



Avaya Solution & Interoperability Test Lab

Application Notes for Xima Chronicall Recording Library Module with Avaya IP Office 9.0 Using Voicemail Pro – Issue 1.0

Abstract

These Application Notes describe the configuration steps required for Xima Chronicall Recording Library Module to interoperate with Avaya IP Office 9.0 using Voicemail Pro. Xima Chronicall is a call reporting application, and the Recording Library Module is an optional module that provides the call recording wave files from Avaya IP Office Voicemail Pro via the Xima Chronicall web interface.

In the compliance testing, the Xima Chronicall Recording Library Module compressed and archived call recording wave files from the Avaya IP Office Voicemail Pro VRL directory, and made available to users via the Chronicall web interface.

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 for Xima Chronicall Recording Library Module to interoperate with Avaya IP Office 9.0.

Xima Chronicall is a call reporting application and the Recording Library Module is an optional module that provides the call recording wave files from Avaya IP Office Voicemail Pro via the Xima Chronicall web interface.

In the compliance testing, the Xima Chronicall Recording Library Module compressed and archived call recording wave files from the Avaya IP Office Voicemail Pro VRL directory, and made available to users via Chronicall cradle to grave and call history reporting.

2. General Test Approach and Test Results

The feature test cases were performed manually. Each call was handled manually on the user with generation of unique audio content for the recordings. Necessary user actions such as hold and reconnect were performed from the user telephone to test the various call scenarios.

The serviceability test cases were performed manually by disconnecting and reconnecting the Ethernet connection to the Chronicall server.

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.

2.1. Interoperability Compliance Testing

The interoperability compliance test included feature and serviceability testing.

The feature testing focused on verifying the following by Chronicall Recording Library Module:

- Handling, reporting, and playback of call recording wave files for various call scenarios including internal, external, inbound, outbound, drop, hold/reconnect, blind/attended transfer, blind/attended conference, voicemail coverage, voicemail retrieval, hunt group, hunt group queuing, park/unpark, simultaneous users, simultaneous calls, and mobile twinning.

The serviceability testing focused on verifying the ability of Chronicall Recording Library Module to recover from adverse conditions, such as disconnecting and reconnecting the Ethernet connection to the Chronicall server.

2.2. Test Results

All test cases were executed and verified. The following were observations on Chronical Recording Library Module from the compliance testing.

- Immediately upon conclusion of a call, recording entries can show up as “Call Recorded” on the cradle to grave report. After Chronical completes association of recordings with proper call segments, then recording icons will appear next to the applicable call sub-entries in place of “Call Recorded” entries. If for some reason Chronical cannot find an appropriate match for a recording, then the recording will continue to appear as a “Call Recorded” entry.
- The blind conference scenario produced a silent recording entry for the conversation between the last two parties on the call, and the silent recording was inherited from Voicemail Pro.

2.3. Support

Technical support on Chronical Recording Library Module can be obtained through the following:

- **Phone:** (888) 944-XIMA
- **Email:** support@ximasoftware.com
- **Web:** <http://www.ximasoftware.com/support>

3. Reference Configuration

The configuration used for the compliance testing is shown below. The Chronical Recording Library Module included a Recording Library service that was installed on the IP Office Voicemail Pro server.

