



INSTALLATION GUIDE

Spring 2016

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CHIME INSTALLATION GUIDE

SYSTEM REQUIREMENTS

- 64-bit Windows Server®: 2008 R2, 2012, 2012 R2
 - Server 2008 R2 requires Desktop Experience feature to be installed
 - Server 2012/2012 R2 requires Media Foundation feature to be installed
- Application cannot be installed on the same server hosting Lync®. Application will conflict with Lync® settings.
- Connection to Microsoft SQL Server®. The application supports full SQL Server® or SQL Express Edition®
 - SQL server can be installed on the same server hosting Chime for Lync®, but it is recommended for larger implantations that it be on a separate server.
 - Account with create access to SQL server (for building and updating the Chime database).
 - Account with read\write access to Chime database
 - The application supports both SQL and Windows server authentication options.
 - *Note:* For optimal performance, Chime and SQL Server should be in the same physical site.
- Read Access to Windows Active Directory

Chime 2.x (Self hosted) with Lync On-Premise support

- .Net Framework 4.5.1+
- UMCA 4.0
- SQL Server 2008 R2+ (SQL Express, Standard, Enterprise...)
- 1 Lync account for Web Client
- 1 Lync account per queue for dispatcher

Chime 2.x (Self hosted) with Office 365 support

- .Net Framework 4.5.1+
- UMCA 4.0
- SQL Server 2008 R2+ (SQL Express, Standard, Enterprise...)
- Office 2013 Lync (Lync 2013 Basic cannot be used)
- 1 Office 365 Lync account for Web Client*
- 1 Office 365 Lync account per queue for dispatcher*

**Lync Online Plan 2 and Microsoft Office 365 with Lync Plans are supported*

HARDWARE RECOMMENDATIONS

The following are the recommended hardware configurations for Chime for Lync

# of Queues	# of Agents	RAM	Processor	Data Storage	Database Size
1-2	10	4 GB	1 - 2 Core	80 - 100 GB	4 GB
2+	10+	6-8 GB	2 - 2-4 Core	150 - 200 GB	8 - 10 GB

REQUIRED ACCOUNTS:

The following accounts will be need for the installation and/or operation of Chime.

Active Directory Query Account

This account will be used by Chime to query Active Directory for users.

AD Server Name: _____

AD Username: _____

Password: _____

Chime Database Installation Account

This account is used to create the Chime database during the installation.

- *This account requires admin privileges on the SQL server.*
- *This account must use **SQL Authentication**.*
- *This account information is not stored, and is only utilized during creation or updating.*

SQL Server Name: _____

Username: _____

Password: _____

Chime Database Service Account

This account will be used by Chime to read and write information to the Chime database and can use SQL or Windows Authentication.

Username: _____

Password: _____

Chime Service Account

This account will be used as the login for running the Chime Service in Windows.

- *If this organization is using Office 365 Lync, use the Chime Service account to install Chime for Lync.*
- *If using Windows Authentication on the SQL connection, this must be the same account.*
- *This account must be granted the Local Security Setting of "Logon as a service". For information, see the Log On As A Service section of this document.*
- *This account must be a member of the Chime server's local Administrator group or a member of the Domain Admins group of the domain to which the Chime server is joined. This is required for the OWIN web server components which power the Chime web interface to operate.*
- *This account needs to be logged in at all times. Please remove any Group Policy auto logouts for this account.*

Username: _____

Password: _____

Web Seeker Account

This account will be used by Chime to connect request from the web chat to Lync experts.

- *This account cannot be the same as a **Dispatcher Account**.*
- *This account needs to be Lync enabled.*
- *This account cannot be used by any other persons or applications.*

AD Username: _____

Password: _____

Dispatcher Accounts

This account will be used by Chime to connect request from a seeker to Lync experts.

- *This account cannot be the same as the **Web Seeker Account**.*
- *This account needs to be Lync enabled.*
- *Each queue will need a separate dispatcher.*
- *This account cannot be used by any other persons or applications.*

CHIME SETUP WIZARD

Once the required accounts have been provisioned for Chime, you are ready to begin the installation of the Chime application. *If this organization is using Office 365 Lync, use the Chime Service account to install Chime for Lync.*

1. Run **ChimeSHInstaller.exe**. You will be prompted with the Chime for Lync Setup wizard.



Figure 1: Chime for Lync Setup Wizard

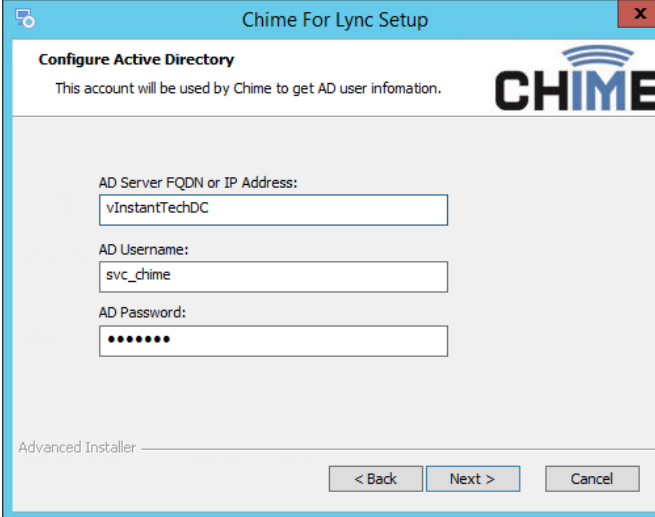
2. Click **Next** to proceed through the Setup wizard.

