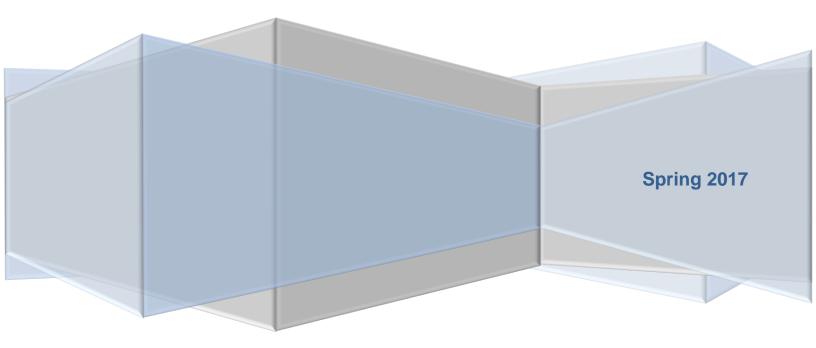


Chime for Lync High Availability Setup



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SUMMARY OF CHANGES: HIGH AVAILABILITY INSTALLATION

At a high-level, the High Availability setup involves installing Chime on two or more servers, pointed at the same application database. In Chime 2.5, each installation must be slightly modified to change the service from "Automatic" startup to "Manual". The primary server will need to be started manually and, in case of fail-over, the secondary server will need to be started manually as well. To make the cold fail-over process as quick as possible, the files containing login information for service accounts, other required accounts, and any Virtual Agent files should always be kept up to date on both servers. Below is a high-level summary of changes that occur when installing Chime in High Availability mode. The rest of this document provides detailed information on each of these steps.

Install Chime on the Primary H.A. server

Install Chime on the primary server as normal. If a custom database name is used, make sure to record it because all of the H.A. installations must use the same database. After the installation and configuration wizards are complete:

- 1. Open Services
- 2. Select "Chime for Lync" service and open the properties
- 3. Change the Startup type from "Automatic(Delayed Start)" to "Manual"

Install Chime on Secondary H.A. server(s)

Install Chime on the secondary H.A. server(s) as normal. If a custom database name is used, make sure all secondary servers use the same custom database name. After the installation and configuration wizards are complete:

- 1. Open Services
- 2. Select "Chime for Lync" service and open the properties
- 3. Verify that the Chime for Lync service has stopped. If it isn't stopped, stop it
- 4. Change the Startup type from "Automatic(Delayed Start)" to "Manual"
- 5. Copy the following files from the primary server to the secondary severs:
 - Settings.xml*
 - Plugins directory*

***NOTE**: These items should be synced regularly. If any of the settings used in the original installations are changed, all of the High Availability Servers need to also have the Settings.xml and Plugins directory synced.

Examples of these changes:

- Changes related to the SQL Server, including the name of the database or db_reader/writer account
- AD Username/password is changed
- · Azure Username/password is changed

Service account is changed

High Availability Manual Fail-over Instructions

Go to the Primary server

Open Services

Verify that the Chime service has stopped

Go to the Secondary server

Start the Chime service

After the service has started, verify that Chime page and associate links and queue accounts are active

HIGH AVAILABILITY REQUIREMENTS

- Minimum 2 Windows Server 2008 R2, 2012, 2012 R2, 2016
 UCMA 4.0 Runtime
- SQL Server access by all Chime Servers
- Active Directory access by all Chime Servers
- Lync\Skype for Business access by all Chime Servers
- Load Balancer\Web Proxy with routing to all Chime Servers
- All Chime links are using Load Balancer\Web Proxy address

CHIME REQUIREMENTS

- 64-bit Windows Server®: 2008 R2, 2012, 2012 R2
 - Server 2008 R2 requires Desktop Experience feature to be installed
 - o 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®
 - 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+
- UCMA 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+
- UCMA 4.0
- SQL Server 2008 R2+ (SQL Express, Standard, Enterprise...)
- 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

RECOMMENDATIONS

• SQL Server cluster accessible by all Chime Servers

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 Admin Account

This account is used to create the Chime database during the installation. This account needs SQL authentication with the ability to create the database.

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.

Username:

Password:

Account must have db_datareader & db_datawriter rights to Chime database

Chime Service Account

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. This account must be granted the Local Security Setting of "Logon as a service".

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.

Username:

Password:

Web Seeker account - This account will be used by Chime to connect request from the web chat to Lync experts. This account needs to be Lync enabled and not used anywhere else.

AD Username: ______
Password:

Dispatcher accounts - This account will be used by Chime to connect request from a guest to Lync experts. This account needs to be Lync enabled. Each queue will need a separate dispatcher.

HIGH AVAILABILITY SETUP

PRIMARY SERVER

This section of the document is used for installing the Chime for Lync application on the primary High Availability server.

