



■ 2023

Proposed to: Energy Connections Inc.

CAMPUS PROJECT
PROPOSAL RESPONSE

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Table of Contents

Contents

Overview	3
The Situation	3
End Goal	3
The Concept	4
Networking Operation	4
Redundancy	5
Security	6
Skills Required	7
Windows Server Operation	8
Operation	8
Roles and Services	8
Group Policy Management	9
Skills Required	10
Linux Operation	11
Overview	11
Roles and Services	11
Skills Required	12
Outcome of Report	13
Challenges + Solutions	13
Networking	13
Windows	13
Linux	13
Appendix	14
Networking	14
IP Addressing Scheme	14
Windows Server	16
Citations	20
Project List	21

Overview

This proposal is a document that shows how Set H – Group 2 can satisfy the needs for Energy Connections Inc. Vancouver Campus. This includes a fully redundant network design with full security, backup servers, and an Active Directory domain structure.

The Situation

The company has allocated four routers and four switches which will be placed across two sites. They require that the network operation be running 24/7, Linux servers running as backup, and a preconfigured Active Directory Domain Service scheme for it's private and public users to have access to.

End Goal

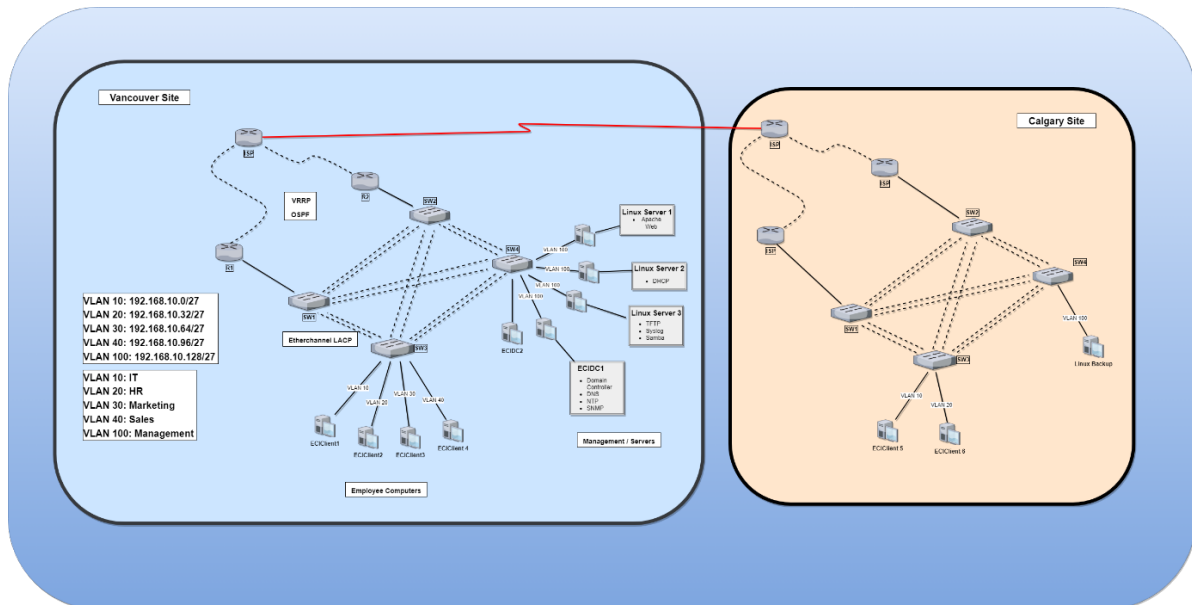
The goal is to make a fully functional network that includes...

- Redundancy to all Networking and End Devices
- Redundancy to Data Drives
- Full connectivity between ISP and other sites
- Active Directory scheme to manage Users and Computers
- Deploy security measures to mitigate unauthorized access to the network.

The Concept Networking Operation

This section explains how each device will function in the network.

Logical Topology



1

Automatic IP Addressing to Computers and Devices

DHCP: Router will be providing DHCP in which every employee and user will automatically get an IP address depending in the department that they are in.

Communication Between Site to Site

GRE Tunnel Over IPsec: this allows point to point communication between multiple sites by placing a secure tunnel through the ISP.