During the setup, you will need to enter the credentials for the following required accounts:

- Active Directory Query Account
- Chime Database Installation Account
- Chime Database Service Account
- Chime Service Account
- Web Seeker Account

ACTIVE DIRECTORY

The first required account is Active Directory. You will need the Active Directory account information to fill out this section.



The screenshot shows a window titled "Chime For Lync Setup" with a close button in the top right corner. The main heading is "Configure Active Directory" with a sub-note: "This account will be used by Chime to get AD user information." The CHIME logo is in the top right. There are three input fields: "AD Server FQDN or IP Address:" containing "vInstantTechDC", "AD Username:" containing "svc_chime", and "AD Password:" with masked characters. At the bottom left is "Advanced Installer" with a progress bar. At the bottom right are three buttons: "< Back", "Next >", and "Cancel".

Figure 2: Active Directory Configuration

1. Enter the Active Directory Fully Qualified Domain Name, or IP Address of the server hosting Active Directory.
2. Enter the username that Chime can use to query Active Directory.
3. Enter the password for the username provided. The password will be encrypted. Chime requires read access of your Active Directory.
4. Click **Next** once you have entered the Active Directory account information.

CHIME DATABASE

Chime requires an account with administrative rights to the SQL database. In this section of the Setup wizard, the Chime database will be created. Chime requires read/write access to its own database.

CREATE/UPDATE THE DATABASE

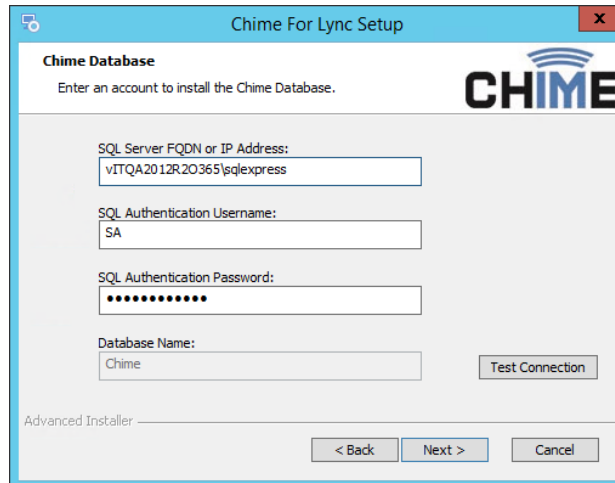
The screenshot shows a Windows-style dialog box titled "Chime For Lync Setup" with a close button (X) in the top right corner. The main heading is "Chime Database" with a sub-instruction "Enter an account to install the Chime Database." and the CHIME logo on the right. There are four text input fields: "SQL Server FQDN or IP Address:" containing "VITQA2012R2O365\sqlexpress", "SQL Authentication Username:" containing "SA", "SQL Authentication Password:" containing a series of dots, and "Database Name:" containing "Chime". A "Test Connection" button is located to the right of the Database Name field. At the bottom, there is a label "Advanced Installer" and three buttons: "< Back", "Next >", and "Cancel".

Figure 3: Chime Database Setup

1. Enter the Fully Qualified Domain Name or IP address of the SQL Server where the Chime database will be installed.

Ex. <ServerName>\<InstanceName>

Ex. <ServerName>\<InstanceName>,<CustomPortNumber>

2. Provide the username of the account that will be used to create the Chime database. This account needs *sys_admin* rights for the SQL Server.
3. Enter the password for the SQL account.
4. Click on **Test Connection** once the required account information has been entered.
5. If successful, **Next** will become active.
6. Click **Next** to proceed.

CONFIGURE DATABASE SERVICE ACCOUNT

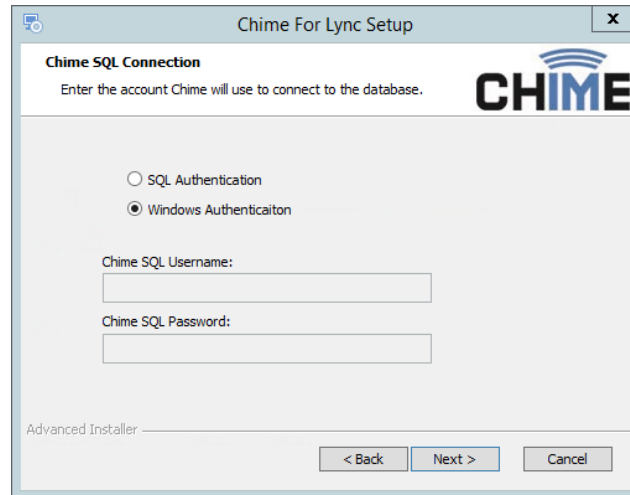


Figure 4: Configure Database Service Account

1. Choose the authentication scheme Chime will use to connect to the database.

If using SQL Authentication:

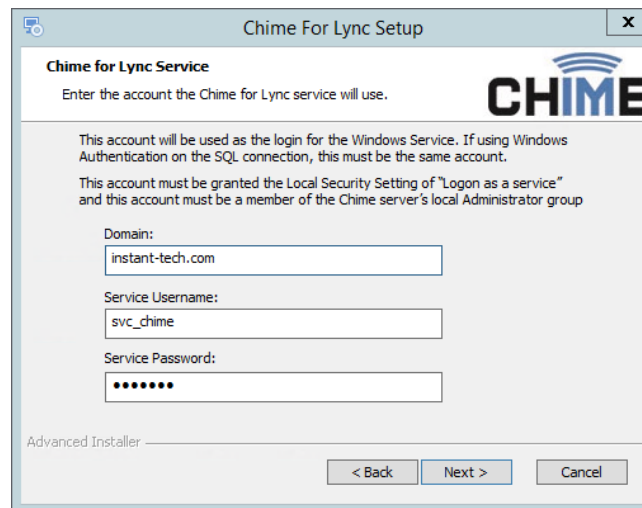
- a. Enter the username for the service account Chime will use to access the database.
- b. Enter the password for the service account

If using Window Authentication, the service account provided in the next screen will be used to connect to the database.

2. Click **Next** to proceed.

SERVICE ACCOUNT

The Chime for Lync Service account is the account that will be used to run the Chime Self-Hosted application.



The image shows a Windows-style dialog box titled "Chime For Lync Setup". Inside, there is a section titled "Chime for Lync Service" with the instruction "Enter the account the Chime for Lync service will use." and the CHIME logo. Below this, there is explanatory text: "This account will be used as the login for the Windows Service. If using Windows Authentication on the SQL connection, this must be the same account." and "This account must be granted the Local Security Setting of 'Logon as a service' and this account must be a member of the Chime server's local Administrator group". There are three input fields: "Domain:" with the text "instant-tech.com", "Service Username:" with the text "svc_chime", and "Service Password:" with masked characters "••••••". At the bottom, it says "Advanced Installer" and has three buttons: "< Back", "Next >", and "Cancel".

Figure 5: Chime Service Account

1. Enter the name of the domain that the Chime service account belongs to.
2. Provide the username of the account that will be used to run Chime.
3. Enter the password for the provided username.
4. Click **Next** to proceed through the installation.
5. Click **Install** to begin installation of the Chime application.

ACTIVE DIRECTORY AUTHENTICATION SCHEME

Beginning with Chime 2.4, we support using Azure AD for Chime deployments against Office 365. For more information on how to obtain the information required for this setup, see the document titled *Configuring Azure AD access for Chime for Lync*.

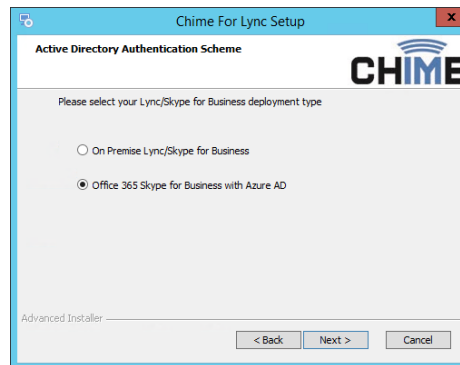


Figure 6: Choose deployment type

For On Premise deployments, choose the corresponding option, and proceed to the next section.

For Office 365 deployments, choose the corresponding option and complete the following steps:

AZURE AD INTEGRATION

PREREQUISITES:

A.) Follow the instructions outlined in *Configuring_Azure_AD_access_for_Chime_for_Lync.pdf*

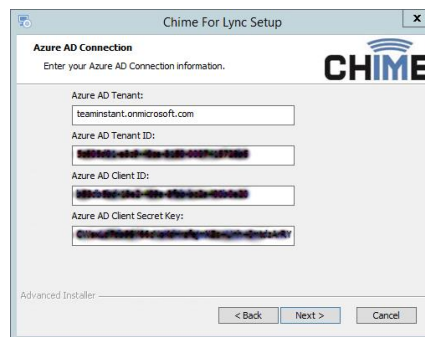
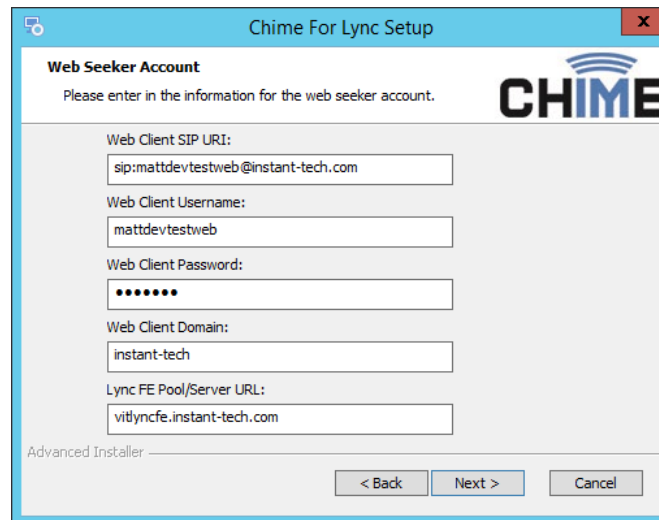


Figure 7: Provide Azure AD information

1. Enter the name of your Office 365 tenant in the input labeled **Azure AD Tenant**. This is usually the domain associated with your Office 365 email address, e.g. example.com.
2. Enter the **Azure AD Tenant ID** obtained in the corresponding input.
3. Enter the **Azure AD Application ID** obtained in the corresponding input.
4. Enter the **Azure AD Application API Key** in the input labeled **Azure AD Client Secret Key**.

