth* 4.0
6. Kensington lock support
7. Backpanel DC power connector (12V - 19V)
8. One Mini DisplayPort* version 1.2 supporting 8 channel digital audio (7.1 surround sound)
9. Intel® Gigabit LAN
10. 2x USB 3.0 ports on the back panel
11. Mini HDMI* port supporting HDMI 1.4a and 7.1 surround sound
12. Support for user-replaceable third-party lids
13. 2x USB 3.0 ports on the front panel (including one charging port)
14. Intel® HD Audio[1] via Headphone/Microphone jack
15. Consumer infrared sensor

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CiB Start-up and Power

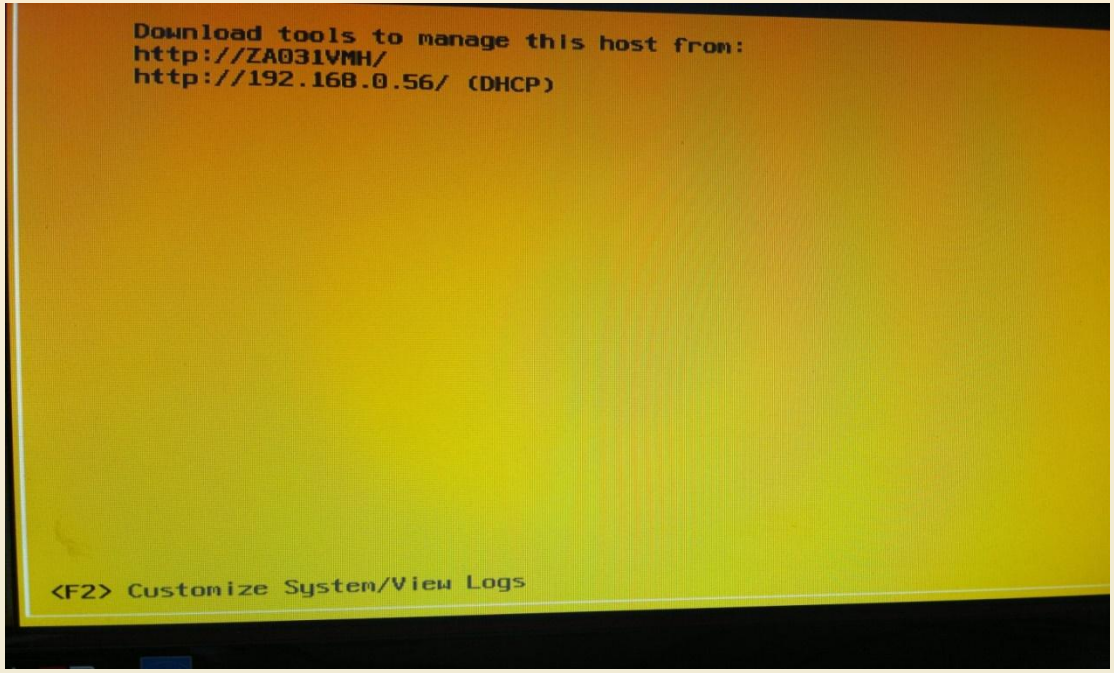
- LED Power Indicator
- No Power, Dead Unit

Quick Check

Symptoms	Quick Check
No Power, Dead Unit • No power • No LED • No fan spin • No startup chime • No image on external display • No hard drive or optical drive activity • Caps Lock LED on wired keyboard doesn't light when pressed.	1. Verify power source. 2. Verify power cable. 3. Listen closely for signs of activity from system including: rotating fans, hard drive or optical drive activity, startup chime, etc. If there is activity then go to the 'Startup and Power Issues' symptom flow.

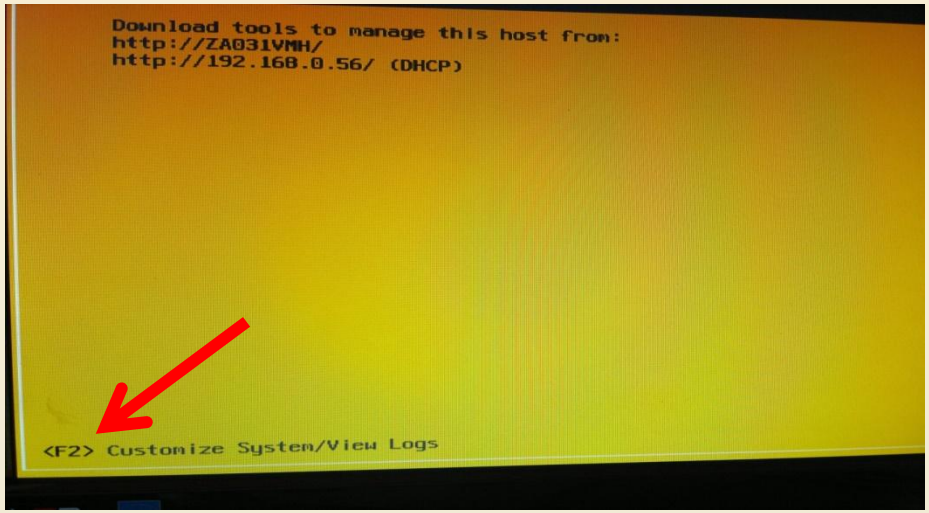
VMHost Hypervisor

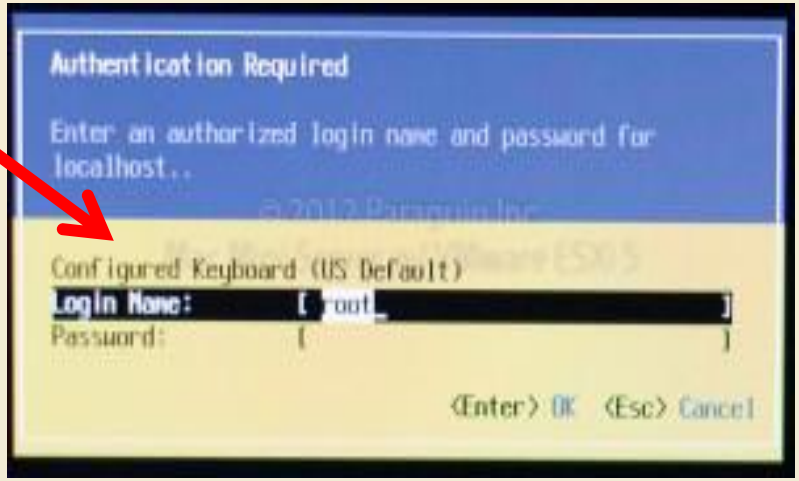
- Vmware ESXi start screen
- VMHost is configured to receive IP Address from DHCP server.



