**! 1. Configurar la IP s0/0/0 del router frontera**

**! 2. Configurar las VLANs**

**! 2.1 Configurar las interfaces del RFrontera**

**! Configurar las interfaces con la última dirección válida**

**! de la subred**

**! 2.3 Crear las VLANs con nombre y rango en Switch SCompany**

**! 3. Configurar el DHCP solo para el grupo de Users obtiene dirección IP dinámica(DHCP)**

**! Configurar DHCP solo para la subred de Users**

**! 4. Configurar una ruta por defautl.**

**! ===========================**

**! ======== RFrontera ==========**

**! ===========================**

**ena**

**config t**

**hostname RFrontera**

**no ip domain-lookup**

**service password-encryption**

**enable secret class**

**banner motd # Unauthorized access is strictly prohibited.#**

**line con 0**

**password cisco**

**login**

**logging synchronous**

**exit**

**line vty 0 4**

**password cisco**

**login**

**exit**

**int s0/0/0**

**desc Interfaz que conecta con ISP**

**ip address 65.255.255.253 255.255.255.252**

**no shut**

**exit**

**! Declaración de subinterfaces.**

**! Administrative VLAN 1**

**int g0/0.1**

**description VLAN Native**

**encapsulation dot1Q 1**

**ip address 192.168.1.158 255.255.255.248**

**exit**

**! Manager VLAN 10**

**int g0/0.10**

**description VLAN Manager**

**encapsulation dot1Q 10**

**ip address 192.168.1.142 255.255.255.240**

**exit**

**! 192.168.0.128/28 128+16 = 144 = 142**

**! Users VLAN 20**

**int g0/0.20**

**description VLAN Users**

**encapsulation dot1Q 20**

**ip address 192.168.1.126 255.255.255.128**

**exit**

**! Services VLAN 30**

**int g0/0.30**

**description VLAN Services**

**encapsulation dot1Q 30**

**ip address 192.168.1.150 255.255.255.248**

**exit**

**! .144/ 29 .144 255.255.255.248 256-248 = 8 144+8=152**

**int g0/0**

**no shut**

**! DHCP Exceptions**

**ip dhcp excluded-address 192.168.1.126**

**! DHCP Pool**

**ip dhcp pool Users**

**network 192.168.1.0 255.255.255.128**

**default-router 192.168.1.126**

**exit**

**! Establecer una ruta por default que se encargue de sacar el tráfico a Internet**

**ip route 0.0.0.0 0.0.0.0 s0/0/0**

**end**

**! ====================**

**! ===== SCompany ======**

**! ====================**

**ena**

**conf t**

**hostname SCompany**

**no ip domain-lookup**

**service password-encryption**

**enable secret class**

**banner motd # Unauthorized access is strictly prohibited.#**

**line con 0**

**password cisco**

**login**

**logging synchronous**

**line vty 0 15**

**password cisco**

**login**

**exit**

**! Creación de la base de datos de las VLANs**

**vlan 10**

**name Manager**

**exit**

**vlan 20**

**name Users**

**exit**

**vlan 30**

**name Services**

**exit**

**!vlan 1 que es la nativa, está creada siempre por default, no la vamos a configurar.**

**! Solamente la configuraríamos si queremos acceder al switch por telnet, ping o ssh**

**! Definición de los puertos de acceso y relación a que VLAN 10**

**int range f0/1-6**

**switchport mode access**

**switchport access vlan 10**

**exit**

**int range f0/7-19**

**switchport mode access**

**switchport access vlan 20**

**exit**

**int range f0/20-24**

**switchport mode access**

**switchport access vlan 30**

**exit**

**! Definición de puertos trunk G0/1**

**int g0/1**

**switchport mode trunk**

**no shut**

**exit**

**int f0/1**

**switchport mode trunk**

**no shut**

**exit**

**int f0/10**

**switchport mode trunk**

**no shut**

**exit**

**int f0/20**

**switchport mode trunk**

**no shut**

**exit**

**int vlan 1**

**description VLAN administrativa**

**ip address 192.168.1.153 255.255.255.248**

**no shut**

**exit**

**ip default-gateway 192.168.1.158**

**end**

**! ====================**

**! ====== SUsers ======**

**! ====================**

**ena**

**conf t**

**hostname SUsers**

**no ip domain-lookup**

**service password-encryption**

**enable secret class**

**banner motd # Unauthorized access is strictly prohibited.#**

**line con 0**

**password cisco**

**login**

**logging synchronous**

**line vty 0 15**

**password cisco**

**login**

**exit**

**vlan 10**

**name Managers**

**exit**

**vlan 20**

**name Users**

**exit**

**vlan 30**

**name Services**

**exit**

**! Users**

**int range f0/2-24**

**switchport mode access**

**switchport access vlan 20**

**int f0/1**

**switchport mode trunk**

**no shut**

**exit**

**int vlan 1**

**description VLAN administrativa**

**ip address 192.168.1.154 255.255.255.248**

**no shut**

**exit**

**ip default-gateway 192.168.1.158**

**end**

**! ====================**

**! ====== SManagers ======**

**! ====================**

**ena**

**conf t**

**hostname SManagers**

**no ip domain-lookup**

**service password-encryption**

**enable secret class**

**banner motd # Unauthorized access is strictly prohibited.#**

**line con 0**

**password cisco**

**login**

**logging synchronous**

**line vty 0 15**

**password cisco**

**login**

**exit**

**vlan 10**

**name Managers**

**exit**

**vlan 20**

**name Users**

**exit**

**vlan 30**

**name Services**

**exit**

**! Users**

**int range f0/2-24**

**switchport mode access**

**switchport access vlan 10**

**int f0/1**

**switchport mode trunk**

**no shut**

**exit**

**int vlan 1**

**description VLAN administrativa**

**ip address 192.168.1.155 255.255.255.248**

**no shut**

**exit**

**ip default-gateway 192.168.1.158**

**end**

**! ====================**

**! ====== SServices ======**

**! ====================**

**ena**

**conf t**

**hostname SServices**

**no ip domain-lookup**

**service password-encryption**

**enable secret class**

**banner motd # Unauthorized access is strictly prohibited.#**

**line con 0**

**password cisco**

**login**

**logging synchronous**

**line vty 0 15**

**password cisco**

**login**

**exit**

**vlan 10**

**name Managers**

**exit**

**vlan 20**

**name Users**

**exit**

**vlan 30**

**name Services**

**exit**

**! Users**

**int range f0/2-24**

**switchport mode access**

**switchport access vlan 30**

**int f0/1**

**switchport mode trunk**

**no shut**

**exit**

**int vlan 1**

**description VLAN administrativa**

**ip address 192.168.1.156 255.255.255.248**

**no shut**

**exit**

**ip default-gateway 192.168.1.158**

**end**

**! ===========================**

**! ======== ISP ==========**

**! ===========================**

**ena**

**config t**

**hostname ISP**

**no ip domain-lookup**

**service password-encryption**

**enable secret class**

**line con 0**

**password cisco**

**login**

**logging sync**

**line vty 0 4**

**password cisco**

**login**

**interface GigabitEthernet0/0**

**ip address 151.101.193.70 255.255.255.248**

**no shutdown**

**interface Serial0/0/0**

**ip address 65.255.255.254 255.255.255.252**

**clock rate 128000**

**no shutdown**

**ip route 192.168.1.0 255.255.255.0 Serial0/0/0**

**end**

**!ip route 0.0.0.0 0.0.0.0 s0/0/0**