



Experts at Making **You** an Expert

CCIE VOICE Workbook

Volume I - Sample Tasks

1.1 VLAN @CorpHQ

- Setup the CorpHQ Switch to support whatever IP phones can be found connected to the switch
- Configure VLAN 11 for the phone(s)' internal Voice VLAN, and 12 as the VLAN to be passed to the PC port attached to the IP phone
- Assure phone(s) are able to "talk" on the network as fast as possible

1.2 VLAN @Branch1

- Setup the Etherswitch installed in the Branch1 router to support whatever IP phones can be found connected
- Configure VLAN 11 for the phone(s)' internal Voice VLAN, and 12 as the VLAN to be passed to the PC port attached to the IP phone
- Assure phone(s) are able to "talk" on the network as fast as possible

1.3 NTP

- Configure the CorpHQ and Branch1 routers to synchronize their time to the PSTN NTP Master Clock.
- CorpHQ router should use Pacific Time Zone (GMT -8) and should follow Daylight Savings Time
- Branch1 router should use Central Time Zone (GMT -6) and should follow Daylight Savings Time
- Configure the CUCM server to synchronize its time to the CorpHQ router

1.4 DHCP @CorpHQ

- Provision the CorpHQ switch to distribute IP addressing and options via DHCP to any IP phones at the CorpHQ site, as well as any PCs connected to these phones
- The subnet for the Phones is 177.1.11.0/24 and for the PCs is 177.1.12.0/24
- Prevent the IP address ranges of 177.1.11.1-29 and 177.1.11.129-147 from being distributed
- Phones should receive an option for a TFTP server, in an IP address format, however using a DHCP option type that will allow them to later switch to DNS naming if they should so choose
- PCs should receive DNS server information. The DNS server IP to be handed out should be the IP address of 177.1.10.110

1.5 DHCP @Branch1 & Branch2

- Provision the CUCM Publisher server to distribute IP addressing and options via DHCP to any IP phones at the Branch1 and Branch2 sites
- The subnet for the Phones at Branch1 is 177.2.11.0/24
- The subnet for the Phones at Branch2 is 177.3.11.0/24
- Prevent the IP address ranges of 177.2.11.1-10 and 177.3.11.1-12 from being distributed