Installation Guide

Chronicall on Avaya Communication Manager (CM)

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Installation Guide
Chronicall on Avaya Communication Manager

Installing Chronicall for Avaya Communication Manager requires a few simple configuration changes.

1) First, create login information for Chronicall to use on your CM server
2) Next, configure CDR services (if applicable) to enable Chronicall to connect and log call events
3) Next, configure your AES server (if applicable) to enable Chronicall to connect and log call events
4) Finally, install Chronicall
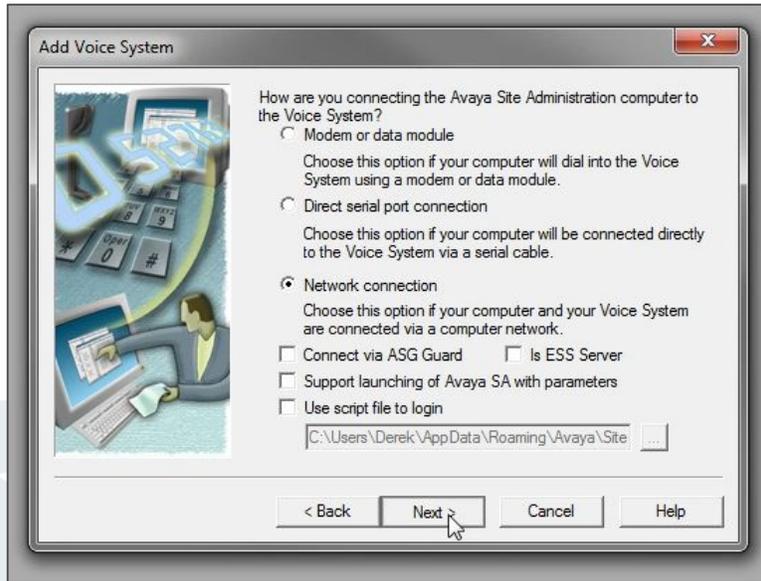
Section 1. CM Configuration

Section 1.1 Access the CM server and open the Avaya site administration (ASA) application.
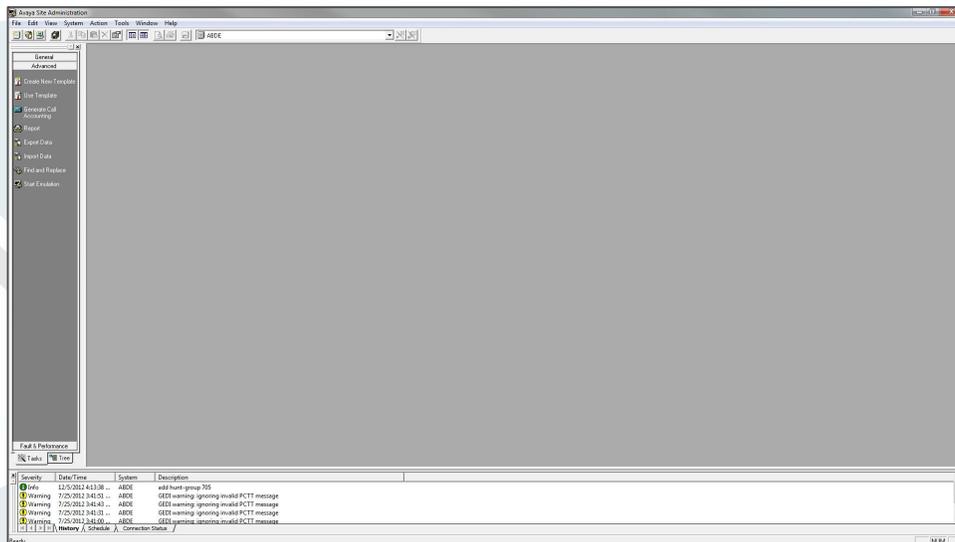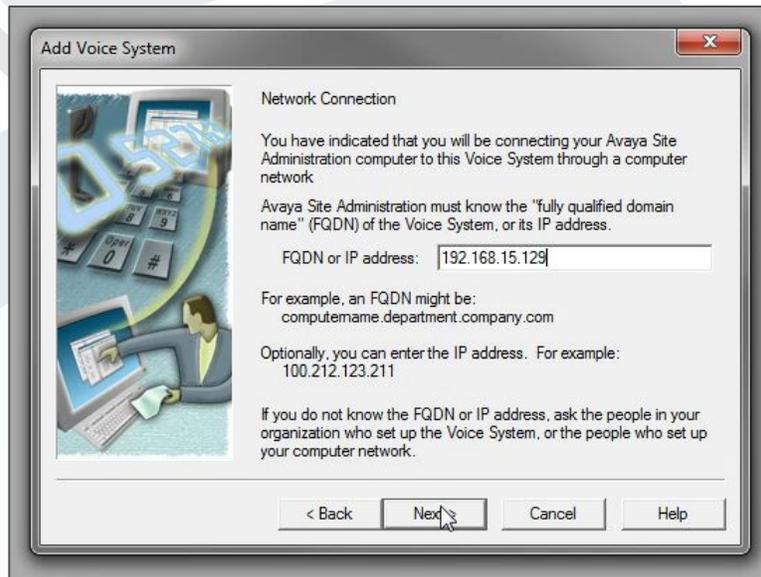

Add a new Voice System by opening File > New > Voice System. Name this new system and press Next.
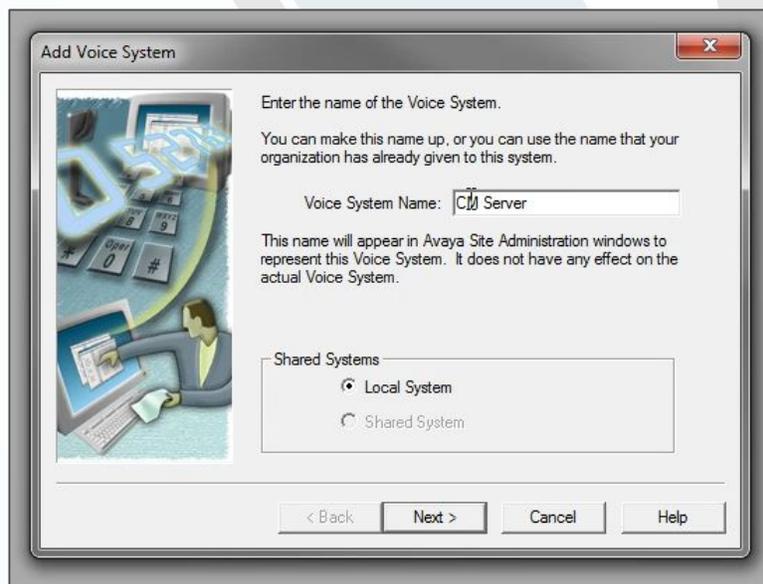
Make sure that Network Connection is selected, then press Next.

Enter the IP address of the CM server.

Accept the default options on the next few screens until you are asked for a login name and password. Enter the information of a privileged administrator account. Continue moving through the next few screens until the process is complete.
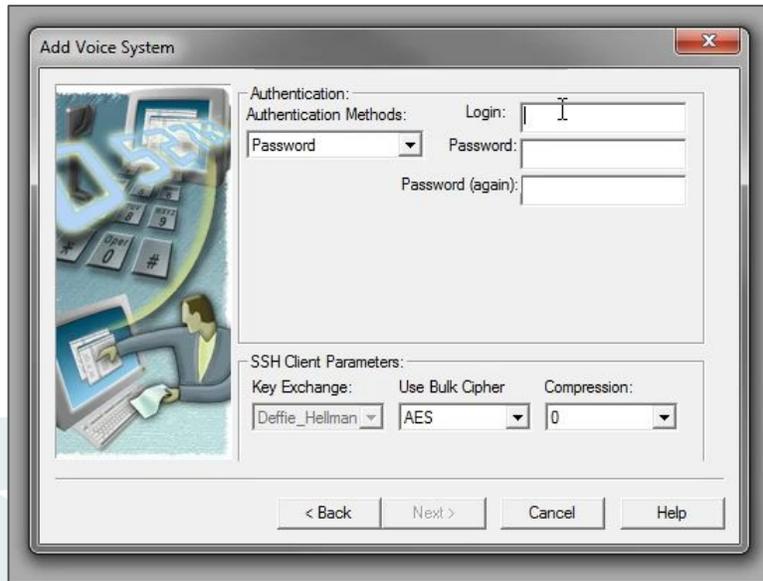
Once this is finished, click Start Emulation in the advanced section of the sidebar to the left.
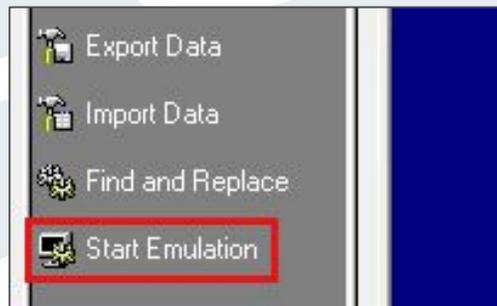
This will bring up a blue command line screen. First, you will need to create a user profile. This profile will outline Chronicall's access privileges. Later, when you create a user, you will apply this user profile to it.
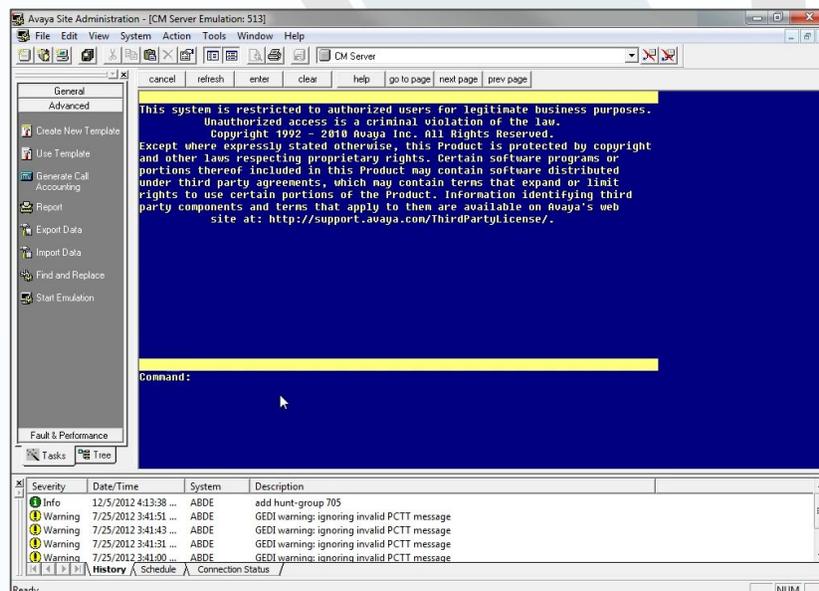
Section 1.2 Adding a User Profile

