AVAYA

Avaya Solution & Interoperability Test Lab

Application Notes for Konftel 300 Conference Unit with Avaya Communication Manager - Issue 1.0

Abstract

These Application Notes document compliance testing the Konftel 300 conference unit with Avaya IP and digital telephones controlled by Avaya Communication Manager. The Konftel 300 attaches to the analog port of an Avaya Media Gateway and enables meeting or conference participants to simultaneously participate in a telephone conversation.

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

The purpose of these Application Notes is to illustrate how the Konftel 300 conference unit can be used within a telephone system consisting of Avaya IP and digital telephones controlled by Avaya Communication Manager. The Konftel 300 conference unit attaches to the analog port of an Avaya Media Gateway, and contains a microphone and loudspeaker, which effectively extends the range from which the telephone can be used to include an area of 30 square meters. Placed within a conference room, the Konftel unit enables all of the participants in the room to take part in a telephone conversation. The unit also performs echo cancellation to avoid feedback problems that might otherwise occur.

This document details the configuration used for compliance testing with Konftel 300 with Avaya Communication Manager. The diagram below depicts the configuration used for compliance testing.
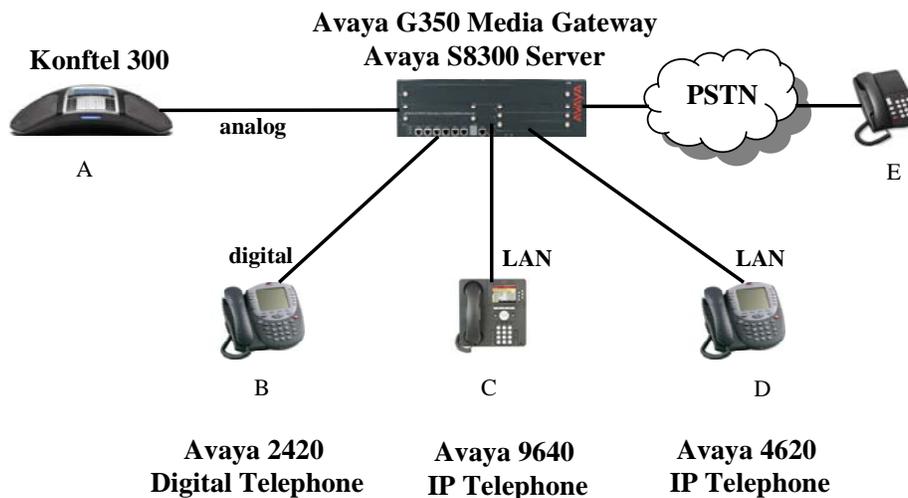

Figure 1: Test Configuration

The configuration that was used for testing consists of an Avaya G350 Media Gateway, and an Avaya S8300 Server. The Avaya telephones and the Konftel 300 were located at physically separate locations to ensure that sound from the test location could not be heard other than via the telephone connection.

The Konftel 300 has a keypad/display, as shown in **Figure 2**.

Figure 2: Konftel 300 Keypad /Display

The "Hold" key alternately blocks/unblocks audio signals in both directions, but the Konftel 300 does not send an indication to Avaya Communication Manager that the "hold" key has been depressed. Consequently, the "hold" key cannot be used to initiate transfer/conference operations. The "off-hook/flash" key must be used for this purpose, in the same manner as the "flash" key is used for Avaya analog telephones: when the Konftel is in the "off hook" state, depression of the "off-hook/flash" key causes the Konftel 300 to send a "flash" signal to Avaya Communication Manager.

The following table contains additional information about each of the telephone endpoints depicted in the System Configuration diagram:

Phone	Ext	PSTN Number	Endpoint
A	30201	069 9073 9887 30201	Konftel 300
B	38001		Avaya 2420
C	30094		Avaya 9640 IP
D	38002		Avaya 4620 IP
E		069 7505 6174	PSTN telephone
	30000		AUDIX

Table 1: Extensions Used for Testing

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2. Equipment and Software Validated

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

Equipment	Software Version
Avaya S8300 Server / Communication Manager	5.0 (R015x.00.0.825.4)
Avaya G350 Media Gateway	27.26.0
Avaya G350 Analog Interface	HW06 / FW089
Avaya MM712AP DCP	HW05 / FW009
Avaya 2410 Digital Telephone	5.0
Avaya 4620 SIP Telephone	2.2.2
Avaya 9640 H.323 Telephone	1.5
Avaya IA 770 INTUITY AUDIX	N5.0-12.0
Konftel 300	1.8.469 EU

Table 2: Version Numbers of Equipment and Software

3. Configuration

3.1. Configuration of the Avaya S8300 Media Server

The configuration and verification operations illustrated in this section were performed using the Avaya Communication Manager System Administration Terminal (SAT).