CHIME SETUP WIZARD

Once the required accounts have been provisioned for Chime, you are ready to begin the installation of the Chime application.

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 Account
- Chime for Lync Service Account
- Web Client Dispatcher Account

NOTE: The accounts and credentials associated with the items listed above will be used on all of the High Availability servers you will set up, so it is required that you have access to this information.

INSTALLATION TYPE

Chime has two installation options, Default and Custom. When installing using the default setting, Chime uses a default installation path and a default SQL Database name.

5	Chime For Lync Setup	
Install Type Select the install type.		CHIME
	 Default Installation Settings Custom Installation Settings 	
Advanced Installer		
	< Back	Next > Cancel

Figure 2: Default Install Type

When installing using the Custom Installation Settings, you will be able to select a specific installation path for Chime as well as more specific control over the name of the SQL Database used with Chime. For a High Availability installation, it is recommended that you use Custom Settings so that you are able to name the SQL Database you will be using.

10	Chime For Lync Setup	×
Install Type Select the install type.		CHIME
	Default Installation Settings Oustom Installation Settings	
Advanced Installer	< Back	Next > Cancel

Figure 3: Custom Install Type

To select an installation folder, simply click the Browse... button and navigate to the folder location you wish to install Chime. Once you have selected the desired folder location, click **Next**.

S Chime For Lync Setup	_ 🗆 X
Select Installation Folder This is the folder where Chime For Lync will be installed.	CHÎME
To install in this folder, click "Next". To install to a different folder, en "Browse".	
Folder: [C:\Program Files\Instant Technologies\Chime For Lync\]	Browse
Advanced Installer	> Cancel

Figure 4: Custom Installation Setup

ACTIVE DIRECTORY

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

5	Chime For Lync Setup	X
	gure Active Directory account will be used by Chime to get AD user infomation.	CHIME
	AD Server FQDN or IP Address:	
	AD Username: svc_chime	
	AD Password:	
Advanced		Next > Cancel

Figure 5: 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

Chime For Lync Setup	S Chime For Lync Setup
Chime Database Enter an account to install the Chime Database.	Chime Database Enter an account to install the Chime Database.
SQL Server FQDN or IP Address: vTQA2012R2O365\sqlexpress SQL Authentication Username: SA SQL Authentication Password: ••••••••	SQL Server FQDN or IP Address: localhost SQL Authentication Username: SA SQL Authentication Password:
Database Name: Chime Chime Test Connection Advanced Installer < Back	Database Name: [NewDBName] Test Connection Advanced Installer Cancel

Figure 6: Chime Database Setup

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

If you chose the Custom Install option, you are able to change the name of the Database Name.

- 4. Make sure you record the name of the Database name because you will need to use the same SQL database in all of the High Availability installations.
- 5. Click on **Test Connection** once the require account information has been entered.
- 6. Click **Next** to proceed.

CONFIGURE DATABASE SERVICE ACCOUNT

5	Chime For Lync Setup	x
	SQL Connection the account Chime will use to connect to the database.	CHÎME
	SQL Authentication Windows Authenticaiton Chime SQL Username:	
Advanced)	Chime SQL Password:	Next > Cancel

Figure 7: 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.

5	Chime For Lync Setup				
Chime	for Lync Service				
Enter	the account the Chime for Lync service will use.				
	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.				
Th an	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				
	Domain:				
	instant-tech.com				
	Service Username:				
	svc_chime				
	Service Password:				
	•••••				
Advanced 1	Installer				
Havancea	< Back Next > Cancel				

Figure 8: 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.

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.*

5	Chime For Lync Setup			
	Active Directory Authentication Scheme			
	Please select your Lync/Skype for Business deployment type			
	O On Premise Lync/Skype for Business			
	Office 365 Skype for Business with Azure AD			
Adv	anced Installer < Back Next > Cancel			

Figure 9: Choose deployment type

For On Premise deployments, choose the corresponding option, and complete the following steps:

For Office 365 deployments, choose the corresponding option and proceed to the section entitled *Azure AD Integration.*

WEB CLIENT CONFIGURATION

ON-PREMISE WEB CLIENT CONFIGURATION

5	Chime For Lync Setup	x
Web Seeke Please en	er Account ter in the information for the web seeker account.	CHIME
	eb Client SIP URI: p:mattdevtestweb@instant-tech.com	
	eb Client Username:	
	eb Client Password:	
Ľ	••••••	
	stant-tech nc FE Pool/Server URL:	
v	itlyncfe.instant-tech.com	
Advanced Insta		Next > Cancel

Figure 10: Web Client configuration screen

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

AZURE AD INTEGRATION

PREREQUISITES:

- A.) Application configured for Azure Active Directory access configured in previous steps
- B.) Recorded Azure AD Tenant ID, Application Client ID, and Application API key from previous steps.

	re AD Connection	
Er	nter your Azure AD Connection information.	CHIM
	Azure AD Tenant:	
	teaminstant.onmicrosoft.com	
	Azure AD Tenant ID:	
	Set05/01-65-01-610-0007+1572855	
	Azure AD Client ID:	
	100000000-1000-000-000-000-0000000	
	Azure AD Client Secret Key:	
	Chinese Proof 166 charles and will an unit - Control ArRy	
lvance	ed Installer	
	< Back Next >	Cancel

Figure 11: 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 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.
- 3.

