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Avaya Solution & Interoperability Test Lab

Application Notes for VXi V200 Office Headsets and VXi VEHS-A2 EHS Cable with Avaya 9500 Series Digital Deskphone – Issue 1.0

Abstract

These Application Notes describe the configuration steps required to integrate the VXi V200 Office Headsets and VXi VEHS-A2 EHS Cable with Avaya 9500 Series Digital Deskphone. This solution provides call control features directly from the headset, such as answering or terminating a call from the headset. Volume control and mute are provided directly from the Avaya digital deskphone as well as on the headset.

Readers should pay attention to **Section 2**, in particular the scope of testing as outlined in **Section 2.1** as well as the observations noted in **Section 2.2**, to ensure that their own use cases are adequately covered by this scope and results.

Information in these Application Notes has been obtained through DevConnect compliance testing and additional technical discussions. Testing was conducted via the DevConnect Program at the Avaya Solution and Interoperability Test Lab.

1. Introduction

These Application Notes describe the configuration steps required to integrate the VXi V200 Office Headsets and VXi VEHS-A2 EHS (Electronic Hook Switch) Cable with Avaya 9500 Series Digital Deskphone. The VXi V200 Office headsets provide two-way audio. This solution provides call control features directly from the headset, such as answering or terminating a call from the headset. Volume control and mute are provided directly from the Avaya digital deskphone as well as from the headset.

The following headsets and accessories were tested:
- VXi VEHS-A2 EHS Cable – provides headsets the ability to hear ring tones, answer and end calls, and mute/un-mute calls directly from the headset when the user is away from their Avaya deskphones.
- VXi V200 Office – Wireless headset.

2. General Test Approach and Test Results

The interoperability compliance test included feature and serviceability testing. The feature testing focused on placing calls to and from the Avaya 9500 Series Digital Deskphones with the VXi V200 Office Headsets and verifying two-way audio. The call types included calls to voicemail, local extensions, and the PSTN.

The serviceability testing focused on verifying the usability of the VXi headsets after restarting the Avaya 9500 Series Digital Deskphones and re-connecting the headset to the deskphone.

DevConnect Compliance Testing is conducted jointly by Avaya and DevConnect members. The jointly-defined test plan focuses on exercising APIs and/or standards-based interfaces pertinent to the interoperability of the tested products and their functionalities. DevConnect Compliance Testing is not intended to substitute full product performance or feature testing performed by DevConnect members, nor is it to be construed as an endorsement by Avaya of the suitability or completeness of a DevConnect member's solution.

Avaya formal testing and Declaration of Conformity is provided only on the headsets/handsets that carry the Avaya brand or logo. Avaya may conduct testing of non-Avaya headset/handset to determine interoperability with Avaya phones. However, Avaya does not conduct the testing of non-Avaya headsets/handsets for: Acoustic Pressure, Safety, Hearing Aid Compliance, EMC regulations, or any other tests to ensure conformity with safety, audio quality, long-term reliability or any regulation requirements. As a result, Avaya makes no representations whether a particular non-Avaya headset will work with Avaya telephones or with a different generation of the same Avaya telephone.

Since there is no industry standard for headset interfaces, different manufacturers utilize different headset interfaces with their telephones. Therefore, any claim made by a headset vendor that its product is compatible with Avaya telephones does not equate to a guarantee that the headset will provide adequate safety protection or audio quality.

2.1. Interoperability Compliance Testing

All test cases were performed manually. The following features were verified:

- Placing calls to the voicemail system. Voice messages were recorded and played back to verify that the playback volume and recording level were acceptable.
- Placing and receiving calls to and from internal extensions to verify two-way audio.
- Placing and receiving calls to and from the PSTN to verify two-way audio.
- Verify ring back tone for outgoing calls.
- Verify ring alert for incoming calls
- Toggling between handset, speaker phone and headset.
- Using the volume control buttons on headset to adjust the audio volume.
- Using the mute control button on Avaya deskphone to mute and un-mute the audio.
- Using the mute control button on headset to mute and un-mute the audio.
- Using the headset with 9506 Digital Deskphones.

For the serviceability testing, the 9500 Series Digital Deskphone was restarted to verify proper operation of the headset after the reboot was completed.

2.2. Test Results

Testing was completed successfully with the following observations/limitations.