WEB CLIENT CONFIGURATION

ON-PREMISE WEB CLIENT CONFIGURATION

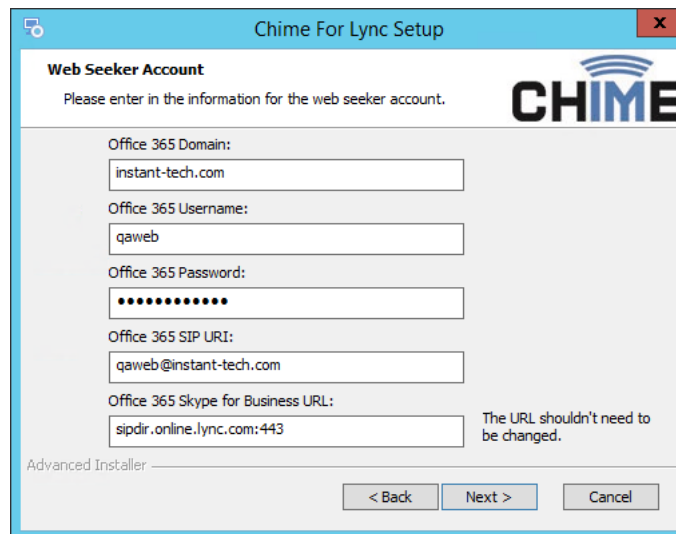


The screenshot shows the 'Chime For Lync Setup' window with the 'Web Seeker Account' tab selected. The window title is 'Chime For Lync Setup' and it has a close button (X) in the top right corner. The CHIME logo is in the top right. The text 'Please enter in the information for the web seeker account.' is displayed. The fields are: Web Client SIP URI (sip:mattdevtestweb@instant-tech.com), Web Client Username (mattdevtestweb), Web Client Password (masked with dots), Web Client Domain (instant-tech), and Lync FE Pool/Server URL (vityncfe.instant-tech.com). At the bottom, there are '< Back', 'Next >', and 'Cancel' buttons. The text 'Advanced Installer' is visible at the bottom left.

Figure 8: Web Client configuration screen

1. Enter the information requested in the appropriate fields.
2. Click **Next** to continue.

OFFICE 365 WEB CLIENT CONFIGURATION



The screenshot shows the 'Chime For Lync Setup' window with the 'Office 365 Web Client' tab selected. The window title is 'Chime For Lync Setup' and it has a close button (X) in the top right corner. The CHIME logo is in the top right. The text 'Please enter in the information for the web seeker account.' is displayed. The fields are: Office 365 Domain (instant-tech.com), Office 365 Username (qaweb), Office 365 Password (masked with dots), Office 365 SIP URI (qaweb@instant-tech.com), and Office 365 Skype for Business URL (sipdir.online.lync.com:443). A note next to the last field states 'The URL shouldn't need to be changed.' At the bottom, there are '< Back', 'Next >', and 'Cancel' buttons. The text 'Advanced Installer' is visible at the bottom left.

Figure 9: Web Client configuration screen

1. Enter the information requested in the appropriate fields.
2. Click **Next** to continue.

READY TO INSTALL

Press the **Install** button to begin installing Chime.

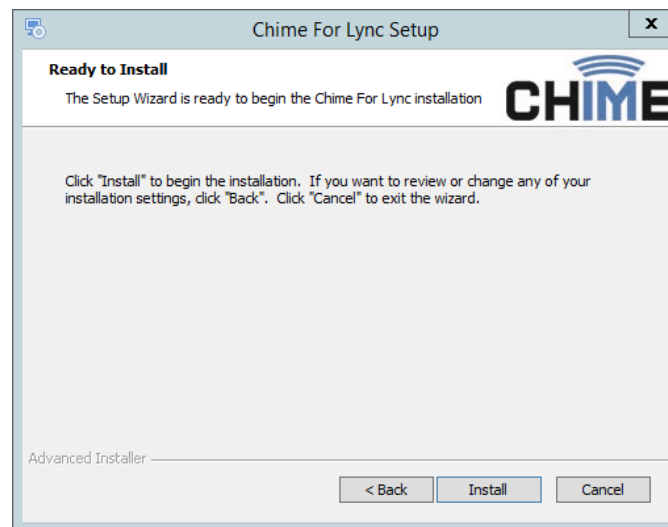


Figure 10: Install Chime

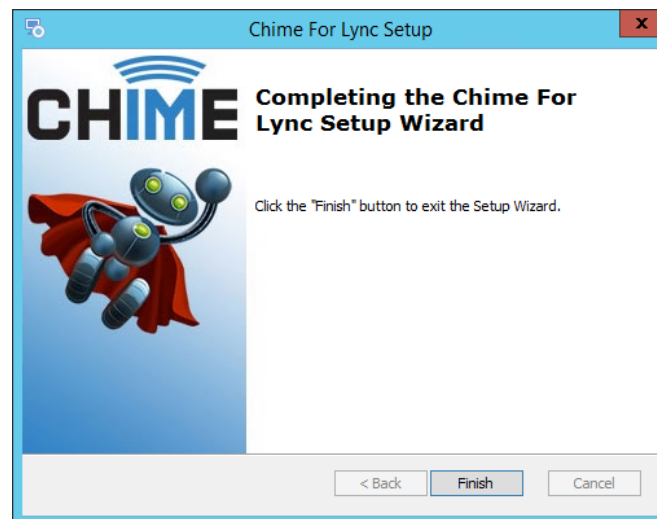


Figure 11: Install Complete

Click **Finish** to close the setup wizard and launch the configuration wizard.