Although the Avaya IA 770 INTUITY AUDIX voicemail system was used for testing, the configuration of this component is outside the scope of this document.

The configuration of the Avaya Communication Manager interface to the PSTN is outside the scope of this document.

3.1.1. Configure Dial Plan

Use the **change dialplan analysis** command to specify that dialed strings which begin with "3" are extensions. The "*7" entry is used by the feature codes described in **Table 5**.

```
change dialplan analysis                                    Page   1 of  12
                          DIAL PLAN ANALYSIS TABLE
                                                   Percent Full:    1

     Dialed  Total  Call      Dialed  Total  Call      Dialed  Total  Call
     String  Length Type      String  Length Type      String  Length Type
       3       5    ext
      *7       4    fac
```

Figure 3: Dialplan Analysis Form

3.1.2. Configure Interface to Konftel

Use the **add station <x>** command to allocate a station for Konftel 300 where <x> is the extension for the Konftel unit as shown in **Table 1**.

Parameter	Usage
Type	Enter the station type for an analog telephone.
Port	Enter the designation for the port interface on the Avaya Media Gateway to which the unit is attached.
Name	Enter the name of the user which is to be associated with the phone.

Table 3: Configuration Konftel Station

```
add station 30201                                          Page   1 of   4
                                 STATION

Extension: 30201                      Lock Messages? n              BCC: 0
    Type: 2500                        Security Code:                 TN: 1
    Port: 001V702                     Coverage Path 1:              COR: 1
    Name: konftel                     Coverage Path 2:              COS: 1
                                      Hunt-to Station:            Tests? y
STATION OPTIONS
     XOIP Endpoint type: auto            Time of Day Lock Table:
             Loss Group: 1          Message Waiting Indicator: none
   Off Premises Station? n




         Survivable COR: internal
   Survivable Trunk Dest? y
```

Figure 4: Konftel Station Form

3.1.3. Configure Avaya Stations

Use the **add station <x>** command to allocate a stations for Avaya Telephones where <x> is the extension for the each of the units as shown in **Table 1**.

Parameter	Usage
Type	Enter the type of station to be configured.
Name	Enter the name of the user which is to be associated with the phone.
Security Code	Enter a security code, which the telephone can use for authorization.

Table 4: Configuration Konftel Station

```
add station   1                                       Page   1 of   5
                                  STATION

Extension: 38001                   Lock Messages? n             BCC: 0
    Type: 4610                       Security Code: XXXXX         TN: 1
    Port: S00009                   Coverage Path 1: 99           COR: 1
    Name: extn 38001               Coverage Path 2:              COS: 1
                                   Hunt-to Station:
STATION OPTIONS
                                        Time of Day Lock Table:
             Loss Group: 19      Personalized Ringing Pattern: 1
                                           Message Lamp Ext: 38001
          Speakerphone: 2-way           Mute Button Enabled? y
      Display Language: english
 Survivable GK Node Name:
         Survivable COR: internal        Media Complex Ext:
   Survivable Trunk Dest? y                   IP SoftPhone? n




                                        Customizable Labels? y
```

Figure 5: Konftel Station Form

3.1.4. Configure Access to Extended Features

Use the **change feature-access-codes** command to assign unused feature codes to those features used by the Konftel 300 as shown in the following **Table 5**. Note the "*7" entry for the dial plan shown in **Figure 3** is used by these entries.

Parameter	Usage
Last number dialed Access Code (p. 2)	This is required to allow the Konftel to redial the last number.
Send All Calls Activation (p. 3)	This is required to activate coverage.
Send All Calls Deactivation (p. 3)	This is required to deactivate coverage.