VMHost Customization

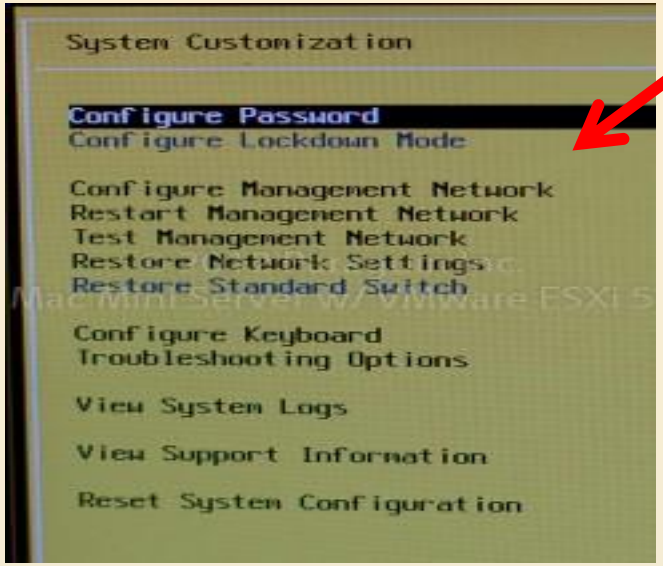
- Set static Network Configuration
- Press F2 to “Customize System”
- Insert Credentials





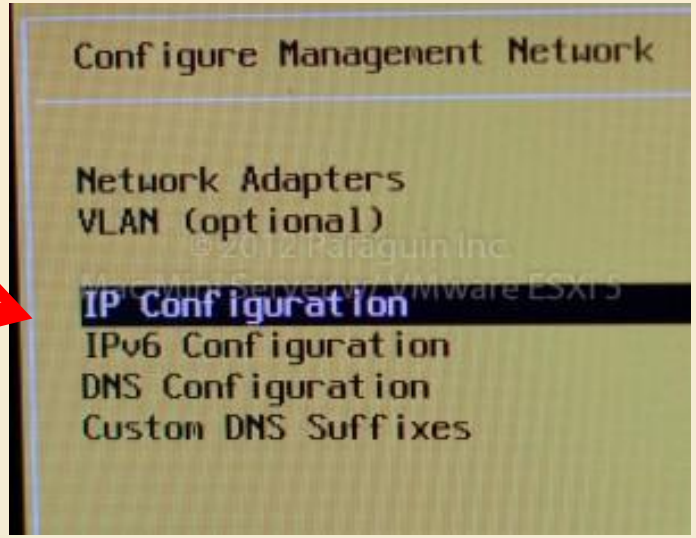
VMHost Customization

- Static Network Configuration



1. Click Configure Management Network

2. Click IP Configuration



3. Configure IP Address

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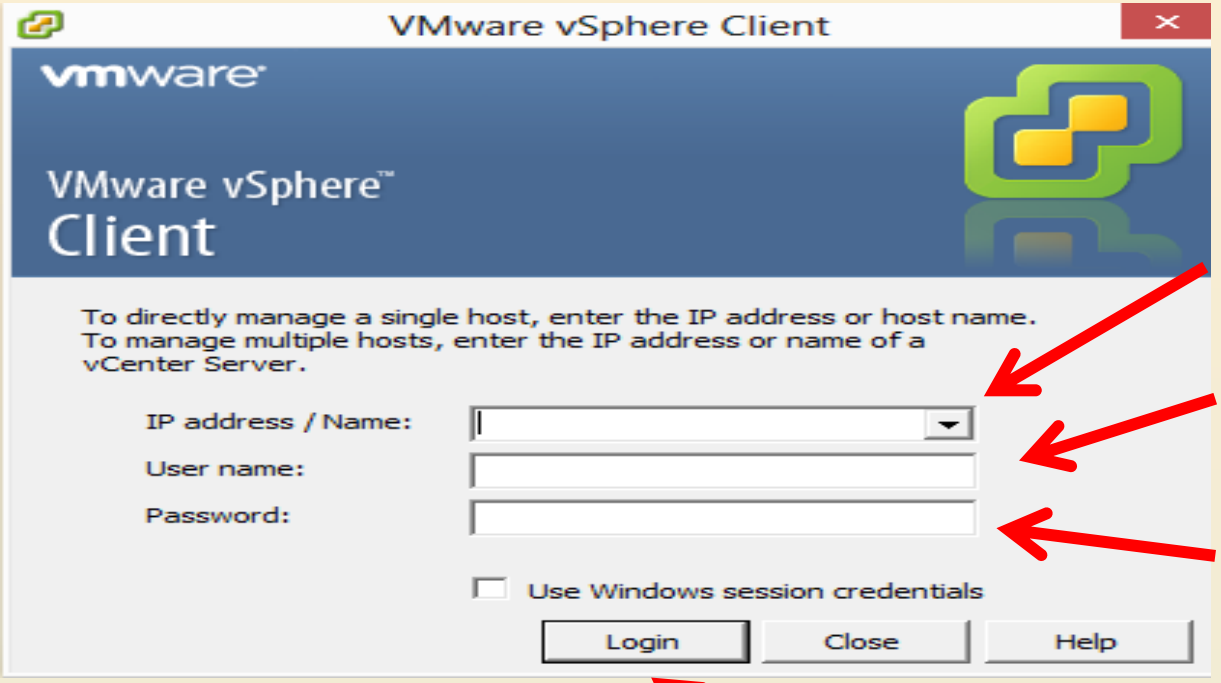
Vmware Vsphere Client

- Connect to ESXi Host using Vsphere client



1. Insert IP Address

2. Insert User Name

3. Insert Password

4. Click Login

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VMHost Overview

File Edit View Inventory Administration Plug-ins Help

Home ▸ Inventory ▸ Inventory

- 192.168.1.82
  - DatabaseServer
  - DatamanagerDesktop
  - SystemServer

SN013VMHost.lan VMware ESXi, 5.5.0, 2068190

Getting Started | Summary | Virtual Machines | Resource Allocation | Performance | Configuration | Local Users & Groups | Events | Permissions

General

Manufacturer:	Apple Inc.
Model:	Macmini6,2
CPU Cores:	4 CPUs x 2,594 GHz
Processor Type:	Intel(R) Core(TM) i7-3720QM CPU @ 2.60GHz
License:	VMware vSphere 5 Hypervisor - Licensed for 1 physical CP...
Processor Sockets:	1
Cores per Socket:	4
Logical Processors:	8
Hyperthreading:	Active
Number of NICs:	1
State:	Connected
Virtual Machines and Templates:	3
vMotion Enabled:	N/A
VMware EVC Mode:	Disabled
vSphere HA State	N/A
Host Configured for FT:	N/A
Active Tasks:	
Host Profile:	N/A
Image Profile:	N/A
Profile Compliance:	N/A
DirectPath I/O:	Supported

Commands

- New Virtual Machine
- New Resource Pool
- Enter Maintenance Mode

Resources

CPU usage: **317 MHz** — Capacity: 4 x 2,594 GHz

Memory usage: **14809,00 MB** — Capacity: 16290,22 MB

Storage	Drive Type	Capacity	Free
datastore1	Non-SSD	924,00 GB	548,49 GB
datastore2	Non-SSD	931,25 GB	929,12 GB

Network	Type
EXTERNAL Network	Standard port group
INTERNAL Network	Standard port group

Fault Tolerance

Fault Tolerance Version:	5.0.0-5.0.0-5.0.0
	Refresh Virtual Machine Counts
Total Primary VMs:	0
Powered On Primary VMs:	0
Total Secondary VMs:	0
Powered On Secondary VMs:	0