- If the headset is off, the headset button on Avaya Deskphone button will not able to activate the VXi headset, work around is to use call control button on the VXi headset instead.
- If a user is active on a call using the headset, and the call drops, the headset will not go inactive – the green LED is still on. The user can use the headset button to hang up the call and turn off the headset LED.
- If the headset is off – the green LED phone is off on a headset base, upon an incoming call, a call alert is heard through headset. When the headset is on – the green LED phone is on, the alert heard on the headset is lower than when it is off.
- During a call if a user uses the mute button on the headset to mute the call, the audio is muted, and the headset indicates the call is muted, but the mute button on the deskphone and the mute icon on the deskphone screen do not update to reflect correct status.
- During a call if user presses the mute button on the deskphone to mute the call, the audio is muted, and the status indicators on the deskphone show that the call is muted, but the user hears/sees no indication on the headset that the call is muted.
- The headset button on the 9500 deskphone remains activated when the far-end drops the call, allowing subsequent calls to be answered automatically on the headset when auto-answer is enabled. In case the headset button on deskphone is not active, auto-answer is configured, the subsequent incoming calls keep ringing until user answer the call or re-routed to Messaging Server.
- When the far end disconnects the call, the headset button on the deskphone remains activated. This is the default behavior of Avaya Digital Deskphones.
- When a user is active on a call using the headset, and the user lifts the handset to transfer call to handset, the headset LED still shows active, but there is no audio path to the headset, only to the handset.

- When a user is active on a call using the handset, and wishes to transfer the call to the headset, the user can press the headset button on the phone, but the headset LED has to be on first. If the headset LED is off, the call will not go to the headset.
- During a call if user walks away from the deskphone out of supported zone (about 300 feet), the call will be dropped and headset goes inactive.

2.3. Support

For technical support and information on VXi V200 Office Headsets, contact VXi Support at:
- Phone: 1-800-742-8588 (USA Toll Free)
  1-603-742-2888
- Website: http://www.vxicorp.com

3. Reference Configuration

Figure 1 illustrates the test configuration used to verify the VXi V200 Office Headsets and VXi VEHS-A2 EHS Cable with Avaya 9500 Series Digital Deskphones. The configuration consists of an Avaya IP Office Server Edition (linux Primary and Expansion 500 V2), 9500 Series Digital deskphone is connected to Expansion 500 V2. The Session Manager/System Manager VM provides connectivity to the simulated SIP PSTN via SIP trunk. The VXi V200 Office Headsets were connected to the VXi VEHS-A2 EHS Cable which in turn is connected to the headset port of the Avaya digital deskphone.
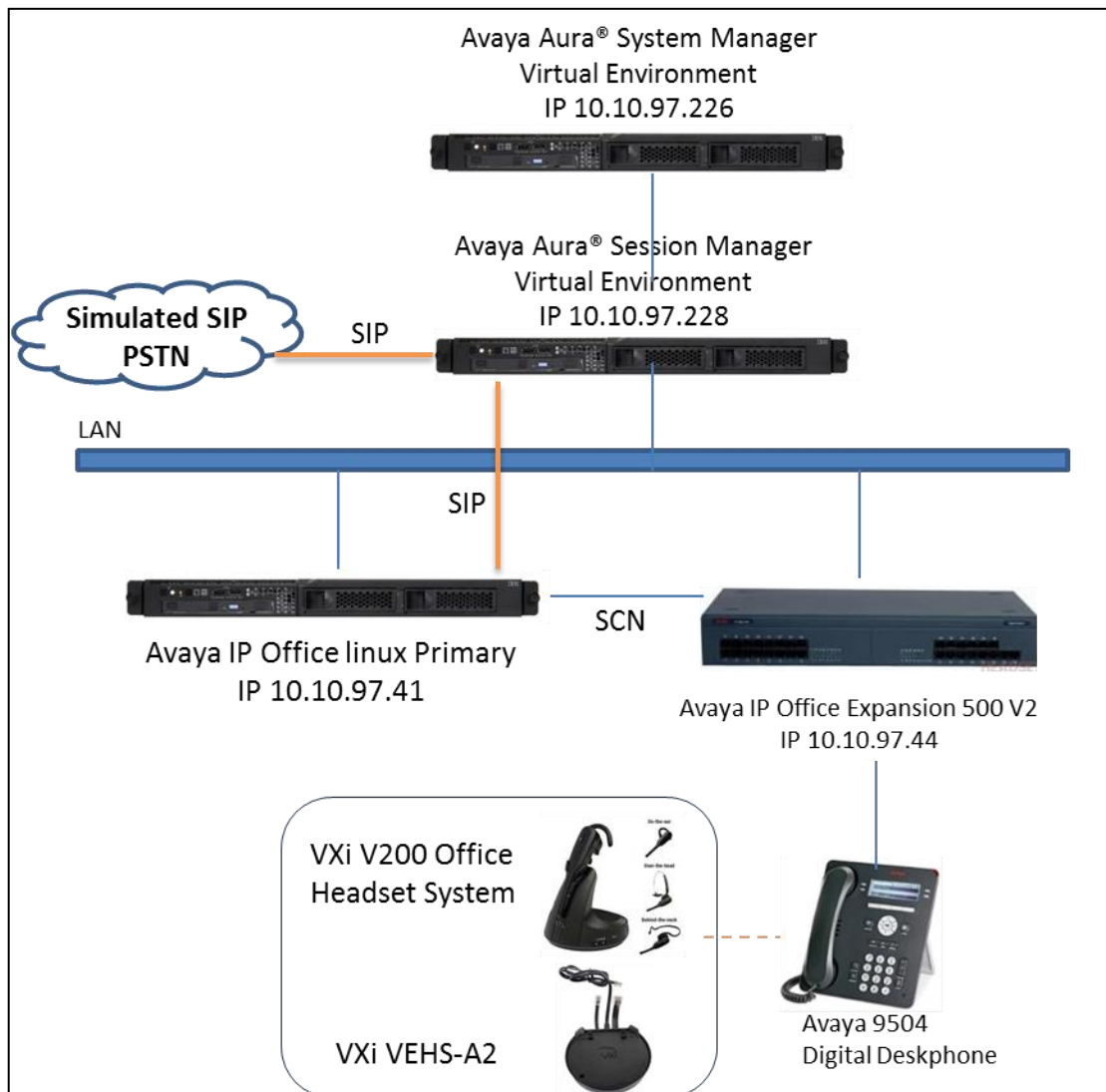
Figure 1: Test diagram for Avaya 9500 Series Digital Deskphone with VXi V200 Office Headsets and VXi VEHS-A2 EHS Cable.

