Workshop B: Network Configuration Cheat Sheet (Fascicule 1)

Definitions for Fascicule 1

Term	Definition
Switch (Commutateur)	A device that connects devices within a network and forwards data based on MAC addresses.
VLAN	A logical grouping of devices in a network, segmented for better security and management.
SVI (Switched Virtual Interface)	A virtual interface on a switch used for routing and remote management.
IP Address	A unique identifier for a device on a network, enabling communication.
Telnet	A protocol for remote command-line access to a network device.
Port Security	A feature that restricts access to switch ports based on MAC addresses.
MAC Address	A unique identifier for a device's network interface used in Layer 2 communication.
VTY (Virtual Terminal Lines)	Virtual lines on a switch that allow remote management via Telnet or SSH.
Default Gateway	The IP address of a router used to forward traffic from the local network to external networks.
Console Password	Password used to access the switch via the console port for local configuration.
IP Routing	The process that enables communication between different subnets or VLANs.
Secure-down State	A port status caused by a port security

violation, where the port is disabled.

MAC Address Table	A table on switches that maps MAC addresses to specific ports for traffic forwarding.
Static MAC Address	A manually configured MAC address assigned to a specific port on a switch.
Dynamic MAC Address	A MAC address learned automatically by a switch from traffic.
Ping	A tool used to test network connectivity by sending ICMP echo requests and waiting for a response.
DHCP	A protocol that automatically assigns IP addresses to devices on a network.

1. Basic Configuration of ZC-Switch5

Task	Command	Explanation
Set Hostname	hostname ZC-Switch5	Sets the switch name.
Set Enable Secret Password	enable secret pwdpriv	Encrypts the privileged mode password.
Disable DNS Lookup	no ip domain-lookup	Prevents DNS lookup for invalid commands.
Set MOTD Banner	banner motd 'Authorized users only!'	Sets a message of the day banner.
Set Console Password	line console 0 password pwdconsole login	Sets password for console access.
Set VTY Password	line vty 0 4 password pwdvty login	Sets password for remote Telnet access (VTY lines).
Enable Password Encryption	service password-encryption	Encrypts plaintext passwords in the configuration.

Task	Command	Explanation
Set Default Gateway	ip default-gateway 172.16.10.1	Sets the default gateway for the switch.
Save Configuration	write memory	Saves the configuration to memory.

2. Configure VLAN 1 (SVI) on ZC-Switch5

Task	Command	Explanation
Configure VLAN 1 IP Address	interface vlan 1 ip address 172.16.10.253 255.255.255.0 no shutdown	Configures IP for management interface VLAN 1.
Verify Interface Status	show ip interface brief	Verifies that the VLAN 1 interface is up and configured properly.

3. Enable Telnet Access

Task	Command	Explanation
Configure VTY Lines for Telnet	line vty 0 4 password telnet_password login	Enables Telnet access and sets password for remote login.
Configure MOTD Banner	banner motd 'Authorized access only!'	Sets a message for users accessing the switch remotely.
Save Configuration	write memory	Saves the configuration after enabling Telnet.
Test Telnet	telnet 172.16.10.253	Test the Telnet connection from ZC-PC2 to ZC-Switch5.