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Avaya Solution & Interoperability Test Lab

Application Notes for Telekonnectors TLK SP30 USB Adaptors and Headsets with Avaya IP Softphone, Avaya IP Agent, Avaya one-X® Communicator and Avaya one-X® Agent - Issue 1.0

Abstract

These Application Notes describe a compliance-tested configuration comprised of Telekonnectors TLK SP30 USB Adaptors and Headsets with Avaya IP Softphone, Avaya IP Agent, Avaya one-X® Communicator, Avaya one-X® Agent and Avaya Aura™ Communication Manager. Telekonnectors TLK SP30 USB Adaptors and Headsets are high quality USB adaptors and headsets that are designed for use in the office and call center environment.

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.

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1. Introduction

These Application Notes describe the configuration steps required for integrating Telekonnectors TLK SP30 USB Adaptors and Headsets with Avaya IP Softphone, Avaya IP Agent, Avaya one-X® Communicator, Avaya one-X® Agent and Avaya Aura™ Communication Manager. Telekonnectors TLK SP30 USB Adaptors and Headsets are high quality USB adaptors and headsets that are designed for use in the office and call center environment.

In this compliance testing, the following three models are tested:

- TLK SP30 USB Adaptor - With TLK SmartKonnect (SK) 1 Cable so that any SK compatible headsets can be used.
- TLK SP30 GBNC USB Headset - With integrated Galaxy Binaural Headset.
- TLK SP30 GPBNC USB Headset - With integrated Galaxy Plus Binaural Headset.

1.1. Interoperability Compliance Testing

The interoperability compliance test included feature and serviceability testing. The feature testing focused on placing calls from Avaya IP Softphone, Avaya IP Agent, Avaya one-X Communicator and Avaya one-X Agent using the Telekonnectors TLK SP30 USB Adaptors and Headsets and verifying good talk path in both directions. The type of calls made included calls to voicemail, to internal extensions and to the PSTN.

The serviceability testing focused on verifying the usability of the TLK SP30 USB Adaptors and Headsets after restarting the Avaya softphone applications and disconnecting and reconnecting the USB Adaptors and Headsets.

1.2. Support

For technical support and information on TLK SP30 USB Adaptors and Headsets, contact Telekonnectors at:

- Phone: +91-44-24414100
- Email: sales@telekonnectors.com

2. Reference Configuration

Figure 1 illustrates the test configuration used to verify the Telekonnectors solution. The configuration comprised of an Avaya S8500 Server running Avaya Aura™ Communication Manager and an Avaya G650 Media Gateway with connections to the following: an Avaya 9640 IP Telephone and an ISDN-BRI trunk to the PSTN. Avaya Aura™ Communication Manager Messaging was used as the voicemail system. Avaya IP Softphone, Avaya IP Agent, Avaya one-X Communicator and Avaya one-X Agent were installed on four desktop PCs respectively, each having a Telekonnectors TLK SP30 USB Adaptor or Headset attached to the USB Port of the desktop PC. The Avaya C364T-PWR Converged Stackable Switch provides Ethernet connectivity to the Avaya Server, Media Gateway, desktop PCs and IP telephone.
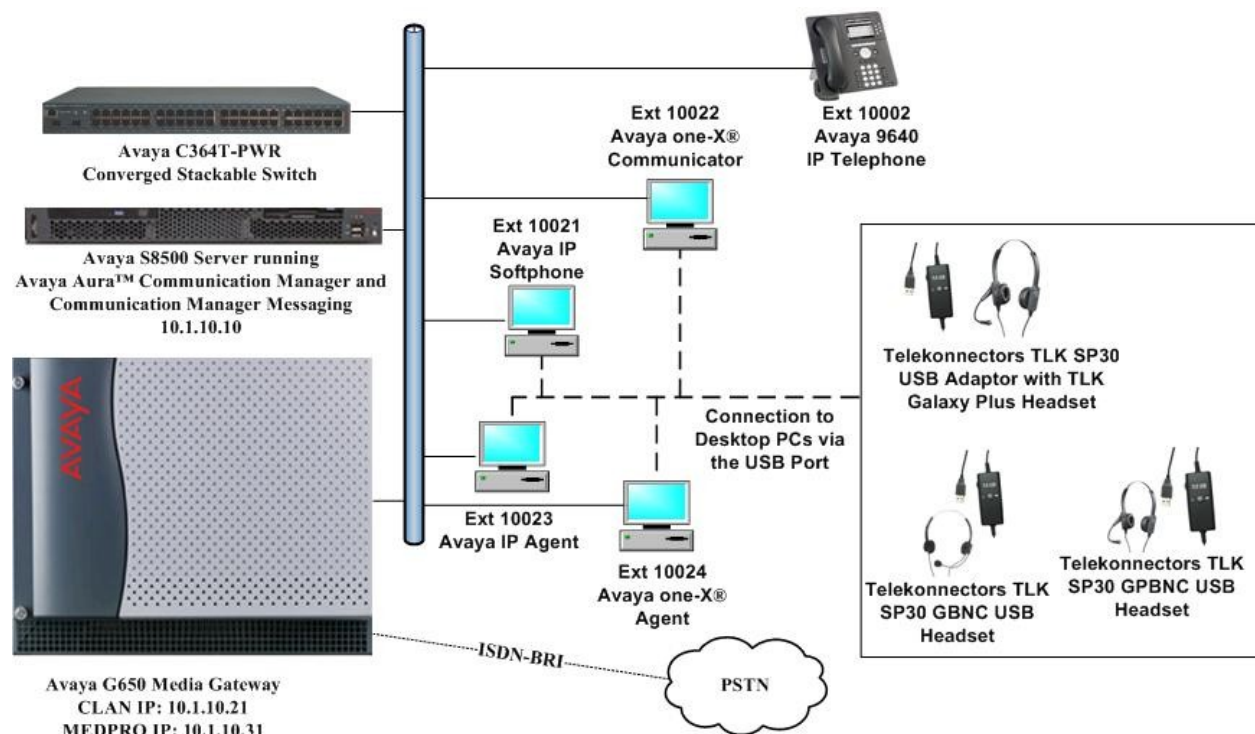

Figure 1: Test Configuration

3. Equipment and Software Validated

The following equipment and software were used for the sample configuration provided:

Equipment	Software
Avaya S8500 Server	Avaya Aura™ Communication Manager 5.2.1 (R015x.02.1.016.4) with Service Pack (02.1.016.4-17774)
Avaya G650 Media Gateway • TN2312BP IP Server Interface • TN799DP C-LAN Interface • TN2302AP IP Media Processor	- HW07, FW049 HW01, FW034 HW20, FW120
Avaya 9640 IP Telephones	3.1 (H.323)
Avaya IP Softphone running on Windows XP Professional SP3	6.0 SP7 (6.01.93)
Avaya IP Agent running on Windows XP Professional SP3	7.0 SP7 (7.0.35.111)
Avaya one-X® Communicator running on Windows XP Professional SP3	5.2 (5.2.0.10)
Avaya one-X® Agent running on Windows XP Professional SP3	2.0 (2.0.07112.0)
Avaya C364T-PWR Converged Stackable Switch	4.5.18
Telekonnectors TLK SP30 USB Adaptors	-
Telekonnectors TLK SP30 GBNC USB Headsets	-
Telekonnectors TLK SP30 GPBNC USB Headsets	-

4. Configure Communication Manager

The following sections show the relevant configuration screens for Communication Manager. The screen shots included in this section focused only on the configuration of the station and ip-codec-set forms. The configuration is performed via the System Access Terminal (SAT) on Communication Manager.