Step 1 Enter `list user-profiles` into the command line. This will show you a list of user profiles that currently exist on the system. User profiles 0 through 19 are reserved by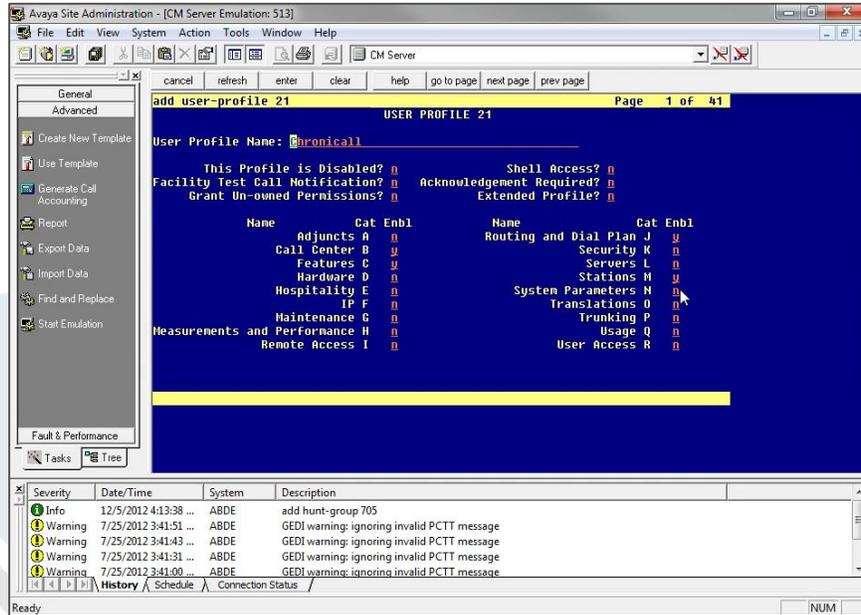 the system, so any user profile number you choose will need to be 20 or higher. Once you've chosen a number, enter `add user-profile` followed by the profile number. For example, `add user-profile 20`. This will bring up a new user profile screen.

Step 2 In the User Profile Name field, enter Chronicall. Next, you need to enable specific permissions for this user profile. Arrow down to the Enbl column and change n to y for Call Center (B), Features (C), Routing and Dial Plan (J), and Stations (M).
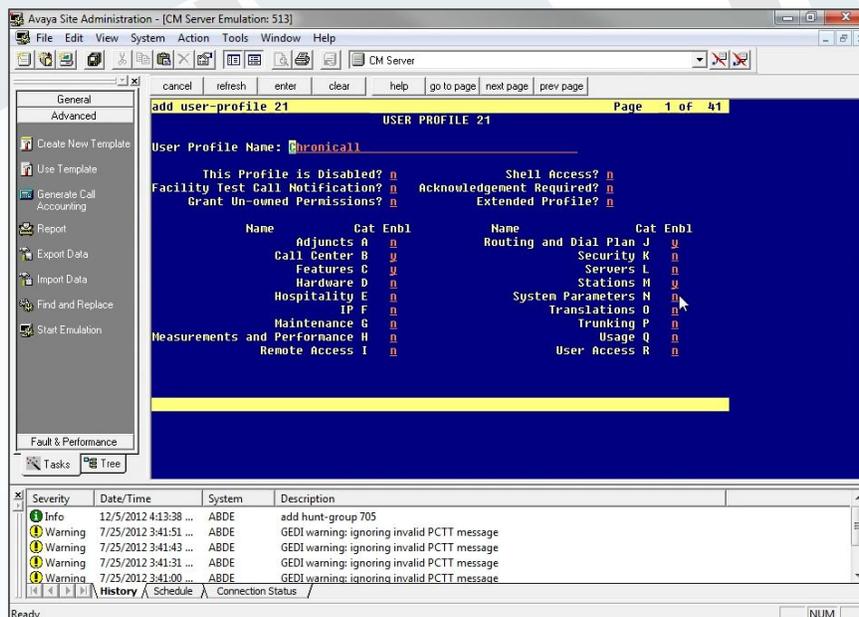
Step 3 Move to the next page using Page Down. This section shows specific read and write functions in each of the categories listed before. Change the permissions for the categories listed above to --, meaning no access.
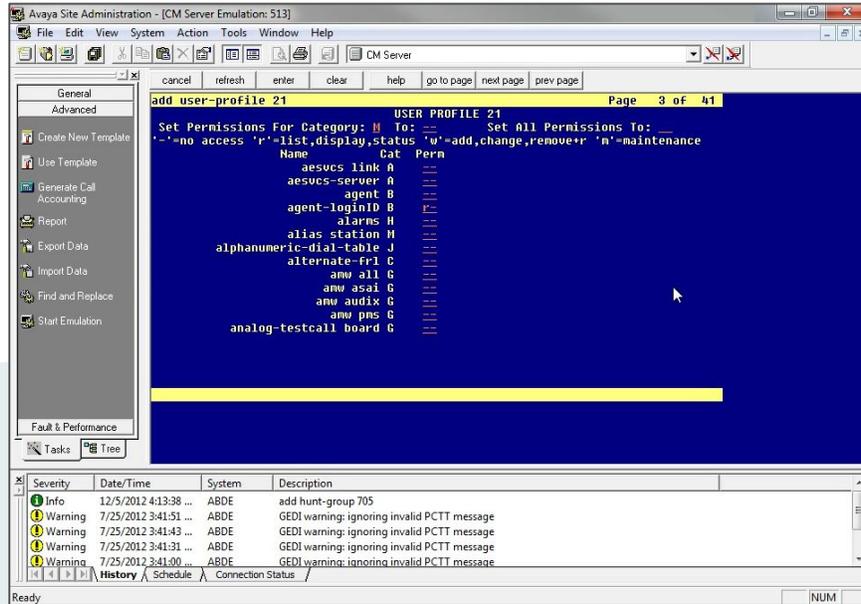
Step 4 Next, give read (r-) access to the following functions:

page 3	agent-loginID
Page 14	hunt-group
Page 31	station
Page 37	uniform-dialplan
Page 39	vdn
Page 39	vector

Once this is finished, click the Enter button at the top of the screen.

Step 5 Open your web browser and navigate to https://[CM server IP address]. This will open the Avaya System Management Interface, or SMI.
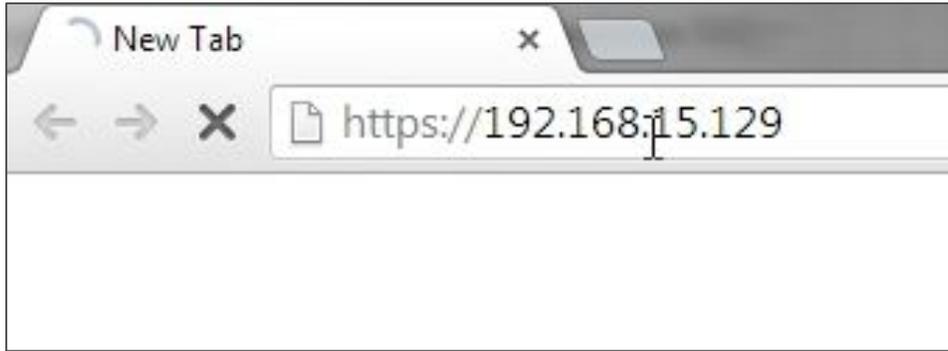
Step 6 Log in, open the Administration drop-down menu at the top of the page, and click Server (Maintenance). Under the Security tab on the left, click Administrator Accounts.
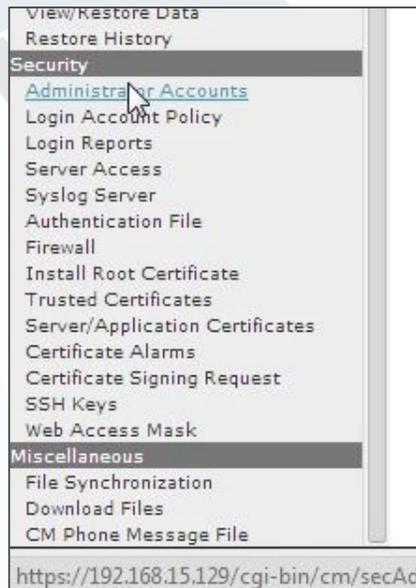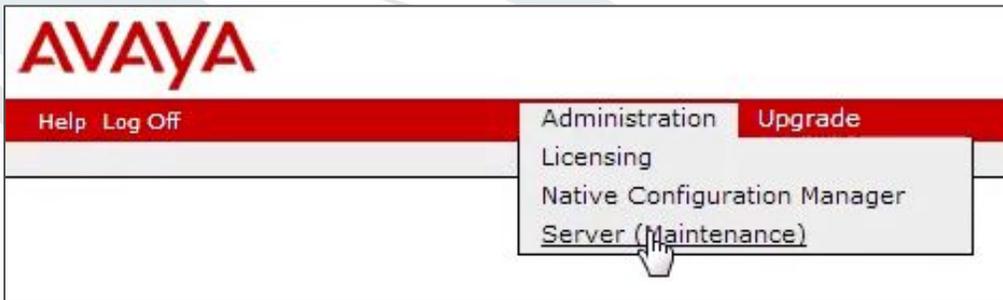
Step 7 Choose Add Group and Submit.
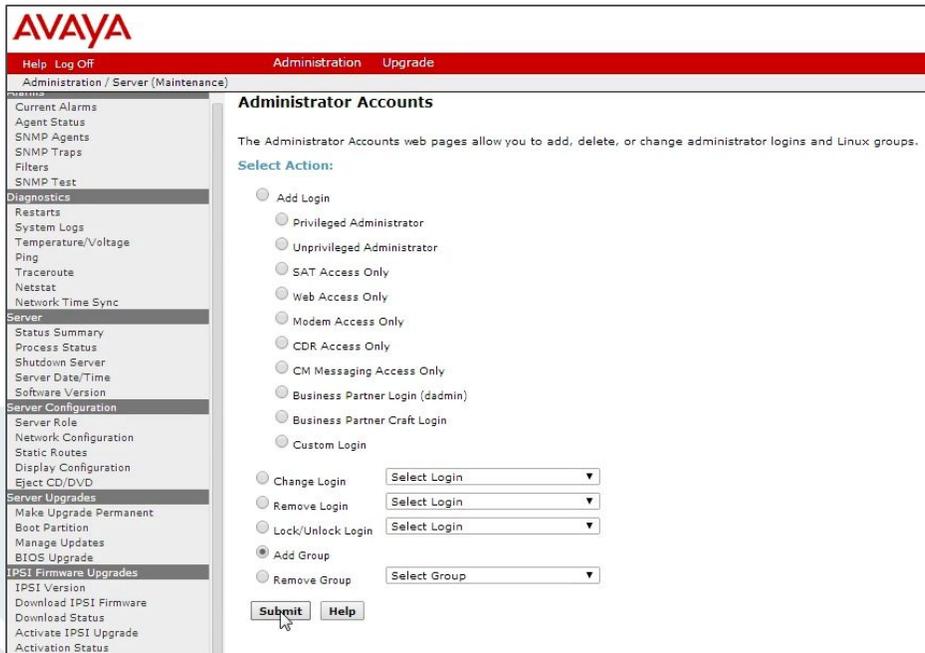
Step 8 In the Add a new access-profile group list, choose the profile number that matches the user profile you created earlier, then click Submit.