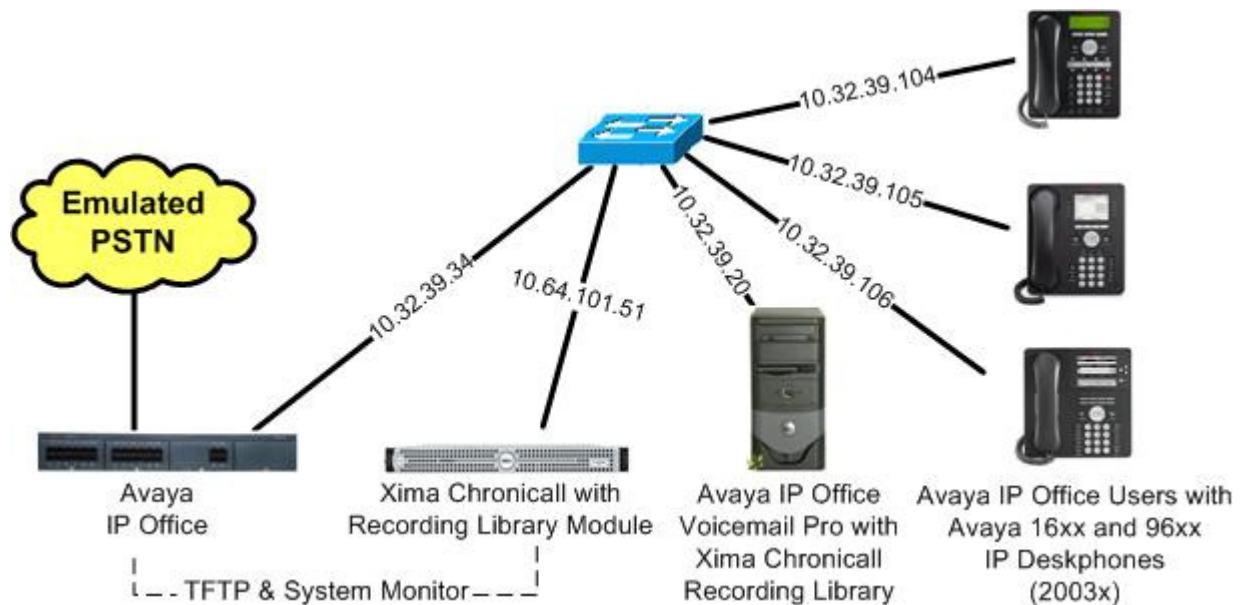


Figure 1: Compliance Testing Configuration

No special configuration was required on IP Office Voicemail Pro running the Chronical Recording Library service. The IP address and relevant port for the Chronical server were entered as part of the Chronical Recording Library service installation. For Additional information on Chronical configuration and installation see [2] and [3].

These Application Notes assume the Chronical basic module is already configured and running on the Chronical server. The TFTP and System Monitor interfaces shown in **Figure 1** were used by the Chronical basic module.

The detailed administration of general devices such as hunt groups and users are assumed to be in place and are not covered in these Application Notes. In the compliance testing, the IP Office hunt groups and user extensions shown in the table below were used.

| Device Type | Extension |
|-------------|---------------------|
| Hunt Groups | 29000, 29002 |
| Users | 20031, 20032, 20033 |

4. Equipment and Software Validated

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

| Equipment | Software |
|--|------------------------|
| Avaya IP Office on IP500V2 | 9.0 (829) |
| Avaya IP Office Voicemail Pro <ul style="list-style-type: none">Xima Chronicall Recording Library | 9.0 (311) 3.4 (30b) |
| Avaya 1608 IP Deskphone (H.323) | 1.330D |
| Avaya 9611G IP Deskphone (H.323) | 6.3037 |
| Avaya 9650 IP Deskphone (H.323) | 3.200 |
| Xima Chronicall on Windows 2008 Server R2 Enterprise <ul style="list-style-type: none">Recording Library Module | 3.4 (30b) SP1 |

Testing was performed with IP Office 500 V2 R9.0, but it also applies to IP Office Server Edition R9.0. Note that IP Office Server Edition requires an Expansion IP Office 500 V2 R9.0 to support analog or digital endpoints or trunks. IP Office Server Edition does not support TAPI Wave or Group Voicemail.

5. Configure Avaya IP Office

This section provides the procedures for configuring IP Office. The procedures include the following areas:

- Verify license
- Administer users

5.1. Verify License

From a PC running the IP Office Manager application, select **Start → All Programs → IP Office → Manager** to launch the application. Select the proper IP Office system, and log in using the appropriate credentials.

