



Components

Published 21 May 2025

Contents

1. Components	3
1.1 Windows Services and Azure WebJobs	3
1.2 Web Applications	4
1.3 Telephony Integrations	4
1.4 Other	5
1.5 App Settings	5
1.5.1 Fulfilment Service	5
1.5.2 Inbound Gateway Service	7
1.5.3 Message Host	13
1.5.4 Outbound Gateway Service	17
1.5.4.1 Date and Time Notation	21
1.5.5 Worklist Engine	23

1. Components

This document describes the various technical components of Syntelate XA.

1.1 Windows Services and Azure WebJobs

The following table describes Syntelate XA's Windows services and Azure WebJobs. Windows services are used in on-premises deployments and Azure WebJobs in cloud deployments.



Tip: Each of these Windows services and Azure WebJobs have an `appsettings.config` file, which are documented in [App Settings](#) on page 5.

Service/WebJob	Description
Fulfilment Service	Processes fulfilments. For information about fulfilments, see document <i>Syntelate XA - Fulfilment Server</i> .
Inbound Gateway Service	Checks monitored mailboxes for new emails from customers. Also handles chat.
Outbound Gateway Service	Processes outbound emails and SMS messages (but not SMS chat messages).
Worklist Engine	Checks the INTERACTION_X table for work items (outbound calls, emails, chats, etc.) to pass to agents.
Worklist Import Web API	Allows records to be imported into the INTERACTION_X table via a JSON web API call. For more information, see document <i>Syntelate XA - Worklist Manager Importer</i> .

1.2 Web Applications

The following table describes Syntelate XA’s web applications.

Web Application	Description
Message Host	Hosts chat.

1.3 Telephony Integrations

The following grid describes Syntelate XA’s telephony integrations.

(See Syntelate XA - Overview of Channels for information on other integrations currently available in Syntelate XA.)

Web API	Description
TAPI Web API	Used for communication between Syntelate XA and Avaya IP Office™. There are no app settings for the TAPI Web API.
TSAPI Web API	Used for communication between Syntelate XA and Avaya Aura® Communication Manager. There are no app settings for the TSAPI Web API.


1.4 Other

Component	Description
Redis	<p>An in-memory data structure store.</p> <p>Redis is used to store things like the session data, configuration, and agent/client connection details.</p>

1.5 App Settings

Advanced configuration options for some Syntelate XA components are held in app settings files.

Each app settings file is an XML file, usually called **AppSettings.config**. These files can be edited in any program that handles XML files, such as Notepad.

 **Warning:** Be very careful when editing app settings files. Only make changes if you are sure you know what you are doing. A mistake could cause Syntelate XA to stop working correctly.

Setting values may be case sensitive. Follow the documentation closely.

1.5.1 Fulfilment Service

The Fulfilment Service is responsible for running fulfilments. For information about configuring fulfilments, see document *Syntelate XA - Fulfilment Server*.

The app settings for the Fulfilment Service are stored in the **App.config** file, in the `<appSettings>` element.



Setting	Description
<code>pollingPeriod</code> Seconds	
<code>workList</code> Databases	
<code>emailFrom</code>	Defines the email address from which error or success emails should be sent, for example <code>donotreply@syntelate.com</code> .
<code>emailError</code> Title	Defines the subject for error emails, for example <code>Syntelate Studio Fulfilment Service Error Report: {datetime}</code> .
<code>emailError</code> Header	Defines text to appear at the start of error emails, for example <code>The Syntelate Studio Fulfilment Service ran the Fulfilment '{fulfilmentname}' on {datetime}\n\n</code> .
<code>emailError</code> Footer	Defines text to appear at the end of error emails, for example <code>This email was generated by the Syntelate Studio Fulfilment Service.</code>
<code>emailSuccess</code> Title	Defines the subject for success emails, for example <code>Syntelate Studio Fulfilment Service Report: {datetime}</code> .
<code>emailSuccess</code> Header	Defines text to appear at the start of error emails, for example <code>The Syntelate Studio Fulfilment Service ran the Fulfilment '{fulfilmentname}' on {datetime}. \n\n</code> .
<code>emailSuccess</code>	Defines text to appear at the end of success emails, for example <code>This email</code>

Setting	Description
Footer	was generated by the Syntelate Studio Fulfilment Service.
serviceUser	
ClientSettings Provider. ServiceUri	

1.5.2 Inbound Gateway Service

The **AppSettings.Config** file for the Inbound Gateway service defines the app settings for this service. It contains the following application settings.

