



## **Avaya Solution & Interoperability Test Lab**

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# **Application Notes for Xima Chronicall with Avaya IP Office – Issue 1.0**

### **Abstract**

These Application Notes describe the configuration steps required for Xima Chronicall to interoperate with Avaya IP Office. Xima Chronicall is a call reporting application. In the compliance testing, Xima Chronicall used the TFTP service and System Monitor interface from Avaya IP Office to obtain configured system resources and call information to produce cradle to grave and call historical reporting.

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 to interoperate with Avaya IP Office. Xima Chronicall is a call reporting application.

In the compliance testing, Xima Chronicall used the TFTP service and System Monitor interface from Avaya IP Office to obtain configured system resources and call information to produce cradle to grave and call historical reporting.

The TFTP service was used to obtain configured system resources from Avaya IP Office, such as configured hunt groups and users. The System Monitor service was used to obtain call events. The obtained information was used to produce cradle to grave and call historical reporting, accessible via the Xima Chronicall web interface.

## 1.1. Interoperability Compliance Testing

The interoperability compliance test included feature and serviceability testing.

The feature testing focused on verifying the following on Xima Chronicall:

- Handling of TFTP responses for system, account codes, hunt groups, users, and hunt group membership information.
- Handling of System Monitor call events and reporting for various call scenarios including internal, external, inbound, outbound, drop, hold/reconnect, blind/attended transfer, blind/attended conference, voicemail coverage, voicemail retrieval, hunt group queuing, park/unpark, simultaneous users, simultaneous calls, mobile twinning, and telecommuter.

The serviceability testing focused on verifying the ability of Xima Chronicall to recover from adverse conditions, such as disconnecting and reconnecting the Ethernet cable to Xima Chronicall.

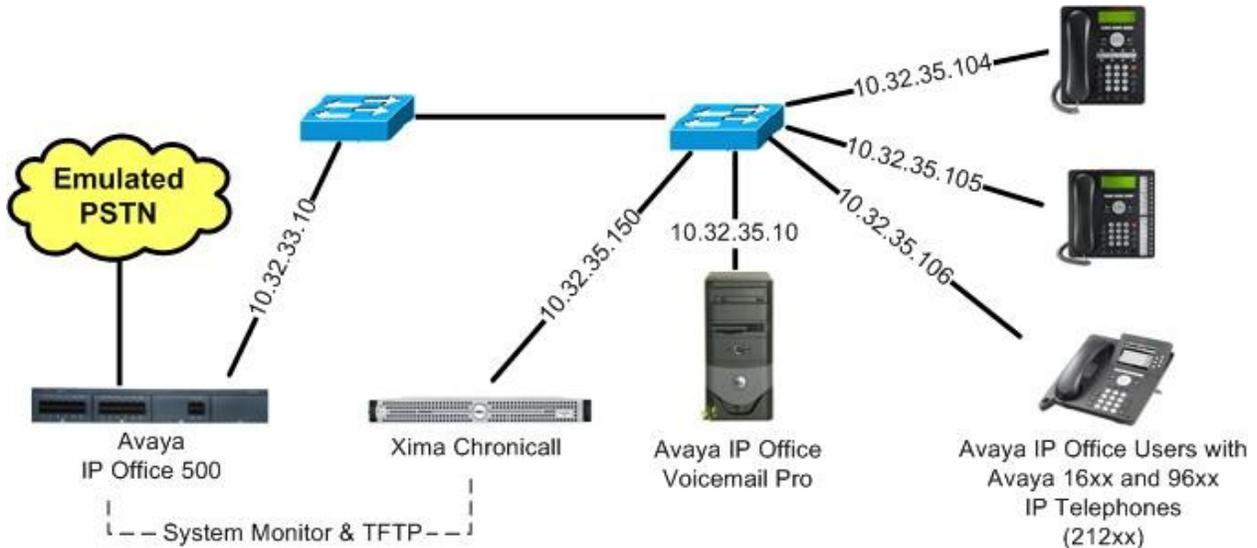
## 1.2. Support

Technical support on Xima Chronicall can be obtained through the following:

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

## 2. Reference Configuration

The configuration used for the compliance testing is shown below. The Avaya IP Office Voicemail Pro was used for the voicemail call scenarios.



No special configuration was required on Avaya IP Office and Xima Chronicall. The IP address of Avaya IP Office and the password for the Avaya IP Office System Monitor interface were entered as part of the Xima Chronicall installation. For details on Xima Chronicall installation see [2].

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 Avaya IP Office hunt groups and user extensions shown in the table below were used.

