

Module 1 Lesson 5 Troubleshooting - Workbook

The OSI Model Approach of troubleshooting methodology

Layer 1 - Physical Layer and the Avaya IP Office.

Filling the blank.

Company ABC installed their IP Office system a year ago. A group of phones stopped working, and others are rebooting looking for DHCP.

Site Information

IP Office LAN1 IP Address= 192.168.70.40/24

Network L3 Switch= 192.168.70.254

Voice VLAN ID= 70

Data VLAN ID= 71

File and HTTP(S) Server is the IP Office embedded File Management

Customer is running a Windows 2012R2 DHCP Server for both VLANs 70 and 71.



First scenario

As a Service technician, you have to know what type of _____ the enduser are using. Next, you have to check the _____ connecting the phones back to the MDF (Main Distribution Frame). You also noticed two different type of phones being utilized (digital and IP).

After having confirmed the Administrators are using IP Phones, you have to engage the network and DHCP Administrator to confirm that DHCP Option _____ is configured with with MCIPADD=_____ VLAN ID _____ HTTP(S)_____

When pinging the Default Gateway _____, you noticed timed out TTLs.

The Network administrator runs a “show vlan 70” and noticed the default IP Address it is set to 192.168.70.1. What needs to be updated to fix the reboot issue/ DHCP time out issue?

Second scenario

A salesman complains his phone stopped showing any display information after the system was updated. After checking the File server, you confirm the _____ for this IP Phone is missing.



Third scenario

You have shipped new headsets to the marketing department, and one of the users is not able to hear or speak. When looking at the bottom of the phone set, you see that the headset is connected to the _____ instead of the jack with the headset logo. After connecting the headset to the correct jack, you still are not able to hear.

What can you check next?

Fourth scenario

Static with Digital and Analog devices

Wiring is the main reason why static happens with Digital and Analog phones. The following scenario walks you through troubleshooting:

A customer has the wiring infrastructure run over the dropped ceiling, instead of having it nicely tie-wrapped to the building's beams with hooks. As you trace the wire, you notice the cables are hanging right over the Fluorescent lights causing static on the phones.



Write another reason why the digital phones might get static.

Static with IP Phones

Fill in the blank.

An _____ network switch will contribute to voice degradation including static, and other quality issues on the voice transmission.

When troubleshooting unmanaged switches, the first step is separate the voice and data traffic by creating _____.

Once you have your Network segregated, it is important to include the VLANID in the DHCP Scope Option _____ for the Data and Voice scopes.



Fifth Scenario

Company ABC has upgraded their IP Office system, but forgot to include the new IP Phone firmware in the File Server. How will this impact the endpoints?