OFFICE 365 WEB CLIENT CONFIGURATION

50	Chime For Lync Setup	×
	ieeker Account se enter in the information for the web seeker account.	CHIME
	Office 365 Domain:	
	instant-tech.com	
	Office 365 Username:	
	qaweb	
	Office 365 Password:	-
	•••••	
	Office 365 SIP URI:	-
	qaweb@instant-tech.com	
	Office 365 Skype for Business URL:	-
	sipdir.online.lync.com:443	The URL shouldn't need to be changed.
Advanced	Installer	
	< Back	Next > Cancel

Figure 12: 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 13: Install Chime



Figure 14: 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)

	Configuration Wizard
	Configure AD Provide the basic information to connect to search your Microsoft Active Direct
b t	2 Configure SQL Provide access to SQL Database
σ	3 Setup Web Client Setup the Chime On-Premise Web client (optional)
St	Setup Web Client Setup the Chime Office365 Web client (optional)
instal	Pick Admin Pick a user as an administrator for Chime
-	5 Setup SSL Reset SSL Setup HTTPS and SSL support (OPTIONAL for On-Premise)
	6 Chime for Lync Service Start Stop 500
F	Further documentation and setup information can be found at http://addchime.com/faq.html
	Close

Figure 15: 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.

	Configure Active Directory	
	AD server IP address or fully qualified domain name	
Enter the	AD Usemame	
svc_chime	e	
Enter the AD Password		
Validat	e Cancel OK	

Figure 16: 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. Enter your Azure AD Tenant.
- 2. Enter your Azure AD Tenant ID.
- 3. Enter your Azure AD Client ID.
- 4. Enter your Azure AD Client Secret Key (API key).
- 5. Click Text... to verify that we can connect using the provided information
- 6. Click **Save** to save the information and close the window.

Setup Azure AD Connection			
Azure AD Tenant:			
teaminstant.onmicrosoft.com			
Azure AD Tenant ID:			
5x808x01+e8x8+45xe-8180-0007418728e8			
Azure AD ClientID:			
000000011000-4000-0000-000040000020			
Azure AD Client Secret Key:			
OWexLa Tele 88/1886 No Karingle in XZa-Unit - Insta ArRY-			
Test			
Save			

Figure 17: Azure AD Connection info

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.

Configure SQL Connection							
Enter the SQL Server IP address or fully qualified domain name							
vITQA2012R203							
Chime Database	name	.					
Chime							
Chime SQL A	Chime SQL Account Chime uses this account to read and write from the database and will be saved.						
Authentication:	Windows Authentication						
Usemame:	instant-tech.com\svc_chime	1					
Password:		1					
	L	-					
	Cancel Test Connection OK						

Figure 18: 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.

Configure SQL Connection				
Entert	Enter the SQL Server IP address or fully qualified domain name			
VITQA	2012R2O365\sqlexpress			
Chime	Database name			
Chime				
Chir	ne SQL Account Chime uses this account to read and write from the database and will be saved.			
Aur	x			
Us Pa	Successfully connected to vITQA2012R2O365\sqlexpress as			
	ОК			
	Cancel Test Connection OK			

Figure 19: 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.

D 5	Setup Chime Web C	lient ×
mattdev		Search for Lync Account
sip:mattdevtestdispatch@ins sip:mattdevtestweb@instant		
Account SIP URI:	sip:mattdevtestweb@insta	ant-tech.com
Account Usemame:	mattdevtestweb	
Account Password:	•••••	
		Show Password?
Account Domain:	Instant-tech	
Lync FE Pool/Server URL:	vitlyncfe.instant-tech.com	
Verify		Cancel OK

Figure 20: 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.

	Configuration Wizard			x	
instant	Setup Chime Office 365 Web Client Active Dire In order to proxy conversations from Office 365 Lync to your local Chime instance, Chime will use the following Office 365 Lync account. Active Dire Office 365 Lync account		S		
	Test Cancel OK				
			Close		

Figure 21: 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*

Skype SDK Client ID: The Azure AD Application Client ID for the Native Application used to connect to Skype for Business over UCWA.

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.

Choose an Admin User	x			
Enter the email of the first administrator, who will add other users, managers, and admins. ex: jwayne				
cr	Search			
cregan@instant-tech.com				
Check User Cancel	OK			

Figure 22: Pick Admin User

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

	Choose an Admin User	x	
who v	Enter the email of the first administrator, who will add other users, managers, and admins. ex: jwayne		
crega			
creg	User cregan@instant-tech.com is valid		
Ch	ОК		

Figure 23: 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).