Step 9 When you return to the Administrator Accounts page, select SAT Access Only in the Add Login list.

Step 10 On the next page, enter a login name, select users from the Primary group list, and choose the profile you created earlier from the Additional groups list. Create a password, then press Submit.

Your user is now created and has been assigned all of the necessary permissions to run Chronicall.

Section 1.3 Configure CM to send CDR data
        Special note - if you are not using CDR data you can skip section 1.3
Step 1: Add Chronicall CDR server to Node Names IP
Add the IP Address of the Chronicall server into the **IP NODE NAMES**. Type **change node-names ip** to access the node names and add the server **Name** and **IP Address** as shown below (example uses xxx.xxx.xxx.xxx - you will need to use an actual IP Address):

```
change node-names ip                                          Page    1 of    2
                              IP NODE NAMES
     Name               IP Address
CLAN-AES                10.0.1.20
Chronicall              xxx.xxx.xxx.xxx
default                 0.0.0.0
procr                   10.0.1.20
procr6                  ::
```

Step 2. Setup CDR Service
Type **change ip-services** to setup a CDR link to the Chronicall Server using the following information. Note the following information may be needed when setting up the Chronicall CDR service on the Chronicall server.

        •**Local Node** is **procr**
        •**Remote Node**: This is the Chronicall node you added in step 1.
        •**Service Type** is **CDR1**
        •**Remote Port:** This is the only information you will need when installing Chronicall. number in this example is **9089** but can be any free port number (please make note of the port number that you use)

See example below:

```
change ip-services                                            Page    1 of    4

                              IP SERVICES
  Service       Enabled       Local         Local         Remote        Remote
   Type                       Node          Port          Node          Port
AESVCS           y            procr         8765
CDR1                          procr         0             Chronicall    9089
```

Step 3. Configure CDR Parameters
Type **change system-parameters cdr**. Ensure all the fields are as shown below on **Page 1 of system-parameters cdr**.
1. Note the **Primary Output Endpoint** is that of the service type added on **Step 2**.
2. Please change the **CDR Date Format** to: month/day Chronicall expects this date format to match this, and then you can change how it is presented to you on the reports within Chronicall.
3. Please ensure that all **Data Item Length** entries are the same as outlined below on **Page 2** of **system-parameters cdr**. Items 35 – seq-num, and item 37 ucid are recommended but optional. In order to enable these features they need to be enabled by Avaya. Please open a ticket with Avaya and ask them to enable special application SA8702.

See example below:

```
change system-parameters cdr                              Page   1 of   2
                          CDR SYSTEM PARAMETERS

   Node Number (Local PBX ID):                  CDR Date Format: month/day
        Primary Output Format: customized    Primary Output Endpoint: CDR1
      Secondary Output Format: _____
              Use ISDN Layouts? n                 Enable CDR Storage on Disk? n
           Use Enhanced Formats? n     Condition Code 'T' For Redirected Calls? y
         Use Legacy CDR Formats? n              Remove # From Called Number? n
   Modified Circuit ID Display? n                        Intra-switch CDR? y
            Record Outgoing Calls Only? n      Outg Trk Call Splitting? y
    Suppress CDR for Ineffective Call Attempts? n       Outg Attd Call Record? y
        Disconnect Information in Place of FRL? n      Interworking Feat-flag? n
  Force Entry of Acct Code for Calls Marked on Toll Analysis Form? n
                                      Calls to Hunt Group - Record: member-ext
  Record Called Vector Directory Number Instead of Group or Member? n
  Record Agent ID on Incoming? n         Record Agent ID on Outgoing? y
          Inc Trk Call Splitting? y
      Record Non-Call-Assoc TSC? n          Call Record Handling Option: warning
          Record Call-Assoc TSC? n    Digits to Record for Outgoing Calls: dialed
      Privacy - Digits to Hide: 0              CDR Account Code Length: 15
   Remove '+' from SIP Numbers? y
```

```
change system-parameters cdr                              Page   2 of   2
                          CDR SYSTEM PARAMETERS

     Data Item - Length         Data Item - Length         Data Item - Length
 1: date           - 6     17: in-trk-code     - 4     33: node-num        - 2
 2: space          - 1     18: space           - 1     34: space           - 1
 3: time           - 4     19: in-crt-id       - 3     35: seq-num         - 10
 4: space          - 1     20: space           - 1     36: space           - 1
 5: sec-dur        - 5     21: out-crt-id      - 3     37: ucid            - 20
 6: space          - 1     22: space           - 1     38: return          - 1
 7: cond-code      - 1     23: ppm            - 5     39: line-feed        - 1
 8: space          - 1     24: space           - 1     40:                 - __
 9: code-used      - 4     25: isdn-cc        - 11     41:                 - __
10: space          - 1     26: space           - 1     42:                 - __
11: code-dial      - 4     27: attd-console    - 2     43:                 - __
12: space          - 1     28: space           - 1     44:                 - __
13: dialed-num    - 18     29: vdn             - 5     45:                 - __
14: space          - 1     30: space           - 1     46:                 - __
15: clg-num/in-tac - 10    31: acct-code      - 15     47:                 - __
16: space          - 1     32: space           - 1     48:                 - __

                         Record length = 152
```

Step 4. Enable Missed and Internal Calls

To allow missed calls to appear on the Chronicall CDR reports, set **CDR Reports** to **r** in the trunk group used for outgoing/incoming calls.

1. Type **change trunk-group x** where **x** is the number of the incoming/outgoing trunk group.
     ** *Please ensure that CDR Reports is set to r*

See example below:

```
change trunk-group 1                                         Page    1 of   21
                                 TRUNK GROUP

Group Number: 1                         Group Type: isdn            CDR Reports: r
  Group Name: Main                              COR: 1       TN: 1         TAC: 8001
   Direction: two-way        Outgoing Display? n         Carrier Medium: PRI/BRI
 Dial Access? n              Busy Threshold: 255   Night Service: _____
Queue Length: 0
Service Type: tie                          Auth Code? n          TestCall ITC: rest
                      Far End Test Line No: █_____

TestCall BCC: 4
```

Step 5. To enable intra-switch calls to be reported, type **change intra-switch-cdr** and add the **Extension** numbers of the sets that are to be reported for internal calls.

See example below:

```
change intra-switch-cdr                                       Page    1 of    3
                              INTRA-SWITCH CDR

                              Assigned Members:    8    of 1000    administered
   Extension         Extension            Extension           Extension
   1000              _____           _____          _____
   4000              _____           _____          _____
   4012              _____           _____          _____
   4013              _____           _____          _____
   4014              _____           _____          _____
   4015              _____           _____          _____
   4016              _____           _____          _____
   4017              _____           _____          _____
   _____        _____           _____          _____
   _____        _____           _____          _____
   _____        _____           _____          _____
   _____        _____           _____          _____
   _____        _____           _____          _____
   _____        _____           _____          _____
   _____        _____           _____          _____

Use 'list intra-switch-cdr' to see all members, 'add intra-switch-cdr' to add
new members and 'change intra-switch-cdr <ext>' to change/remove other members
```

END

Section 1.4 Exporting CM Users and Groups for CDR Reporting

**_Special note_ - if you are not using CDR for reporting, or if you have an AES Server you can skip section 1.4. The AES server can send Chronicall all the usernames and groups.

