**Final Skills Assessment**

Truong Ngoc Gia Hieu

SWS01217

**Requirement 1:** Configure device names on all switches and routers

|  |
| --- |
| For Fred router:  Router> ena  Router# config t  Enter configuration commands, one per line. End with CNTL/Z.  Router(config)# hostname Fred  For Wilma switch:  Switch> ena  Switch# config t  Enter configuration commands, one per line. End with CNTL/Z.  Switch(config)# hostname Wilma  For Pebbles switch:  Switch> ena  Switch# config t  Enter configuration commands, one per line. End with CNTL/Z.  Switch(config)# hostname Pebbles  Pebbles(config)# end |

**Requirement 2:** Configure a Message of the Day on all devices (ensure your Student ID in within the MOTD)

|  |
| --- |
| For Fred router:  Fred# config t  Enter configuration commands, one per line. End with CNTL/Z.  Fred(config)# banner motd +\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*  Enter TEXT message. End with the character '+'.  \*\*\*\*\*\*SWS01217\*\*\*\*\*\*+  Fred(config)# END  For Wilma switch:  Wilma# config t  Enter configuration commands, one per line. End with CNTL/Z.  Wilma(config)# banner motd +\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*  Enter TEXT message. End with the character '+'.  \*\*\*\*\*\*SWS01217\*\*\*\*\*\*+  Wilma(config)# end  For Pebbles switch:  Pebbles# config t  Enter configuration commands, one per line. End with CNTL/Z.  Pebbles(config)# banner motd +\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*  Enter TEXT message. End with the character '+'.  \*\*\*\*\*\*SWS01217\*\*\*\*\*\*+  Pebbles(config)# END |

**Requirement 3: The links between Pebbles and Wilma ust be configured as redundant trunk links. You MUST NOT configure EtherChannel Bundling.**

|  |
| --- |
| For Wilma switch:  Wilma# config t  Enter configuration commands, one per line. End with CNTL/Z.  Wilma(config)# int range g1/0/5-6  Wilma(config-if-range)# switchport mode trunk  Wilma(config-if-range)#  %LINEPROTO-5-UPDOWN: Line protocol on Interface GigabitEthernet1/0/5, changed state to down  %LINEPROTO-5-UPDOWN: Line protocol on Interface GigabitEthernet1/0/5, changed state to up  %LINEPROTO-5-UPDOWN: Line protocol on Interface GigabitEthernet1/0/6, changed state to down  %LINEPROTO-5-UPDOWN: Line protocol on Interface GigabitEthernet1/0/6, changed state to up  Wilma(config-if-range)# end  For Pebbles switch:  Pebbles# config t  Enter configuration commands, one per line. End with CNTL/Z.  Pebbles(config)# int range g1/0/5-6  Pebbles(config-if-range)# switchport mode trunk  Pebbles(config-if-range)#  %LINEPROTO-5-UPDOWN: Line protocol on Interface GigabitEthernet1/0/5, changed state to down  %LINEPROTO-5-UPDOWN: Line protocol on Interface GigabitEthernet1/0/5, changed state to up  %LINEPROTO-5-UPDOWN: Line protocol on Interface GigabitEthernet1/0/6, changed state to down  %LINEPROTO-5-UPDOWN: Line protocol on Interface GigabitEthernet1/0/6, changed state to up  Pebbles(config-if-range)# end |

**Requirement 4 and 5: Configure the Fred router as a router-on-a-stick between all VLANS and all Fred sub-interfaces must be configured with the first usable IP address in the allocated subent**