URL Reservation Exists	URL Reservation Exists X
URL reservation for http://+:80/Chime already exists	URL reservation for https://+:443/Chime already exists
ОК	ОК

Figure 24: URL Reservations

 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.

Windows Security X	Windows Security X
Select SSL Certificate Select the SSL certificate you would like to use with Chime for Lync Instant-tech-VINSTANTTEC	Select SSL Certificate Select the SSL certificate you would like to use with Chime for Lync
Click here to view certificate. properties	Instant tech wildcard
The USERTrust Network™ Issue: AddTrust Letenal CA Roet Valid From: 5/30/2000 to 5/30/2020 DigiCert Issue: DigiCert Assured ID Root CA Valid From: 11/9/2006 to 11/9/2031	Issuer: DigiCert SHA2 Secure Server CA Valid From: 1/19/2016 to 1/24/2017 Click here to view certificate
Go Daddy Class 2 Certification Authority Issuer Go Daddy Class 2 Certification Authority	properties
Valid From: 6/29/2004 to 6/29/2034	OK Cancel



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

	Confirm Action?	x
?	Execute command? netsh http add sslcert ipport="0.0.0.0:443" certhash="E4195A594901C2D5299E261CF7B1CE2A2EAD96F4" appid="{e6ca0d67-d313-43ce-80ac-a71b8ddb29ef}" certstorename="My"	
	Yes No	

Figure 26: Executing SSL Command

STARTUP SETTINGS

1. Open Services

9,		Services					x
File Action View	Help						
🔶 🌒 💼 🖬 🕼	à 🔒 🛛 🖬 🕨 🔳 🕪						
🔍 Services (Local)	Services (Local)	_					
	Chime For Lync	Name 📩	Description	Status	Startup Type	L.,	1
		🔍 App Readiness	Gets apps re		Manual	L.,	
	Stop the service	Application Experience	Processes a		Manual (Trig	L.,	
	Restart the service	Application Identity	Determines		Manual (Trig	L.,	
		Application Information	Facilitates t		Manual (Trig	L.,	
	Description:	Application Layer Gateway	Provides su		Manual	L.,	
	Chime For Lync service	Application Management	Processes in		Manual	L.,	
		AppX Deployment Service (Provides inf		Manual	L.,	
		Background Intelligent Tran	Transfers fil	Running	Manual	L.,	
		Background Tasks Infrastru	Windows in	Running	Automatic	L.,	
		Base Filtering Engine	The Base Fil	Running	Automatic	L.,	
		Certificate Propagation	Copies user	Running	Manual	L.,	
		Chime For Lync	Chime For L	Running	Automatic (D	i	
		CNG Key Isolation	The CNG ke		Manual (Trig	L.,	
		COM+ Event System	Supports Sy	Running	Automatic	L.,	
		COM+ System Application	Manages th		Manual	L.,	
		Computer Browser	Maintains a		Disabled	L.,	
		Credential Manager	Provides se		Manual	L.,	
	Extended (Standard /	ng eredenter Hundger					
	(/(/						

Figure 27: Services Window

2. Select "Chime for Lync" service and open the properties

Chime	For Lync Properties (Local Computer)
General Log On	Recovery Dependencies
Service name:	ChimeSH.exe
Display name:	Chime For Lync
Description:	Chime For Lync service
Path to executal "C:\Program File	ole: s\Instant Technologies\Chime For Lync\ChimeSH.exe''
Startup type:	Automatic (Delayed Start)
Service status:	Running
Start	Stop Pause Resume
You can specify from here.	the start parameters that apply when you start the service
Start parameters	
	OK Cancel Apply

Figure 28: Chime For Lync Properties

3. Change the Startup type from "Automatic(Delayed Start)" to "Manual"

Chime	For Lync Properties (Local Computer)
General Log On	Recovery Dependencies
Service name:	ChimeSH.exe
Display name:	Chime For Lync
Description:	Chime For Lync service
Path to executab "C:\Program Files	le: \\Instant Technologies\Chime For Lync\ChimeSH.exe''
Startup type:	Manual v
Service status:	Running
Start	Stop Pause Resume
You can specify t from here.	he start parameters that apply when you start the service
Start parameters:	
	OK Cancel Apply
	OK Cancel Apply

Figure 29: Manual Start

NOTE: If any of the settings used in the original installations are changed, all of the secondary servers need to also have these changes made to them. Examples of these changes:

- SQL Server used is changed
- AD Username/password is changed
- Azure Username/password is changed
- Service account is changed

SECONDARY SERVERS

This section of the document is used for installing the Chime for Lync application on the remaining nonprimary High Availability servers.