This section will show you how to export your stations, agents, groups, VDNs and vectors.
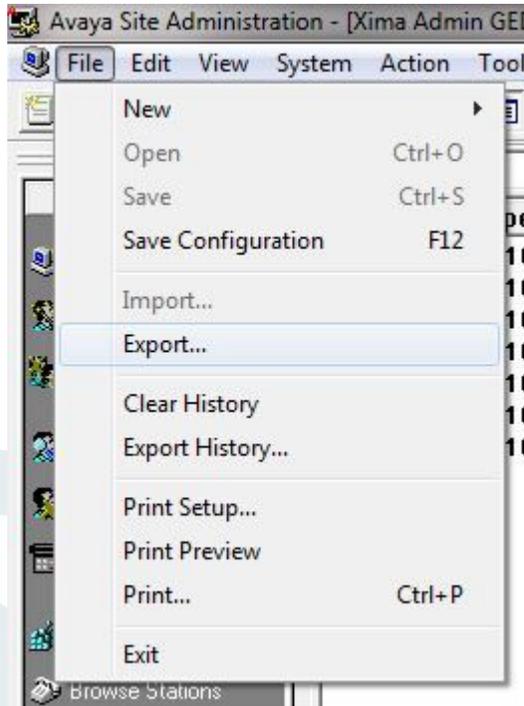
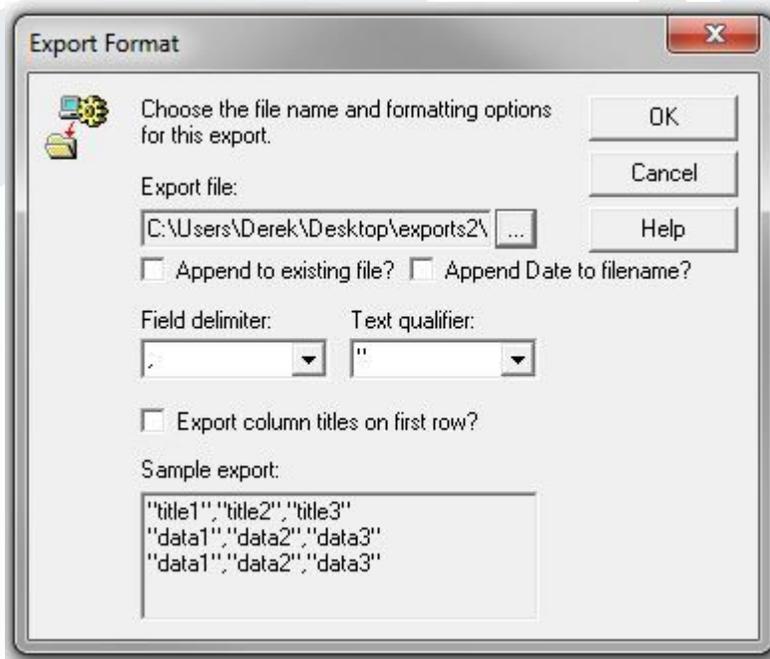**Step 1: Please open a GEDI connection to your Communication Manager**
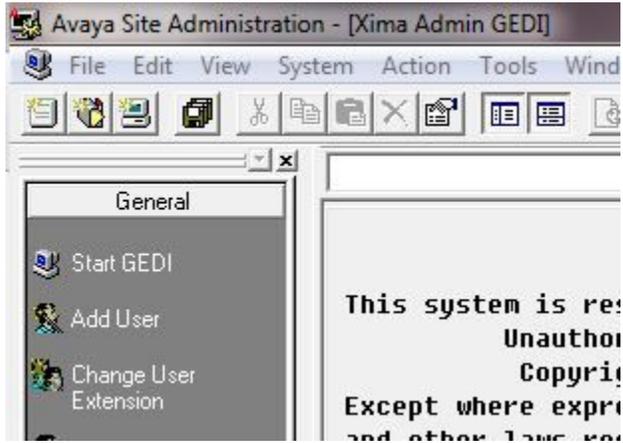
Step 2: Run a list command to query the data you want.

Step 3: Go to File → Export

Step 4: Choose a location for the export file and hit OK – You'll want to put all of the exports in a directory together and name them smartly to make it easy to find them when Chronicall asks for them.

Step 5: You'll need to repeat these steps for each of the following commands resulting in the 5 files:
list vdn
list vector
list hunt-group
list station
list agent-loginID

Step 6: During the Chronicall installation you will be asked to import these files. Again you don't need these files if you are using an AES Server.

End

Section 1.5: Configure TSAPI CTI LINK
      **Special Note – If you are not using an AES Server you may skip this section

Step 1: Add CTI Link
Type add cti-link x command, where x is a number between 1 and 64. Enter a valid extension number under the provisioned dial plan. Set the Typ Field to ADJ-IP and assign a descriptive Name to the CTI LINK. Defaul values may be used in the remaining fields.

Example Below:

```
add cti-link 2                                              Page   1 of   3
                              CTI LINK
 CTI Link: 2
Extension: 4098_____
     Type: ADJ-IP___
                                                           COR: 1__
     Name: Chronicall_____
```

Step 3. Enter Node Name
Type **change node-names ip** In the compliance-tested configuration, the CLAN IP address was utilized for registering H.323 endpoints (Avaya IP Telephones, Avaya IP Agents, and Avaya AES DMCC stations). The CLAN-AES IP address was used for connectivity to the Avaya AES server. Please note if you are configuring the AES to connect to an S8300 the IP Address needs to be the same IP as your processor.

See example below:

```
change node-names ip                                       Page   1 of   2
                            IP NODE NAMES
    Name              IP Address
CLAN-AES_____      10.0.1.20_____
default               0.0.0.0
procr                 10.0.1.20
procr6                ::
_____      _____
```

Step 3. Change IP Services
Type **change ip-services** On Page 1, configure the Service Type field to AESVCS and the Enabled field to y. The Local Node field should be pointed to the CLANAES board that was configured previously in the node-name ip form. During the compliance test, the default port was utilized for the Local Port field.

See example below:

```
change ip-services                                              Page    1 of    3

                              IP SERVICES
  Service        Enabled        Local           Local        Remote         Remote
   Type                         Node            Port         Node           Port
 AESVCS           y           procr            8765
```

Step 4. Change IP Services
Type **change ip-services** On Page 3, configure the Service Type field to AESVCS and the Enabled field to y. The Local Node field should be pointed to the CLANAES board that was configured previously in the node-name ip form. During the compliance test, the default port was utilized for the Local Port field.

See example below:

```
change ip-services                                              Page    3 of    3
                          AE Services Administration

   Server ID      AE Services           Password           Enabled        Status
                    Server
      1:          aesxima              *                      y           in use
      2:
      3:
      4:
```

Step 5. Log into the AES web Interface

See example below:

Please login here:
Username [   ]

Continue

Step 6. Add New Connection

Select Communication Manager Interface and add new connection. The next page will prompt you to enter a password. If your processor is already configured please proceed to next step.

See example below:

You will need to enter the switch password that you configured in step 4

Step 7. Add CLAN to AES

After returning to the Switch Connections page, select the radio button corresponding to the switch connection added previously, and click on Edit CLAN IPs. Enter the IP address of the CLAN used for Avaya AES connectivity from Section 3.6, and click on Add Name or IP.

See example below:

From here your Communication Manager should be able to communicate with your AES Server.

End

Section 1.6 Configure AES Server

You will also need to set up an AES user. You can do this by accessing the Management Console on the AES server.

Step 1 In a web browser, navigate to http://[AES server IP address] and log in.
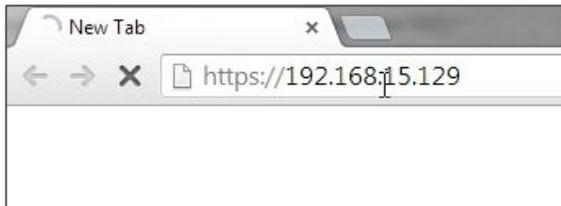
Log in and expand the AE Services section at the top of the sidebar to the left, followed by TSAPI, then TSAPI Links. Make sure the TSAPI link is selected and select Edit. Change the ASAI Link Version to 5 and apply the changes.
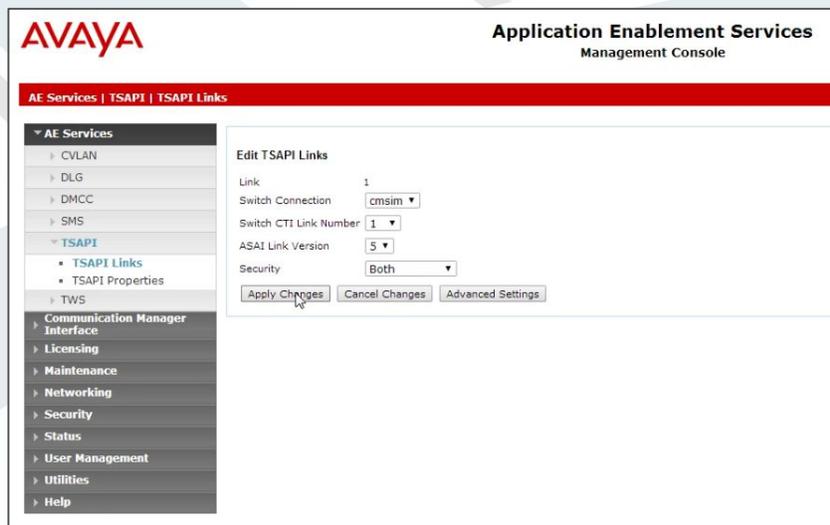
Step 2 Under User Management, open User Admin and select Add User. Give the new user a name and a password. Change the CT User option to Yes, then scroll down and press Apply.
*** Special Note – for the password alphanumeric is accepted and the following special characters . , @ $*

Step 3 You may also need to enable SDB for TSAPI Service, JTAPI and Telephony Web Services under Security, Security Database, Control.

