MobilityManager IVR Dead Air Issue

Document ID: 70575

Contents

Introduction

This document describes one reason why Cisco MobilityManager Interactive Voice Responder (IVR) responds with dead air when an inbound call comes in, and provides a solution in a Cisco CallManager environment.

Prerequisites

Requirements

Cisco recommends that you have knowledge of these topics:

- Cisco CallManager
- Cisco MobilityManager
- Cisco IOS®

Components Used

The information in this document is based on these software and hardware versions:

- Cisco CallManager 4.2
- Cisco MobilityManager version 1.2
- Cisco IOS Software Release 12.4(5.9)

The information in this document was created from the devices in a specific lab environment. All of the devices used in this document started with a cleared (default) configuration. If your network is live, make sure that you understand the potential impact of any command.

Conventions

Refer to Cisco Technical Tips Conventions for more information on document conventions.

Problem

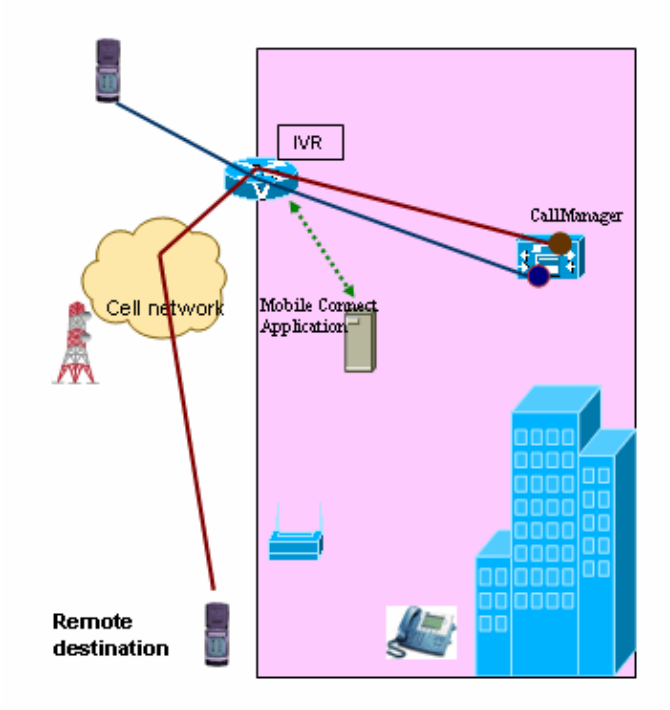
This is the normal data flow for an inbound call to IVR on H.323 gateway in a Cisco MobilityManager environment (see Figure 1):

1. There is an inbound call to IVR on the H.323 gateway.
2. Gateway IVR interacts with Cisco MobilityManager to play prompts, collect data for authentication, and to receive a destination number the user wants to dial. Cisco MobilityManager verifies the identity of the caller and collects the destination number information.
3. Cisco MobilityManager then transfers the call from the gateway to a selected outgoing CTIPort.
4. Cisco MobilityManager uses the shared line CTIPort of the user to make a call to the destination number.
5. Once the destination number answers, Cisco MobilityManager performs media manipulation and the call enters a connected state between remote destination and destination number.

When the call is in this connected state, this sequence occurs:

1. There is an inbound call to IVR on the H.323 gateway.
2. When the inbound call reaches IVR, the caller receives dead air. Gateway IVR does not play prompts.

Figure 1 Cisco MobilityManager Topology



Solution

This problem is related to Cisco IOS software that runs on the H.323 gateway. Issue this command to verify if the VXML application/service is loaded correctly:

```
show call application voice <app name>
```

If the VXML application is loaded correctly, it displays a VXML page similar to this:

```
VXML Application snr3
            URL=http://172.22.120.104:8080/cmmivr/pages/IVRMainpage.vxml
            Security not trusted
            No languages configured
            It has: 0 calls active.
                    7 incoming calls
                    0 calls handed off to it
                    3 call transfers initiated
```

```
            35 pages loaded,  35 successful
            38 prompt play attempts, 38 successful
            0 recorded messages
            The transfer mode is 'rotary'(Default)
     Interpreted by Voice Browser Version 2.0 for VoiceXML 1.0 & 2.0.

The VXML Script is:
------------------
<?xml version="1.0" encoding="iso-8859-1"?>
<vxml version="1.0">

   <form id="main">
      <block>

        <prompt>
          <audio src="http://172.22.120.104:8080/cmmivr/audio/english/1.au"/>
        </prompt>
        <var name="callerid" />
        <assign name="callerid" expr="session.telephone.ani"/>

        <var name="langdir" />
        <assign name="langdir" expr="'english'"/>

        <if cond="callerid !='blocked' " >
           <submit next="http://172.22.120.104:8080/cmmivr/IVRCalleridLookup.do"
            method="get" namelist="callerid langdir"/>
        <else />
           <goto next="#Getuserid"/>
        </if>

      </block>

   </form>
  <form id="Getuserid">
      <field name="userid" type="digits?minlength=3;maxlength=16">
         <prompt>
            <audio src="http://172.22.120.104:8080/cmmivr/audio/english/2.au"/>
         </prompt>

         <noinput count="3">

         <exit/>

         </noinput>

         <filled>
           <var name="callerid" />
           <assign name="callerid" expr="null"/>

           <var name="langdir" />
           <assign name="langdir" expr="'english'"/>

           <submit next="http://172.22.120.104:8080/cmmivr/IVRUseridLookup.do"
            method="get" namelist="userid callerid langdir"/>
         </filled>

      </field>
   </form>

</vxml>
```

Next, look for the IP address. Complete these steps if the IP address is not proper or null is present:

1. Check the Cisco MobilityManager server and configure the Hostname. In Cisco MobilityManager version 1.1.2, it is required to enter this information manually under the Platform Administration

page.

2. Verify the Cisco IOS Software release. There is a bug in Cisco IOS Software Release 12.4(5.9). Cisco recommends to upgrade to Cisco IOS Software Release 12.4(7) or later. Refer to Cisco bug ID CSCej70517 (registered customers only) .
3. Restart the Cisco Mobility Manager.
4. Reload the application in the gateway.

Related Information

- **Voice Technology Support**
- **Voice and IP Communications Product Support**
- **Troubleshooting Cisco IP Telephony**
- **Technical Support & Documentation − Cisco Systems**

Updated: Aug 16, 2006 Document ID: 70575