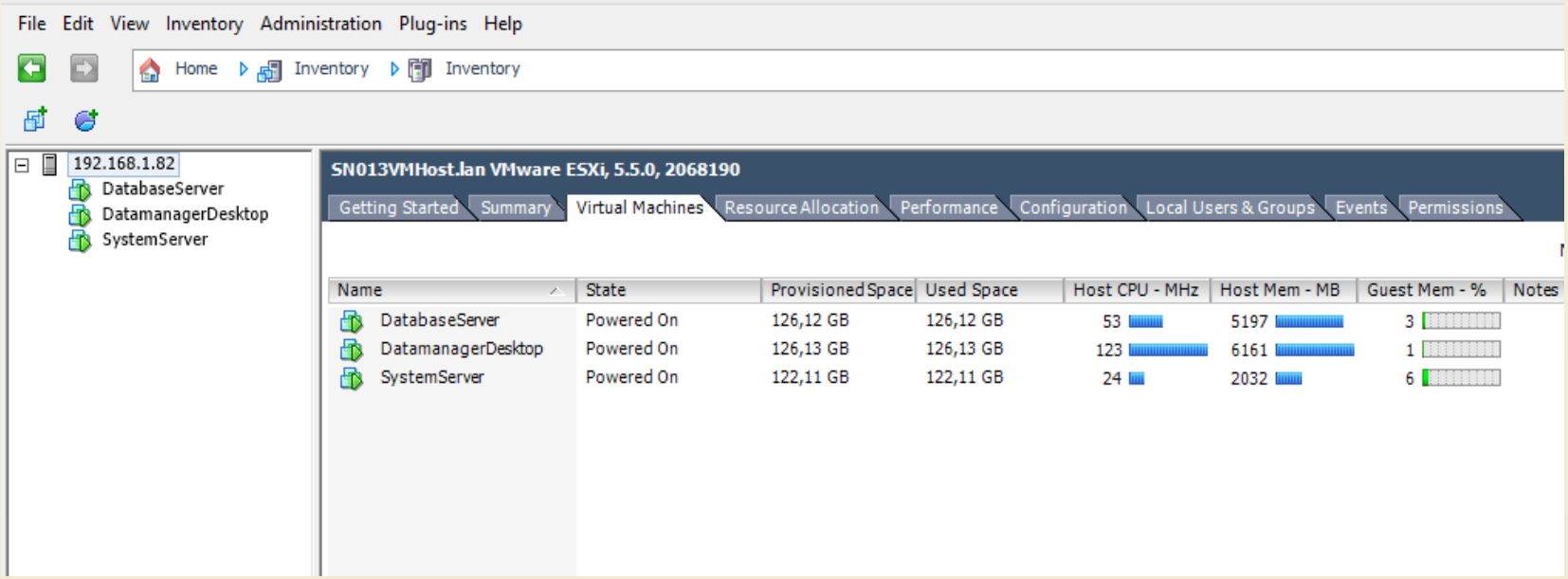
Host Management

Manage this host through VMware vCenter.

Tasks

Host Tabs Overview

- The Virtual Machines tab displays information about the State, Space, CPU and Memory resources of the virtual machines.



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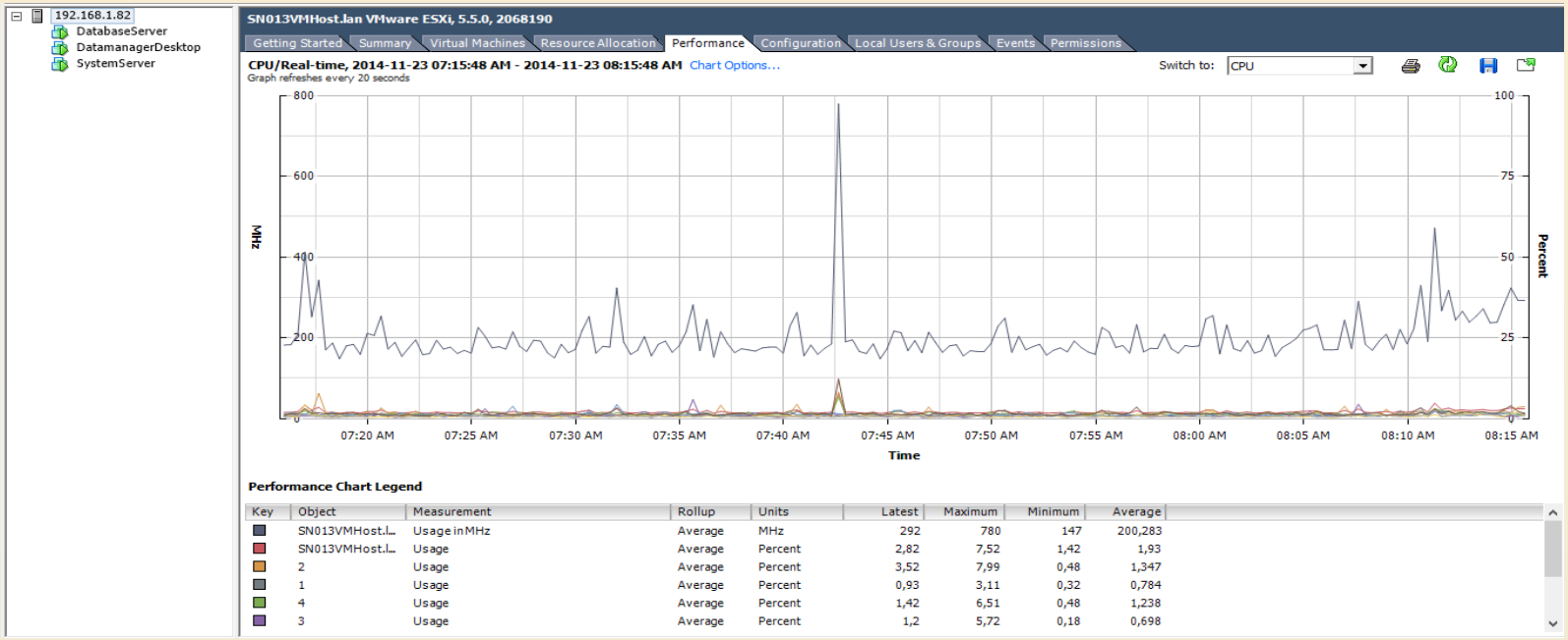
Host Tabs Overview

- The Performance tab displays performance information about the utilization of resources for the host and virtual machines.