Setting	Description
ExchangeVersion	Defines the Microsoft Exchange version, for example Exchange2010.
EmailServerConnString	Defines the string for your email server connection.
FetchTimeSeconds	Defines how frequently to check mailboxes. For the value, enter a number for the time interval, in seconds, for example, 3.
ReadInboxMessage Folder	<p>Possible values are true or false.</p> <p>If set to true, only emails from the inbox folder are processed by the Syntelate XA inbound service.</p> <p>If set to false, emails from all folders in the mailbox are processed, including any spam, junk, or other folders that exist.</p>

Setting	Description
<p><code>AllowedExt</code></p>	<p>Defines the file name extensions that are allowed for customer email attachments. Type a comma-separated list. For example:</p> <pre data-bbox="586 464 1406 541">.doc,.docx,.docm,.pdf,.rtf</pre> <div data-bbox="586 569 1406 867" style="border: 1px solid #0056b3; padding: 10px;"> <p> Note: If a customer attaches a file with a file name extension that is not included in this list, the email message is added to a new record in INTERACTION_X_MESSAGE but the attachment is not saved. For such a record, Syntelate XA sets LKTL_FILESTRIP to Y.</p> </div>
<p><code>AsyncExchangeAccess</code></p>	<p>Defines whether mailboxes are polled asynchronously. Possible values are <code>true</code> and <code>false</code>.</p> <div data-bbox="586 1052 1406 1192" style="border: 1px solid #0056b3; padding: 10px;"> <p> Note: We recommend that this setting is set to <code>false</code> unless the polling of mailboxes is time critical.</p> </div>
<p><code>ErrorEmailTo</code></p>	<p>Defines the email address to which the daily error log report should be sent.</p>
<p><code>ErrorEmailTime</code></p>	<p>Defines the time at which the daily error log report email should be sent. Enter the time in the format <code>hh:mm</code>, using the 24-hour clock. For example, to send the email just before midnight, enter <code>23:59</code>.</p>
<p><code>ErrorEmailActive</code></p>	<p>Defines whether the daily error log report email should be sent. Possible values are <code>true</code> and <code>false</code>.</p>

Setting	Description
ErrorLogToSend	Defines the full path of the log file to attach to the daily error log report email.
ErrorEmailSubject	Defines the subject of the daily error log report email.
ErrorEmailBody	<p>Defines the body text of the daily error log report email. Type \n for a new line. For example:</p> <pre>Please find attached the daily log of errors from the Inbound Gateway service.\n\n Regards,\n\n The Inisoft Team</pre>
MaxAutoRepliesPerEmailAddressIn24Hrs	<p>Limits the number of auto-reply emails sent to the same email address.</p> <p>We recommend setting this value to “3”.</p>
MaxAutoRepliesPerInteractionIn24Hrs	<p>Limits the number of auto-reply emails sent to the same interaction record.</p> <p>We recommend setting this value to “3”.</p>
MaxRetries	<p>Specifies the maximum number of receive attempts accepted before new inbound messages are ignored.</p> <p>We recommend setting this value to “2”.</p> <p>This setting is also used by the outbound gateway for send attempts; both gateways need to be set to the same value, which should be “2”.</p>
sqlConnectionString	Required. Defines the SQL server connection string.

Setting	Description
	<p>For web chat, remember to also specify the <code>ChatUrl</code> to enable the inbound message gateway to process your web chat interactions.</p>
<code>ChatUrl</code>	<p>Required for web chat. Defines the URL of your Message Host web application. Remember to also specify the <code>sqlConnectionString</code> to enable the inbound message gateway to process your web chat interactions.</p>
<code>ChatConnectRetryIntervalSeconds</code>	<p>Defines the number of seconds to wait before attempting to reconnect if a web chat connection is lost.</p>
<code>SmsUrl</code>	<p>Required for SMS chat (but not outbound SMS). Defines the URL of your SMS API.</p>
<code>MailRefreshMins</code>	<p>Defines how frequently, in minutes, the Inbound Gateway service should check for new email rules.</p> <p>Email rules are defined in database table <code>IMMAILBOXRULES</code>. They can be managed via a configuration desktop. See the section Email Rules in <i>Syntelate XA - Supervisor</i>.</p>