Step 4 Expand the CTI Users section next to the Control Link and select List All Users. Select the Chronicall user and select Edit. Instead of giving this user specific access privileges, select the Unrestricted Access box. Chronicall itself will handle the appropriate access permissions.
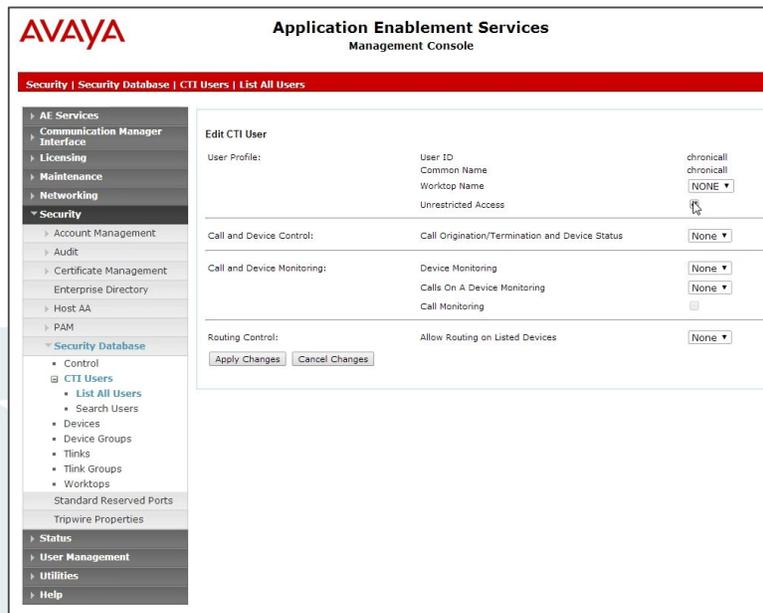
For future reference, you will want to copy the first Tlink under Security, Security Database, Tlinks, and paste it somewhere it will be easy to access later.
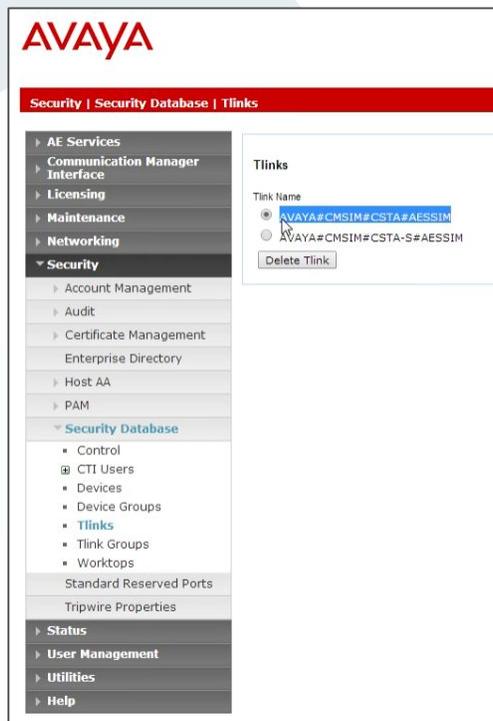
Under Maintenance, open the Service Controller. Here, you will need to select TSAPI Service and click Restart Service.

End

Install Chronicall

The final step is to download and install Chronicall. Visit our downloads page at **www.ximasoftware.com/chronicall/downloads** and enter your serial key to access file downloads. If you do not have a serial key, visit **www.ximasoftware.com/chronicall/trial** or talk to your Xima re-seller

Once you have downloaded the Chronicall installer, run it and follow the installation instructions as given.

*The most current version of Oracle's JVM is required for installation of Chronicall.
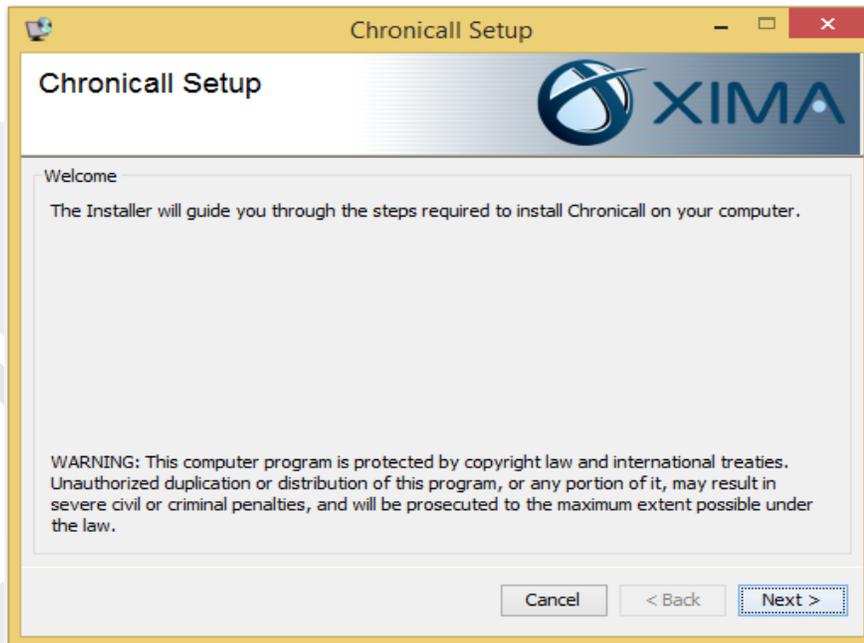
Read the License Agreement. You must accept the terms of this agreement before continuing with the installation.

Chronicall will be installed in the folder shown. To change where Chronicall is installed, enter the file path or click Browse.
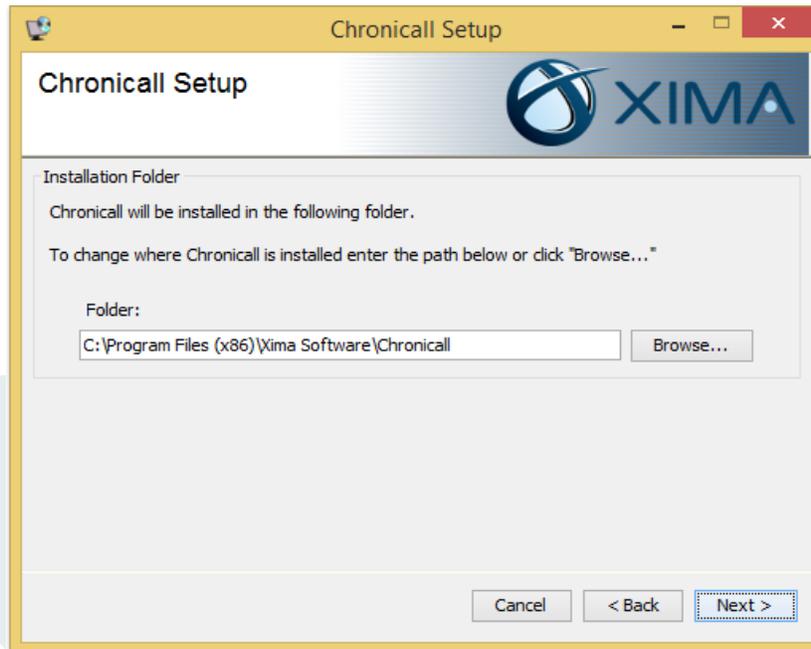
Chronicall will only log when it is able to verify its registration with Xima Software. Please enter your serial key below to register Chronicall.

