



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

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# **Application Notes for Xima Chronicall Realtime Module with Avaya IP Office 9.0 – Issue 1.0**

### **Abstract**

These Application Notes describe the configuration steps required for Xima Chronicall Realtime Module to interoperate with Avaya IP Office 9.0. Xima Chronicall is a call reporting application, and the Realtime Module is an optional module that provides real-time user status. The real-time user status can be accessed via the Xima Chronicall web-based interface or via the optional Xima Chronicall Agent Dashboard client application.

In the compliance testing, the Xima Chronicall Realtime Module used the TFTP service and System Monitor interface from Avaya IP Office to obtain initial and real-time user status to produce real-time user status reporting, and the Xima Chronicall web-based interface was used for all verifications.

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 Realtime Module to interoperate with Avaya IP Office 9.0. Xima Chronicall is a call reporting application, and the Realtime Module is an optional module that provides real-time user status. The real-time user status can be accessed via the Xima Chronicall web-based interface or via the optional Xima Chronicall Agent Dashboard client application.

In the compliance testing, the Xima Chronicall Realtime Module used the TFTP service and System Monitor interface from Avaya IP Office to obtain initial and real-time user status to produce real-time user status reporting, and the Xima Chronicall web-based interface was used for all verifications.

The TFTP service was used to obtain initial user feature status such as forward unconditional. The System Monitor interface was used to obtain real-time events on user status change, such as activation/deactivation of do-not-disturb

## 2. General Test Approach and Test Results

The feature test cases were performed both automatically and manually. Upon start of Chronicall with Realtime Module, the application automatically sends TFTP requests to IP Office to obtain initial user status such as forward unconditional.

For the manual part of the testing, user actions such as activation/deactivation of do-not-disturb were performed from the user telephones using the Feature or programmed buttons.

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 on Chronical:

- Handling of initial TFTP responses and reporting of user status for do-not-disturb, hunt group membership, follow-me-to, forward busy/busy number/hunt group/no-answer/number/unconditional, log in/out, and follow-me-to information.
- Handling of real-time System Monitor responses and reporting of user status for do-not-disturb, hunt group membership, follow-me-to, forward busy/busy number/hunt group/no-answer/number/unconditional, log in/out, and follow-me-to information.

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

## 2.2. Test Results

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

- Feature configuration changes on IP Office Manager cannot reflect in real-time on Chronical Realtime Module due to nature of the interface. A workaround is to restart the Chronical service to force a re-synchronization with IP Office.
- Feature status changes via short codes may not always reflect by Chronical Realtime Module. The recommendation is to always use the Feature button or the programmed feature button on the Avaya deskphones.
- The Idle and Ready states reported by Chronical Realtime Module do not correspond to any one feature or state on IP Office, but rather determined by the application and deduced from several features and may not match to the IP Office user state. As such, these two reporting parameters were not verified.