Setting	Description
<p>NewContactCreate Always</p>	<p>Valid values: one or more email addresses. Wildcards may be used, such as an asterisk. You need to separate multiple email addresses by three pipe symbols. For example:</p> <pre>*@inisoft.com auto-reply- dameon@hotmail.com accountholder@mail.com</pre> <p>Defines whether to always create a new record in the CONTACT_X table for inbound emails, even if a contact already exists for the email address.</p> <p>If the value for NewContactCreateAlways is left blank, then incoming emails will be attached to the existing contact record if there is one. If no contact record exists for the email then a new contact record will be created.</p>
<p>IgnoreConversationIdAll Contacts</p>	<p>Valid values: true false</p> <p>For inbound email from either a new or an existing contact, this setting determines if the email will be chained to an existing email that has the same conversation ID and associated with the same interaction record.</p> <p>If set to true, then an inbound email will not be chained to an existing email.</p> <p>If set to false, then the inbound email will be chained to an existing email that has the same conversation ID and will be associated with the same interaction record as the existing email.</p>

Setting	Description
<p><code>IgnoreConversationId</code> <code>NewContacts</code></p>	<p>Valid values: true false</p> <p>For inbound email from newly created contacts, this setting determines if the email will be chained to an existing email that has the same conversation ID and associated with the same interaction record.</p> <p>We recommend specifying this setting to true.</p> <p>If set to true, then an inbound email from a newly created contact will not be chained to an existing conversation and therefore will not be associated with an existing interaction record.</p> <p>If set to false, then the inbound email will be chained to an existing email that has the same conversation ID and will be associated with the same interaction record as the existing email.</p>

1.5.3 Message Host

The Message Host **AppSettings.Config** file defines the configuration of the Message Host web application, which processes Syntelate XA's chat channels (web chat, WhatsApp, social media messaging). It contains the following settings.



Tip: To disable an entry, enclose it in a comment:

```
<!-- -->
```

Note that a comment cannot have two dashes anywhere in the comment except at the start and end.

Setting	Description
MaxNumChat Sessions	<p>We do not recommend changing this setting. Instead, edit the WebChatAgentMaxChats general setting (see the GENERAL table) or the MAXNUM column of the CHANNELGROUP table.</p> <p>This setting defines the maximum possible number of chats that can be assigned to an agent. Where the GENERAL or CHANNELGROUP database tables define a number higher than this setting, this setting overrules these tables.</p> <p>However, where the GENERAL or CHANNELGROUP database tables define a number lower than this setting, the lower number applies.</p>
EnableTransfer	<p>Valid values: true false</p> <p>Default value: false</p>

Setting	Description
	Determines whether the Transfer button is displayed in the Chat control of the agent desktop.
MaxChatMinutes	Applies a limit, specified in minutes, to the length of a chat session.
RedisDatabase	Required. Defines the Redis database number.
RedisPort	Required. Defines the Redis port number.
RedisConnection String	Required. Defines the Redis connection string.
ClientValidation Enabled	Valid values: true false Standard ASP.NET MVC app setting. For Syntelate XA, the value must be set to true.
Unobtrusive JavaScriptEnabled	Valid values: true false Standard ASP.NET MVC app setting. For Syntelate XA, the value must be set to true.
aspnetspell_key	Specifies the license key for Nanospell, a plugin ASP.Net spell checker, used by the web chat application to provide user guidance on spelling.
hideEmailPrint Chat	Valid values: true false Determines whether the web chat will offer the customer the options to email or print the chat transcript.


Setting	Description
ChatBotEnabled	<p>Valid values: true false</p> <p>Determines whether the chatbot is active.</p>
ChatBot	<p>For chat channels that use a third-party AI chatbot. Enter the name of the chatbot service.</p>
ChatBotName	<p>Enter the name of the chat bot avatar. If you don't want to use an avatar, this value can be left blank.</p>
UltimateAIChatBot Id	<p>Only required for chat channels that integrate an Ultimate AI chatbot. Enter the ID of your chatbot.</p>
UltimateAIChatBot URI	<p>Only required for chat channels that integrate an Ultimate AI chatbot. Enter the URI of your Ultimate AI chatbot.</p>
RenderChatHead Css	<p>Optional.</p> <p>This setting enables the web chat application to display embedded Google fonts. To achieve this, a CSS file must be created in the Web Chat directory of Syntelate XA, where the CSS specifies the HTML that will embed the Google font. When this CSS file exists, Syntelate XA will automatically pick up the HTML and inject it into the web page that hosts the web chat application. The value for this setting must be the filename of the new CSS file.</p> <p>Your Inisoft consultant will create the CSS file and update the app setting for you. After implementation, if you need to make a change to the CSS or change the value for this setting you must restart the Web Chat app pool in order for the change to be effected.</p>

Setting	Description
<p><code>MaxFileSize</code></p>	<p>Specifies the maximum file size for attachments uploaded by the customer to the chat.</p> <p>Write the value in bytes (binary prefixes). So, you should specify “1048576” if the maximum file size limit is 1 MB.</p>

1.5.4 Outbound Gateway Service

The Outbound Gateway service checks INTERACTION_X_NEWMESSAGE for new messages. When the service finds a new message, it processes it as an outbound email, SMS, or printed letter as appropriate and then moves the record to the INTERACTION_X_MESSAGE table.

