

CI CO

Campus Wired LAN

TECHNOLOGY DESIGN GUIDE

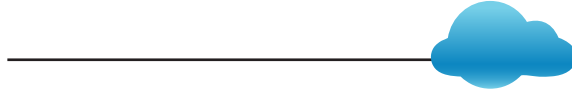
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This design guide enables the following network capabilities when connecting wired devices to an organization's network:

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Figure 3 - Access layer connectivity



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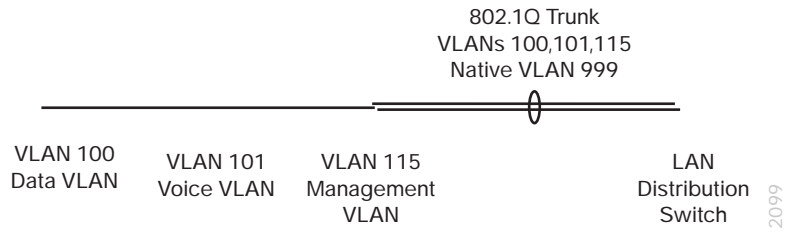
In a large LAN environment there often arises a need to have multiple distribution layer switches. One reason for this is that when access layer switches are located in multiple geographically dispersed buildings, you can





Step 11: If you want to reduce operational tasks per device, configure centralized user authentication by using

Step 3:



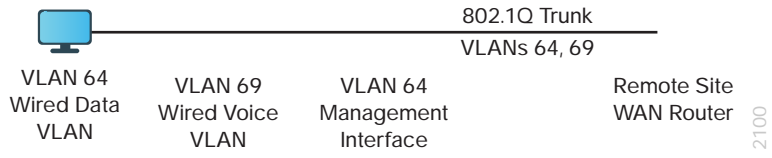
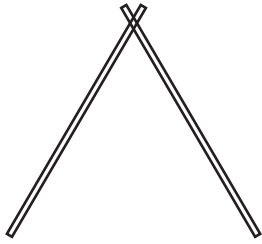




Figure 18 - Simplified design with VLANs spanning access switches



- The Supervisor 2T-based switch enhances support for Cisco TrustS

Step 3: E

Step 4: Configure dual-active detection mechanism.

A critical aspect of the Cisco Catalyst 6500 VSS 4T is the control plane and data plane operating models. From a control plane standpoint the VSS uses an active-standby operating model. This means that one supervisor


```
random-detect dscp-based
random-detect dscp 26 percent 90 100
class-map ipercent 90 100
class-map iuSACTIONAL-DATA-QUEUE00
```


Step 4:





Step 9: If your network operational support is centralized, you can increase network security by using an access list to limit the networks that can access your device. In this example, only devices on the 10.4.48.0/24 network will be able to access the device via SSH or SNMP.

```
access-list 55 permit 10.4.48.0 0.0.0.255
line vty 0 15
  access-class 55 in
!
snmp-server community cisco RO 55
snmp-server community cisco123 RW 55
```

Caution: If you configure an access-list on the vty interface, you may lose the ability to use ssh to login from one device to the next for hop-by-hop troubleshooting.

If you configure an access-list on the vty interface, you may lose the ability to use ssh to login from one device to the next for hop-by-hop troubleshooting.

Step 3: Save the running configuration that you have entered so it will be used as the startup configuration file when your switch is reloaded or power-cycled.

```
copy running-config startup-config
```


Appendix B: Device Configuration Files

To view the configuration files from the CVD lab devices that we used to test this guide, please go to the following URL:

<http://cvddocs.com/fw/Rel2-215>

Please use the