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4.1. Configure Station for Avaya IP Softphone or Avaya one-X Communicator

Use the **add station n** command, where **n** is an available extension in the dial-plan. To create a station to be used by Avaya IP Softphone or Avaya one-X Communicator, the following information should be provided:

- **Type:** The IP Telephone type that will be emulated. In this compliance testing, the type was set to **2420**.
- **Security Code**: Password used by Avaya IP Softphone or Avaya one-X Communicator to log in.
- **Port**: Set to **X** to administer the station without hardware.
- **IP SoftPhone?**: **y**

```
add station 10023                                              Page   1 of   6
                                  STATION

Extension: 10023                      Lock Messages? n            BCC: 0
      Type: 2420                     Security Code: 12345          TN: 1
      Port: X                       Coverage Path 1:              COR: 1
      Name: IP Softphone            Coverage Path 2:              COS: 1
                                    Hunt-to Station:
STATION OPTIONS
                                    Time of Day Lock Table:
            Loss Group: 2       Personalized Ringing Pattern: 1
           Data Option: none            Message Lamp Ext: 10023
           Speakerphone: 2-way        Mute Button Enabled? y
      Display Language: english        Expansion Module? n

         Survivable COR: internal       Media Complex Ext:
   Survivable Trunk Dest? y               IP SoftPhone? y

                                      IP Video Softphone? n

                                      Customizable Labels? Y
```

4.2. Configure Station for Avaya IP Agent or Avaya one-X Agent

Use the **add station n** command, where **n** is an available extension in the dial-plan to create a new station to be used by Avaya IP Agent or Avaya one-X Agent. Configure the following:

- **Type:** The IP Telephone type that will be emulated. In this compliance testing, the type was set to **2420**.
- **Security Code**: Password used by Avaya IP Agent or Avaya one-X Agent to log in.
- **Port**: Set to **X** to administer the station without hardware.
- **IP SoftPhone?**: **y**

```
add station 10021                                              Page   1 of   6
                                  STATION

Extension: 10021                    Lock Messages? n               BCC: 0
      Type: 2420                    Security Code: 12345            TN: 1
      Port: X                       Coverage Path 1:               COR: 1
      Name: IP Softphone            Coverage Path 2:               COS: 1
                                    Hunt-to Station:
STATION OPTIONS
                                         Time of Day Lock Table:
            Loss Group: 2       Personalized Ringing Pattern: 1
           Data Option: none              Message Lamp Ext: 10021
          Speakerphone: 2-way          Mute Button Enabled? y
      Display Language: english          Expansion Module? n

        Survivable COR: internal          Media Complex Ext:
  Survivable Trunk Dest? y                      IP SoftPhone? y

                                           IP Video Softphone? n

                                           Customizable Labels? Y
```

On **Page 4** of the STATION form, configure the additional feature buttons that are used by Avaya IP Agent or Avaya one-X Agent to log in as an Automatic Call Distribution (ACD) agent. The following feature buttons were configured:

```
add station 10021                                              Page   4 of   6
                                  STATION
 SITE DATA
      Room:                                      Headset? n
      Jack:                                      Speaker? n
     Cable:                                      Mounting: d
     Floor:                                  Cord Length: 0
  Building:                                    Set Color:

ABBREVIATED DIALING
    List1:                 List2:                 List3:

BUTTON ASSIGNMENTS
 1: call-appr                     5: manual-in         Grp:
 2: call-appr                     6: after-call        Grp:
 3: call-appr                     7: aux-work    RC:   Grp:
 4: auto-in           Grp:        8: assist            Grp:

    voice-mail Number:
```

4.3. Configure IP Codec Set

The following screen shows the codec set configuration that was used during the test. To configure the codec set, use the **change ip-codec-set n** command, where **n** is the IP codec set used by the Avaya Softphone applications. In this compliance testing, the G.711 mu-law codec was used.

```
change ip-codec-set 1                                           Page   1 of   2

                             IP Codec Set

      Codec Set: 1

      Audio          Silence       Frames    Packet
      Codec          Suppression   Per Pkt   Size(ms)
 1:  G.711MU              n            2         20
 2:
 3:
 4:
 5:
 6:
 7:
```

5. Configure Avaya IP Softphone

After logging into Avaya IP Softphone, select **Audio → Tuning Wizard** from the menu as shown below.