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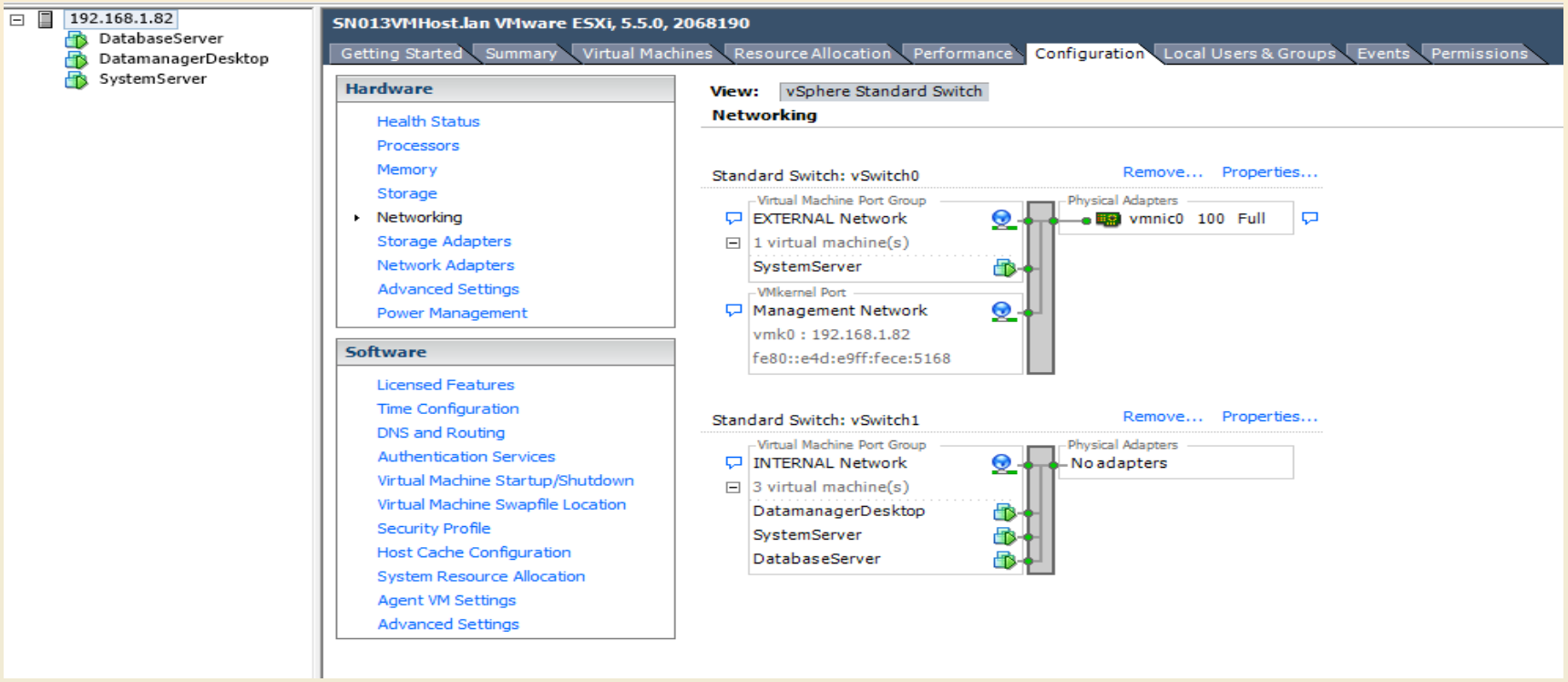
Host Tabs Overview

- The Configuration tab displays host configuration information.



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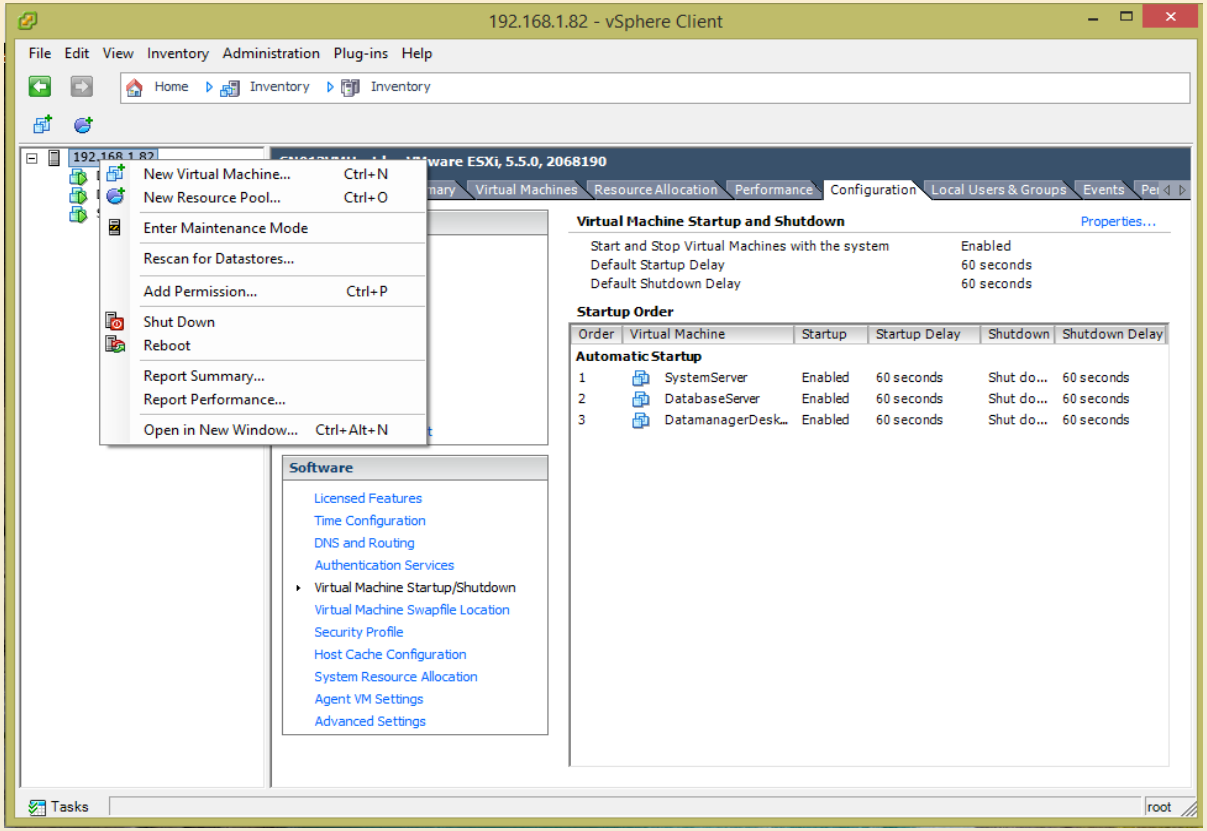
Virtual Machines Overview