CHIME SETUP WIZARD

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



Figure 30: 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 Account
- Chime for Lync Service Account
- Web Client Dispatcher Account

NOTE: The accounts and credentials associated with the items listed above will be used on all of the High Availability servers you will set up, so it is required that you have access to this information.

INSTALLATION TYPE

Chime has two installation options, Default and Custom. For this install you will need to choose the same install setting that you used on the primary High Availability server.

5	Chime For Lync Setup	×	76	Chime For Lync Setup	×
Install Type Select the install type.		CHÎME	Install Type Select the install type.		CHIME
	Default Installation Settings Custom Installation Settings			Default Installation Settings Oustom Installation Settings	
Advanced Installer ————	< Back Nex	t > Cancel	Advanced Installer	< Back Ne	ext > Cancel

Figure 31: Default and Custom Install Types

To select an installation folder, simply click the Browse... button and navigate to the folder location you wish to install Chime. Once you have selected the desired folder location, click **Next**.

5	Chime For Lync Setur	
Select Installati This is the folder	on Folder r where Chime For Lync will be installed.	CHÎME
To install in this "Browse".	folder, dick "Next". To install to a different	folder, enter it below or click
Folder:	\Instant Technologies \Chime For Lync \	Browse
Advanced Installer —	< Back	Next > Cancel

Figure 32: Custom Installation Setup

ACTIVE DIRECTORY

The first required account is Active Directory. You will need the information for the Active Directory account you used on the primary High Availability server to fill out this section.

5	Chime For Lync Setup
-	account will be used by Chime to get AD user infomation.
	AD Server FQDN or IP Address: vInstantTechDC AD Username:
	svc_chime AD Password:
Advanced	Installer

Figure 33: 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, you will need to enter in the information for the SQL Database you set up for the primary High Availability server.

(CREATE	/UPDATE THE DATABASE	=		
	5	Chime For Lync Setup	x	5	

Chime For Eyne Setup		
Chime Database Enter an account to install the Chime Database.	CHIME	Chime Database Enter an account to install the Chime Database.
SQL Server FQDN or IP Address: vITQA2012R2O365/sqlexpress		SQL Server FQDN or IP Address: localhost
SQL Authentication Username: SA		SQL Authentication Username:
SQL Authentication Password:		SQL Authentication Password:
Database Name: Chime	Test Connection	Database Name: [NewDBName] Test Connection
Advanced Installer — < Back N	lext > Cancel	Advanced Installer

Figure 34: Chime Database Setup

- 1. Enter the Fully Qualified Domain Name or IP address of the SQL Server where the Chime database is located.
- 2. Provide the username of the account for the Chime database.
- 3. Enter the password for the SQL account.
- 4. Click on Test Connection once the require account information has been entered.
- 5. Click **Next** to proceed.

x

Chime For Lync Setup

CONFIGURE DATABASE SERVICE ACCOUNT

5	Chime For Lync Setup	x
	SQL Connection r the account Chime will use to connect to the database.	CHÎME
	 SQL Authentication Windows Authenticaiton Chime SQL Username: 	1
	Chime SQL Password:]
Advanced	Installer	Next > Cancel

Figure 35: Configure Database Service Account

1. Choose the authentication scheme used in the primary High Availability Chime server 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.

5	Chime For Lync Setup
Chime	e for Lync Service
Ente	r the account the Chime for Lync service will use.
	his account will be used as the login for the Windows Service. If using Windows uthentication on the SQL connection, this must be the same account.
	his account must be granted the Local Security Setting of "Logon as a service" nd this account must be a member of the Chime server's local Administrator group Domain:
	instant-tech.com
	Service Username:
	svc_chime
	Service Password:
	•••••
Advanced	Installer
	< Back Next > Cancel

Figure 36: 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.

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.*

5	Chime For Lync Setup
1	Active Directory Authentication Scheme
	Please select your Lync/Skype for Business deployment type
	O On Premise Lync/Skype for Business
	Office 365 Skype for Business with Azure AD
Adv	anced Installer Cancel

Figure 37: Choose deployment type

For On Premise deployments, choose the corresponding option, and complete the following steps:

For Office 365 deployments, choose the corresponding option and proceed to the section entitled *Azure AD Integration.*

WEB CLIENT CONFIGURATION

ON-PREMISE WEB CLIENT CONFIGURATION

S Chime For Lync Setup	x
Web Seeker Account Please enter in the information for the web seeker account.	CHIME
Web Client SIP URI: sip:mattdevtestweb@instant-tech.com	1
Web Client Username:	
Web Client Password:	
Web Client Domain:	
instant-tech Lync FE Pool/Server URL:]
vitlyncfe.instant-tech.com]
Advanced Installer —	Next > Cancel

Figure 38: Web Client configuration screen

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

AZURE AD INTEGRATION

PREREQUISITES:

- A.) Application configured for Azure Active Directory access configured in previous steps
- B.) Recorded Azure AD Tenant ID, Application Client ID, and Application API key from previous steps.