Logging

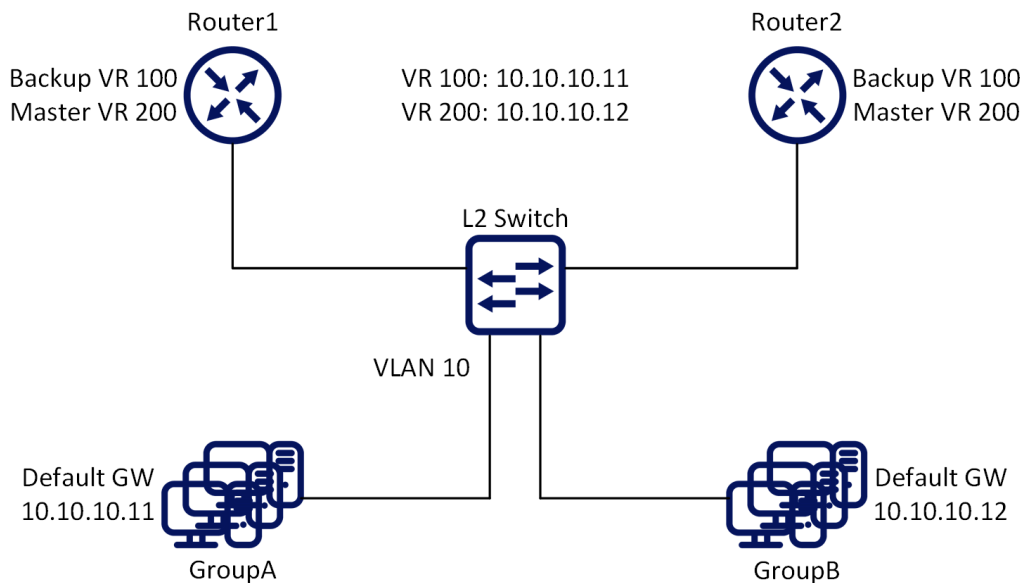
Syslog: logging messages from the routers and switches and will be sent to the Linux TFTP server. Provides centralized viewing of syslog messages. Configure to be Warning and above.

¹ Topology of how ECI Networking Infrastructure is designed.

Redundancy

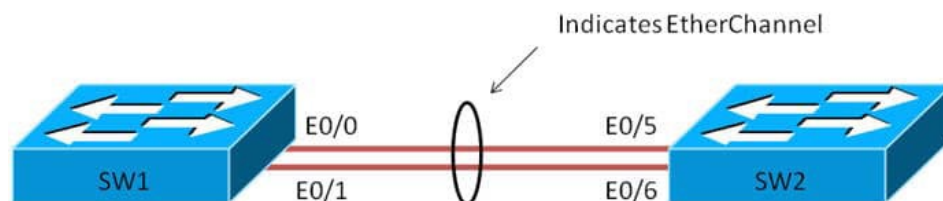
Routers

We have implemented a failover mechanism called **Virtual Router Redundancy Protocol (VRRP)** which allocates two **Layer 3 Routers** that share the same virtual IP address so that if one of the routers goes down, the other router can take over. This is an **open-standard protocol** - multi-vendor and Cisco routing devices can be interconnected.



Switches

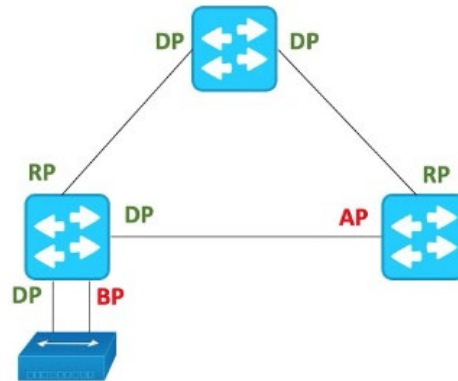
EtherChannel: We have implemented a failover mechanism called **EtherChannel in LACP Mode** which allocates four **Layer 2 Switches** that interconnects to each other. If one of the switching devices fails to carry data, there is always another path for each router and end device for the data to be carried. This is an **open-standard protocol** - multi-vendor and Cisco Layer 2 switching devices can be interconnected.



