CS4400x D09

TurnOut Setup Manual

ECE 3/15/2009

Getting the Server Image

- 1. There are two ways to access the image.
 - i. Through a FOSSIL lab workstation Using your given password and username, log into a workstation in the FOSSIL lab.

In-Lab Location: p:/CS-4400x/server/turnout

ii. Though the FOSSIL lab server outside of the lab Use WinSCP to connect to the fossil server using your fossil username and password.

FOSSIL Server Address: fossil.cs.wpi.edu

Username and Password: Same as your fossil account

Image Location: /home/public/CS-4400x/server/turnout

2. The image is split up into about 5 files and you will need them all, so copy the entire directory to wherever you will be working. You will need to import and setup the image every time that it moves, so you will want to put it into a location that will be stable throughout the term.

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Address 🛅 P:\CS-4400x\server\turno	ut				💌 🔁 '	Go
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Home Workspace Setup

- 1. Go to the VMware Server site and download the latest release of VMware Server for your operating system. You will need to register with VMware in order to obtain the free key to run the server.
 - <u>http://register.vmware.com/content/download.html</u>
 - <u>http://register.vmware.com/content/registration.html</u>
- 2. Get the TurnOut Server image from the FOSSIL Lab Server and save it to your personal computer.
- 3. Setup VMware server by running the installer.

Importing the TurnOut Server Image

- 1. There are a number of different ways to run the copied image, the quickest is to just double click "Ubuntu.vmx" from the file explorer.
- 2. The VMware Server Console should come up after loading the TurnOut Server image. Do NOT start the TurnOut Server yet!

🚟 Local host - VMware Server C	Console		
File Edit View Host VM P	ower Snapshot Windows Help		
i 🔲 II 🕨 🧐 🔯 🕅			
Inventory ×	TurnOut Server		×
🖞 TurnOut Server	TurnOut Server State: Powered off Guest OS: Ubuntu Configuration file: C:{Documents and Settings}Admin Version: Current virtual machine for VMwa	nistrator\Desktop\turnout\Ubuntu re Server 1.0.6	.vmx
	Commands	Devices	
	 Start this virtual machine Edit virtual machine settings 	Hard Disk (SCSI 0:0) Hard Disk (SCSI 0:0) CD-ROM (IDE 1:0) Fioppy Ethernet Processors	1024 MB Using image C:\Documents and Setti Using drive A: Host-only 1
	Notes Type here to enter notes for this virtual machine		×
	-		VMware Server 1.0.6 🗗 🥢

You must make sure that the server's "Ethernet" setting is set to "Host-only". There are three possible settings for the server's network configuration: NAT, Bridged and Host-only. NAT will use one IP address for both the host and guest operating systems and have the host operating system route packets as necessary to the guest operating system. If you are on the WPI network, using NAT is a violation of

the network AUP and can quickly lead to a one-on-one session with Net-Ops. Bridged mode will have the network connection act as two separate connections. Both the host and guest operating systems will receive individual IPs and will act as separate devices. This is allowed on the WPI network after registering in NetReg. The third, and option that is safest for this course, is Hostonly. This sets up a second network within the host operating system that is completely isolated from the WPI network. The only machine that can access the guest operating system is the host computer. This is the best option to sandbox the guest operating system and avoids placing a potentially insecure system onto the live network.

3. The TurnOut Server will be using DHCP to obtain an address from the host operating system. From the "Host" menu select "Virtual Network Settings..." to get the "Virtual Network Editor". Note the three virtual networks that exist. In this case, VMnet1 is the host-only virtual network. Go to the "DHCP" tab to view the DHCP settings.

<mark>ਡ^ਊ Virtual Network Edito</mark>	or		
Summary Automatic Bridgin	g Host Virtual Network Mapping Ho of your virtual networks. Use the other p vorks, add and remove adapters and m	st Virtual Adapters D ages of this editor to ch ore.	HCP NAT
Virtual Network	Summary	Subnet	DHCP
₩Mnet0 (Bridged) WMnet1 (Host-only)	Bridged to an automatically chosen ad A private network shared with the host Used to share the host's IP address	L 192.168.233.0 192.168.130.0	Enabled
	OK Can	cel Apply	Help

a [‡] Virtual Network	Editor			
Summary Automatic B	Bridging Host Virtual to configure the Dyna vell as control the DHC	Network Mapping H amic Host Configuratio CP service.	Host Virtual Adapters	DHCP NAT
Virtual Network VMnet1 VMnet8	Subnet 192.168.233. 0 192.168.130. 0	Netmask 255.255.255.0 255.255.255.0	Description vmnet1 vmnet8	
DHCP service Service status:	Started	<u>A</u> dd	<u>R</u> emove	Properties
Service request:		ок Са	ancel Apply	St <u>op</u> R <u>e</u> start Help

4. Click the virtual network for the host-only virtual network then click the "Properties" button below the list. Note the "Start IP address", in this case

192.168.233.128

DHCP Settings		
Settings		
⊻Mnet host:	VMnet1 💌	
Subne <u>t</u> :	192 . 168 . 233 . 0	
Net <u>m</u> ask:	255 . 255 . 255 . 0	
<u>S</u> tart IP address:	192 . 168 . 233 . 128	
End IP address:	192 . 168 . 233 . 254	
<u>B</u> roadcast address:	192 . 168 . 233 . 255	
Lease duration for DHCP c	lients	
Day	ys: Hours: Mi	nutes:
Default lease time: 0	C 🗘 30) 🛟
Ma <u>x</u> lease time: 0	2 2	*
	OK Cancel	Help

- 5. Close out all of the dialogs to get back to the VMware Server Console. Click the "Start this virtual machine" link under the "Commands" section.
- 6. A dialog will pop up due to the change in image location since the last start. Make sure the "Keep" radio button is selected then click "OK"

TurnOut	Server - Virtual Machine	
2	The location of this virtual machine's configuration file has changed since it was last powered on.	
	If the virtual machine has been copied, you should create a new unique identifier (UUID). If it has been moved, you should keep its old identifier.	
	If you are not sure, create a new identifier.	
	What do you want to do?	
	⊙ Create	
	О Кеер	
	O Always Create	
	O Always Keep	
	OK Cancel	

7. The server will startup. Let the system come to a full start before continuing with any assignments.



Please note that although in this particular setup, it is possible to gain administrative access to the system by booting into safe mode or by using a live cd, it may not be within the scope of the assignment to do so.