Chronicall can optionally be installed in Demo Mode, which allows you to use the software without a connection to a phone system. Demo Mode is used by authorized Xima Partners who need to demonstrate Chronicall without a phone system.
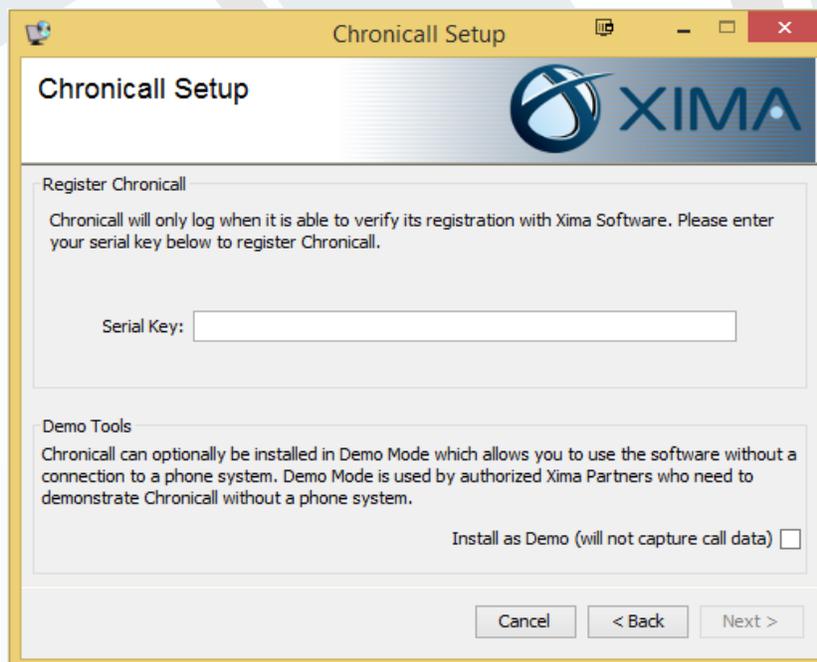
Chronicall stores its data in a PostgreSQL database. Indicate which port PostgreSQL should use to communication with other applications. A database user will be created with the credentials listed.
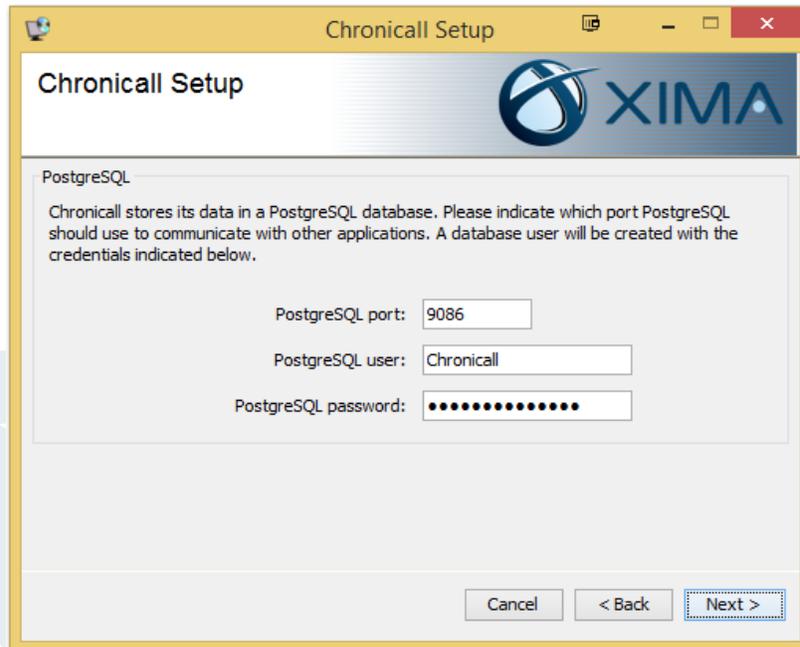
Chronicall is accessed through a web interface served by Apache Tomcat. Please make sure no other applications are using the Tomcat port as you will be unable to access Chronicall if this port is not free.
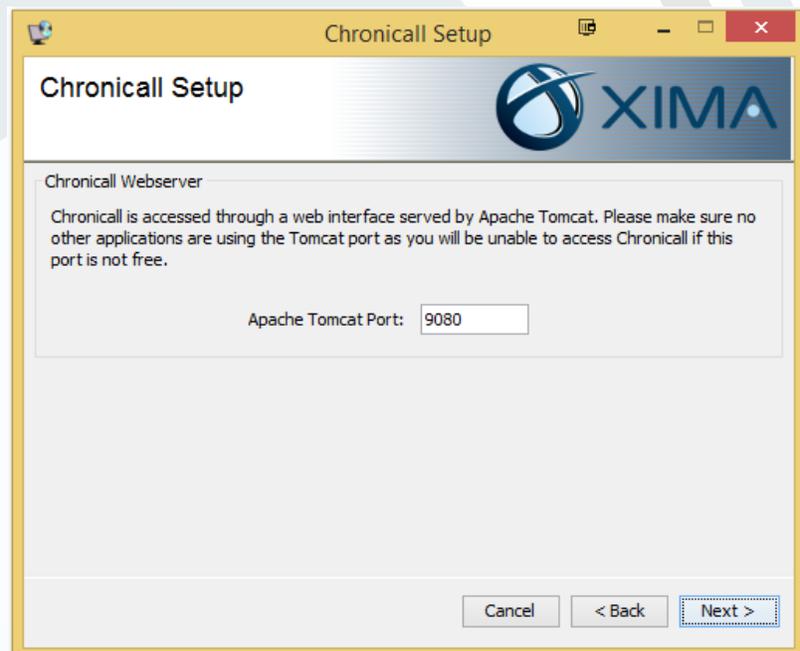
If your customer purchased Recording Library it will ask if you would like to Install the Recording Library Service. If this is the PC where the recordings will be stored please select "yes"
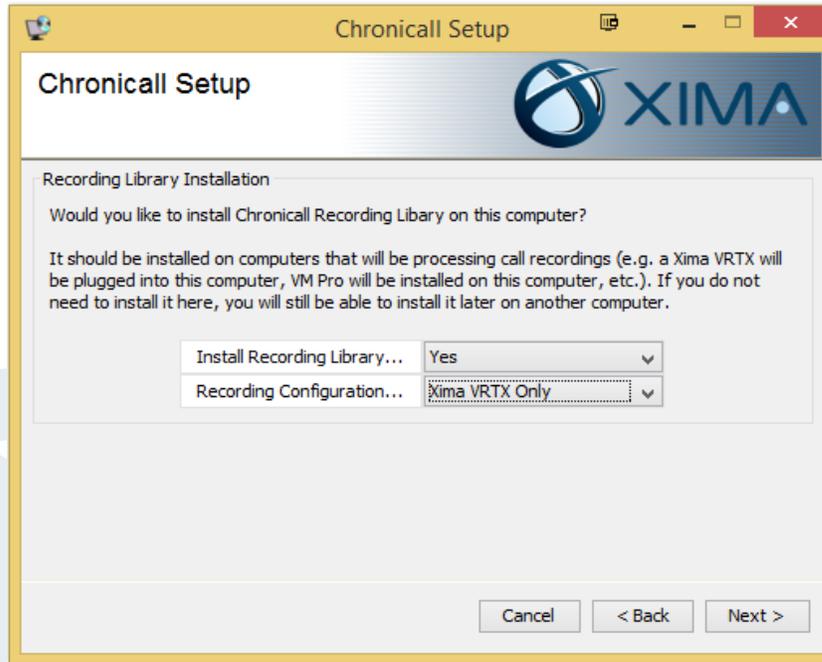
If this is not the PC where the recordings will be stored it will ask you to copy a URL that you can use to install the Recording Library software on the storage PC

Once you reach this screen, the installer has all of the information necessary to begin installation. To begin, click the Install button.
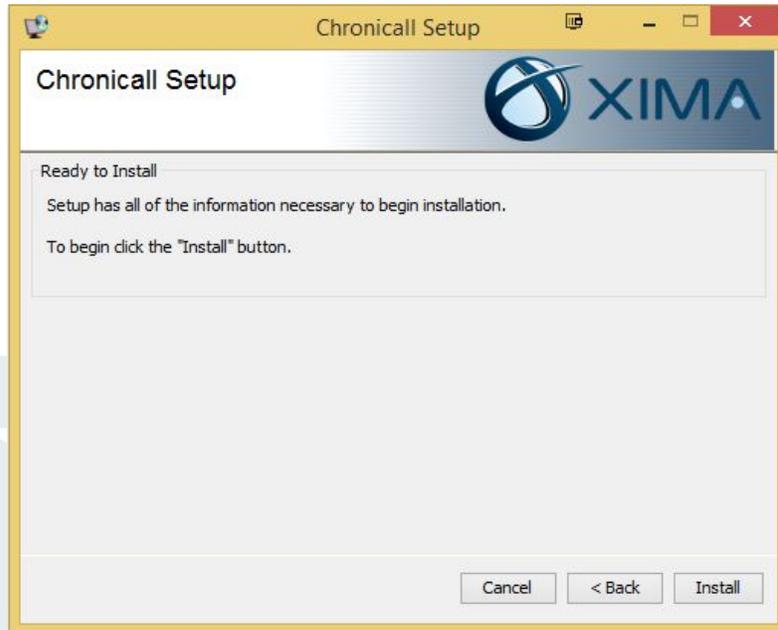
A progress bar will be displayed while Chronicall is installed.
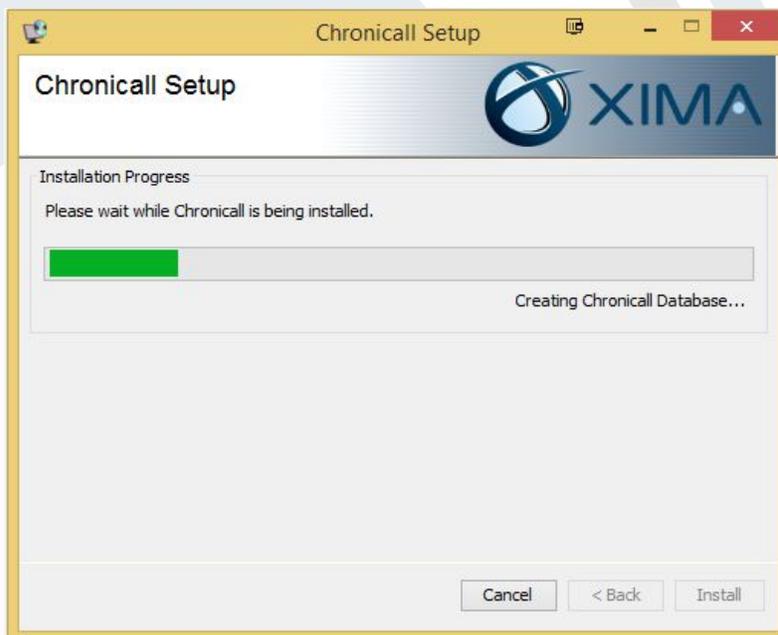
When the installation is finished, copy or bookmark the web address given to you. This is how you will access Chronicall.

Open Chronicall. The default user login is **Administrator**, and the password is **password**. These can be changed later.
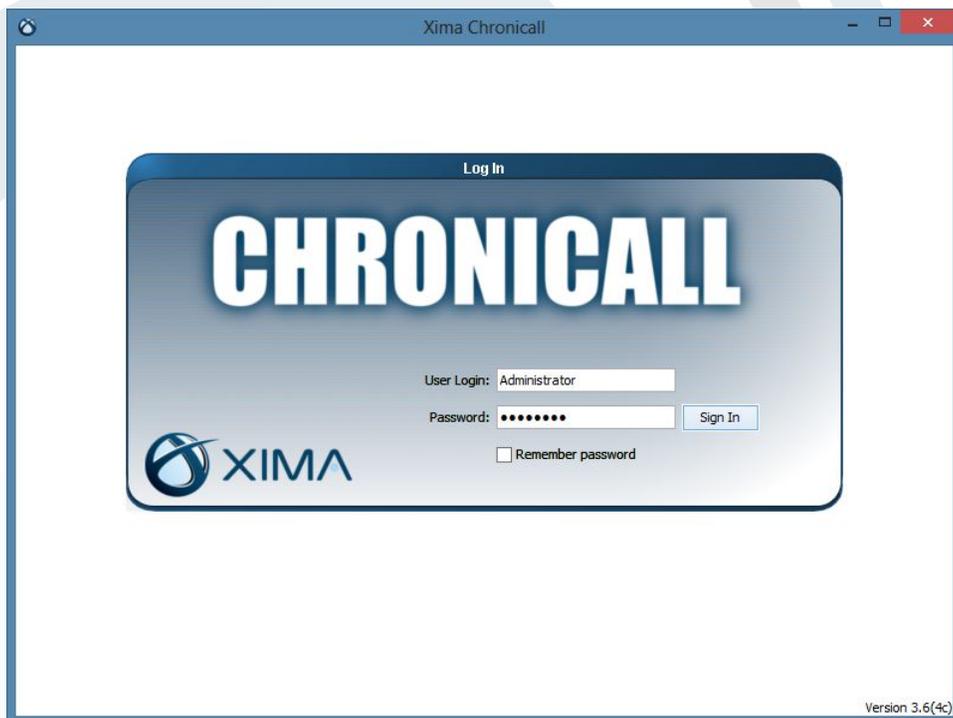
The first time you open the Chronicall web client, you will be presented with a short setup wizard that will help you connect your phone system and choose agents for Realtime and Agent Dashboards functions. You can skip this setup process by clicking Skip in the bottom right corner of the Chronicall window, but it will reappear the next time you use Chronicall.