- Automatic Shutdown and Start-up



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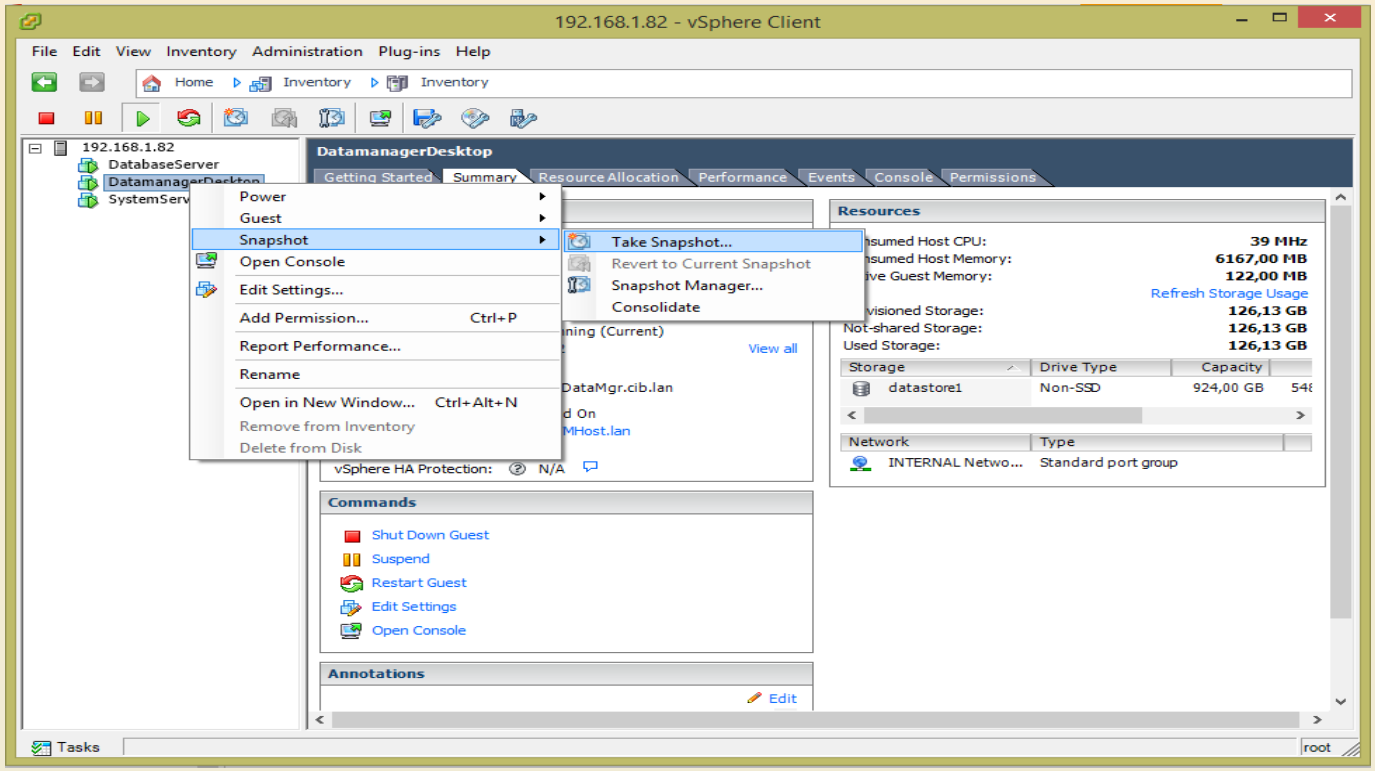
Virtual Machine Snapshots

- A snapshot preserves the state and data of a virtual machine at a specific point in time.



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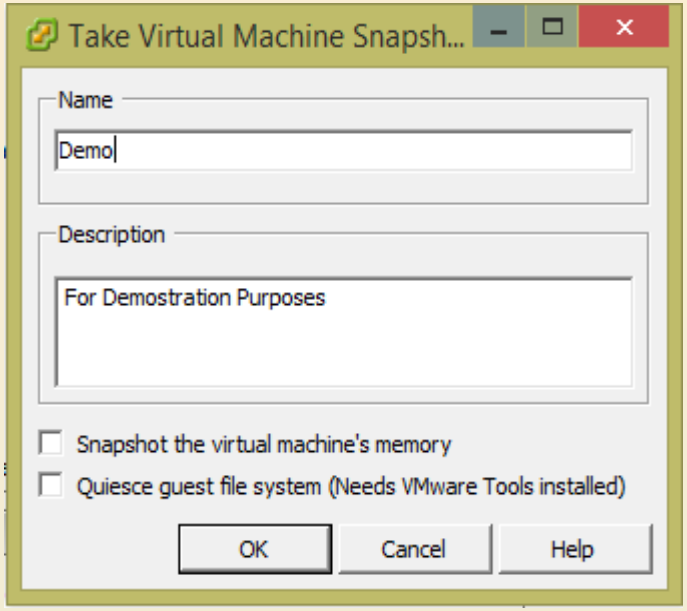
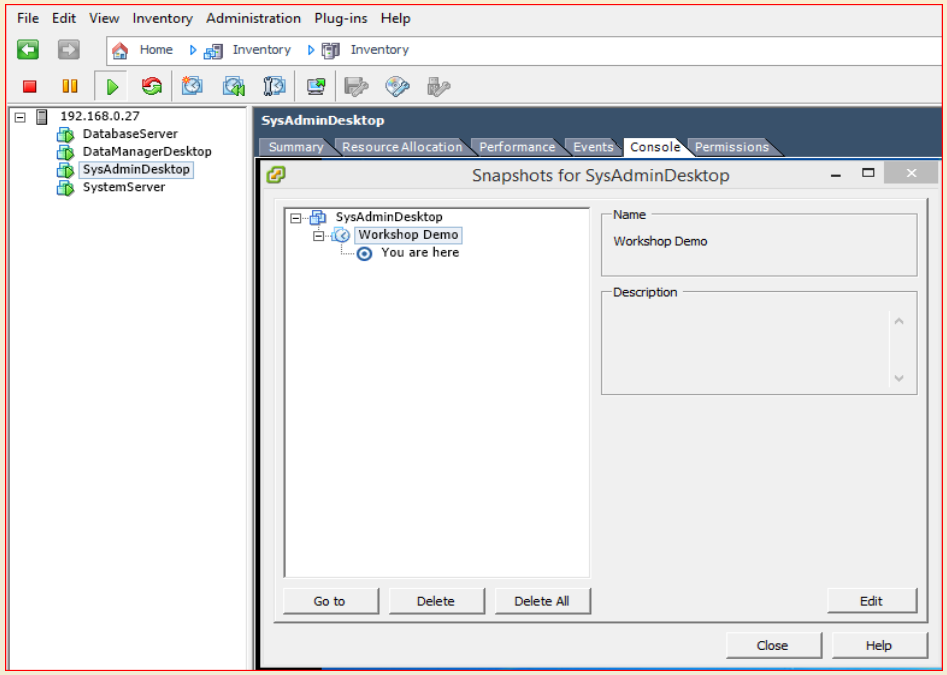
Virtual Machine Snapshots

- **VMware recommends using only 2-3 snapshots in a chain.**





NB: **Uncheck Snapshot the Virtual Machines Memory.**
Not recommended to store single snapshot for more than 24-72 hours.

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ghettoVCB backup

- This script performs backups of virtual machines residing on **ESXi** servers.

- The script takes snapshots of live running virtual machines, backs up the master VMDK(s) and then upon completion, deletes the snapshot until the next backup.