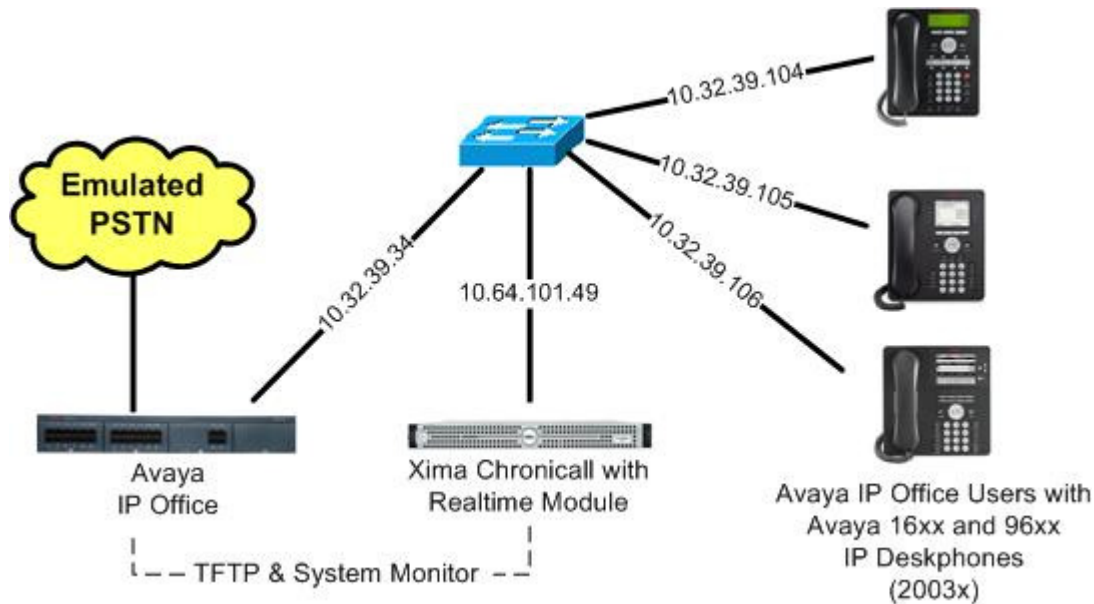
## 2.3. Support

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

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

### 3. Reference Configuration

The configuration used for the compliance testing is shown below.



**Figure 1: Compliance Testing Configuration**

These Application Notes assume the Chronicall basic module is already configured and running on the Chronicall server.

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, 29004
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 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"><li>• Realtime Module</li></ul>	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

No special configuration was required on IP Office.