Are you going to use TSAPI licenses to log additional details? If yes, select Use TSAPI. If no, select Do Not use TSAPI

Communication Manager (site 1) Configuration

TSAPI Logging

Do you intend to log using the Avaya TSAPI licenses? TSAPI Licenses allow you to capture more granular data on extensions and skills. If you choose not to use TSAPI, logging will be done using CDR alone and will be slightly less granular.

○ Use TSAPI

◉ Do not use TSAPI

< Back   Next >

If you Select yes, please follow the next step. If you selected no, please proceed to CDR only installation.
The first time you open the Chronicall web client, you will be presented with a short setup wizard that will help you connect your phone system and choose agents for Realtime and Agent Dashboards functions. You can skip this setup process by clicking Skip in the bottom right corner of the Chronicall window, but it will reappear the next time you use Chronicall.

Enter your AES and CM server information. Hitting next will verify that your CM user is created and has necessary access. After your CM user is verified it will download information including your users and groups which may take a couple of minutes.

Communication Manager (site 1) Configuration

Load Users and Groups

In order to automatically load your users and groups Chronicall must know where the AES and CM servers are. It also needs a valid CM user and password with access to request the information it needs.

AES IP Address: xxx.xxx.xxx.xxx

CM IP Address: xxx.xxx.xxx.xxx

CM User: Username

CM Password: ••••••••••••

< Back   Next >

Enter the requested TSAPI and AES information. Hitting next will verify that your AES user is created and has necessary access.

Communication Manager (site 1) Configuration

TSAPI Settings

In order to monitor your phone system Chronicall will need the following TSAPI service information as well as AES user credentials with access to monitor your phones.

TSAPI Service Port: 450

Tlink:

AES User:

AES Password:

< Back   Next >

Enter which stations, and agents you would like to log data for within Chronicall.

Communication Manager (site 1) Configuration

Chronicall Seat Assignment

Please select which stations and agents you would like to log data for. You must assign a seat to a station if you want to log TSAPI data for it or for any agent that logs into it.

Search: (i.e. "200-299, 400-499" or "Agent Name(204)")

☑ Amy Decker(4012)
☑ David Roth(4014)
☑ Ed Bob(4017)
☑ Jack Russel(4015)
☑ Mike Johnson(4013)
☑ Richard Jacobs(4016)
☑ Test(1000)
☑ Xima Skills Agent(64014)

Select All   Deselect All   8 / 100 selected

< Back   Next >

Set a number of max TSAPI licenses and check the boxes for the stations and skills you would like to monitor. Please note, that if you don't assign a TSAPI license to a station or agent, they will default to CDR logging. Logging both TSAPI and CDR is possible.
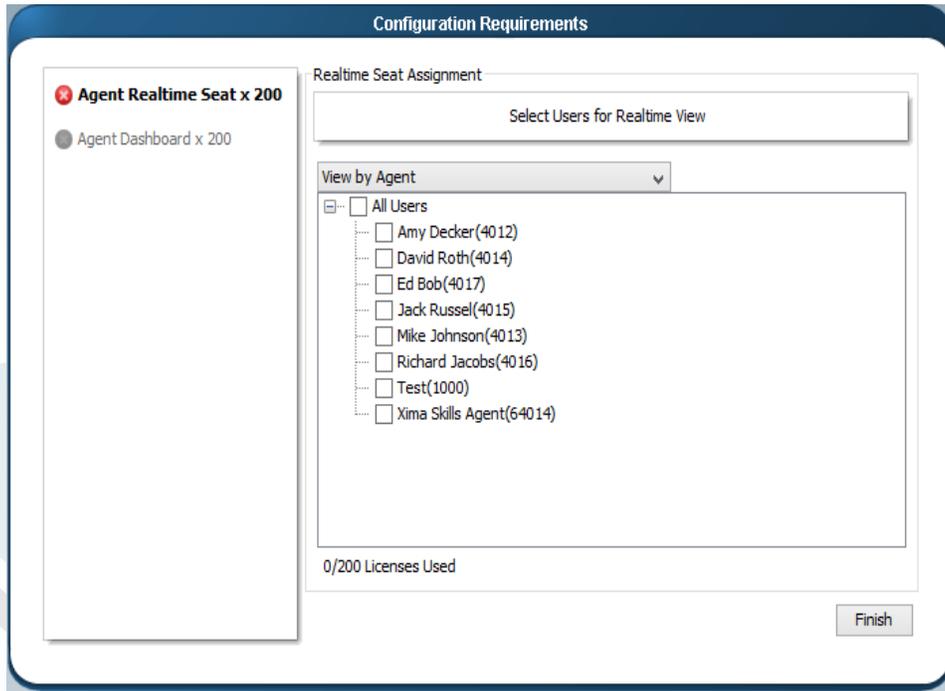

Select the hunt group you use for voicemail.

On this screen, you can enter information about your AUX Work states and reason codes. Select Add to add a new reason code.
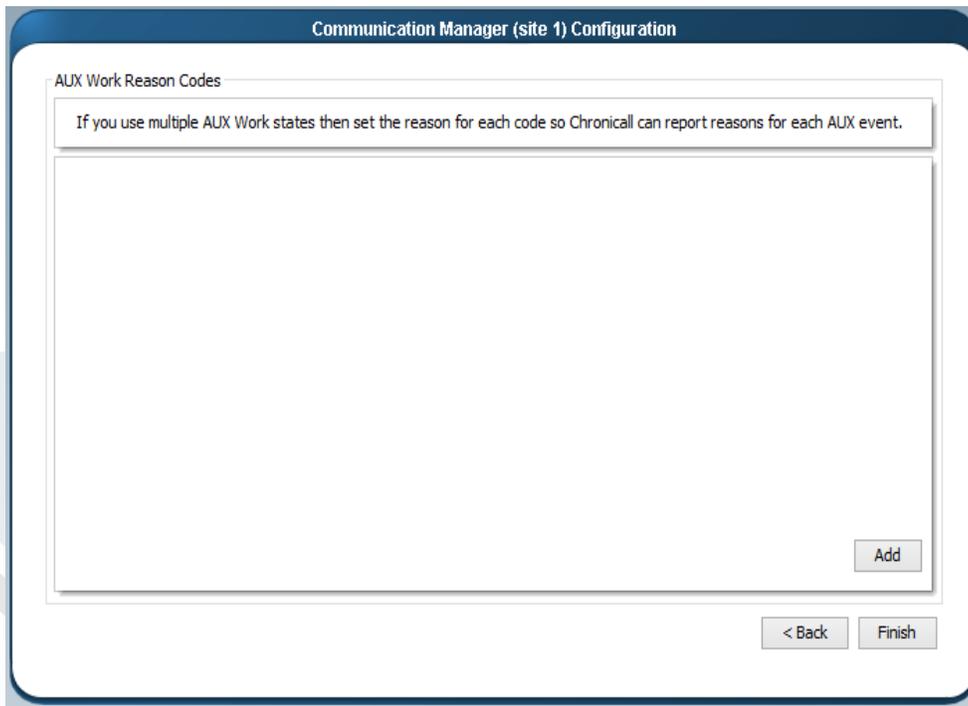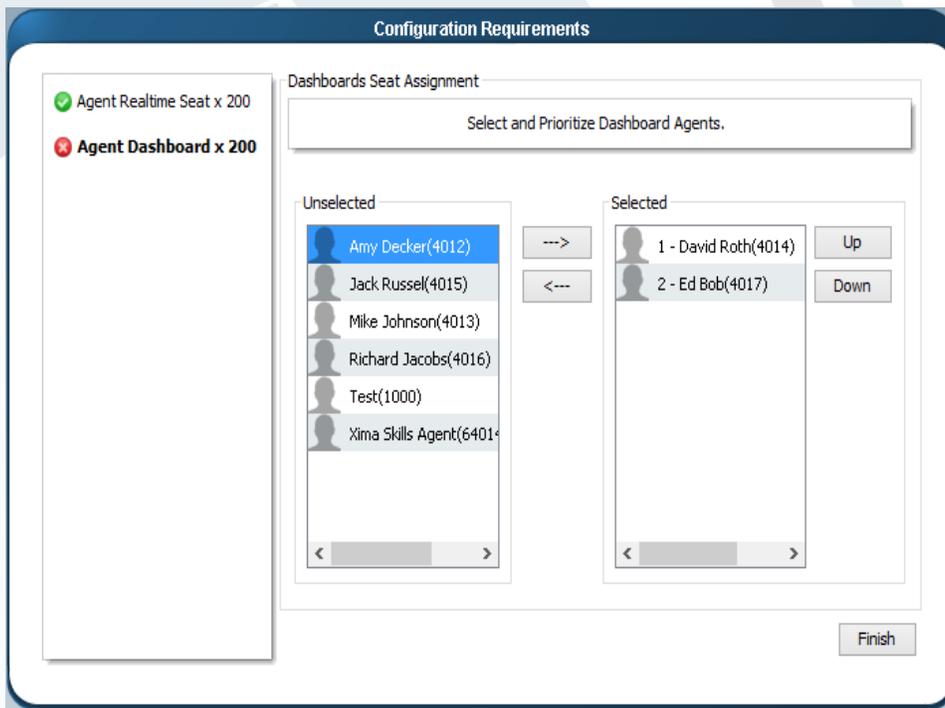