Device Type	Extension
Hunt Groups	21000, 22000
Users	21251, 21252, 21253

### 3. Equipment and Software Validated

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

Equipment	Software
Avaya IP Office 500	6.1 (5)
Avaya IP Office Voicemail Pro	6.1 (15)
Avaya 16xx Series IP Telephones (H.323)	1.3
Avaya 96xx Series IP Telephone (H.323)	3.11
Xima Chronicall on Windows 2003 Server with Service Pack 2	3.2 (11)

## 4. General Test Approach and Test Results

The feature test cases were performed both automatically and manually. Upon start of the Xima Chronicall application, the application automatically sends TFTP requests to obtain configured account codes, hunt groups, users, and hunt group memberships information from Avaya IP Office.

For the manual part of the testing, calls were made from the PSTN and from local users to the hunt groups and users. Necessary user actions such as hold/reconnect were performed from the user telephones to generate events for the various call scenarios.

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

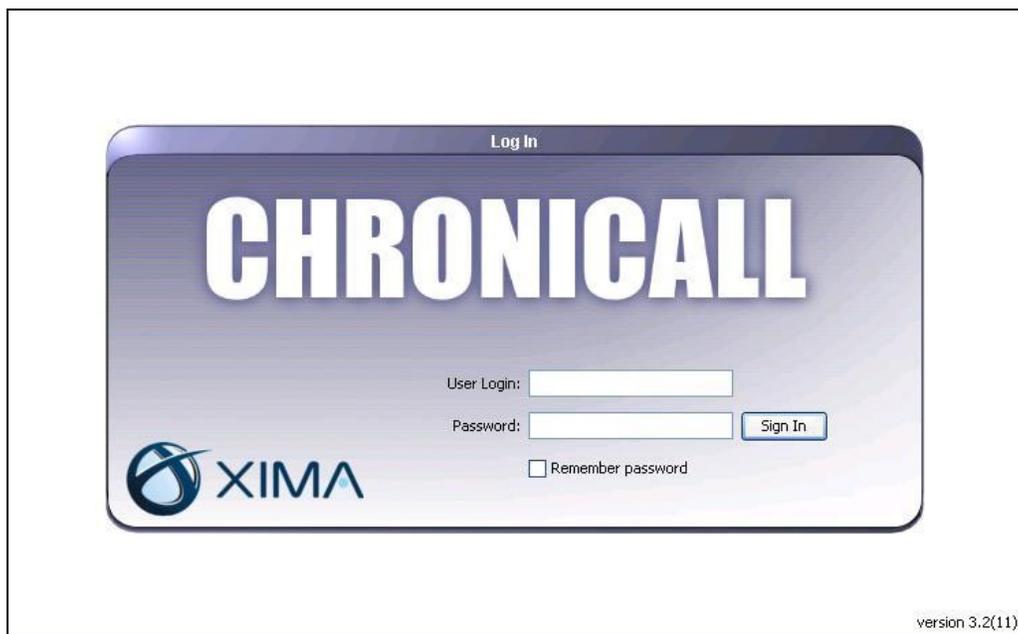
All test cases were executed. The following were the observations on Xima Chronicall from the compliance testing.

- Configuration changes on Avaya IP Office Manager cannot be reflected in real-time on Xima Chronicall due to the nature of the interface. A workaround is to restart the Chronicall service to force a re-synchronization with Avaya IP Office.
- Digits dialed as part of the short codes were not reflected in the call reporting.

## 5. Verification Steps

This section provides the tests that can be performed to verify proper integration between Xima Chronicall and Avaya IP Office. Prior to verification, place an incoming trunk call to a hunt group with an available user. Answer the call at the user and perform a few actions such as hold/reconnect before ending the call.

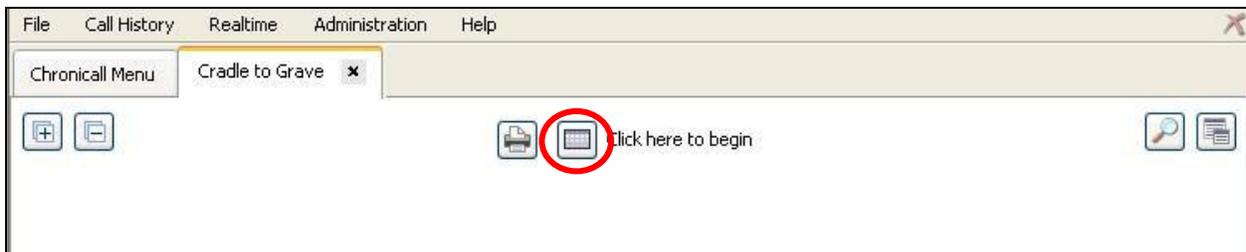
Access the Xima Chronicall web interface by using the URL “http://ip-address:9080/chronicall.html” in an Internet browser window, where “ip-address” is the IP address of the Chronicall server. Log in using the appropriate credentials.