Table 5: Parameters for the Feature Access Codes

```
change feature-access-codes                                Page   2 of   5
                             FEATURE ACCESS CODE (FAC)
                   Contact Closure  Pulse Code: *726
               Data Origination Access Code: *727
                   Data Privacy Access Code: *728
             Directed Call Pickup Access Code: *729
       Directed Group Call Pickup  Access Code: *730
     Emergency Access to Attendant Access Code: *731
           EC500 Self-Administration Access Code: *732
                     Enhanced EC500 Activation: *733   Deactivation: *734
             Enterprise Mobility User Activation: *735   Deactivation: *736
  Extended Call Fwd Activate Busy D/A *737 All: *738   Deactivation: *739
           Extended Group Call Pickup Access Code:
                  Facility Test Calls Access Code: *741
                          Flash Access Code: *742
              Group Control Restrict Activation: *743   Deactivation: *744
                   Hunt Group Busy Activation: *745   Deactivation: *746
                          ISDN Access Code:
                 Last Number Dialed Access Code: *748
        Leave Word Calling Message Retrieval Lock: *749
      Leave Word Calling Message Retrieval Unlock: *750
```

Figure 6: Feature Access Code Form, Page 2

```
change feature-access-codes                                Page   3 of   5
                             FEATURE ACCESS CODE (FAC)
               Leave Word Calling Send A Message: *751
               Leave Word Calling Cancel A Message: *752
    Limit Number of Concurrent Calls Activation: *753   Deactivation: *754
                Malicious Call Trace Activation:        Deactivation:
          Meet-me Conference Access Code Change: *757

 PASTE (Display PBX data on Phone) Access Code: *758
 Personal Station Access (PSA) Associate Code:        Dissociate Code:
          Per Call CPN Blocking Code Access Code: *761
        Per Call CPN Unblocking Code Access Code: *762

                   Priority Calling Access Code: *763
                         Program Access Code: *764

        Refresh Terminal Parameters Access Code: *765
               Remote Send All Calls Activation: *766   Deactivation: *767
                 Self Station Display Activation:
                       Send All Calls Activation: *769   Deactivation: *770
           Station Firmware Download Access Code: *771
```

Figure 7: Feature Access Codes Form, Page 3

3.2. Configuration of the Konftel units

The Konftel 300, as shown in **Figure 2**, can be configured via its keypad.

Use the "Line Mode" key to select "ANALOGUE" mode.

Testing with Avaya Communication Manager was done with a flash value of 60ms. The Konftel 300 flash duration can be configured via its keypad via the following sequence:

- Press the "Menu" key
- Push the "down" key to select "SETTINGS"
- Push the "OK" key
- Push the "down" key repeatedly to select "FLASH/R"
- Push the "OK" key
- Push the "up" and "down" keys as required to select the desired flash time value (60ms – 600ms)
- Push the "OK" key to select the desired flash time
- Push the "MENU" key to exit the menu

4. Verification Steps

- Use the Konftel 300 to make a call to another extension. Verify that both parties can hear each other well.
- Verify that the Konftel 300 can initiate transfer and conference operations using its "flash" key.
- Verify that the keypad keys on the Konftel 300 can be used to navigate the menu of a voice mail system or other service.
- Verify that Konftel 300 can redial numbers using the "Last Number Dialed" access code".
- Verify that Konftel 300 can activate/deactivate voicemail coverage via the "Send All Calls Activation/Deactivation" access codes.

5. Support

Support for Konftel products is available at
- Web-based support: http://www.konftel.com/
- Email: info@konftel.com
- International help desk: +46 90706489
- North American help: +1 866-606-4728

6. Conclusion

The Konftel 300 conference unit can be attached to the analog port of an Avaya Media Gateway to enable all those present in a room to participate in a telephone conversation. The configuration described in these Application Notes has been successfully compliance tested.

7. Additional References

This section references documentation relevant to these Application Notes. The Avaya product documentation is available at http://support.avaya.com.

[1] *Administrator Guide for Avaya Communication Manager*, January 2008, Issue 4.0, Document Number 03-300509.
[2] *Feature Description and Implementation for Avaya Communication Manager,* January 2008, Issue 6, Document Number 555-245-205.
[3] *User Guide Konftel 300 (English)*, available at www.konftel.se.

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