Choose a code number and name for each reason code, then press OK.
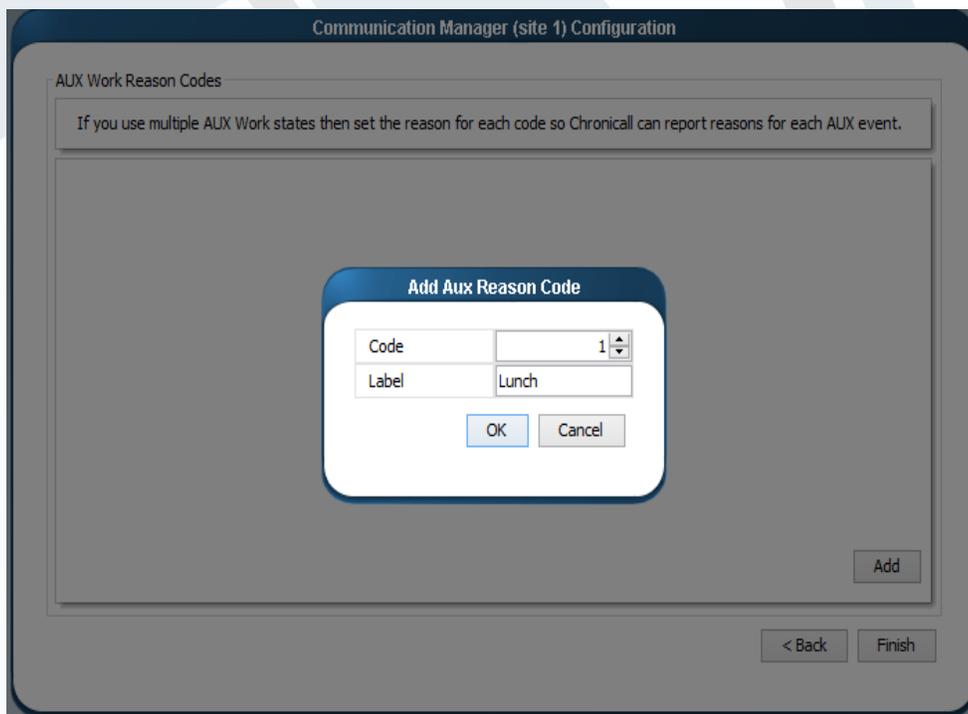
On this screen, choose the users you would like to monitor with Realtime.

On this screen, choose the users you would like to monitor with Dashboards.

CDR Installation instructions
If you are logging data with an AES server please select Do no use TSAPI.
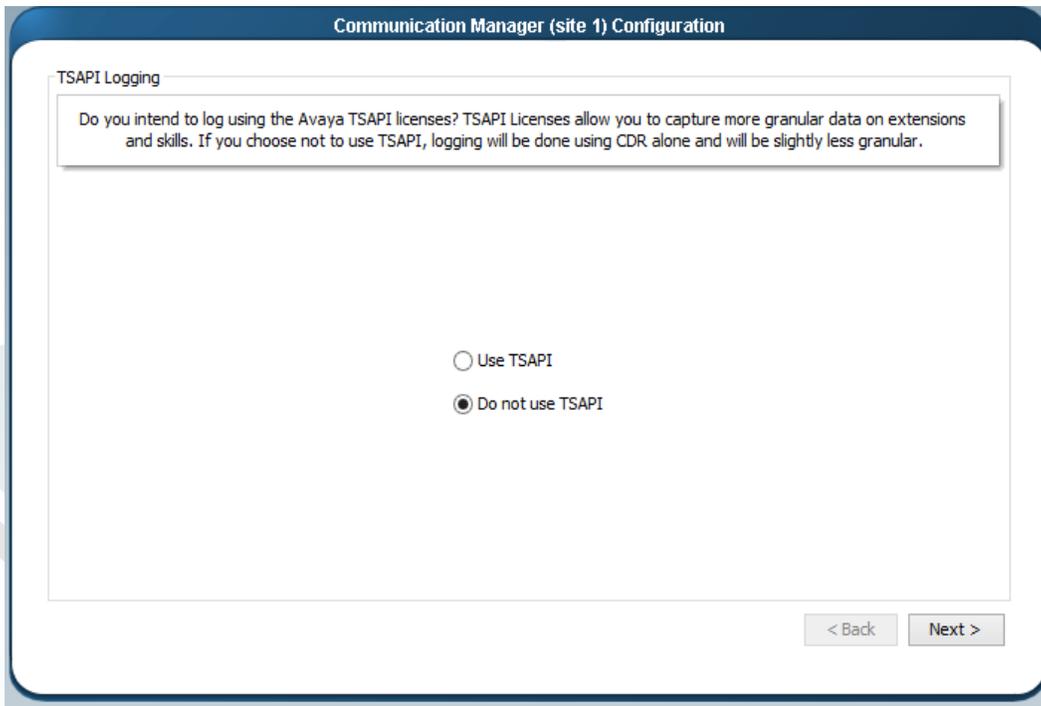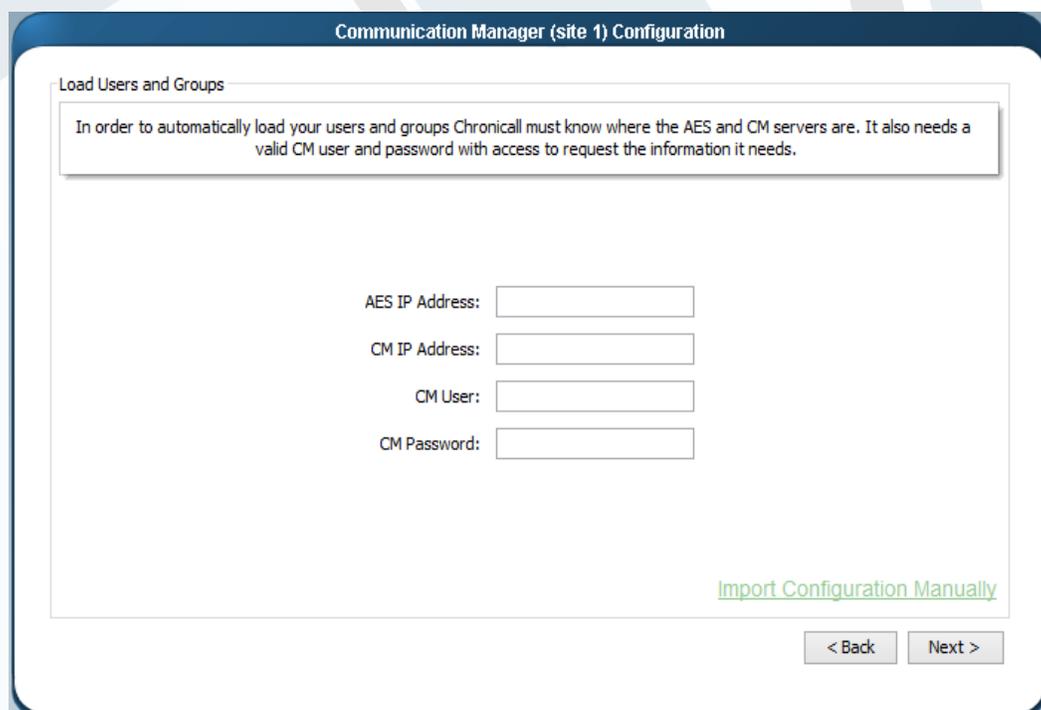
Communication Manager (site 1) Configuration

TSAPI Logging

Do you intend to log using the Avaya TSAPI licenses? TSAPI Licenses allow you to capture more granular data on extensions and skills. If you choose not to use TSAPI, logging will be done using CDR alone and will be slightly less granular.

○ Use TSAPI

⦿ Do not use TSAPI

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Enter your AES and CM server information. Hitting next will verify that your CM user is created and has necessary access. After your CM user is verified it will download information including your users and groups which may take a couple of minutes. If you do not have an AES server, please click Import Configuration Manually to import your users and groups.

Communication Manager (site 1) Configuration

Load Users and Groups

In order to automatically load your users and groups Chronicall must know where the AES and CM servers are. It also needs a valid CM user and password with access to request the information it needs.

AES IP Address: [   ]

CM IP Address: [   ]

CM User: [   ]

CM Password: [   ]

Import Configuration Manually

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You will need to import each of the files listed below in order to categorize the database with the CDR records

Each file should be imported as a .txt file

Press Finish and you will be taken to the main Chronicall interface. Visit our support site at **www.ximasoftware.com/support** for additional information.

Please select which users receive a Chronicall logging license
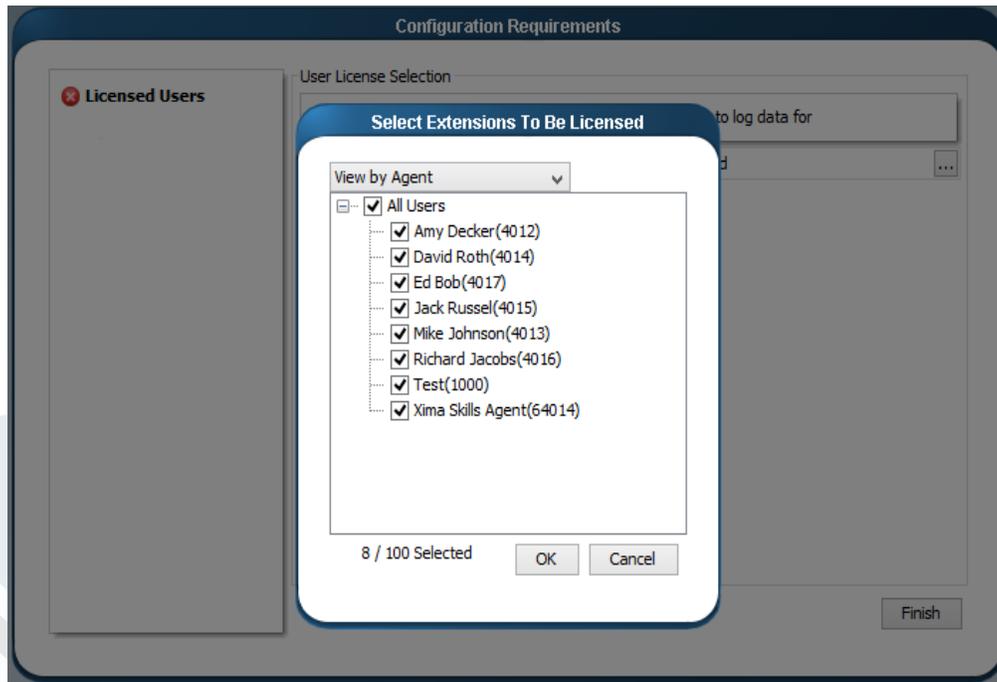
You have finished installing Chronicall.

Press Finish and you will be taken to the main Chronicall interface. Visit our support site at **www.ximasoftware.com/support** for additional information.