The **AppSettings.Config** file for the Outbound Gateway service defines the configuration for this service. It contains the following application settings.

Setting	Description
AllowedExt	<p>Defines the file name extensions that are allowed for agent email attachments. Type a comma-separated list. For example:</p> <pre>.doc,.docx,.docm,.pdf,.rtf</pre>
AsyncExchangeAccess	<p>Defines whether the INTERACTION_X_NEWMESSAGE database table is polled asynchronously. Possible values are true and false.</p> <div style="border: 1px solid blue; padding: 5px; margin-top: 10px;"> <p> Note: We recommend that this setting is set to false unless the polling of this database table is time critical.</p> </div>
ConvertAutoReplyToFrench	<p>This setting enables localization of Syntelate XA auto-reply emails for customers in Québec, Canada.</p> <p>Determines whether an auto-reply email sent from Syntelate</p>

Setting	Description
	<p>XA to a Microsoft 365 email account will be automatically translated into Canadian French (fr-CA) and will convert its date and time details in the header to the original timezone.</p> <p>Valid values: true false</p> <p>Default value: false</p>
<p><code>ConvertHTMLToPlainTextOldWords</code></p>	<p>Required. The HTML entities specified here will be converted into the Unicode characters listed in <code>ConvertHTMLToPlainTextNewWords</code>.</p> <p>Use the following:</p> <div data-bbox="613 955 1404 1297" style="border: 1px solid #ccc; padding: 10px; margin: 10px 0;"> <pre>value="&rsquo; ,&nbsp; ,&amp; ,&q uot; ,&lt; , &gt; ,&reg; ,&copy; ,&bull; ,& trade; ,&#39; "</pre> </div>
<p><code>ConvertHTMLToPlainTextNewWords</code></p>	<p>Required. This key specifies the Unicode characters that will be converted from the HTML entities listed in <code>ConvertHTMLToPlainTextNewWords</code>.</p> <p>Use the following:</p>

Setting	Description
	<pre data-bbox="657 394 1365 499">value="', , & , & , &quot; , &lt; , &gt; , ® , © , • , ™ , &apos; "</pre>
DatabaseConnectionTime outInMins	<p>Defines the time period (in minutes) during which the Outbound Gateway service attempts to reconnect to the Syntelate XA database if the connection is lost.</p> <p>Valid values: A positive integer, for example, 20.</p> <p>Default value: 20</p>
ExchangeVersion	<p>Defines the Microsoft Exchange version, for example Exchange2010.</p>
FetchTimeSeconds	<p>Defines how frequently to check the INTERACTION_X_NEWMESSAGE database table. Type a number of seconds.</p>
sqlConnectionString	<p>Defines the SQL Server connection string.</p>
ErrorEmailTo	<p>Defines the email address to which the daily error log report should be sent.</p>
ErrorEmailTime	<p>Defines the time at which the daily error log report email should be sent. Enter the time in the format hh:mm, using the 24-hour clock. For example, to send the email just before midnight, enter 23:55.</p>

Setting	Description
ErrorEmailActive	Defines whether the daily error log report email should be sent. Possible values are true and false.
ErrorLogToSend	Defines the full path of the log file to attach to the daily error log report email.
ErrorEmailSubject	Defines the subject of the daily error log report email.
ErrorEmailBody	<p>Defines the body text of the daily error log report email. Type \n for a new line. For example:</p> <div style="border: 1px solid #ccc; padding: 10px; margin: 10px 0;"> <pre>Please find attached the daily log of errors from the .\n\n Regards,\n\n The Team</pre> </div>
DontSendEmail	<p>Defines whether the Outbound Gateway service should send emails/SMS. If set to false, the service will still process messages (move them from the INTERACTION_X_NEWMESSAGE table to the INTERACTION_X_MESSAGE table). However, emails and SMS will not be sent.</p> <p>Possible values are true and false. In a live environment, this should be false.</p>
SnippetsDateTimeFormat	Defines the date/time format for snippets, for example dd/MM/yyyy HH:mm:ss.
SnippetsDateFormat	Defines the date format for snippets, for example dd/MM/yyyy.