CHIME CONFIGURATION WIZARD

Once all the required account information has been filled out in the Chime Setup wizard, you will be prompted with the next part of the installation, the Configuration Wizard. In this section you will do the following:

- Verify Active Directory account information
- Verify and test connection to the SQL Database
- Setup the Chime Web Client
- Pick the first administrative user for the Chime application
- Configure SSL Certificates (optional)

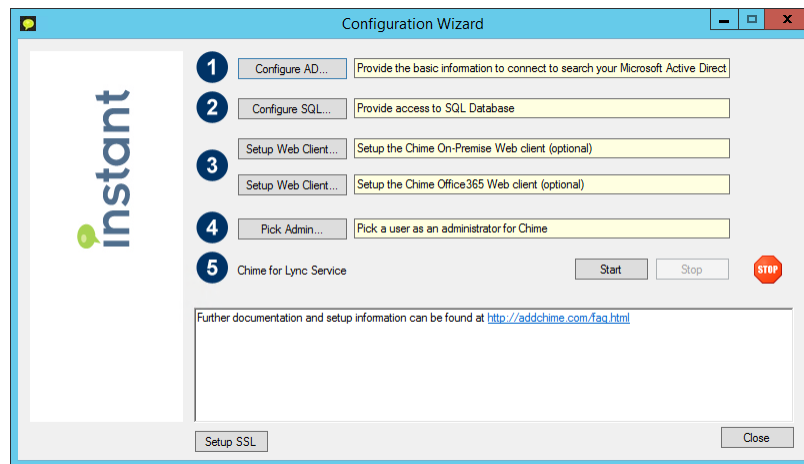


Figure 12: Configuration Wizard

CONFIGURE ACTIVE DIRECTORY

In the first step of the configuration wizard, you will need to verify your active directory credentials.

ON PREMISE

1. Click **Configure AD**.
2. Enter the Active Directory FQDN, username, and password (if not provided during the previous installation process).
3. Click **Validate**.

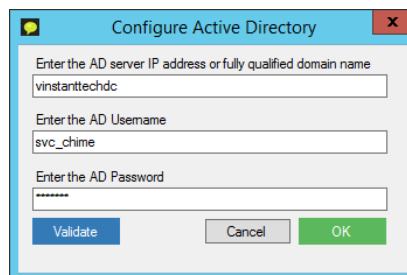


Figure 13: Active Directory

4. Click **OK** on the alert once you have been notified that we've successfully connected to Active Directory.
5. Click **OK** to proceed to the next step.

OFFICE 365

Verify that the information in these fields matches what was provided during the installation phase. You can test to be sure that we can connect using the information provided using this tool.

1. Click **Test...** to verify that we can connect using the provided information.
2. Click **Save** to save the information and close the window.

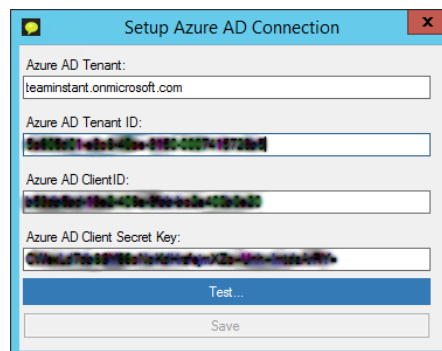


Figure 14: Azure AD Connection info

If any of this information is missing, please refer to [Configuring_Azure_AD_access_for_Chime_for_Lync.pdf](#)

CONFIGURE SQL

In this section you will need to enter the required account information for the Chime SQL account. This account needs read and write access to the Chime database.

1. Click **Configure SQL** in the configuration wizard.
2. Enter the name of the SQL instance that Chime will be hosted on.

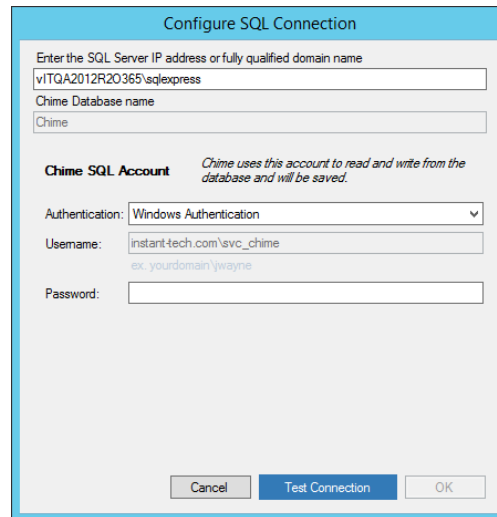


Figure 15: SQL Connection

3. Select the appropriate authentication method for the Chime SQL account.
4. Enter the username and password for the Chime SQL account.
5. Click on **Test Connection** to test the connection to the database.