Backup Configuration

- Backup Location - Datastore2
- Backup Disk Format – Thin Provisioned
- Backup Rotation – 3 VM's
- Backup Schedule – 12AM
  (Based on date and time of VMHost)

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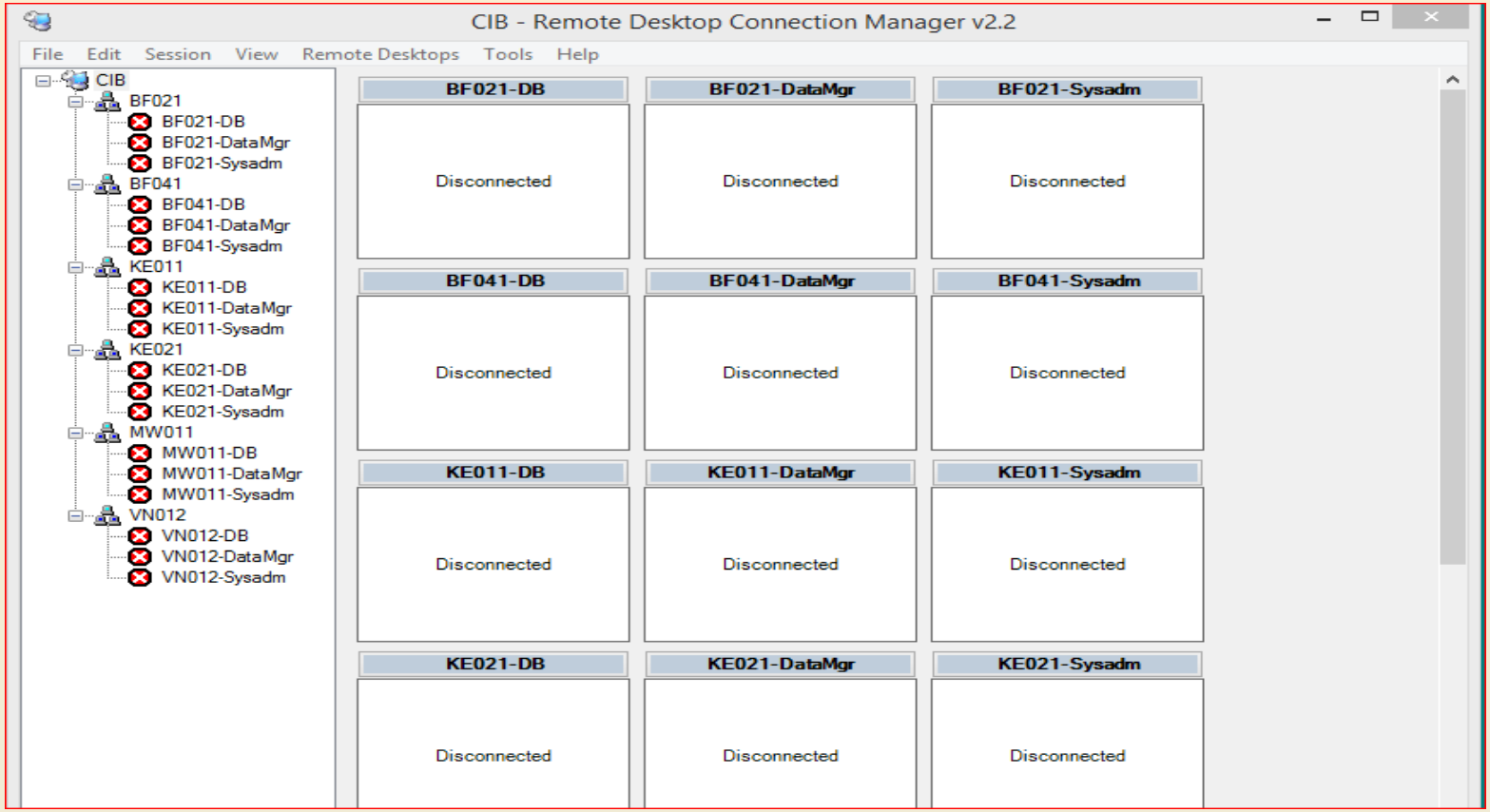
Remote Desktop Connection Manager

- Centrally Manage your RDP connections.



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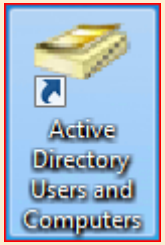
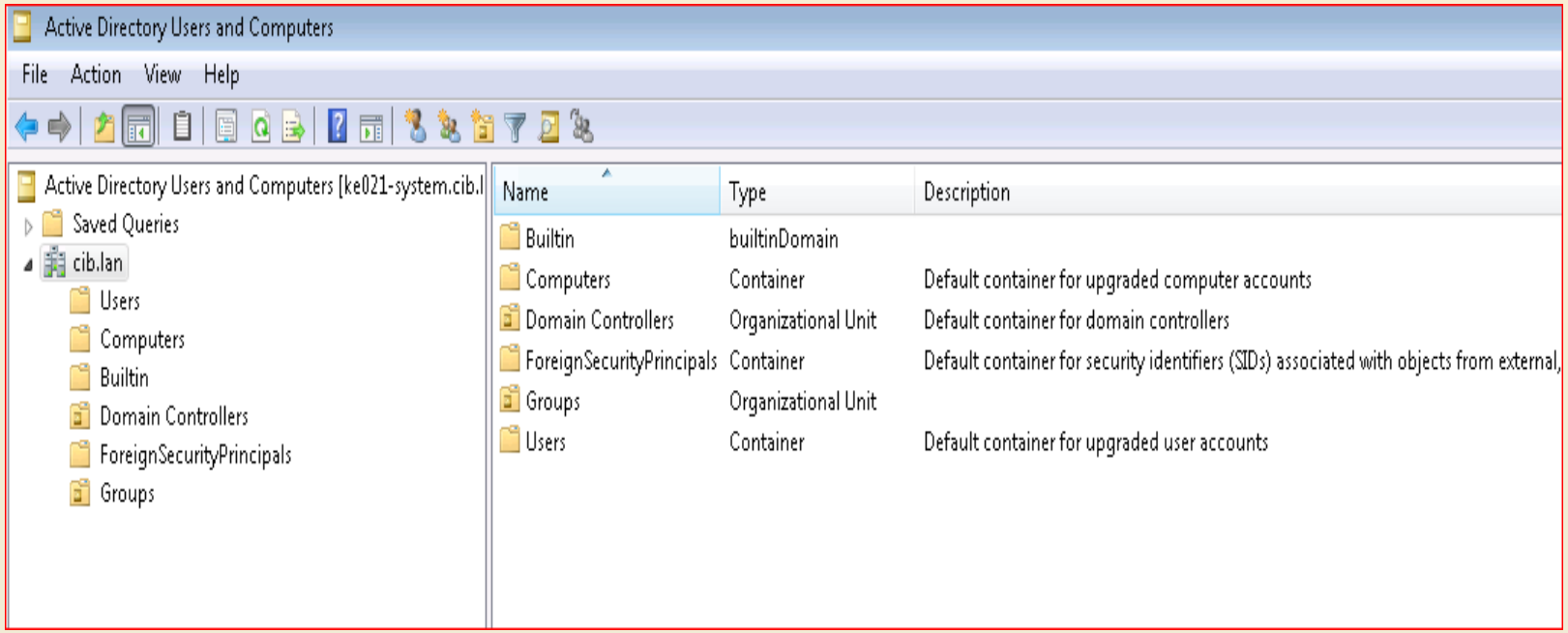
VMware Vsphere Client

- The vSphere Client is a Windows program that you can use to configure the host and to operate its virtual machines.