4. Equipment and Software Validated

The following equipment and software were used for the compliance test:

Equipment	Software
Avaya IP Office Server linux Primary	10 SP 2
Avaya IP Office 500 V2	10 SP 2
Avaya 9504 Digital Deskphone	(IP Office) Rel 0.59
VXi V200 Office	PN 203940
VXi VEHS-A2 EHS Cable	PN 203930

5. Configure Avaya IP Office

It is assumed that a fully functioning IP Office are in place with the necessary licensing. For further information on the configuration of IP Office, please refer to **Section 9** of these Application Notes.

5.1. Configure a Station for Avaya 9500 Series Digital Deskphone

These Application Notes assume that the Avaya 9500 Series Digital Telephones are configured and operational in Avaya IP Office. There are no additional settings required on IP Office, the V200 Office headset and EHS cable VEHS-A2 to work with Avaya 9500 Series Digital Desk phones. For further information on how to configure these Avaya Digital Desk phones refer to **Section 9** of these Application Notes.

6. Connect VXi V200 Office Headset

Connect the VXi V200 Office headsets to the VXi VEHS-A2 EHS Cable, and then connect the EHS cable directly to the headset port of the Avaya 9500 Series Digital Deskphone as described in VXi V200 Office Quick Start Guide.

7. Verification Steps

Verify that the VXi V200 Office Headsets and VXi VEHS-A2 EHS Cable have been connected to the Avaya 9500 Series Digital Deskphones. Once the headset is connected to the phone, verify that incoming and outgoing calls are established with two-way audio to the headset.

8. Conclusion

These Application Notes describe the configuration steps required to integrate the VXi V200 Office Headsets and VXi VEHS-A2 EHS Cable with Avaya 9500 Series Digital Deskphone. Testing was completed successfully with observations noted in **Section 2.2**.

9. Additional References

The following Avaya product documentation can be found at http://support.avaya.com.
  [1] *Avaya IP Office™ Platform Server Edition Reference Configuration Release 10.0 Issue 04.AD August 2016*
  [2] *Administering Avaya IP Office™ Platform with Manager Release 10.0 September 2016*

The VXi product documentation is available with the headset and at
http://www.vxicorp.com/v200