## 6. Configure Xima Chronicall Realtime Module

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

- Launch Chronicall
- Administer realtime stats
- Administer leaderboard

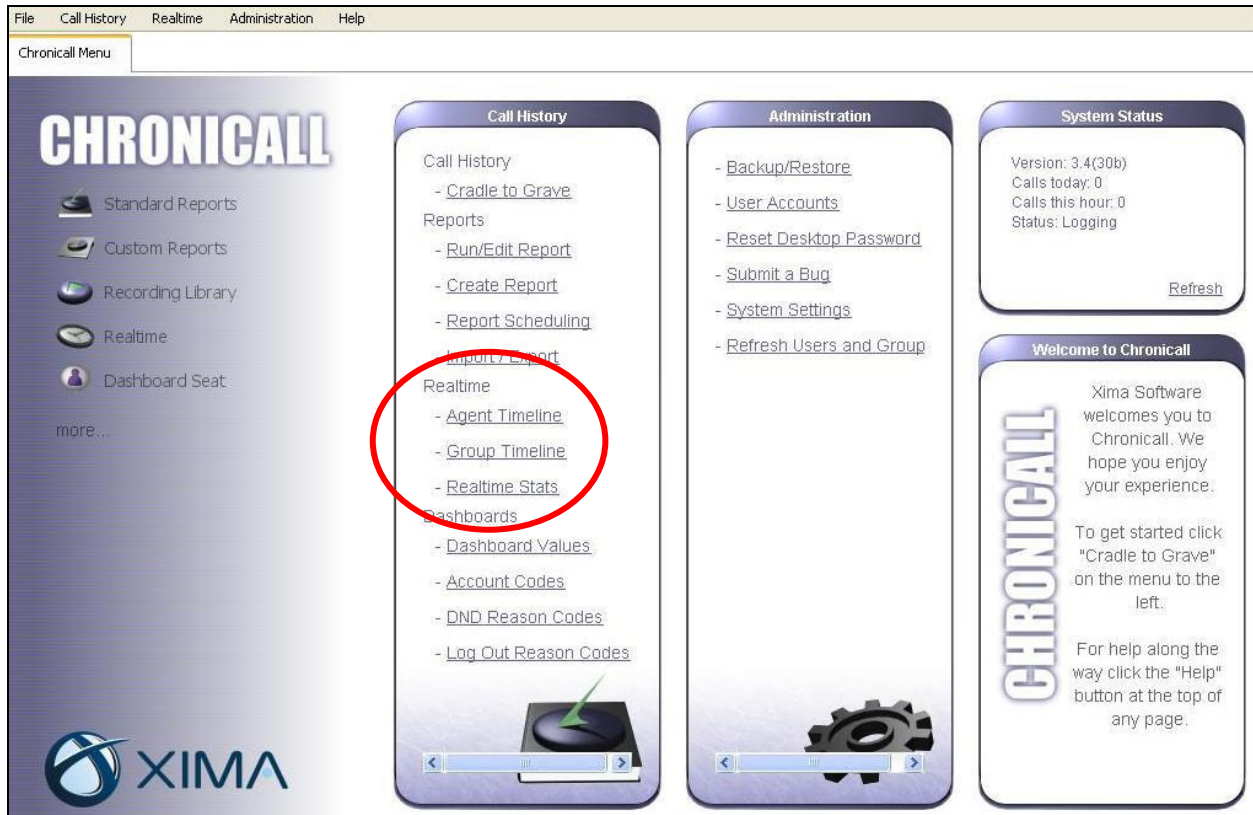
### 6.1. Launch Chronicall

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 Realtime Stats