² Example of VRRP

³ Example of EtherChannel

RSTP: We have implemented a looping prevention mechanism called **Rapid Spanning Tree Protocol (RSTP)** that blocks redundant ports. This will prevent data packets from creating excessive network traffic, network congestion, and performance issues.



4

Security

Segmentation

Employee Computers

Employee computers are segmented by departments with a process called **Virtual Local Area Network**. Devices in separate VLANs isolate sensitive or critical devices in your network. In the case of a security breach, the intruder would be less likely to access sensitive data. This will also allow employees from each of their department to only access files that they are authorized to view.

Servers + Management Computer

Servers and centralized management computer are isolated on another Layer 2 switch to ensure safety and security between employee computers and sensitive data. This allows easier monitoring and stricter access control. Only authorized users and devices will be allowed to access internal servers. Implementing a **Management Computer** (centralized computer) allows easier monitoring and deploying security mechanisms so that your data is protected.

⁴ Example of Rapid Spanning-Tree

Layer 2 Security

Dynamic ARP Inspection	inspects ARP packets and ensures that IP-to-MAC address bindings are valid and trusted
Root Guard	protects against unauthorized switches from taking control as the root bridge
BPDU Guard	protects against accidental or malicious connections of unauthorized spanning tree switch or bridge
DHCP Snooping	inspects DHCP messages ensuring that valid DHCP servers are allowed to assign IP addresses to clients
Port Security	restricts the number of MAC addresses allowed on an interface to prevent unauthorized devices from connecting to switch ports
Shutdown Ports	unused ports are shutdown so if a device is plugged in it will not participate in the network

Layer 3 Security

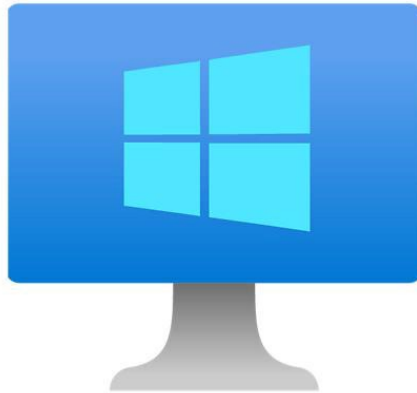
SSH	provides encrypted communication between the client and server
Access Control List	set of rules used to filter network traffic
Routing Authentication	verifies authenticity and integrity to ensure only trusted routers can participate in the routing process
GRE over IPSec	allows for secure transmission of IP packets between two endpoints over the internet

Skills Required

- Experience in deploying Cisco, Windows, and Linux services.
- Workstation deployments
- Ability to install configure and troubleshoot networking devices.
- Ability to monitor cybersecurity activities.
- Strong knowledge in Cisco devices.

Windows Server Operation

This section explains how Windows Server will be implemented to your network



Operation

The purpose of having Windows Server implemented into the network is to have a domain that would provide centralized management to users, authentication, and security policies for the company.

Roles and Services

Domain Controller

A computer used for centralized management of the network's Users and Computers. Below are the functions of a Domain Controller.

- Authentication and Authorization
- User and Group Management
- Active Directory Database Management
- Group Policy Management
- Domain Name Services
- Security and Authentication Policies
- Time Synchronization

Client Computer

Each employee and their computers will be linked through the Domain Controller for centralized management of each device and user in the company.

Virtual Machines

Each host machine will have a static IP address configured but the VMs will obtain their address through DHCP.

NTP

Each client PC will be getting their time from the Domain Controller as Stratum 2 Devices.

Samba

Allows interoperability between Windows and Linux systems. This enables file sharing for Windows machine to access shared directories and files on hosted Linux systems.

Group Policy Management

Policies have been implemented for every user in their department to give them the principle of least privilege. Each user and computer will be granted permission to files or resources necessary to complete their tasks.