	Chime For Lync Setup	
Azu	re AD Connection	
En	nter your Azure AD Connection information.	HIM
	Azure AD Tenant:	
	teaminstant.onmicrosoft.com	
	Azure AD Tenant ID:	
	5a108401-a8a8-40aa-8180-0007418728a8	
	Azure AD Client ID:	
	allada Sad-Sana-Allan-Allan-Bala-Colada 20	
	Azure AD Client Secret Key:	
	Civiance Possid 1665 lander and gritilas- Link-Embda ArRY	
vance	ed Installer	
	< Back Next >	Cancel

Figure 39: 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 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.

5	Chime For Lync Setup	x
Web 9	Seeker Account	
Plea	se enter in the information for the web seeker account.	CHIME
	Office 365 Domain:	
	instant-tech.com	
	Office 365 Username:	
	qaweb	
	Office 365 Password:	_
	•••••	
	Office 365 SIP URI:	
	qaweb@instant-tech.com	
	Office 365 Skype for Business URL:	
	sipdir.online.lync.com:443	The URL shouldn't need to be changed.
Advanced	Installer	

Figure 40: 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.

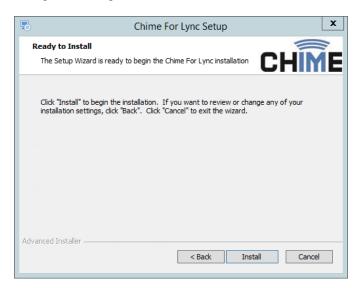


Figure 41: Install Chime



Figure 42: Install Complete

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

SECONDARY SERVER SETTINGS

Close the Configuration Wizard

Open Services

File Action View Help Image: Services (Local) Image: Service (Clips Provides inf	🔍 Services					_		×
Services (Local) Services (Local) Chime For Lync Name Description Status Startup Type L Annual Start the service Background Intelligent Tran Transfers fil Manual L Annual Description: Background Tasks Infrastru Windows in Running Automatic L Chime For Lync Base Filtering Engine The Base Fil Running Automatic L Description: Chime For Lync service CDPUserSvc_31e932 <failed r<="" th="" to=""> Running Automatic L Chime For Lync service Collectificate Propagation Copies user Running Manual L Chime For Lync Chime For Lync Chime For Lync Manual L Chime For Lync Chime For Lync Manual L Manual L Chime For Lync Chime For Lync Manual L Manual L Chime For Lync Chime For Lync Manual L Manual L Chime For Lync Chime For Lync Manual L Manual</failed>	File Action View	Help						
Chime For Lync Name Description Status Startup Type L ^ Start the service Background Intelligent Tran Transfers fil Manual L ^ Description: Background Tasks Infrastru Windows in Running Automatic L Description: Base Filtering Engine The Base Fil Running Automatic L Obscription: Bluetooth Support Service The Bluetoo Manual (Trigge L Chime For Lync service CDPUserSvc_31e932 <failed r<="" td="" to=""> Running Automatic L Chime For Lync service Certificate Propagation Copies user Running Manual L Chime For Lync Chime For Lync Chime For Lync Automatic (Del L Collect License Service (ClipS Provides inf Manual (Trigge L COM+ Event System Supports Sy Running Manual L COM+ System Application Manual L Manual L Computer Browser Maintains a Disabled L L</failed>	🗢 🄿 🗖 🗐 🖸	à 📑 🚺 📷 🕨 🔳 II IV						
Chime For Lync Name Description Status Startup Type L Start the service Background Intelligent Tran Transfers fil Manual L Background Tasks Infrastru Windows in Running Automatic L Description: Base Filtering Engine The Base Fil Running Automatic L Chime For Lync service Bluetooth Support Service The Bluetoo Manual L Q: CDPUserSvc_31e932 < Failed to R Running Automatic L Q: Chime For Lync service Chime For Lync Chime For Lync Manual L Q: Client License Service (ClipS Provides inf Manual (Trigge L Q: Client License Service (ClipS Provides inf Manual (Trigge L Q: COM+ Event System Supports Sy Running Manual (Trigge L Q: COM+ System Application Manages th Manual L Manual L Q: Computer Browser Maintains a Disabled L L Manual L	🔍 Services (Local)	Services (Local)						
Start the service Background Tasks Infrastru Windows in Running Automatic L Description: Base Filtering Engine The Base Fil Running Automatic L Chime For Lync service CDPUserSvc_31e932 < Failed to R Running Automatic L Chime For Lync service Copies user Running Manual L Chime For Lync service Copies user Running Manual L Chime For Lync Chime For Lync Chime For Lync Manual L Client License Service (ClipS Provides inf Manual (Trigge L COM + Event System Supports Sy Running Manual (Trigge L COM + Event System Supports Sy Running Automatic L Computer Browser Manuages th Manual L		Chime For Lync		Description	Status	Startup Type	L	^
