

LAN Switch Port Assignments

Function Router 1 Router 2 Modules

Modules IT Stuff (Cyclade, ELAN/CLAN, UPS, Security System, AirMagnet, etc) IT Stuff (Cyclade, ELAN/CLAN, UPS, Security System, AirMagnet, etc)

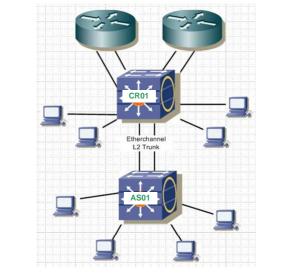
WAPs WAPs User ports User ports User ports

Physical Notes

- Modules represent any optional module the site may have (Demo Labs, Engineering Networks, Data Centers, etc). Equipment for these modules will not be supplied by the IT Networking Team unless IT Networking has management responsibility for all devices inside the Module.
- Number of WAPs needed will be based on the site layout. Six LAN ports are provided for WAPs.

Split IDFs

For sites that have more than one IDF, the second IDF will be connected as pictured below. The first IDF should contain the standard Tier-3 sites with two routers and 3750(s). The second IDF can have as many 3750s as needed (stacked if more than one), connected to the CR stack in the 1st IDF. The 3750(s) in the 2nd IDF should be named AS01. Users and WAPs should be distributed between the two IDFs. SFP ports should be used to connect the switches with appropriate SFPs based on site cabling.



Title

Revision















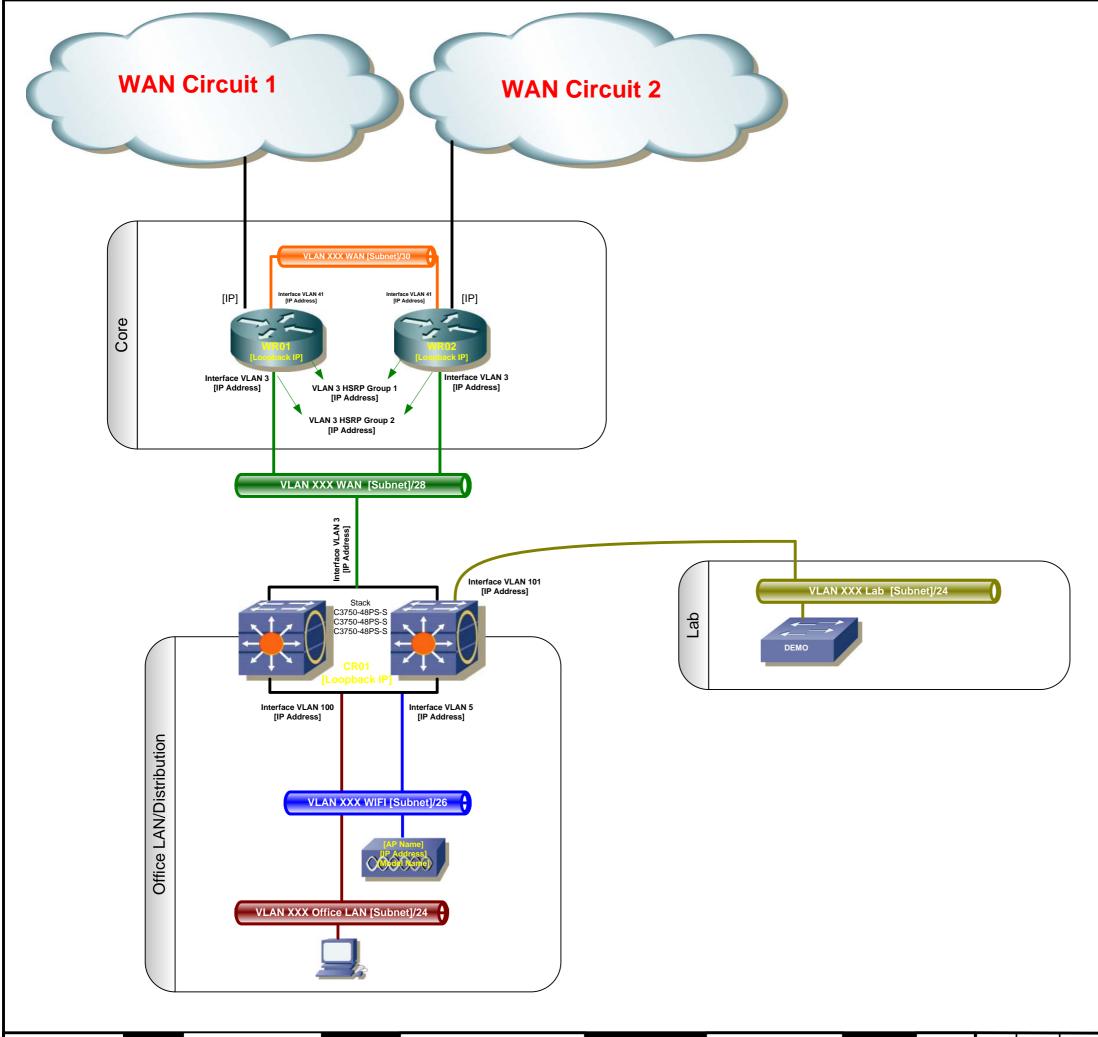












Layer 2 Notes

- · User VLANs are configured as needed. The site can have multiple VLANs as needed. VLAN numbering should follow the Network Architecture Document standards.
- VLAN 5 will be the WLAN VLAN. The number of WLAN Access Points deployed will depend on the site needs. Access Points will follow WLAN standards for configuration.
- Spanning Tree PortFast should be enabled on all user ports with the interface command "spanning-tree portfast". PortFast should not be configured on any other interfaces.
- Spanning Tree BPDU-Guard should be enabled with the global command "spanning-tree portfast bpduguard".
- Both connections to a "Module" should be at L3 unless the Module only has L2 capability. In this case, L2 links are acceptable. In this case, the spanning-tree root should the L2 switch inside the Module that connects to the 3750.

Layer 3 Notes

- User subnets will be configured at Tier 3 sites as needed. A separate subnet will be assigned to the WLAN. If extra user VLANs are configured extra subnets will be configured.
- When using a Type-C WAN connection (Internet GRE), GRE tunnels will be configured to the respective regional hub sites. These tunnels will be encrypted with IPSec.
- All point-to-point L3 interfaces will be configured with a 30-bit
- HSRP will not be configured as the stack of 3750 switches acts as one logical L3 switch.
- QoS will be configured according to the QoS Policy.

File Name





