The **Avaya IP Office R9 Manager** screen is displayed. From the configuration tree in the left pane, select **License** to display a list of licenses in the right pane. Verify that there is a license for **Preferred Edition (Voicemail Pro)** and that the **Status** is “Valid”, as shown below.

| Feature | License Key | Instances | Status |
|--|----------------------------|------------|--------------|
| AUDIX Voicemail | S4TrwdbMAS6207mx5CcGgZ | 255 | Valid |
| Avaya IP endpoints | syn6cLdwvsq2F9fYRNugL@R | 255 | Valid |
| Avaya IP endpoints | Virtual Avaya IP Endpoints | 12 | Valid |
| Avaya Softphone License | XAmMrmYmVd8CAMqYJJx61V | 255 | Valid |
| CTI Link Pro | NAMnt99YtUpNVF6cCIxG9mZ | 255 | Valid |
| DECT Integration (ports) | D4eSOTVcXSR1aLRBYXuHg | 255 | Obsolete |
| Essential Edition | stxTs5g5vjfcKbq1JEeykEidjv | 255 | Valid |
| Essential Edition Additional Voicemail ... | IAebKWVeAAFevo01wjcwGd | 255 | Valid |
| IP500 Universal PRI (Additional chan... | V4cB1y6HvvYN3mfpJAc9 | 255 | Valid |
| IP500 Voice Networking Channels | 2TD5VFLpvAP2bLHw54e9ckR | 255 | Valid |
| Mobile User Upgrade | hAt6KP9zXSGcZblekjcZcy | 255 | Valid |
| Mobile Worker | @vCccghkXUkc49ae5Mu6oZ | 255 | Valid |
| Office Worker | ytCOWSvxXSAcyoF9HJehglfV | 255 | Valid |
| Office Worker Upgrade | Ah1UOyBcvvLCUF0QCUCbw5 | 255 | Valid |
| Phone Manager Pro | O4yo59oevvAn4LueP2udoeR | 255 | Valid |
| Phone Manager Pro (per seat) | AXcFd5VoXjKxaFmCRlx5HB | 255 | Valid |
| Phone Manager Pro IP Audio Enabled... | tTcdLD68ASsNdl8cwCxxvBLKL | 255 | Valid |
| Power User | Nv2fwvd1tGGHKmZW1uc65 | 255 | Valid |
| Preferred Edition (Voicemail Pro) | yAD9Vbh_XGZeXSRQk | 255 | Valid |
| Preferred Edition Additional Voicemail ... | AAahG4owXvqJFbuWwEcs | 255 | Valid |
| R8+ Preferred Edition (VM Pro) | i4CxvM@5tGqNdd4Ckzc9_Ch | 255 | Valid |
| Receptionist | FXHJ9ybwwj6IUvmmCNe9gP | 255 | Valid |
| SIP Trunk Channels | KyW2GEg6AssCG@oEWPCwL | 255 | Valid |
| Software Upgrade 255 | Uhzfmlv5MOYltAQf38p1mI7H | 1 | Valid |

5.2. Administer Users

From the configuration tree in the left pane, select the first user from **Section 3**, in this case “20031”. Select the **Voice Recording** tab, and enter the following values for the specified fields.

- **Recording Outbound:** “On”
- **Recording Inbound:** “On”
- **Recording (Auto):** “Voice Recording Library”
- **Auto Record Calls:** “External & Internal”
- **Recording (Manual):** “Voice Recording Library”

Repeat this section for all desired users. In the compliance testing, users 20031-20033 were configured with recording capability.