Setting	Description
SnippetsTimeFormat	Defines the time format for snippets, for example HH:mm tt.
MaxRetries	<p>We recommend setting this value to “2”.</p> <p>Defines the maximum number of send attempts permitted before the outbound message is ignored. This setting is also used by the inbound gateway for receive attempts; both gateways need to be set to the same value, which should be “2”.</p>
ZangAPIURL	<p>Defines the REST base URL required by the Avaya Communications API. The base URL that you'll need depends on your geographic region. You can find Avaya's list of base URLs by region in Avaya's documentation at:</p> <p>https://docs.avayacloud.com/asp/rest#base-url.</p>

1.5.4.1 Date and Time Notation

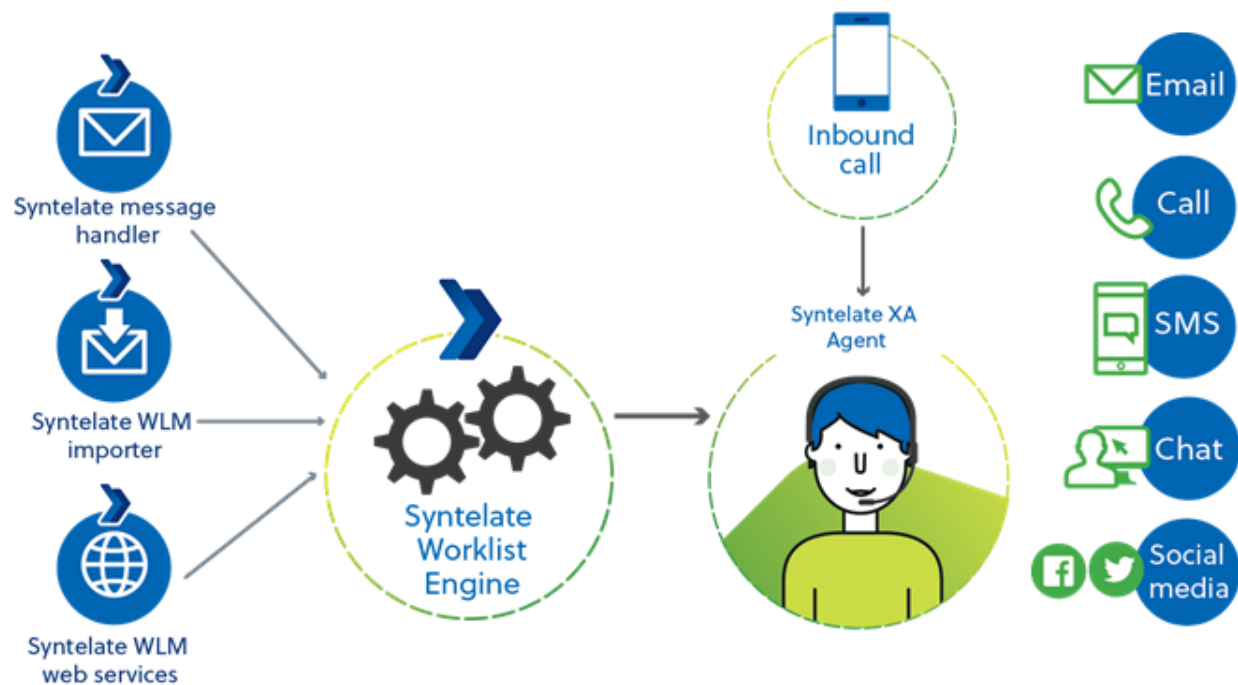
You can use the following notation when specifying a date and time in Syntelate XA.

Format specifier	Description
d	The day of the month, from 1 through to 31.
dd	The day of the month, from 01 through to 31.
ddd	The abbreviated name of the day of the week, for example “Mon”.
dddd	The full name of the day of the week, for example “Monday”.

Format specifier	Description
h	The hour, using the 12-hour clock from 1 to 12.
hh	The hour, using the 12-hour clock from 01 to 12.
H	The hour, using the 24-hour clock from 0 to 23.
HH	The hour, using the 24-hour clock from 00 to 23.
m	The minute, from 0 through to 59.
mm	The minute, from 00 through to 59.
M	The month, from 1 through to 12.
MM	The month, from 01 through to 12.
MMM	The abbreviated name of the month, for example “Jan”.
MMMM	The full name of the month, for example “January”.
tt	The AM/PM designator.
yy	The year, from 00 to 99.
yyyy	The year, from 0000 to 9999.

1.5.5 Worklist Engine

With the exception of inbound calls, the Worklist Engine is responsible for passing all types of interactions to agents: outbound calls, emails, and chats (including web, SMS, and social media chats).



The **appsettings.config** file for the Worklist Engine defines the app settings for this service. It contains the following application settings.

Setting	Description
RefreshSeconds	
AgentDesktopUrl	Defines the URL of the agent desktop.