The **Chronicall Menu** tab is created, and displays the screen below. Select **Realtime** → **Realtime Stats**.



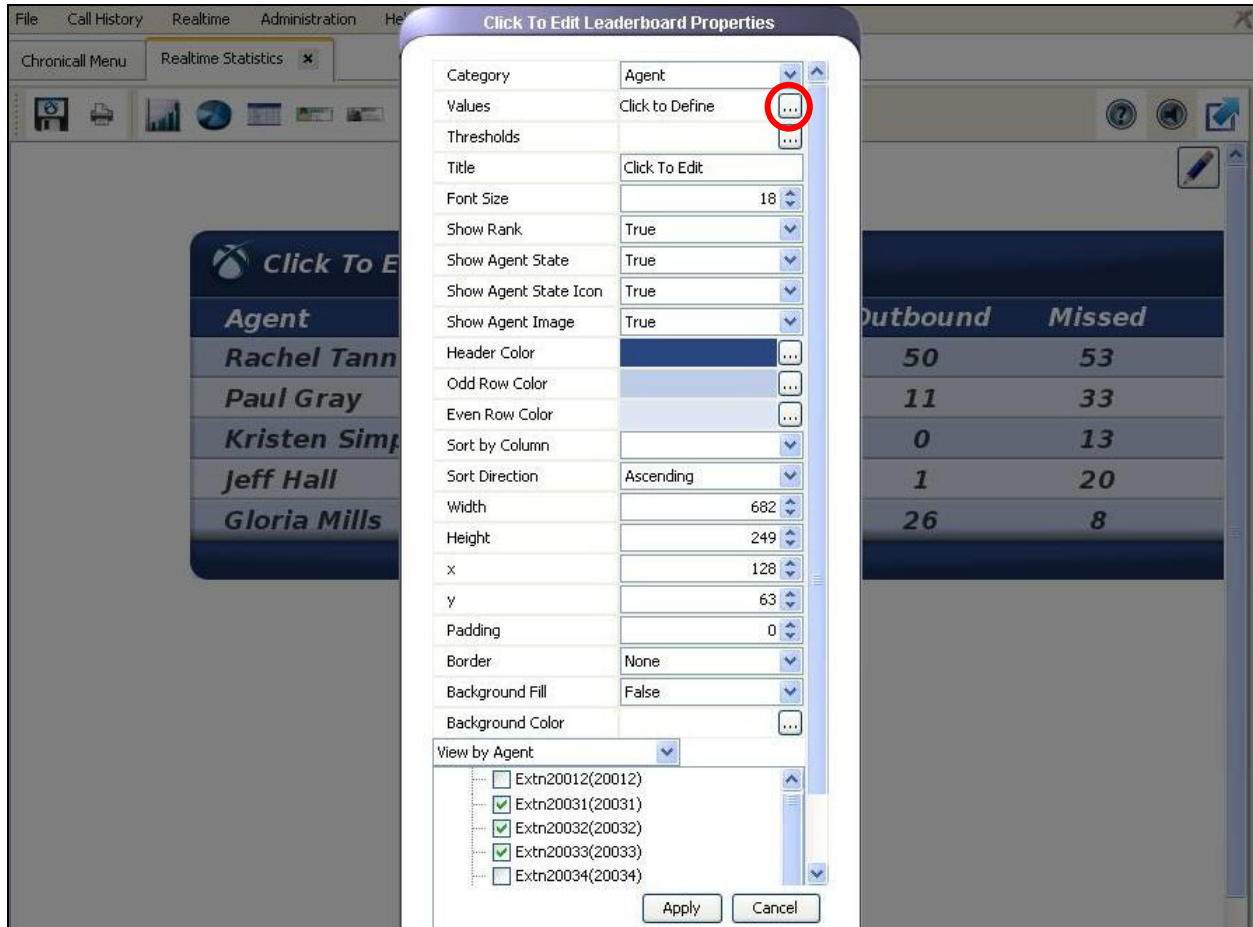
The **Realtime Statistics** tab is created, and displays the screen below. Click the **Leaderboard Widget** icon, and drag-and-drop the mouse in the blank pane below to define the size of a leaderboard.



