

## Build a Windows 2012 Server Project

<b>Scope</b>	Build a Domain Controller for a small department with 6 users, two supervisors and two network administrators using two Windows 2012 Servers. The computers will have two 2 TB hard drives setup using RAID 1. The client computers will use Windows 7 and connect to the machines by 1000 Mbps Ethernet cable. The server has two network interface cards.
<b>Active Directory</b>	All 6 users will be loaded in Active Directory and they can only read and write to their own database. Supervisors will have their own accounts and have full permissions to read and write to all parts of the database. Administrators will have their own accounts and have full permissions to read and write to all folders.
<b>Security</b>	Username and passwords will conform to institution rules used in other departments.
<b>Roles</b>	Active Directory, DNS, DHCP, NAT, VPN, Print
<b>Documentation</b>	<p>Create an installation manual showing every step to build the two servers for disaster recovery purposes.</p> <ol style="list-style-type: none"> <li>1. Title page</li> <li>2. Table of contents</li> <li>3. Hardware requirements</li> <li>4. BIOS settings</li> <li>5. Windows 2012 installation</li> <li>6. Drivers load</li> <li>7. Updates and service packs</li> <li>8. Security settings and audit policies</li> <li>9. Active Directory setup</li> <li>10. DNS setup</li> <li>11. VPN and NAT setup</li> <li>12. DHCP setup</li> <li>13. Print server setup</li> <li>14. NTP server setup</li> <li>15. Establish RAID 1 backup</li> <li>16. Load personnel and create user folders</li> <li>17. Testing</li> <li>18. LAN Diagram</li> <li>19. Index</li> <li>20. Disk with Windows 2012 Server, drivers and documents</li> </ol>

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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 2 NICs with the external card on the 192.168.10.0 network (use IP assigned)

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 your first name with dot local (i.e. – charles.local)

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

Load yourself as an administrator with a user folder

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

## Build a Windows 2012 Server Project

Create an account for single user with a shared folder

User: Ryan Smith  
LAN technician  
1234 Main St.  
Columbus, Ohio 43230  
614-999-8888  
Office: room 506  
Supervisor: you  
Your supervisor: Instructor

Setup Windows recommended file sizes for the server log

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

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