Active Directory Users and Computers



- Active Directory® Users and Computers is a Microsoft Management Console (MMC) snap-in that you can use to administer users and groups.



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CiB Tools

- Active Directory Users and Computers
- Remote Desktop Connection Manager
- Vmware Vsphere Client
- GhettoVCB backup script

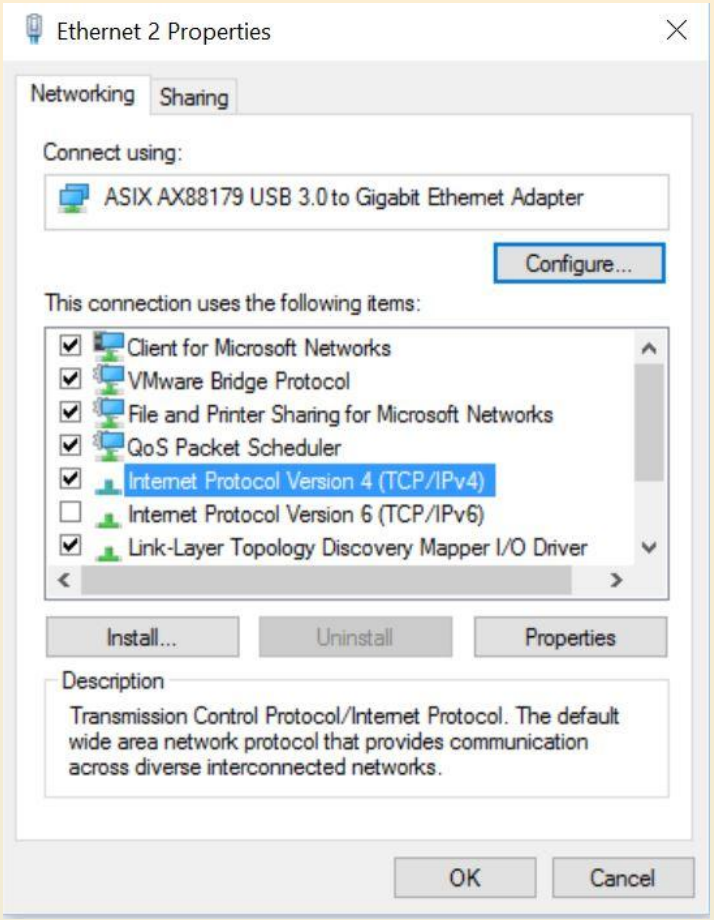
Connect to Local PC

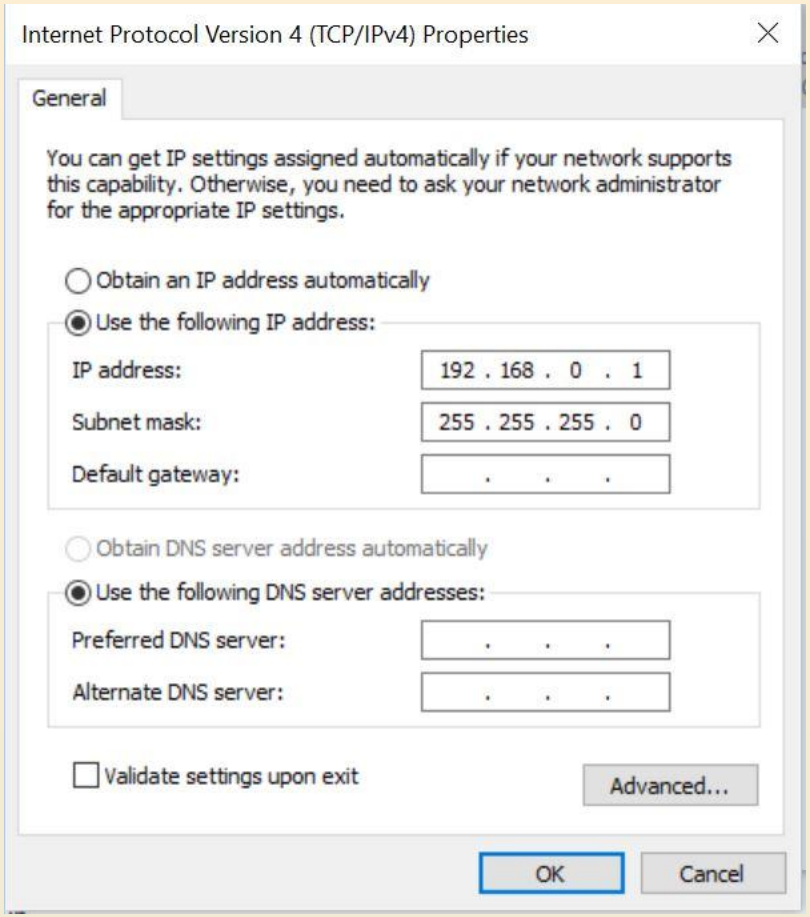
Overview

- Ethernet Cable – Cross-over fly lead
- Configure your machines network card
- Download and install OpenDHCP
- https://sourceforge.net/projects/dhcpserver/
- Open DHCP Server

- Next steps……..

Network Card Config





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Open DHCP install steps

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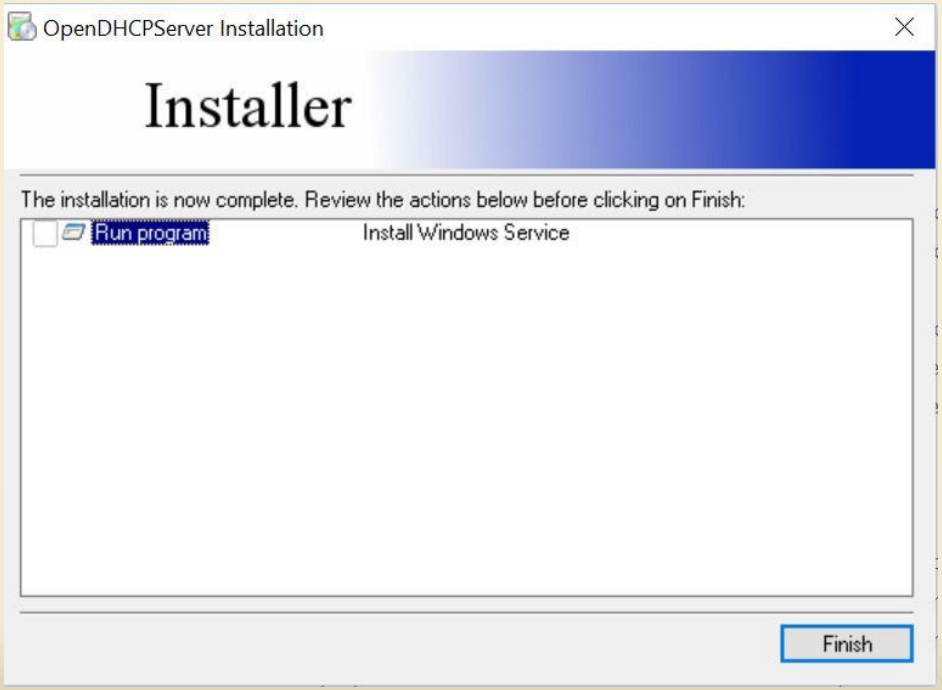
Uncheck Windows Service

1.