Description: Seckground lasks intrastru Windows in Running Automatic L Obscription: Seckground lasks intrastru The Base Fil Running Automatic L Chime For Lync service Bluetooth Support Service The Bluetoo Manual (Trigge L Chime For Lync service Copies user Running Automatic L Chime For Lync service Copies user Running Manual L Chime For Lync Chime For Lync Chime For Lync Automatic (Del L Chime For Lync Chime For Lync Chime For Lync Automatic (Del L Chime For Lync Chime For Lync Chime For Lync Automatic (Del L Chime For Lync Chime For Lync Chime For Lync Manual (Trigge L Cold Cold Sey Isolation The CNG ke Running Manual (Trigge L COM+ System Application Manuages th Manual L L Computer Browser Maintains a Disabled L			🍓 Background Intelligent Tran	Transfers fil		Manual	L	- 10
Description: Image: Bluetooth Support Service The Bluetoo Manual (Trigge L Chime For Lync service CDPUserSvc_31e932 < Failed to R Running Automatic L Computer For Lync service Certificate Propagation Copies user Running Manual L Chime For Lync Chime For Lync Chime For Lync Chime For L Automatic (Del L Client License Service (ClipS Provides inf Manual (Trigge L Client License Service (ClipS Provides inf Manual (Trigge L COM+ Event System Supports Sy Running Manual (Trigge L COM+ Event System Supports Sy Running Automatic L Computer Browser Manages th Manual L Computer Browser Maintains a Disabled L		Start the service	🌼 Background Tasks Infrastru	Windows in	Running	Automatic	L	
Chime For Lync service CDPUserSvc_31e932 < Failed to R Running Automatic L Certificate Propagation Copies user Running Manual L Chime For Lync Chime For Lync Chime For L Automatic (Del L Client License Service (ClipS Provides inf Manual (Trigge L CNG Key Isolation The CNG ke Running Manual (Trigge L COM+ Event System Supports Sy Running Automatic L COM+ System Application Manages th Manual L Computer Browser Maintains a Disabled L			🆏 Base Filtering Engine	The Base Fil	Running	Automatic	L	
Certificate Propagation Copies user Running Manual L Certificate Propagation Copies user Running Manual L Chime For Lync Chime For L Automatic (Del L Client License Service (ClipS Provides inf Manual (Trigge L CNG Key Isolation The CNG ke Running Manual (Trigge L COM+ Event System Supports Sy Running Automatic L COM+ System Application Manages th Manual L Computer Browser Maintains a Disabled L			🆏 Bluetooth Support Service	The Bluetoo		Manual (Trigge	L	
Chime For Lync Chime For L Automatic (Del L Client License Service (ClipS Provides inf Manual (Trigge L CNG Key Isolation The CNG ke Running Manual (Trigge L COM+ Event System Supports Sy Running Automatic L COM+ Event System Supports Sy Running Automatic L COM+ System Application Manages th Manual L Computer Browser Maintains a Disabled L		Chime For Lync service	🖏 CDPUserSvc_31e932	<failed r<="" th="" to=""><th>Running</th><th>Automatic</th><th>L</th><th></th></failed>	Running	Automatic	L	
Q Client License Service (ClipS Provides inf Manual (Trigge L Q CNG Key Isolation The CNG ke Running Manual (Trigge L Q COM+ Event System Supports Sy Running Automatic L Q COM+ Event System Supports Sy Running Automatic L Q COM+ System Application Manages th Manual L Q Computer Browser Maintains a Disabled L			🆏 Certificate Propagation	Copies user	Running	Manual	L	
CNG Key Isolation The CNG ke Running Manual (Trigge L COM+ Event System Supports Sy Running Automatic L COM+ System Application Manages th Manual L Computer Browser Maintains a Disabled L			🎑 Chime For Lync	Chime For L		Automatic (Del	- I	
COM+ Event System Supports Sy Running Automatic L COM+ System Application Manages th Manual L Computer Browser Maintains a Disabled L			🖏 Client License Service (ClipS	Provides inf		Manual (Trigge	L	
COM+ System Application Manages th Manual L Computer Browser Maintains a Disabled L			🆏 CNG Key Isolation	The CNG ke	Running	Manual (Trigge	L	
Computer Browser Maintains a Disabled L			🆏 COM+ Event System	Supports Sy	Running	Automatic	L	
			🆏 COM+ System Application	Manages th		Manual	L	
			🎑 Computer Browser	Maintains a		Disabled	L	
		Enclose (Strandard (March 10 - Dire	TI · · ·	n ·	A 1 17 /B 1		~
		Extended Standard						

