

Network Troubleshooting Overview

Construct and Integrate your Network Infrastructure

- Establish organizational name, domain name and function.
- Determine private IP addresses
- Determine Active Directory infrastructure

Configure VMWare Consoles

- 1 Fedora 10 - (Linux)**
 - Main harddrive 10 Gb
 - Secondary harddrives (3) at 5 GB each
 - Allocate 512 Mb virtual RAM
 - Install and configure operating system
 - Configure RAID 5 via LVM on secondary harddrives.
 - Install and configure simple Samba file services
 - Share the entire RAID 5 array
- 2 Windows Server 2003**
 - Main harddrive 10 Gb
 - Allocate 512 Mb virtual RAM
 - Install and configure operating system
 - Activate
 - Update
 - Install antivirus
 - Install and configure Active Directory
 - Have DNS install automatically
 - Build directory infrastructure
 - Delegate control to IT manager
 - Install GPMC
 - Configure group policies
 - Setup static network properties
 - Install and configure IIS
 - Install and configure DHCP
- 3 Windows XP Professional**
 - Main harddrive 8 Gb
 - Allocate 256 Mb virtual RAM
 - Install operating system
 - Join the domain
 - Configure and test remote desktop
 - Configure and test network properties
 - Get addresses from DHCP
 - Configure and test access to network shares

Install and configure GNS3 virtual router

Initiative auditing/monitoring strategies

- Document hardware and software for current servers and workstations.
 - Install/Configure Microsoft SMS
 - Map using Visio
 - Make information web accessible
- Determine baseline for key system/network performance objects.
 - Use network monitoring techniques
 - Use MS system monitoring techniques
 - Use Linux system monitoring techniques
- Install/configure automatic network monitoring software to alert administrator if performance standards/services fail to meet expectations.
 - Install and configure Nagios

Troubleshooting

- Discuss basic troubleshooting steps.
- Perform physical layer troubleshooting
- Perform data-link layer troubleshooting
- Perform network/transport layer troubleshooting
- Perform session/presentation/application layer troubleshooting

Document the processes/procedures that are performed in class in a personal web journal.