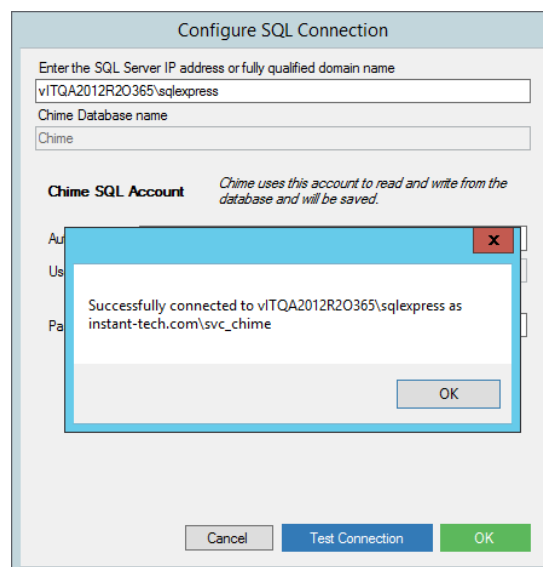


Figure 16: Test SQL Connection

6. Click **OK** once you have successfully connected to the database.
7. Click the green **OK** button in the Configure SQL Connection window to proceed to the next step.

SETUP WEB CLIENT (OPTIONAL)

There are two options in the configuration wizard for setting up the Web Client:

1. Setup the Chime On Premise web client – uses your On Premise Lync Server
2. Setup the Chime Office 365 web client – uses an Office 365 Lync-enabled account

SETUP ON PREMISE WEB CLIENT

Follow these instructions to setup the Web Client with an On Premise Lync Server.

1. Click **Setup Web Client...** in the configuration wizard.
2. Enter a SAM account name to search for, and click **Search for Lync Account**. The wizard will query Active Directory for a Lync-enabled account matching the provided name.
3. Select the desired account, and the wizard should pre-populate whatever fields it can obtain from Active Directory.
4. Provide information for any missing fields.
5. Click **Verify**, and the wizard will attempt to log in using the credentials provided.
6. Click **OK** once the information has been verified to save the values and close the window.

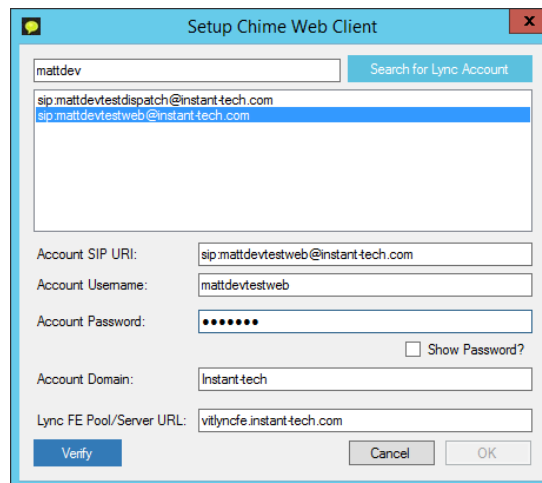
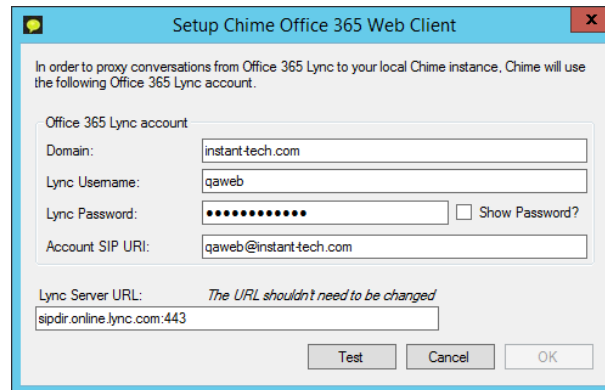


Figure 17: Web Client configuration

SETUP OFFICE 365 WEB CLIENT

Follow these instructions to setup the Web Client with an Office 365 account.

1. Click **Setup Web Client...** in the configuration wizard.
2. Provide the required information for the web client dispatcher account.
3. Click **Test**, and the wizard will attempt to log in using the credentials provided.
4. Click **OK** once the information has been verified to save the values and close the window.



Setup Chime Office 365 Web Client

In order to proxy conversations from Office 365 Lync to your local Chime instance, Chime will use the following Office 365 Lync account.

Office 365 Lync account

Domain: instant-tech.com

Lync Username: qaweb

Lync Password: ☐ Show Password?

Account SIP URI: qaweb@instant-tech.com

Lync Server URL: *The URL shouldn't need to be changed*
sipdir.online.lync.com:443

Test Cancel OK

Figure 18: Web Client Configuration

Account SIP URI: The SIP URI for a Lync-enabled Office 365 account. The Chime Web Client will log in as this account.

Account Domain: The name of the domain that the chosen Office 365 account belongs to.

Account Username: The full username of the chosen Office 365 account.

Account Password: The password for the username provided.

Lync Server URL: Provide the Lync Server URL. For Office 365 this should be:
sipdir.online.lync.com:443

PICK ADMIN USER

Chime will need a Lync-enabled account to be configured as the first Admin user of Chime. That person will be able to add other people once they log in.