2.



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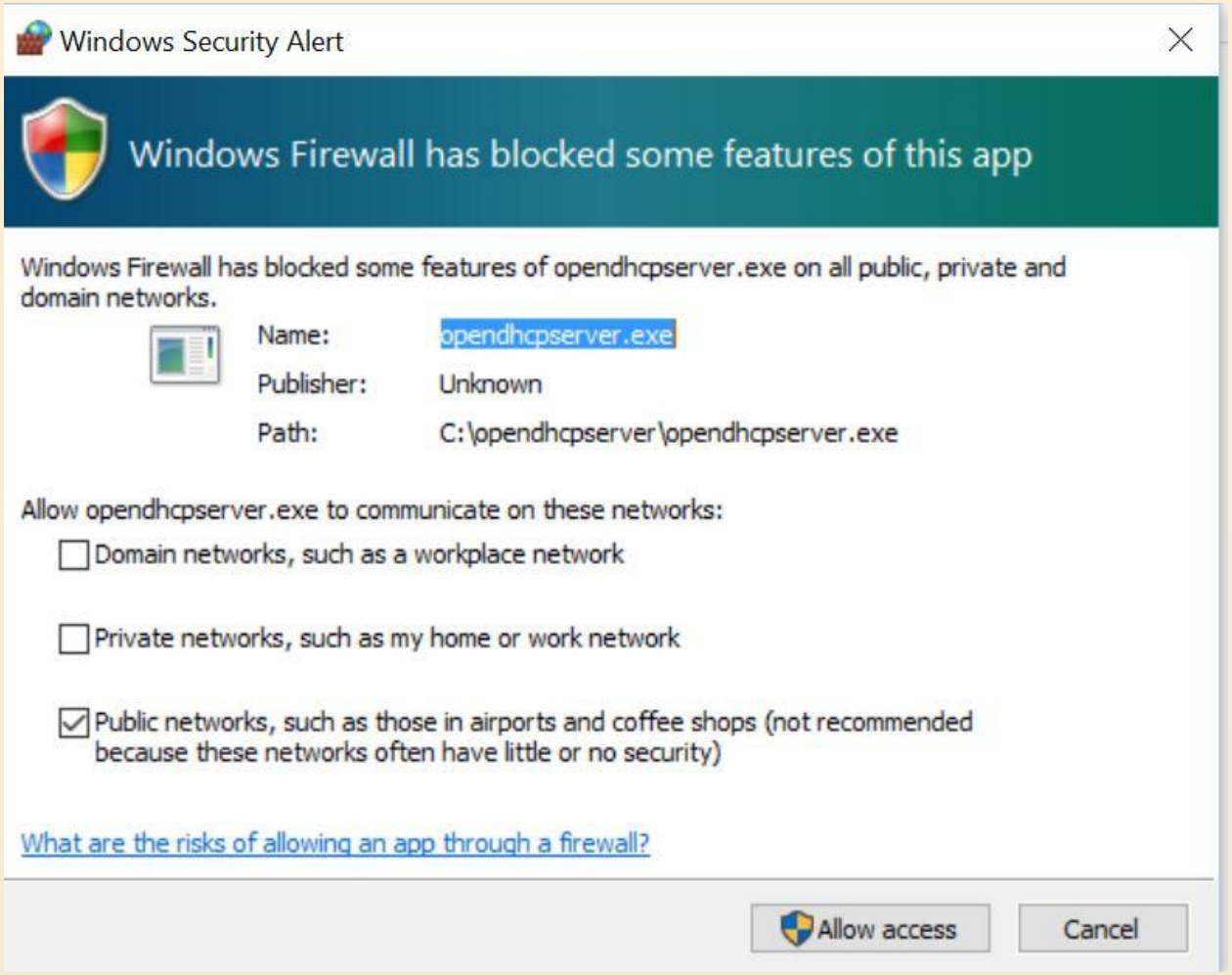
Installation Location

This PC > OS (C:) > OpenDHCPServer

Name	Date modified	Type	Size
log	2016/05/14 12:41 PM	File folder	
InstallService.exe	2016/05/14 12:31 PM	Application	33 KB
OpenDHCPServer.exe	2016/05/14 12:31 PM	Application	234 KB
OpenDHCPServer.htm	2016/05/14 1:22 PM	HTM File	1 KB
OpenDHCPServer.ini	2016/05/14 12:31 PM	Configuration settings	14 KB
OpenDHCPServer.log	2016/05/14 12:31 PM	Text Document	0 KB
OpenDHCPServer.state	2016/05/14 12:44 PM	STATE File	1 KB
OpenDHCPServer	2016/05/14 12:41 PM	Internet Shortcut	1 KB
OpenDHCPServerManual.pdf	2016/05/14 12:31 PM	Adobe Acrobat Docu...	683 KB
README.txt	2016/05/14 12:31 PM	Text Document	6 KB
RemoveService.exe	2016/05/14 12:31 PM	Application	33 KB
RunStandAlone.bat	2016/05/14 12:31 PM	Windows Batch File	1 KB

Windows Firewall



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OpenDHCPServer Console

C:\WINDOWS\system32\cmd.exe

```
Warning: Interface 192.168.81.1 is not Static, not used
Warning: Interface 192.168.229.1 is not Static, not used
Lease Status URL: http://127.0.0.1:6789
Listening On: 192.168.0.1
Network changed, re-detecting Static Interfaces..
Warning: Interface 192.168.1.75 is not Static, not used
Warning: Interface 192.168.81.1 is not Static, not used
Warning: Interface 192.168.229.1 is not Static, not used
Lease Status URL: http://127.0.0.1:6789
Listening On: 192.168.0.1
Client 127.0.0.1, HTTP Request Received
Client 127.0.0.1, HTTP Request Received
Client 127.0.0.1, /favicon.ico not found
Client 127.0.0.1, HTTP Request Received
Client 127.0.0.1, /favicon.ico not found
Network changed, re-detecting Static Interfaces..
Warning: Interface 192.168.1.75 is not Static, not used
Warning: Interface 192.168.81.1 is not Static, not used
Warning: Interface 192.168.229.1 is not Static, not used
Lease Status URL: http://127.0.0.1:6789
Listening On: 192.168.0.1
DHCPDISCOVER for b8:ae:ed:7d:10:6b () from interface 192.168.0.1 received
Host b8:ae:ed:7d:10:6b (Hostb8aeed7d106b) offered 192.168.0.2
DHCPREQUEST for b8:ae:ed:7d:10:6b () from interface 192.168.0.1 received
Host b8:ae:ed:7d:10:6b (Hostb8aeed7d106b) allotted 192.168.0.2 for 36000 seconds
DHCPDISCOVER for 00:50:56:2a:2b:2c (system) from interface 192.168.0.1 received
Host 00:50:56:2a:2b:2c (system) offered 192.168.0.3
DHCPREQUEST for 00:50:56:2a:2b:2c (system) from interface 192.168.0.1 received
Host 00:50:56:2a:2b:2c (system) allotted 192.168.0.3 for 36000 seconds
```