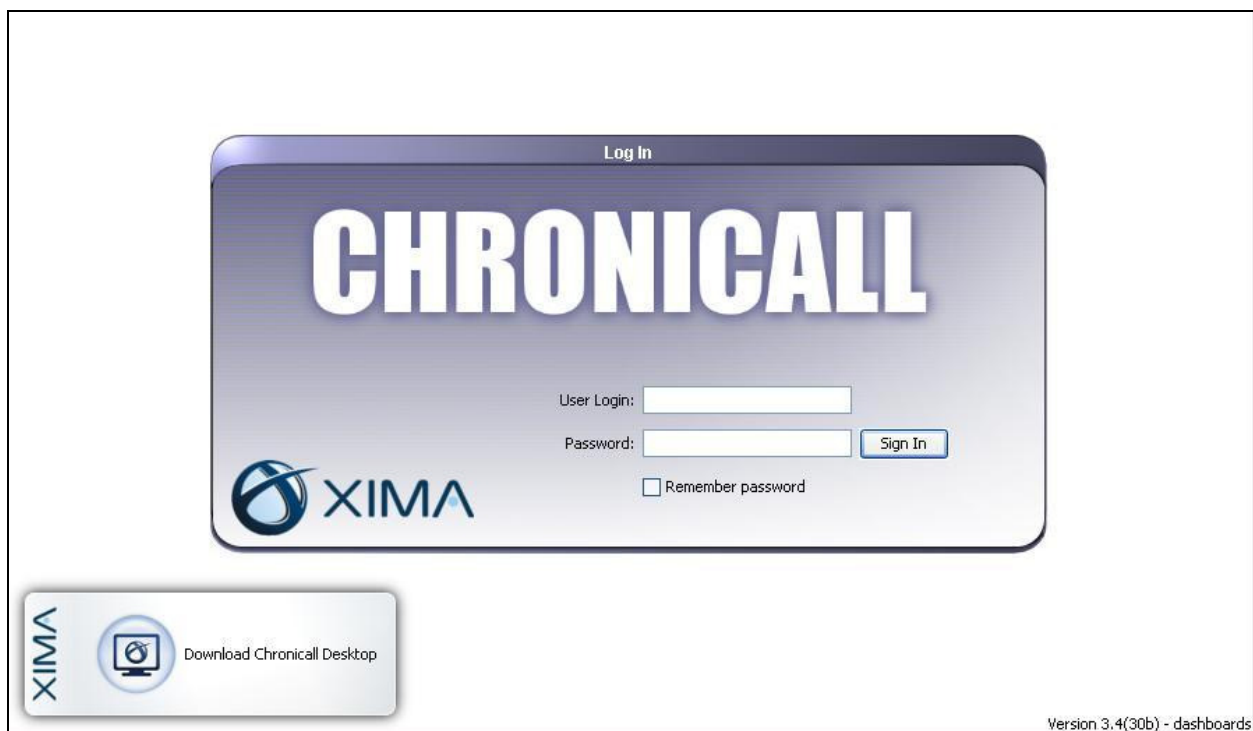
6. Configure Xima Chronicall Recording Library Module

This section provides the procedures for configuring Chronicall Recording Library Module. The procedures include the following areas:

- Launch Chronicall
- Administer system settings

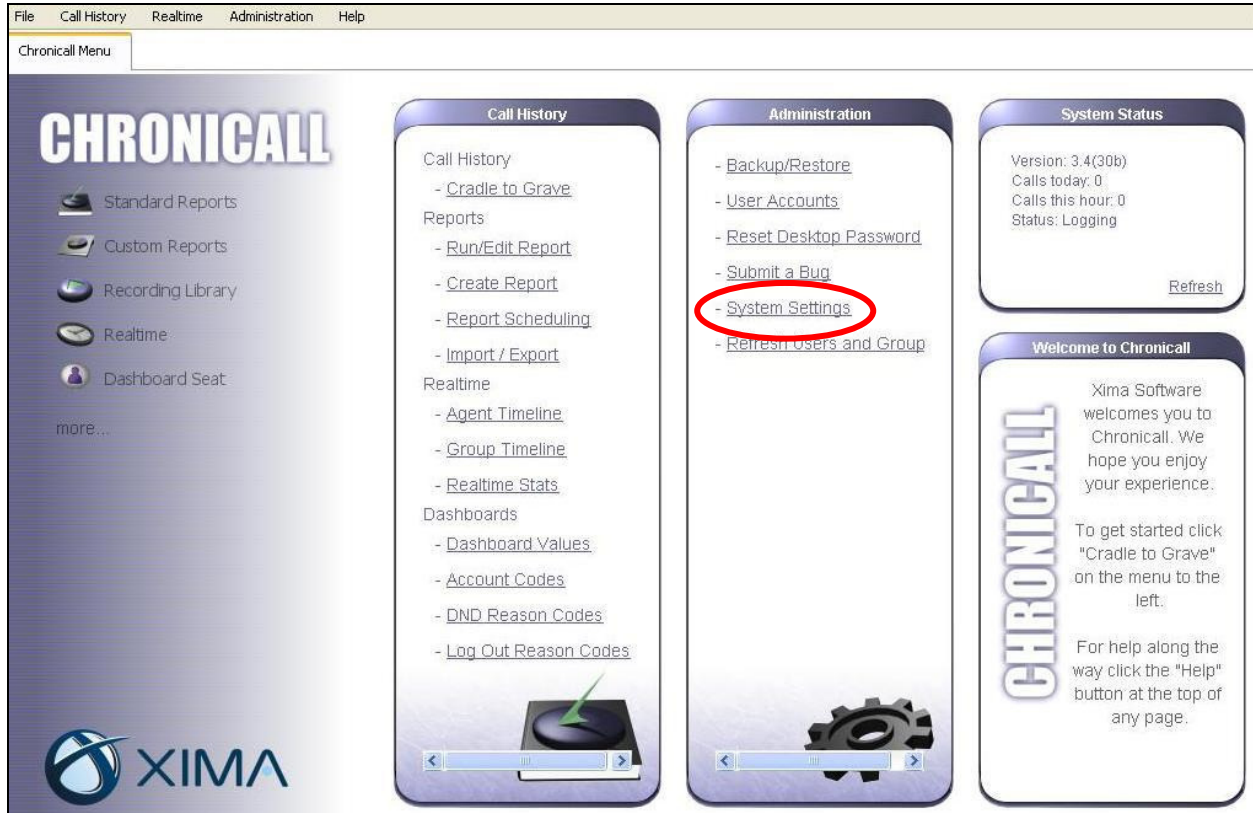
6.1. Launch Chronicall

Access the Chronicall web interface by using the URL “http://ip-address:9080” in an Internet browser window, where “ip-address” is the IP address of Chronicall. Log in using the appropriate credentials.



6.2. Administer System Settings

The **Chronicall Menu** tab is created, and displays the screen below. Select **Administration** → **System Settings**.



The **System Settings** tab is created, and displays the screen below. Select **Recording Library** to expand this sub-section. Enter the following values for the specified fields, and retain the default values for the remaining fields.

- **Voicemail Pro IP Address:** IP address of the Voicemail Pro server.
- **Chronicall Server Address:** IP address of the Chronicall server.