1. Click on **Pick Admin** from the Configuration Wizard.
2. Enter the partial or full username of the person who will be the first admin. Click Search to find the user.

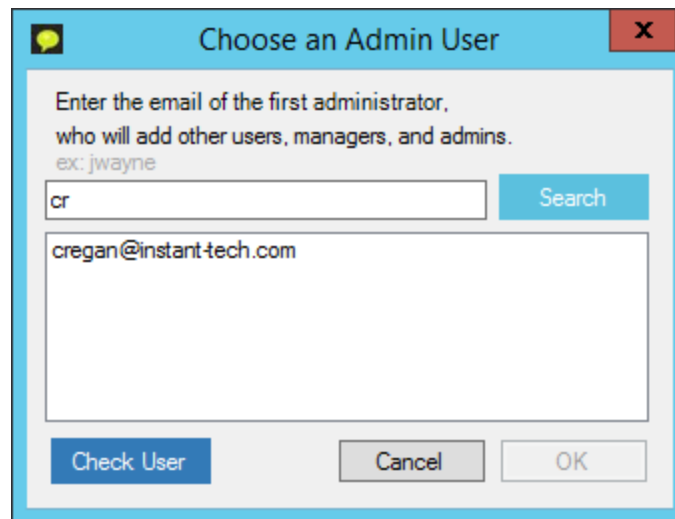


Figure 19: Pick Admin User

3. Select the correct user from the list, and click Check User.

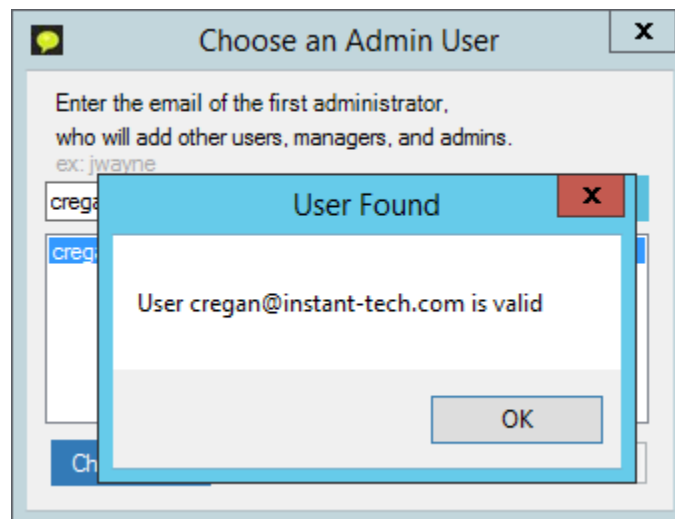


Figure 20: Check User

4. Once you've verified that the user picked is valid, click OK. Then, click OK in the Choose Admin user window to proceed to the next step of the Configuration Wizard.

SETUP SSL (OPTIONAL)

The configuration wizard provides a tool to register an SSL certificate with the Chime application. As a prerequisite, you will need to have a valid SSL certificate installed on the server. Once the certificate has been installed on the server, you can follow these steps.

1. Click **Setup SSL**.
2. Click through the prompts to register listeners for ports 80 and 443 (or click OK if already reserved).

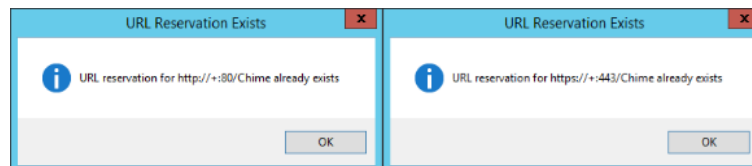


Figure 21: URL Reservations

3. Select the desired SSL Certificate from the list provided. Click on the desired certificate and click **OK** to try and use that certificate. If you don't see the certificate desired, click **Cancel**, and another list will be displayed.