Telekonnectors TLK SP30 USB Adaptor and Headset are automatically detected in Microsoft Windows as **C-Media USB Headphone Set**. Select this device as the **Primary Playback Device** and **Recording Device** as shown below. Select **Next**.

Select **Headset or Handset**. Click **Next** and follow the remaining procedures to tune the audio.

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6. Configure Avaya IP Agent

After logging into Avaya IP Agent, select **Audio → Tuning Wizard** from the menu as shown below.

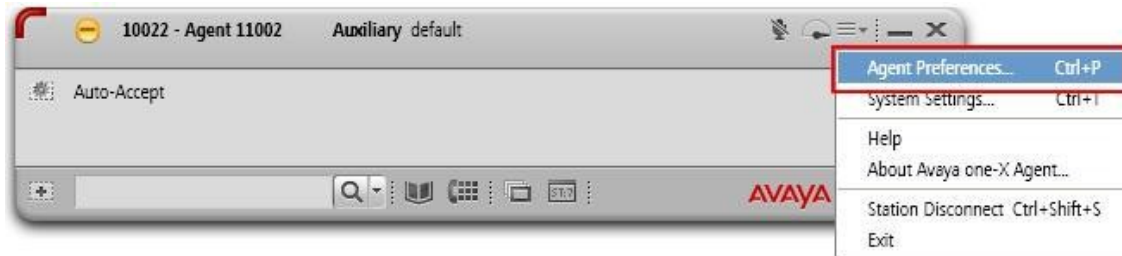

Telekonnectors TLK SP30 USB Adaptor and Headset are automatically detected in Microsoft Windows as **C-Media USB Headphone Set**. Select this device as the **Primary Playback Device** and **Recording Device** as shown below. Select **Next**.

Select **Headset or Handset**. Click **Next** and follow the remaining procedures to tune the audio.

7. Configure Avaya one-X Communicator

After logging into Avaya one-X Communicator, select `⌄☰` → **Settings** → **General Settings** from the menu as shown below.

Select **Audio** from the left panel and click the **Basic** tab. Click **Audio Tuning Wizard**.

Telekonnectors TLK SP30 USB Adaptor and Headset are automatically detected in Microsoft Windows as **C-Media USB Headphone Set**. Select this device as the **Playback Device** and **Recording Device** as shown below. Click **Next** and follow the remaining procedures to tune the audio.

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8. Configure Avaya one-X Agent

After logging into Avaya one-X Agent, select ⬛≡ ➔ **Agent Preferences** from the menu as shown below.

Select **Audio** from the left panel and click the **Advanced** tab. Telekonnectors TLK SP30 USB Adaptor and Headset are automatically detected in Microsoft Windows as **C-Media USB Headphone Set**. Select this device as the **Playback Device** and **Record Device** as shown below. Select **OK**.