Default Domain Policy (linked to entire domain):	
Policy	Option
Enforce Password History	10 passwords remembered
Maximum Password Age	60 days
Minimum Password Age	1 day
Minimum Password Length	12 characters
Account Lockout Duration	30 minutes
Account Lockout Threshold	10 attempts
Audit account logon events	Success and Failure
Accounts: Guest account status	Disabled
Accounts: Rename Administrator Account	ECIAdministrator
Interactive Logon: Do not require CTRL+ALT+DEL	Disabled
Interactive Logon: Don't display last at sign-in	Enabled
Interactive Logon: Don't display username at sign-in	Enabled
Interactive Logon: Message text for users attempting to log on	"Only authorized ECI Domain users are permitted to access this computer. Logon attempts are tracks"
Interactive Logon: Message title for users attempting to log on	"Attention:"
Interactive Logon: Prompt user to change password before expiration	14 days
Network Security: Do not store LAN Manager hash value on next password change	Enabled
Network Security: Do not allow anonymous enumeration of SAM accounts	Enabled
Network Security: Do not allow anonymous enumeration of SAM accounts and shares	Enabled
Sign-in and lock last interactive user automatically after restart	Enabled

Non-Admins (linked to ECI-OU):	
Policy	Option
Prohibit access to Control Panel and PC settings	Enabled
Prevent access to the command prompt	Enabled (Disable the command prompt script processing also? No)
Prohibit User Installs	Enabled
No auto-restart with logged on users for scheduled automatic updates installations	Enabled
Control Panel: Settings Page Visibility	Disabled

Disable Powershell (linked to ECI-OU):	
Policy	Option
Additional Rules	Add path "C:\Windows\System32\WindowsPowerShell\v1.0\powershell.exe"
Security Level	Disallowed

Skills Required

- Administer Active Directory environments.
- Develop, implement, and manage policies ensuring Windows security.
- Ability to deploy new on-board employees.
- Deep understanding in various Windows operating systems
- Networking fundamentals
- Familiarity with Windows server roles and services. (Active Directory, DNS, DHCP, GPO validation, management and implementation)

Linux Operation

This section explains how Linux will be implemented to your network



Overview

The purpose of having Linux OS is to provide redundancy to the company network, provide redundancy to Files and Directories, and to have a dedicated web server for the public to access.

Roles and Services

DHCP Server

In case the DHCP server on the routers cease to function, Linux will be a hot swap device in which the Linux DHCP Server will provide DHCP addresses to end devices.

Apache Web Server

Used to host and server over the internet or local network. Below lists the functions of an Apache Web Server

- Web Content Delivery
- Website Hosting
- Dynamic Content Generation
- URL Rewriting and Redirection
- Security and Access Control
- Logging and Monitoring
- Scalability and Performance



Trivial File Transfer Protocol (TFTP) Server

Facilitates file transfers between networking devices. Below are the functionalities of a TFTP server.

- Firmware Updates
- Configuration Management – backup, restore, or deploy configurations to multiple devices.
- Network Booting – device booting directly from network.
- File Transfers
- Software Distribution
- Development and Testing

RAID 5

Provides data redundancy and increased performance in Linux systems This combines multiple physical disks into a single logical disk that distributes data and information across the disks.

Samba

Allows interoperability between Windows and Linux systems. This enables file sharing for Windows machine to access shared directories and files on hosted Linux systems.

Skills Required

- Experience using CentOS.
- Experience in deploying and managing networking services. (DNS, DHCP)
- Backup/Restore Linux filesystems.
- Experienced in Virtualization (VMWare Workstation or Hyper-V)
- Sufficient in Linux problem solving.

Outcome of Report

Challenges + Solutions

Networking

- DHCP would assign IP addresses to the other router even if it was statically configured.
 - **Solution:** input *'no service config'* command on router, save configuration, and reload.
- LAN devices were not able to ping ISP.
 - **Solution:** assure default gateway is last resort is configured towards the ISP
- LAN and Calgary LANs unable to communicate with each other.
 - **Solution:** assure OSPF is properly configured so that the tunnel on both sides can form a neighbor adjacency.