### 6.3. Administer Leaderboard

The screen is updated with a sample leaderboard, along with the **Click To Edit Leaderboard Properties** screen in the foreground. Check the desired users in the bottom pane, as shown below.

Click the icon associated with the **Values** field, followed by **Add** in the subsequent **Leaderboard Values** screen (not shown).

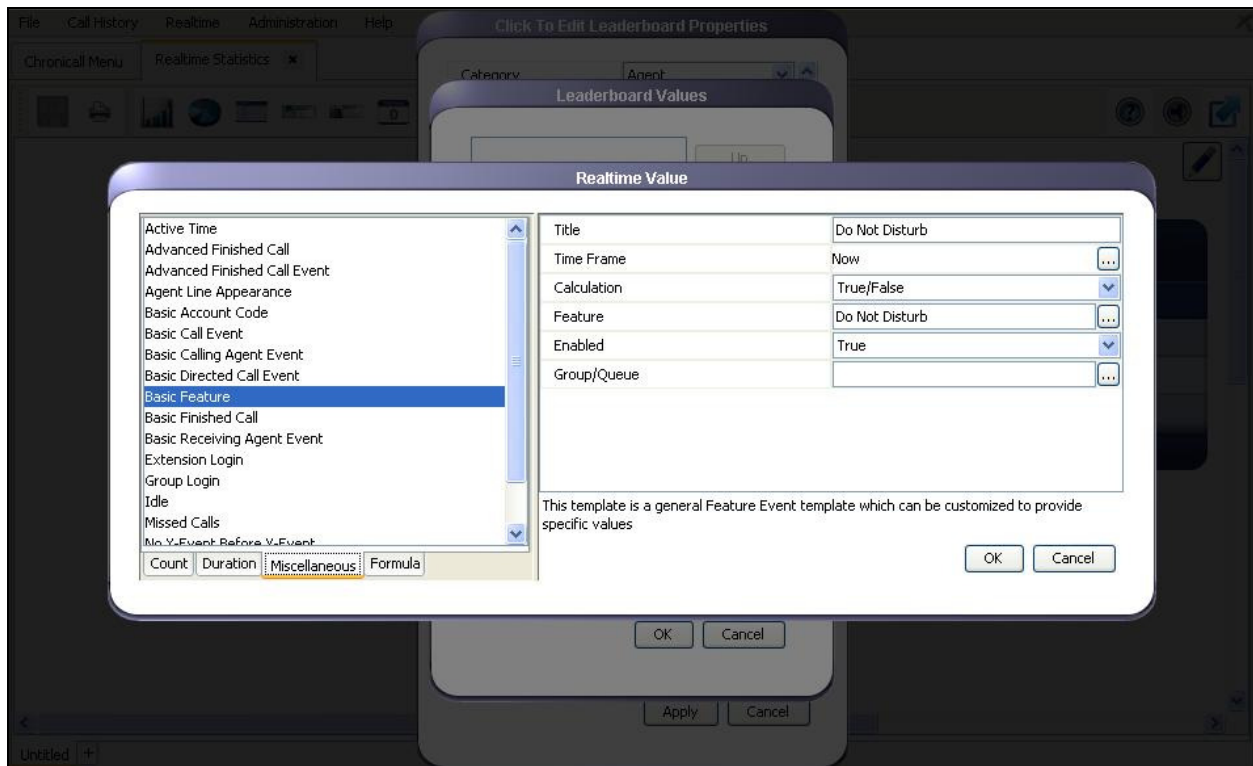




The **Realtime Value** screen is displayed. Select the **Miscellaneous** tab in the bottom left pane, followed by **Basic Feature** in the top left pane.

In the right pane, enter a desired **Title**, select the desired **Calculation**. Click on the icon next to the **Feature** field, and check the desired feature in the pop-up screen (not shown), in this case “Do Not Disturb”.

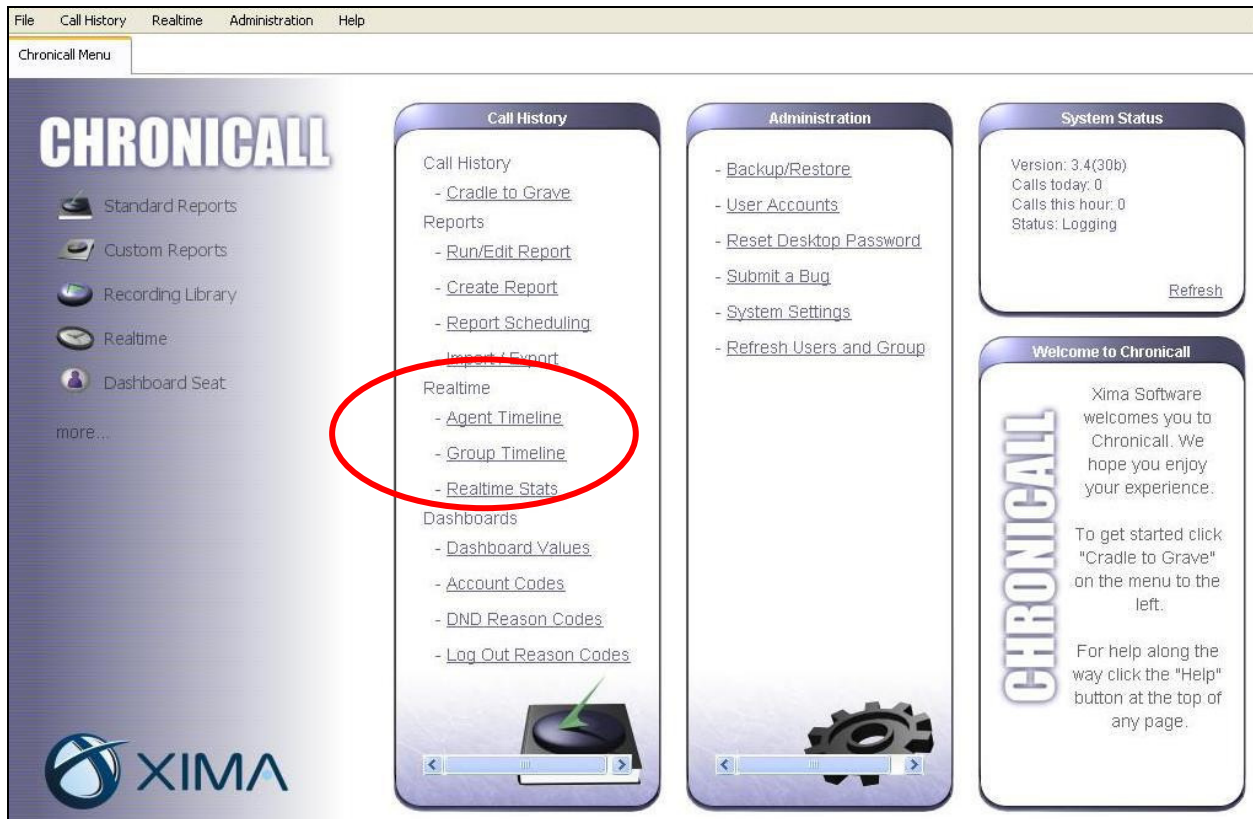
Repeat this section to add all desired features.