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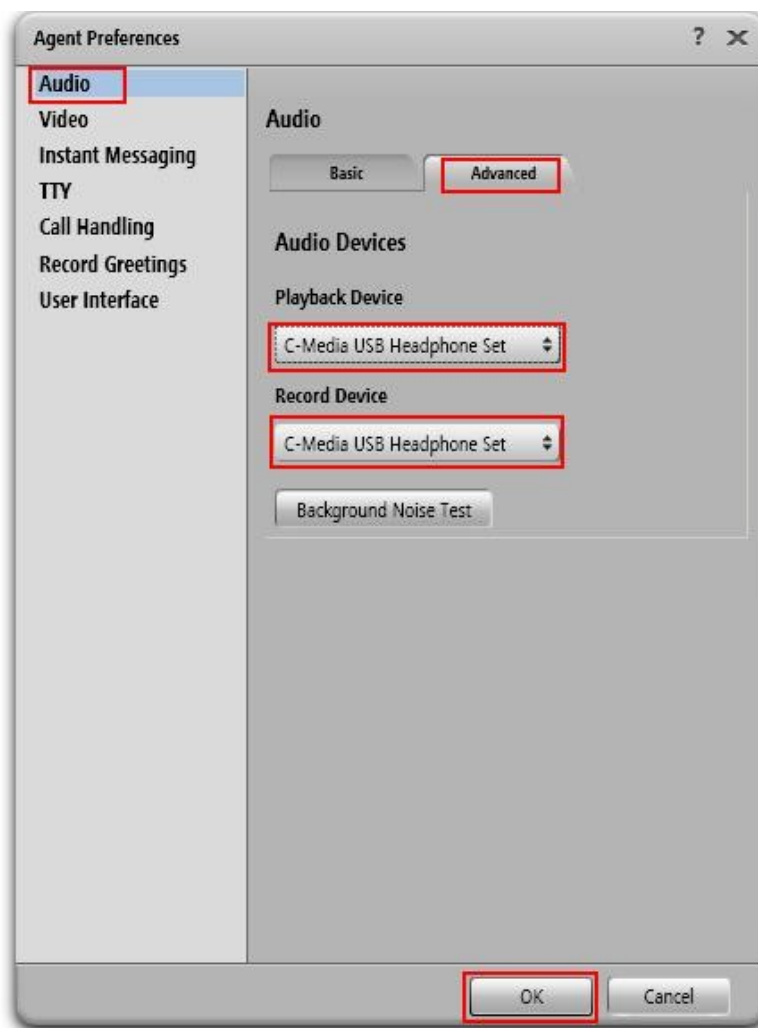
9. Configure Telekonnectors TLK SP30 USB Adaptors and Headsets

The TLK SP30 USB Adaptors and Headsets are USB plug-and-play devices. When plugged into the USB Port of the desktop PC, they are automatically detected in Windows XP without requiring any additional driver software. In this test configuration, the TLK SP30 USB Adaptors and Headsets are detected as **C-Media USB Headphone Set** in Windows XP.

10. General Test Approach and Test Results

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 good.
- Placing calls to internal extensions to verify that the playback volume and recording level were good.
- Placing calls to the PSTN to verify that the playback volume and recording level were good.
- Using the volume control on the TLK SP30 USB Adaptors and Headsets to adjust the playback volume.
- Using the mute control on the TLK SP30 USB Adaptors and Headsets to mute the recording level.

For the serviceability testing, the TLK SP30 USB Adaptors and Headsets were disconnected and reconnected to verify proper operation. Avaya IP Softphone, Avaya IP Agent, Avaya one-X Communicator and Avaya one-X Agent were also restarted to verify proper operation.

All test cases passed successfully.

11. Verification Steps

From the Windows Control Panel, open **Sounds and Audio Devices** and click the **Audio** tab. Verify that the device **C-Media USB Headphone Set** is listed in both the **Sound playback** and **Sound recording** section as shown below.

12. Conclusion

These Application Notes describe the configuration steps required for integrating Telekonnectors TLK SP30 USB Adaptors and Headsets with Avaya IP Softphone, Avaya IP Agent, Avaya one-X® Communicator and Avaya one-X® Agent. All test cases were completed successfully.

13. Additional References

This section references the Avaya and Telekonnectors documentation that are relevant to these Application Notes.

The following Avaya product documentation can be found at http://support.avaya.com.

[1] *Administering Avaya Aura™ Communication Manager*, Release 5.2, Issue 5.0, May 2009, Document Number 03-300509.
[2] *Avaya IP Softphone Release 6.0 User Reference*, Issue 1, May 2007.
[3] *Avaya IP Agent Release 7.0 Installation and User Guide*, Issue 1.1, August 2007.
[4] *Avaya one-X® Communicator User Reference*, November 2009.
[5] *Installing and Configuring Avaya one-X® Agent*, Release 2.0, November 2009.

For product information on Telekonnectors TLK SP30 USB Adaptors and Headsets, visit the Telekonnectors website http://www.telekonnectors.com/adaptors_pc.html.