

Build a Windows 2012 Server Project 1

Scope	Build a primary and secondary file server for a graphics department with 100 users, three supervisors and two network administrators using two Windows 2012 Servers. The computers will have two 2 TB hard drives setup using RAID 1. The users will be saving their files created on Apple computers using OS X and connecting to the machines by 100 Mbps Ethernet cable. The servers have only one network interface card.
Active Directory	All 100 graphics users will be loaded in Active Directory and they can only read and write to their own project folder. Supervisors will have their own accounts and have full permissions to read and write to all folders. Administrators will have their own accounts and have full permissions to read and write to all folders.
Security	Username and passwords will conform to institution rules used in other departments.
Roles	Active Directory, DNS, File services, Distributed File Services
Documentation	Create an installation manual showing every step to build the two servers for disaster recovery purposes. <ol style="list-style-type: none">1. Title page2. Table of contents3. Hardware requirements4. BIOS settings5. Windows 2012 installation6. Drivers load7. Updates and service packs8. Security settings and audit policies9. Active Directory setup10. DNS setup11. Personnel load and folder setup12. Establish RAID 1 backup13. Procedure for Apple client to save files to the server14. Setup procedure for the secondary server15. Testing16. LAN Diagram17. Index18. Disk with Windows 2012 Server, drivers and documents

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Procedures are at: <http://www.worldclasscad.com/server2012.htm>

Specifics:

Installation will be Windows 2012 Standard Server

All critical updates installed

All drivers installed (check your drivers before you reinstall)

- Refer to manufacturer' website

All password, account and audit policies set

Servers will have two NICs with the external card on the 192.168.10.0 network (use IP assigned)

Router address is 192.168.10.1

External IP address will be 192.168.10.2 and 192.168.10.3 (successive addresses per your IP address sheet)

Internal IP address is:

- Group 1: 192.168.50.1
- Group 2: 192.168.51.1
- Group 3: 192.168.52.1
- Group 4:: 192.168.53.1
- Group 5: 192.168.54.1
- Group 6: 192.168.55.1

Install SNMP feature

The server will be a Domain Controller (AD load)

- Domain name will be graphics(number).local
- Primary DC name is server1
- Secondary DC name is server2

DNS forwarders will be:

8.8.8.8
8.8.4.4
209.18.47.61
209.18.47.62
74.202.52.145
216.136.95.2
64.132.94.250
206.222.120.186

Setup A host for your client computer

Setup a Reverse Lookup Zone

Setup a WINS server

Setup VPN and open the firewall for VPN

Setup a DHCP scope for 50 IP addresses

Setup printer and print server for network printer at 192.168.10.100

Synchronize your server with US Navy NTP server

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Load yourself as an administrator with a user folder

Load your instructor as an administrator (email your instructor their username and password)

Setup the Distributed File System between the two servers

Create accounts for 50 users with shared folders

User: Jane Smith

Group: Student

Password: JM1234

Each student has full rights for their own folder

Create accounts for two instructors with a shared folders

User: Ryan Thompson

Group: Instructor

Password: RT1234

Each instructor has full rights for their own folder and for every student folder

Create accounts for two administrators (one for yourself and the other for your partner)

User: Toni Golf

Group: Administrators

Password: ABCdef123

Each administrator has full rights to every student folder

Setup Windows recommended file sizes for the server log

Logon on the server from the client computer as Jsmith (username)

Open a file in Microsoft Word and save it to the server (user's folder) as test.docx