Figure 43: Services

Select "Chime for Lync" service and open the properties

Verify that the Chime for Lync service has stopped

Chime Fo	or Lync Pr	operties (Lo	cal Comput	er)		\times
General	Log On	Recovery	Dependenci	es		
Service	name:	ChimeSH.ex	xe			
Display	name:	Chime For L	ync			
Descrip	tion:	Chime For L	ync service		~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	
Path to		e:			o. o	
"C:\Pro	gram H	stant Tech	nnologies \Chi	me For Lync	ChimeSH.exe"	_
Startup	type: 2	Automatic	(Delayed Star	t)	~	
_						
Service	status:	Stopped <			1	
S	Start	Stop		Pause	Resume	
You car from her		ne start parar	meters that ap	ply when you	start the service	
Start pa	rameters:					
		[OK	Cance	el Apply	

Figure 44: Chime Properties

Change the Startup type from "Automatic(Delayed Start)" to "Manual"

Chime For Lync Properties (Local Computer) X		
Chime For Lync Properties (Local Computer) X General Log On Recovery Dependencies Service name: Chime SH.exe Display name: Chime For Lync Description: Chime For Lync service Image: Chime For Lync service Image: Chime For Lync Service Path to exactable: "C:\Program Unstant Technologies\Chime For Lync\ChimeSH.exe" Startup type: Manual Service status: Stop Pause Resume You can specify the start parameters that apply when you start the service from here. Start parameters: OK Cancel Apply		
Service name: ChimeSH.exe		
Display name: Chime For Lync		
Description: Chime For Lync service		
Path to exact able:		
Startup type: Manual ~		
Display name: Chime For Lync Description: Chime For Lync service Path to excutable: "C:\Program \\Instant Technologies\Chime For Lync\ChimeSH.exe" Startup type: Manual Service status: Stopped Start Stop Pause Resume You can specify the start parameters that apply when you start the service from here.		
OK Cancel Apply		

Figure 45: Chime Startup

Copy the following files from the primary server to the secondary severs:

Note: The default installation path is C:\Program Files\Instant Technologies\Chime For Lync\

- 1. Settings.xml
- 2. Plugins directory

These items should be synced regularly.

HIGH AVAILABILITY MANUAL FAIL-OVER INSTRUCTIONS

Go to the Primary server

Open Services

File Action View	Help						
⊨ 🔿 📊 📑 🤇	3 📑 🛛 📷 🕨 💷 💵						
Services (Local)	Services (Local)						
	Chime For Lync	Name	Description	Status	Startup Type	L	
		🥋 Background Intelligent Tran	Transfers fil		Manual	L	1
	Start the service	🍓 Background Tasks Infrastru	Windows in	Running	Automatic	L	
		🏟 Base Filtering Engine	The Base Fil	Running	Automatic	L	
	Description:	🌼 Bluetooth Support Service	The Bluetoo		Manual (Trigge	L	
	Chime For Lync service	🖏 CDPUserSvc_31e932	<failed r<="" td="" to=""><td>Running</td><td>Automatic</td><td>L</td><td></td></failed>	Running	Automatic	L	
		🌼 Certificate Propagation	Copies user	Running	Manual	L	
		🎇 Chime For Lync	Chime For L		Automatic (Del	I	
		Client License Service (ClipS	Provides inf		Manual (Trigge	L	
		🌼 CNG Key Isolation	The CNG ke	Running	Manual (Trigge	L	
		🖏 COM+ Event System	Supports Sy	Running	Automatic	L	
		🥋 COM+ System Application	Manages th		Manual	L	
		🆏 Computer Browser	Maintains a		Disabled	L	
	Extended Standard	A LID S DUC	.	n :	A 1 10 10 1		

Figure 46: Services

Verify that the Chime service has stopped

Go to the Secondary server

🔍 Services					-		×
File Action View	Help						
ם 🗐 🔚 🔶 🗢	à 📑 👔 📷 🕨 🔳 II IV						
🔍 Services (Local)	Services (Local)						
	Chime For Lync	Name	Description	Status	Startup Type	L	^
	Start the service	Background Intelligent Tran Background Tasks Infrastru Base Filtering Engine		Running Running	Manual Automatic Automatic	L L	1
	Description: Chime For Lync service	 Bluetooth Support Service CDPUserSvc_31e932 Certificate Propagation 	The Bluetoo <failed r<br="" to="">Copies user</failed>	Running	Manual (Trigge Automatic Manual		
		Chime For Lync Client License Service (ClipS	Chime For L		Automatic (Del Manual (Trigge	l	
		CNG Key Isolation COM+ Event System	The CNG ke Supports Sy	-	Manual (Trigge Automatic	L L	
		COM+ System Application	Manages th Maintains a		Manual Disabled	L L	
	Extended Standard		T 1 · · ·	<u>n</u> ·	A I I /D I		

Figure 47: Services on Secondary Server

Start the Chime service

After the service has started, verify that Chime page and associate links and queue accounts are active