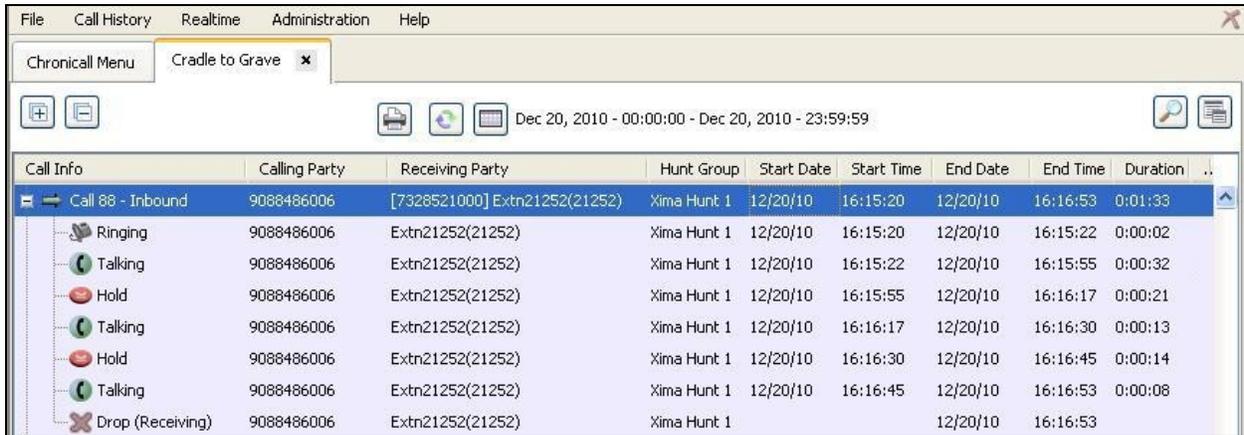
The **Chronicall Menu** tab is created, and displays the screen below. Select **Call History > Cradle to Grave**.



The **Cradle to Grave** tab is created, and displays the screen below. Click on the icon next to **Click here to begin**, followed by **OK** in the subsequent **Date / Time Range** pop-up screen (not shown).



The **Cradle to Grave** tab is updated as shown below. Verify that there is an entry reflecting the last call, in this case “Call 88”. Expand the entry, and verify that all reported details reflect the last call with proper values in the respective columns.



Call Info	Calling Party	Receiving Party	Hunt Group	Start Date	Start Time	End Date	End Time	Duration
Call 88 - Inbound	9088486006	[7328521000] Extn21252(21252)	Xima Hunt 1	12/20/10	16:15:20	12/20/10	16:16:53	0:01:33
Ringing	9088486006	Extn21252(21252)	Xima Hunt 1	12/20/10	16:15:20	12/20/10	16:15:22	0:00:02
Talking	9088486006	Extn21252(21252)	Xima Hunt 1	12/20/10	16:15:22	12/20/10	16:15:55	0:00:32
Hold	9088486006	Extn21252(21252)	Xima Hunt 1	12/20/10	16:15:55	12/20/10	16:16:17	0:00:21
Talking	9088486006	Extn21252(21252)	Xima Hunt 1	12/20/10	16:16:17	12/20/10	16:16:30	0:00:13
Hold	9088486006	Extn21252(21252)	Xima Hunt 1	12/20/10	16:16:30	12/20/10	16:16:45	0:00:14
Talking	9088486006	Extn21252(21252)	Xima Hunt 1	12/20/10	16:16:45	12/20/10	16:16:53	0:00:08
Drop (Receiving)	9088486006	Extn21252(21252)	Xima Hunt 1			12/20/10	16:16:53	

## 6. Conclusion

These Application Notes describe the configuration steps required for Xima Chronicall to successfully interoperate with Avaya IP Office. All feature and serviceability test cases were completed with observation noted in **Section 4**.

## 7. Additional References

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

1. *IP Office 6.1 Documentation CD*, November 2010, available at <http://support.avaya.com>.
2. *CHRONICALL Configuration Manual*,  
[http://www.ximasoftware.com/chronicall/documentation/Chronicall\\_Configuration\\_Manual.pdf](http://www.ximasoftware.com/chronicall/documentation/Chronicall_Configuration_Manual.pdf).

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