Quick Reference Troubleshooting Guide

Avaya EHS Adapters

Scope

This document is intended to provide basic guidelines for technical support staff answering support questions from customers experiencing difficulties with the Avaya EHS adapters.

Requirements

Telephones

Table 1 highlights the different phones supported by each EHS adapter. For some phones restrictions apply on the telephone firmware version, switch type etc. These restrictions are also listed. It is very important to note that the Avaya Model 2420 phone only works reliably with Electronic Hook Switch when it is connected to an IP switch. Older digital switches are not guaranteed to work.

Avaya EHS	Avaya Phone Model	Remarks
1	2420	Only supported on IP switches, Firmware 4.0 or higher, Incoming call signaling is supported with only a single ringtone.
1	4610	Only supported on IP switches, Firmware 4.0 or higher, Incoming call signaling is supported with only a single ringtone.
1	4620/4620 SW	Only supported on IP switches, Firmware 4.0 or higher, Incoming call signaling is supported with only a single ringtone.
1	4621/ 4621 SW	Only supported on IP switches, Firmware 4.0 or higher, Incoming call signaling is supported with only a single ringtone.
1	4622/4622 SW	Only supported on IP switches, Firmware 4.0 or higher, Incoming call signaling is supported with only a single ringtone.
1	4625/4625 SW	Only supported on IP switches, Firmware 4.0 or higher, Incoming call signaling is supported with only a single ringtone.
1	4630/4630 SW	Only supported on IP switches, Firmware 4.0 or higher, Incoming call signaling is supported with only a single ringtone.
1	5420	Only supported on IP switches, Firmware 4.0 or higher, Incoming call signaling is supported with only a single ringtone.
2	2410	Firmware must be 1.8 or higher. Incoming call signaling is supported with only a single ringtone.
2	5410	Firmware must be 1.8 or higher. Incoming call signaling is supported with only a single ringtone.
2	5610	Firmware must be 1.8 or higher. Incoming call signaling is supported with only a single ringtone.
5	9620	Ring indicator is not supported
5	9630	Ring indicator is not supported

Table 1 – Supported phones by each Avaya EHS adapter

Headset

The Avaya EHS adapters are compatible with all Jabra GN 9350 (Rev. 1.17 or higher) and GN 9120-EHS (available in Q208) wireless office headsets. The Avaya EHS adapter is not backwards compatible with older GN 9120 standard versions.
The adapters all support auto sensing, and will detect if the AUX port is configured in RHL (standard GN 1000 mode) or DHSG mode.
The interface adapters work in both modes (please see details below).

Troubleshooting

When there is a problem it is important to establish if it's related to the audio not being present, or to missing Electronic Hook Switch signaling.
A good start is to ensure that the headset is working, and that audio works in the headset. Then the user can connect the EHS adapter, check to see if the audio is still working, and after that, check that the Electronic Hook Switch functionality is working as well.

Please note that the incoming call signaling only is supported with the Avaya EHS-1 adapters. When an incoming call arrives, the first ring is signaled in the headset earpiece. **Subsequent rings are not signaled to the headset user.**

1. Make sure the headset is adjusted to the RHL Hook mode.
If the GN headsets supports both DHSG and RHL hook interface, adjust it to RHL first. When everything works, the user can switch to DHSG if desired.

2. Connect all cables
Avaya EHS interface adapters will connect between the EU24/ ADJ port on the phone and the AUX port on the headset.
The audio is connected through the cable that was supplied with the headset – between the headset port on the phone and the phone port on the headset base station.

With the Avaya EHS-2, and EHS-5 adapters, the single cable in one end of the interface adapter plugs into the headset port on the phone, and the two cables on the other side plug into the AUX port and phone port on the headset.

3. Listen for dial tone & try the EHS function
When the headset is removed from the base it must make a click sound and establish a link.
The phone should now go off hook and a dial tone should be present in the headset earpiece.

If no dial tone is present try the following:

1. Press the headset button a couple of times, toggling the audio link up and down. See if the phone catches up and starts to react on the signaling from the headset.

2. Press the headset button on the phone while the headset is off hook. Now a dial tone must be heard in the headset earpiece.

3. If there are still no dial tone – check the cabling (especially that the audio cable isn't plugged in the handset socket on the headset base station.

EU 24 – Expansion Unit

The Avaya EHS-1 interface adapter connects to the EU24/ ADJ port on the telephone. When the headset adapter is connected it is not possible to connect a EU24 expansion keypad too. The expansion port doesn't support cascading of the expansion units.

RHL versus DHSG modes of Operation:

In standard RHL mode, there is a limitation in the signaling supported by the headset base station. The base station is only capable of signaling hook status from the headset to the phone.
There is no way to tell if the headset that should turn itself on or off.

If the call is terminated by pressing the headset button on the phone,
or if the far end hangs up first - the user has to press the button on the headset to stay in sync. Otherwise what will happen is, when the next call comes in, the headset user will press the headset button and by doing that he will accidentally turn off the link. He then has to press the button once more to answer the call. I think it's fair to say that this isn't a major disadvantage, but it certainly is worth noting.

In DHSG mode we don't have this limitation - because we have a full two-way communication path, we can tell the headset when to turn itself on and off, and can then ensure that the phone and the headset always have the same hook status.

PBX Switch Support:

The Avaya phone models load their firmware from the PBX Switch upon start up. They prompt the switch for a software (firmware) update. If the switch has a more recent version of firmware, it will download automatically to the phone. It is important prior to installation of the Avaya EHS-1, EHS-2 or EHS-5 adapters that you know which version of firmware is loaded on the phone and can verify that the PBX is an IP Switch.