|  |
| --- |
| For Fred router:  Fred> ena  Fred# config t  Enter configuration commands, one per line. End with CNTL/Z.  Fred(config)# int g0/0/1  Fred(config-if)# no shutdown  Fred(config-if)#  %LINK-5-CHANGED: Interface GigabitEthernet0/0/1, changed state to up  %LINEPROTO-5-UPDOWN: Line protocol on Interface GigabitEthernet0/0/1, changed state to up  Fred(config)# int g0/0/1.20  Fred(config-subif)#  %LINK-5-CHANGED: Interface GigabitEthernet0/0/1.20, changed state to up  %LINEPROTO-5-UPDOWN: Line protocol on Interface GigabitEthernet0/0/1.20, changed state to up  Fred(config-subif)# description vlan 20  Fred(config-subif)# encapsulation dot1q 20  Fred(config-subif)# ip address 203.34.175.64 255.255.255.192  Bad mask /26 for address 203.34.175.64  Fred(config-subif)# exit  Fred(config)# int g0/0/1.120  Fred(config-subif)#  %LINK-5-CHANGED: Interface GigabitEthernet0/0/1.120, changed state to up  %LINEPROTO-5-UPDOWN: Line protocol on Interface GigabitEthernet0/0/1.120, changed state to up  Fred(config-subif)# description vlan 120  Fred(config-subif)# encapsulation dot1q 120  Fred(config-subif)# ip address 103.20.248.1 255.255.248.0  Fred(config-subif)# exit  Fred(config)# int g0/0/1.500  Fred(config-subif)#  %LINK-5-CHANGED: Interface GigabitEthernet0/0/1.500, changed state to up  %LINEPROTO-5-UPDOWN: Line protocol on Interface GigabitEthernet0/0/1.500, changed state to up  Fred(config-subif)# description vlan 150  Fred(config-subif)# encapsulation dot1q 500  Fred(config-subif)# ip address 193.35.200.17 255.255.255.224  Fred(config-subif)# end  For Wilma switch:  Wilma> ena  Wilma# config t  Enter configuration commands, one per line. End with CNTL/Z.  Wilma(config)# int range g1/0/5-6  Wilma(config-if-range)# switchport mode trunk  Wilma(config-if-range)# exit  Wilma(config)# int g1/0/11  Wilma(config-if)# switchport mode trunk  Wilma(config-if)#  %LINEPROTO-5-UPDOWN: Line protocol on Interface GigabitEthernet1/0/11, changed state to down  %LINEPROTO-5-UPDOWN: Line protocol on Interface GigabitEthernet1/0/11, changed state to up |

**Requirement 6: Configure Loopback0 interface on Fred with IP address 105.60.90.81/29**

|  |
| --- |
| For Fred router:  Fred(config)# int lo0  Fred(config-if)#  %LINK-5-CHANGED: Interface Loopback0, changed state to up  %LINEPROTO-5-UPDOWN: Line protocol on Interface Loopback0, changed state to up  Fred(config-if)# ip address 105.60.90.81 255.255.255.248  Fred(config-if)# end |

**Requirement 7: Pebbles’ ports Gí/0/11-24 and Gi1/1/1-4 must be disabled**

|  |
| --- |
| For Pebbles switch:  Pebbles> ena  Pebbles# config t  Enter configuration commands, one per line. End with CNTL/Z.  Pebbles(config)# int range g1/0/11-24  Pebbles(config-if-range)# shutdown  %LINK-5-CHANGED: Interface GigabitEthernet1/0/11, changed state to administratively down  %LINK-5-CHANGED: Interface GigabitEthernet1/0/12, changed state to administratively down  %LINK-5-CHANGED: Interface GigabitEthernet1/0/13, changed state to administratively down  %LINK-5-CHANGED: Interface GigabitEthernet1/0/14, changed state to administratively down  %LINK-5-CHANGED: Interface GigabitEthernet1/0/15, changed state to administratively down  %LINK-5-CHANGED: Interface GigabitEthernet1/0/16, changed state to administratively down  %LINK-5-CHANGED: Interface GigabitEthernet1/0/17, changed state to administratively down  %LINK-5-CHANGED: Interface GigabitEthernet1/0/18, changed state to administratively down  %LINK-5-CHANGED: Interface GigabitEthernet1/0/19, changed state to administratively down  %LINK-5-CHANGED: Interface GigabitEthernet1/0/20, changed state to administratively down  %LINK-5-CHANGED: Interface GigabitEthernet1/0/21, changed state to administratively down  %LINK-5-CHANGED: Interface GigabitEthernet1/0/22, changed state to administratively down  %LINK-5-CHANGED: Interface GigabitEthernet1/0/23, changed state to administratively down  %LINK-5-CHANGED: Interface GigabitEthernet1/0/24, changed state to administratively down  Pebbles(config-if-range)# exit  Pebbles(config)# int range g1/1/1-4  Pebbles(config-if-range)# shutdown  %LINK-5-CHANGED: Interface GigabitEthernet1/1/1, changed state to administratively down  %LINK-5-CHANGED: Interface GigabitEthernet1/1/2, changed state to administratively down  %LINK-5-CHANGED: Interface GigabitEthernet1/1/3, changed state to administratively down  %LINK-5-CHANGED: Interface GigabitEthernet1/1/4, changed state to administratively down  Pebbles(config-if-range)# end |