Windows

- Blending virtualization with hardware
 - **Solution:** considerable trial and error while trying to understand how the network was functioning
 - **Technical**
 - **Static assign IP address to host machine so its on dedicated VLAN**
 - **Domain join computer so that it will obtain DHCP**

Linux

- No standardized procedures. Due to many distributions and open source.
 - **Solutions:** Keeps testing configurations out and find the best solution to solve it
- Navigating CLI environment is always a challenge with Linux, when you break something, you can't enter a command to undo it.
 - **Solution:** the positive is that we're in a virtual environment can make snapshots

Appendix
Networking
IP Addressing Scheme

VANCOUVER			
VLAN Address Scheme		PCs	
10 - Sales	192.168.10.0/27	DC1 > Main NTP + DNS	192.168.10.129
20 - Finance	192.168.10.32/27	DC2 > Backup	192.168.10.130
30 - Marketing	192.168.10.64/27	DHCP	192.168.10.131
40 - IT	192.168.10.96/27	TFTP	192.168.10.132
100 - Management	192.168.10.128/27	WEB	192.168.10.133
101 - Native	NATIVE	Client DHCP	DYNAMIC
Default Gateway for VRRP			
VLAN	R1	R2	VIP
10 - Sales	192.168.10.28	192.168.10.29	192.168.10.30
20 - Finance	192.168.10.60	192.168.10.61	192.168.10.62
30 - Marketing	192.168.10.92	192.168.10.93	192.168.10.94
40 - IT	192.168.10.124	192.168.10.125	192.168.10.126
100 - Management	192.168.10.156	192.168.10.157	192.168.10.158
101	NATIVE	NATIVE	NATIVE

⁵ Network Addressing Scheme

Device	Interface	IP Address	Subnet Mask	VLAN	Port-Channel	Native VLAN	Virtual IP / Default Gateway	NID	VLAN
R1	G0/0/0.10	192.168.10.28	255.255.255.224				192.168.10.30	192.168.10.0	IT
R1	G0/0/0.20	192.168.10.60	255.255.255.224				192.168.10.62	192.168.10.32	HR
R1	G0/0/0.30	192.168.10.92	255.255.255.224				192.168.10.94	192.168.10.64	Marketing
R1	G0/0/0.40	192.168.10.124	255.255.255.224				192.168.10.126	192.168.10.96	Sales
R1	G0/0/0.100	192.168.10.156	255.255.255.224				192.168.10.158	192.168.10.128	Management
R1	G0/0/1	100.100.100.1	255.255.255.252						Native
R1	Tunnel10	192.168.20.1	255.255.255.252						
R2	G0/0/0.10	192.168.10.29	255.255.255.224				192.168.10.30		
R2	G0/0/0.20	192.168.10.61	255.255.255.224				192.168.10.62		
R2	G0/0/0.30	192.168.10.93	255.255.255.224				192.168.10.94		
R2	G0/0/0.40	192.168.10.125	255.255.255.224				192.168.10.126		
R2	G0/0/0.100	192.168.10.157	255.255.255.224				192.168.10.158		
R2	G0/0/1	100.100.200.1	255.255.255.252						
R2	Tunnel20	192.168.30.1	255.255.255.252						
ISP	G0/0/0	100.100.200.2	255.255.255.252						
ISP	G0/0/1	100.100.100.2	255.255.255.252						
ISP	S0/1/0	200.200.200.2	255.255.255.252						
ISP	Loopback0	8.8.8.8	255.255.255.255						
Calgary	S0/1/0	200.200.200.1	255.255.255.252						
Calgary	Loopback0	96.96.96.96	255.255.255.255						
Calgary	Tunnel10	192.168.20.2	255.255.255.252						
Calgary	Tunnel20	192.168.30.2	255.255.255.252						
SW1	F0/1-2			Trunk	1				
SW1	F0/3-4			Trunk	4				
SW1	F0/5-6			Trunk	5				
SW2	F0/1-2			Trunk	1				
SW2	F0/3-4			Trunk	2				
SW2	F0/7-8			Trunk	6				
SW3	F0/1-2			Trunk	3				
SW3	F0/3-4			Trunk	4				
SW3	F0/5				20				
SW3	F0/7-8			Trunk	6				
SW3	F0/13				10				
SW4	F0/1-2			Trunk	3				
SW4	F0/3-4			Trunk	2				
SW4	F0/5-6			Trunk	5				
SW4	F0/7				30				
SW4	F0/8				40				
SW4	F0/9				100				
DC1 (with NTP)		192.168.10.129	255.255.255.224	100		101			
DC2 (with DNS)		192.168.10.130	255.255.255.224	100		101			
DHCP Server		192.168.10.131	255.255.255.224	100		101			
TFTP Server		192.168.10.132	255.255.255.224	100		101			
Web Server		192.168.10.133	255.255.255.224	100		101			
S1	VLAN 100	192.168.10.152	255.255.255.224	100					
S2	VLAN 100	192.168.10.153	255.255.255.224	100					
S3	VLAN 100	192.168.10.154	255.255.255.224	100					
S4	VLAN 100	192.168.10.155	255.255.255.224	100					
									> doesn't work for S4 > crypto key gen rsa