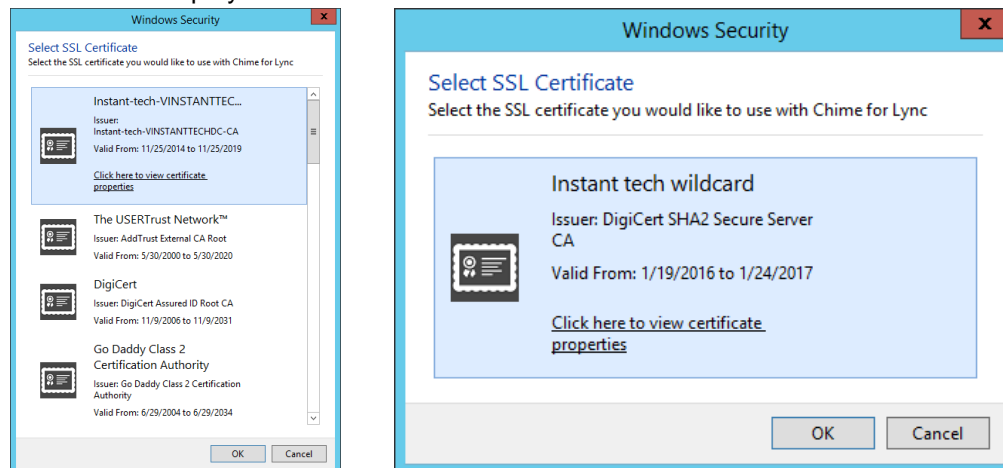


Figure 22: Selecting SSL Certificates

4. Click to **OK** to execute the command to register the SSL Certificate.

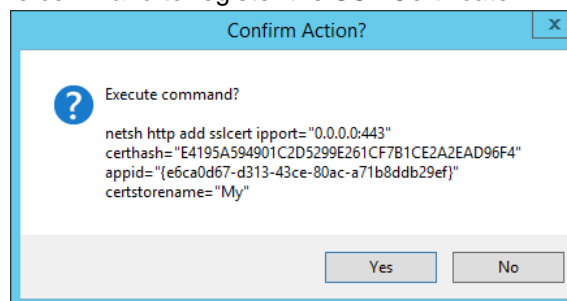


Figure 23: Executing SSL command

START THE CHIME APPLICATION

STARTING FROM CONFIGURATION WIZARD

Click the **Start** button on the configuration wizard to start the Chime service.

STARTING THROUGH SERVICES

1. Log on to the server that Chime is hosted on.
2. Go to the Control Panel, and navigate to Administrative Tools.
3. Open 'Services'.
4. Find 'Chime for Lync' in the list of services.
5. Right-click on Chime for Lync and click 'Start'.

ISSUES STARTING THE CHIME APPLICATION

UNABLE TO START THE CHIME SERVICE – INCORRECT LOGON

If you are unable to start the Chime service due to a logon failure, it's possible that you entered the incorrect credentials for the Chime Service account during the install. To verify these credentials, follow these steps:

1. Log on to the server that Chime is hosted on.
2. Go to the **Control Panel**, and navigate to **Administrative Tools**.
3. Open '**Services**'.
4. Find '**Chime for Lync**' in the list of services.
5. Right-click on Chime for Lync and click on '**Properties**'.
6. Navigate to the '**Log On**' tab.
7. **Click OK** once the account credentials have been changed or verified.
8. Follow the steps to start the Chime service.

UNABLE TO START THE SERVICE – LOG ON AS A SERVICE

Please review the steps in the Log On As A Service section

ACCESS THE CHIME APPLICATION

Once you've successfully installed Chime, you are ready to access the application.

1. Type in the URL of the Chime instance. It will look something like this:

<http://<ServerName>.<DomainName>/chime>

- or -

<http://<IPAddress>/chime>

2. Log in to the application.
3. You are ready to add more administrators, agents, and start routing chats.

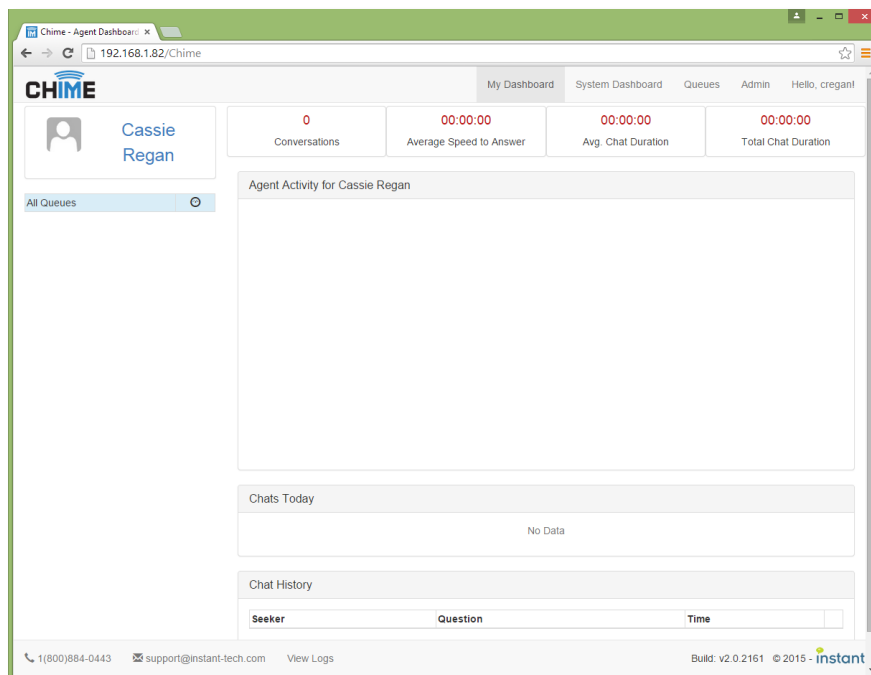


Figure 24: Chime Agent Dashboard

APPENDIX

LOG ON AS A SERVICE

If you are unable to start the Chime service, and receive an error message that the account doesn't have the proper rights, you will need to give administrative rights to the Chime Service account.

1. Log on to the server that Chime is hosted on.
2. Go to the **Control Panel**, and navigate to **Administrative Tools**.
3. Open '**Local Security Policy**'
4. Under '**Local Policies**', click on '**User Rights Assignment**'.
5. Click on '**Log On as a Service**', and then click on **Add User or Group**.
6. Enter the service account name, and click '**Check Names**'
7. **Click OK** once you've selected the service account to add.
8. Follow the steps to start the Chime service.