**Requirement 8: Pebbles’ ports Gi1/0/1-4 must be enabled access ports, allocated to the People VLAN and with switchport port-security turn on**

|  |
| --- |
| For Pebbles switch:  Pebbles# config t  Enter configuration commands, one per line. End with CNTL/Z.  Pebbles(config)# int range gi1/0/1-4  Pebbles(config-if-range)# switchport mode access  Pebbles(config-if-range)# switchport access vlan 20  Pebbles(config-if-range)# switchport port-security  Pebbles(config-if-range)# end  Pebbles#  %SYS-5-CONFIG\_I: Configured from console by console  Pebbles# |

**Requirement 9: Pebbles’ ports Gi1/0/7-10 must be enabled access ports and allocated to the Dinosaurs VLAN**

|  |
| --- |
| For Pebbless switch:  Pebbles# config t  Enter configuration commands, one per line. End with CNTL/Z.  Pebbles(config)# int range gi1/0/7-10  Pebbles(config-if-range)# switchport mode access  Pebbles(config-if-range)# switchport access vlan 120  Pebbles(config-if-range)# end  Pebbles#  %SYS-5-CONFIG\_I: Configured from console by console |

**Requirement 10: Configure the Management IP Address on the switches: Wilma-2nd usable address and Pebbles-3rd usable address**

|  |
| --- |
| For Pebbles switch:  Pebbles# config t  Enter configuration commands, one per line. End with CNTL/Z.  Pebbles(config)# int vlan 500  Pebbles(config-if)#  %LINK-5-CHANGED: Interface Vlan500, changed state to up  %LINEPROTO-5-UPDOWN: Line protocol on Interface Vlan500, changed state to up  Pebbles(config-if)# ip address 193.35.200.19 255.255.255.248  Pebbles(config-if)# end  Pebbles#  For Wilma switch:  Wilma> ena  Wilma# config t  Enter configuration commands, one per line. End with CNTL/Z.  Wilma(config)# int vlan 500  Wilma(config-if)#  %LINK-5-CHANGED: Interface Vlan500, changed state to up  %LINEPROTO-5-UPDOWN: Line protocol on Interface Vlan500, changed state to up  Wilma(config-if)# ip address 193.35.200.18 255.255.255.248  Wilma(config-if)# end |

**Requirement 11: Wilma must be configured to become the STP root bridge for the Management and People VLAN**

|  |
| --- |
| For Wilma switch:  Wilma# config t  Enter configuration commands, one per line. End with CNTL/Z.  Wilma(config)# spanning-tree vlan 20 root primary  Wilma(config)# spanning-tree vlan 500 root primary  Wilma(config)# end  Wilma#  %SYS-5-CONFIG\_I: Configured from console by console |

**Requirement 12: Pebbles must be configured to become the STP root bridge for the Management and People VLAN**

|  |
| --- |
| For Pebbles switch:  Pebbles# config t  Enter configuration commands, one per line. End with CNTL/Z.  Pebbles(config)# spanning-tree vlan 120 root primary  Pebbles(config)# end  Pebbles#  %SYS-5-CONFIG\_I: Configured from console by console |