Windows Server

Name:	ECIDC1	Name:	ECIClient1
OS:	Windows server 2022 Datacenter	OS:	Windows 11 Pro
Processors:	2	Processors:	2
Cores:	2 (per processor)	Cores:	2 (per processor)
RAM:	4096MB	RAM:	4096MB
HDD:	500GB	HDD:	500GB
NIC:	NAT and Bridged	NIC:	NAT and Bridged
Local Username:	ECIDC1	Local Username:	Client1
Password:	3c!4Dmin2023	Password:	3c1Client111

Name:	ECIClient2	Name:	ECIClient3
OS:	Windows 11 Pro	OS:	Windows 11 Pro
Processors:	2	Processors:	2
Cores:	2 (per processor)	Cores:	2 (per processor)
RAM:	4096MB	RAM:	4096MB
HDD:	500GB	HDD:	500GB
NIC:	NAT and Bridged	NIC:	NAT and Bridged
Local Username:	Client2	Local Username:	Client3
Password:	3c1C!ient222	Password:	3c1Client333

Name:	ECIClient4	Name:	ECIDC2
OS:	Windows 11 Pro	OS:	Windows Server 2022
Processors:	2	Processors:	2
Cores:	2 (per processor)	Cores:	2
RAM:	4096MB	RAM:	4096MB
HDD:	500GB	HDD:	500GB
NIC:	NAT and Bridged	NIC:	NAT and Bridged
Local Username:	Client4	Local Username:	
Password:	3c1C!ient444	Password:	

Domain Account:

Username:	ECIAdministrator
Password:	3c!4Dmin2023
Domain Name:	eci.com
DC Restore Password:	P455w.rd

Domain Users and Groups:

Users:				
Calgary OU	IT	Joutiar Ghaderyan	jghaderyan@eci.com	eoWY64rjFCHN
		Steven Ng	sng@eci.com	9yLL1fubLTzx
		Rouzbeh Keshavarz	rkeshavarz@eci.com	jC%aicjE4Wic
		Jora Duhra	jduhra@eci.com	aDc2F\$daivE2
		Jingjing Lount	jlount@eci.com	bmYztYdy2sBs
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		Tony Hawk	thawk@eci.com	\$4ibucE678VC
		Samuel Jackson	sjackson@eci.com	diC67A \$icmei
		Irene Fredrickson	ifredrickson@eci.com	ifC8%uc283wi
Toronto	Sales	Jasmine Harold	jharold@eci.com	If&aVnci#267
		Tony Robbins	trobbsins@eci.com	V\$%4869alekc
		Tiger Woods	twoods@eci.com	Aib8\$aiCielbi

		Kathrine Tarrice	ktarrice@eci.com	kUc8@fiachod
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		Tyson Ngo	tngo@eci.com	tmricbiE58Ae
		Zendaya Coleman	zcoleman@eci.com	C%ivbiec24c\$