## 7. Verification Steps

This section provides the test that can be performed to verify proper integration between IP Office and Chronicall Realtime Module.

Follow the procedures in **Section 6.1** to access the Chronicall web interface. In the **Chronicall Menu** tab, select **Realtime → Realtime Stats**.

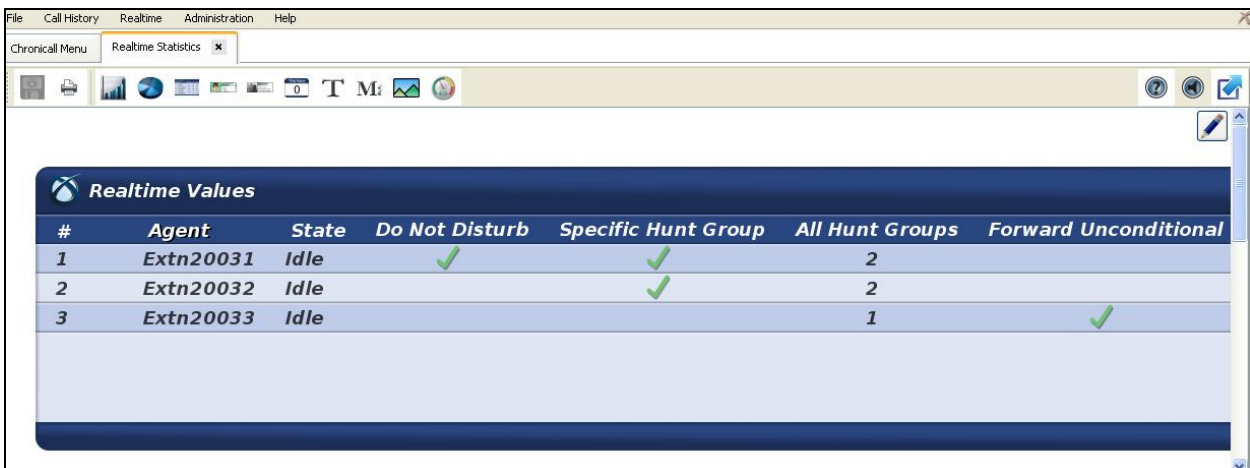


The **Realtime Statistics** tab is created, and displays the screen below. Verify that the leaderboard shows proper status for all agents/users.



#	Agent	State	Do Not Disturb	Specific Hunt Group	All Hunt Groups	Forward Unconditional
1	Extn20031	Idle		✓	2	
2	Extn20032	Idle		✓	2	
3	Extn20033	Idle			1	✓

Change the status of a user, such as activation of do-not-disturb. Verify that the corresponding agent/user entry in the leaderboard is updated showing proper **Do Not Disturb** status.



#	Agent	State	Do Not Disturb	Specific Hunt Group	All Hunt Groups	Forward Unconditional
1	Extn20031	Idle	✓	✓	2	
2	Extn20032	Idle		✓	2	
3	Extn20033	Idle			1	✓

## 8. Conclusion

These Application Notes describe the configuration steps required for Xima Chronicall Realtime 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](http://www.ximasoftware.com/chronicall/documentation/Chronicall_Configuration_Manual.pdf).

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