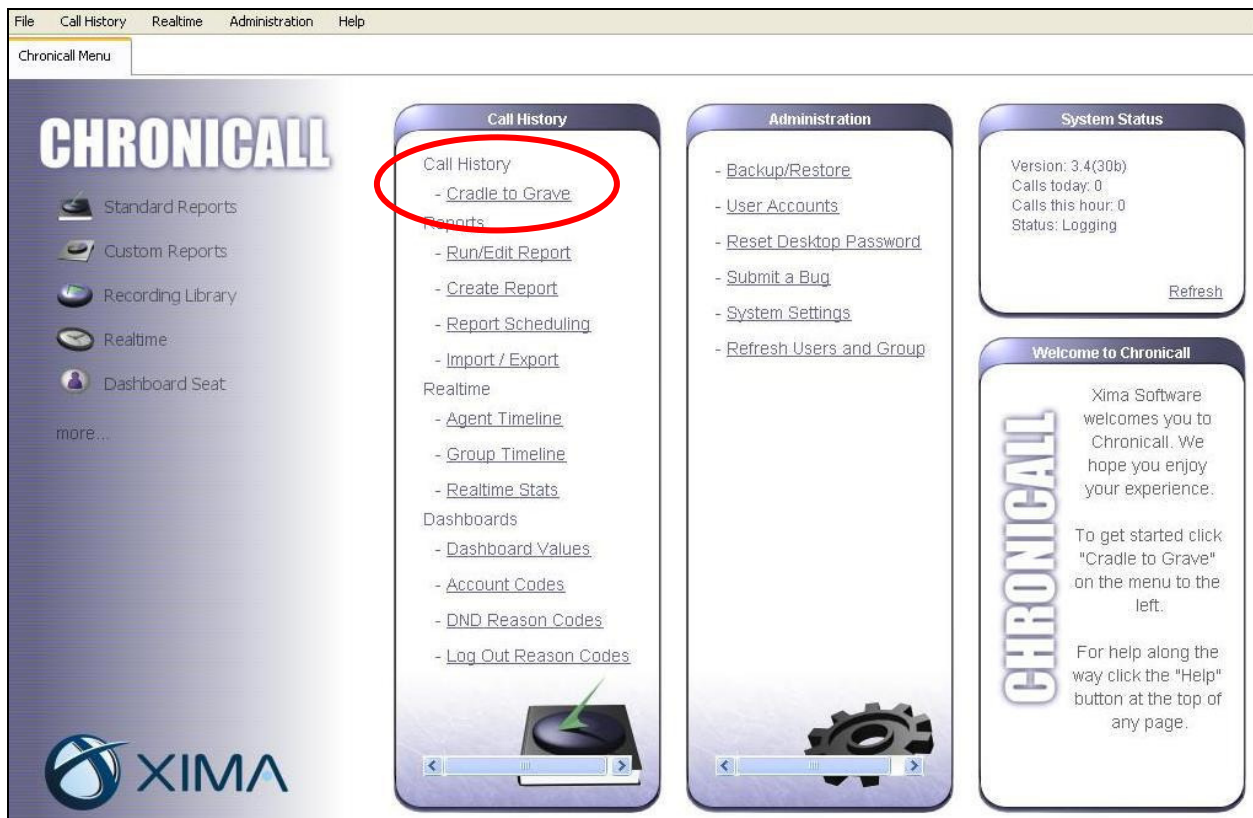
The screenshot shows the 'Chronicall Settings' window. The 'Recording Library (127.0.0.1)' section is expanded, displaying the following settings:

| Setting | Value |
|---------------------------|-----------------------|
| Voicemail Pro IP Address | 10.32.39.20 |
| Chronicall Recording Port | 9081 |
| Voicemail System ID | 1 |
| VRL Polling Interval | 5 |
| Chronicall Server Address | 10.64.101.51 |
| Chronicall Server Port | 9080 |
| Max Encoding Threads | 1 |
| VRL Directory | |
| Clean VRL Recordings | True |
| Recording Limbo Directory | |
| Recording Files Storage | Store all unencrypted |
| Storage Location Override | |
| Use Samba/CIFS Storage | False |
| Samba/CIFS Domain | ? |
| Samba/CIFS Username | GUEST |
| Samba/CIFS Password | |