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ECI_Montreal	Sean Delfin, Oliver Dacanay, Thomas Norm, Amy Dumoulin, Marcus Woo, Janice Simpson, Ash Chik, Howard Tsang, Erin Shamblewood, Joshua Peck, Alden Cruz, Jennifer Lawrence, Andrew Tate, Fredrick Cleveland, Tony Hawk, Samuel Jackson, Irene Fredrickson
ECI_Toronto	Lorj Villaneuva, Kyle Evangelista, James Zamora, Ibrahim Worneh, Jinwoo Park, Conan Gray, Nasim Rezazadehnojehehi, Nicholas Wong-Smith, David Chen, Carson Daw, Chris Pratt, Justin Trudeau, Newton Stud, Jasmine Harold, Tony Robbins, Tiger Woods, Kathrine Tarrice
ECI_Vancouver	Zane Housil, Austin Webber, Amir Ghabchi, Dustyn Badach, Wesley Kitane, Rick Phelan, Thomas Shelby, Pawan Dhoother, Mattias Egger, Jackson Chow, Stephen Harper, Tom Holland, Lourie Preece, Yao Ming, Roger Federer, Tyson Ngo, Zendaya Coleman
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Sales	Gordon Ramsay, Andrew Garfield, Chris Evans, Leonardo Davinci, Fredrick Cleveland, Tony Hawk, Samuel Jackson, Irene Fredrickson, Jasmine Harold, Tony Robbins, Tiger Woods, Kathrine Tarrice, Yao Ming, Roger Federer, Tyson Ngo, Zendaya Coleman
Marketing	Bob Morley, John Ali, Harchit Chawla, Timothy Chalamet, Joshua Peck, Alden Cruz, Jennifer Lawrence, Andrew Tate, Carson Daw, Chris Pratt, Justin Trudeau, Newton Stud, Jackson Chow, Stephen Harper, Tom Holland, Lourie Preece
HR	Angela Roberts, Timothy Dawson, Paul Kim, Kaiden Koran, Janice Simpson, Ash Chik, Howard Tsang, Erin Shamblewood, Conan Gray, Nasim Rezazadehnojehehi, Nicholas Wong-Smith, David Chen, Rick Phelan, Thomas Shelby, Pawan Dhoother, Mattias Egger

Citations

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Project List

Task Mode	Task Name	Duration	Start	Finish	Predecessors	Resource Names	% Complete
Manually Scheduled	Campus Project	11 days?	Thu 23-05-11	Thu 23-05-25			84%
Manually Scheduled	Logistics	11 days	Thu 23-05-11	Thu 23-05-25		Wesley	0%
Manually Scheduled	Create MS Project	1 day	Thu 23-05-11	Thu 23-05-11			0%
Manually Scheduled	Assign Tasks	1 day	Thu 23-05-11	Thu 23-05-11			0%
Manually Scheduled	Gather Questions	1 day	Thu 23-05-11	Thu 23-05-11			0%
Auto Scheduled	Determine Hardware Requirements	1 day	Mon 23-05-15	Mon 23-05-15			0%
Manually Scheduled	Networking	11 days?	Thu 23-05-11	Thu 23-05-25		Ibrahim,Sean,Wesley	91%
Manually Scheduled	Finalize Topology	4 days	Thu 23-05-11	Tue 23-05-16		Ibrahim	100%
Manually Scheduled	Create Subnets	3 days	Sat 23-05-13	Tue 23-05-16			100%
Manually Scheduled	Configurations	3 days?	Mon 23-05-15	Wed 23-05-17			100%

Manually Scheduled	Subnets	2 days	Mon 23-05-15	Tue 23-05-16			100%
Manually Scheduled	STP	3 days	Mon 23-05-15	Wed 23-05-17			100%
Manually Scheduled	Etherchannel	1 day	Mon 23-05-15	Mon 23-05-15			100%
Manually Scheduled	NTP	1 day	Mon 23-05-15	Mon 23-05-15			100%
Manually Scheduled	OSPF/Dynamic Routing	3 days	Mon 23-05-15	Wed 23-05-17			100%
Manually Scheduled	VLANs	3 days	Mon 23-05-15	Wed 23-05-17			100%
Manually Scheduled	VRRP	2 days	Tue 23-05-16	Wed 23-05-17			100%
Manually Scheduled	NAT	3 days	Mon 23-05-15	Wed 23-05-17			100%
Manually Scheduled	Syslog	1 day	Mon 23-05-15	Mon 23-05-15			100%
Manually Scheduled	Router Native VLAN	1 day	Mon 23-05-15	Mon 23-05-15			100%
Manually Scheduled	DHCP/DNS	1 day	Mon 23-05-15	Mon 23-05-15			100%
Manually Scheduled	Cost OSPF						0%

Manually Scheduled	SNMP	1 day	Mon 23-05-15	Mon 23-05-15			100%
Auto Scheduled	Security	1 day	Thu 23-05-11	Thu 23-05-11			50%
Manually Scheduled	GRE w/ IPSec						0%
Manually Scheduled	Nessus Vul Scanner						0%
Manually Scheduled	DAI: ARP Inspection	1 day	Thu 23-05-11	Thu 23-05-11			0%
Manually Scheduled	DTP	1 day	Thu 23-05-11	Thu 23-05-11			100%
Auto Scheduled	Layer 2	1 day	Thu 23-05-11	Thu 23-05-11			50%
Manually Scheduled	DHCP Snooping/Starvation	1 day	Thu 23-05-11	Thu 23-05-11			0%
Manually Scheduled	ARP Poisoning						0%
Manually Scheduled	Port Security	1 day	Thu 23-05-11	Thu 23-05-11			100%
Manually Scheduled	Basic Security (SSH)						0%
Manually Scheduled	VLAN Hopping	1 day	Thu 23-05-11	Thu 23-05-11			0%
Manually Scheduled	STP Manipulation						0%

Manually Scheduled	ACLs						0%
Manually Scheduled	MAC Flooding	1 day	Thu 23-05-11	Thu 23-05-11			100%
Manually Scheduled	VLAN Segmentation	1 day	Thu 23-05-11	Thu 23-05-11			100%
Manually Scheduled	BPDU Guard						0%
Manually Scheduled	OSPF Authentication						0%
Manually Scheduled	Windows	11 days?	Thu 23-05-11	Thu 23-05-25		Austin, Marcus, Zane	99%
Auto Scheduled	Create DC1	1 day?	Thu 23-05-11	Thu 23-05-11			100%
Manually Scheduled	DC1	1 day	Thu 23-05-11	Thu 23-05-11			100%
Auto Scheduled	Configure ADDS and DNS	0 days?	Thu 23-05-11	Thu 23-05-11			100%
Manually Scheduled	Create User Accounts						100%
Manually Scheduled	Create security groups and add users						100%
Manually Scheduled	Create Ous - min 3 accounts per OU						100%
Auto Scheduled	Security	0 days?	Thu 23-05-11	Thu 23-05-11			100%

Manually Scheduled	Group Policies						100%
Manually Scheduled	Assure users can access own share folder						100%
Manually Scheduled	map network drive						100%
Auto Scheduled	Create 4 User PCs	0 days?	Thu 23-05-11	Thu 23-05-11			100%
Manually Scheduled	Connect to domain and ensure connectivity						100%
Manually Scheduled	Linux	11 days?	Thu 23-05-11	Thu 23-05-25		Amy,Lorj,Jinwoo	100%
Auto Scheduled	Create Backup	0 days?	Thu 23-05-11	Thu 23-05-11			100%
Manually Scheduled	DHCP						0%
Manually Scheduled	TFTP						100%
Manually Scheduled	Syslog						100%
Manually Scheduled	Crontab						0%
Manually Scheduled	Hardware	7 days?	Thu 23-05-11	Fri 23-05-19			89%
Auto Scheduled	Networking R1 + R2	1 day	Thu 23-05-11	Thu 23-05-11			88%

Manually Scheduled	IP Addressing	1 day	Thu 23-05-11	Thu 23-05-11			100%
Manually Scheduled	VRRP	1 day	Thu 23-05-11	Thu 23-05-11			100%
Manually Scheduled	Tunnel	1 day	Thu 23-05-11	Thu 23-05-11			0%
Manually Scheduled	OSPF	1 day	Thu 23-05-11	Thu 23-05-11			100%
Manually Scheduled	DHCP	1 day	Thu 23-05-11	Thu 23-05-11			100%
Manually Scheduled	Default Route	1 day	Thu 23-05-11	Thu 23-05-11			100%
Manually Scheduled	NAT	1 day	Thu 23-05-11	Thu 23-05-11			100%
Manually Scheduled	NTP	1 day	Thu 23-05-11	Thu 23-05-11			100%
Auto Scheduled	Networking ISP	1 day	Thu 23-05-11	Thu 23-05-11			100%
Manually Scheduled	OSPF	1 day	Thu 23-05-11	Thu 23-05-11			100%