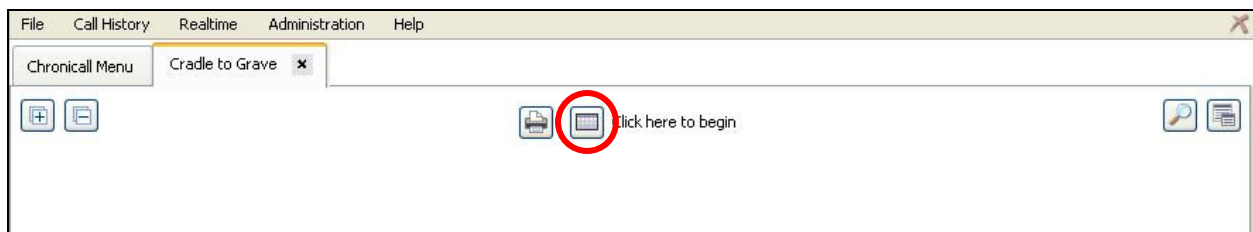
7. Verification Steps

This section provides the test that can be performed to verify proper integration between IP Office and Chronicall Recording Library Module. Prior to verification, place an incoming trunk call to a hunt group with an available user. Answer the call at the user, and generate unique audio content for the call prior to hanging up.

Follow the procedures in **Section 6.1** to access the Chronicall web interface. In the **Chronicall Menu** tab, select **Call History** → **Cradle to Grave**.



The **Cradle to Grave** tab is created, and displays the screen below. Click on the icon next to **Click here to begin**.



The **Date / Time Range** screen is displayed next. Select the desired date and time range.

The screenshot shows a 'Date / Time Range' dialog box. On the left is a 'Monthly Calendar' for December 2013. The 4th of the month is highlighted. To the right of the calendar are two time selection fields: 'Start Time' and 'End Time'. The 'Start Time' is set to 00:00:00 and the 'End Time' is set to 23:59:59. At the bottom of the dialog are 'OK' and 'Cancel' buttons.

The **Cradle to Grave** tab is updated as shown below. Verify that there is an entry reflecting the last call, in this case “Call 83”.

Expand the entry, and verify that there is a **Recording** icon associated with the **Talking** sub-entry. Click on the **Recording** icon, and verify that the audio can be played back.

The screenshot shows the 'Cradle to Grave' tab with a list of call events. The first event is 'Call 83 - Inbound'. Below it are several sub-events: 'Ringing', 'Talking', 'Hold', and 'Drop (Receiving)'. A red circle highlights a recording icon (a green circle with a white 'd') next to the second 'Talking' event.

| Call Info | Calling Party | Receiving Party | Group | Start Date | Start Time | End Date | End Time | Duration | Reco... |
|-------------------|---------------|-------------------------------|-------|------------|------------|----------|----------|----------|---------|
| Call 83 - Inbound | 9088445001 | [7328529000] Extn20031(20031) | Main | 12/4/13 | 09:23:32 | 12/4/13 | 09:24:50 | 0:01:18 | |
| Ringing | 9088445001 | Extn20031(20031) | Main | 12/4/13 | 09:23:32 | 12/4/13 | 09:23:33 | 0:00:01 | |
| Talking | 9088445001 | Extn20031(20031) | Main | 12/4/13 | 09:23:33 | 12/4/13 | 09:24:30 | 0:00:56 | |
| Hold | 9088445001 | Extn20031(20031) | Main | 12/4/13 | 09:24:30 | 12/4/13 | 09:24:38 | 0:00:08 | |
| Talking | 9088445001 | Extn20031(20031) | Main | 12/4/13 | 09:24:38 | 12/4/13 | 09:24:50 | 0:00:12 | |
| Drop (Receiving) | 9088445001 | Extn20031(20031) | Main | | | 12/4/13 | 09:24:50 | | |

8. Conclusion

These Application Notes describe the configuration steps required for Xima Chronicall Recording Library Module to successfully interoperate with Avaya IP Office 9.0. All feature and serviceability test cases were completed with observations noted in **Section 2.2**.

9. Additional References

This section references the product documentation relevant to these Application Notes.

1. *Avaya IP Office Manager*, Release 9.0, Issue 9.01, September 2013, Document Number 15-601011, available at <http://support.avaya.com>.
2. *Application Notes for Xima Chronicall with Avaya IP Office 9.0*, Issue 1.0, available at <http://support.avaya.com>.
3. *CHRONICALL Configuration Manual*,
http://www.ximasoftware.com/chronicall/documentation/Chronicall_Configuration_Manual.pdf.

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