

# Active Roles 8.1.3 SP1

## Release Notes

**07 September 2023, 08:42**

These release notes provide information about the Active Roles 8.1.3 SP1 release. For the most recent documents and product information, see [Active Roles Technical Documents](#) on the *One Identity support portal*.

## About this release

Active Roles 8.1.3 SP1 (build 8.1.3.10) is a service pack release containing additional resolved issues compared to the original Active Roles 8.1.3 (build 8.1.3.2) release.

- For more information on the enhancements in releases 8.1.3 and 8.1.3 SP1, see [Enhancements](#).
- For more information on the resolved issues fixed in releases 8.1.3 and 8.1.3 SP1, see [Resolved issues](#).
- For more information on the list of known issues, see [Known issues](#).

## Enhancements

The following is a list of enhancements contained in both Active Roles 8.1.3 and 8.1.3 SP1.

**Table 1: General Active Roles enhancements**

Enhancement	Issue ID
In preparation for the deprecation of the Remote PowerShell (RPS) protocol in	402974

Enhancement	Issue ID
<p>Exchange Online PowerShell, Active Roles 8.1.3 and 8.1.3 SP1 are updated to:</p> <ul style="list-style-type: none"> <li>• Use Exchange Online PowerShell v3 instead of earlier versions.</li> <li>• Use cmdlet Connect-ExchangeOnline instead of the deprecated cmdlet New-PSSession when establishing Exchange Online connections.</li> </ul> <p>For more information, see <a href="#">Announcing Deprecation of Remote PowerShell (RPS) Protocol in Exchange Online PowerShell</a> in the <i>Microsoft Tech Community</i> portal.</p> <p><b>NOTE:</b> You can continue using cmdlet <i>New-PSSession</i> to connect to on-premises Exchange Server deployments.</p>	

**Table 2: Active Roles Synchronization Service enhancements**

Enhancement	Issue ID
<p>Updated the Generic SCIM Connector with the following enhancements:</p> <ul style="list-style-type: none"> <li>• Added support for the following Starling Connect connectors and connector versions: <ul style="list-style-type: none"> <li>• Pipedrive 1.0</li> <li>• ServiceNow 2.0</li> <li>• SuccessFactors HR 9.0</li> <li>• WorkdayHR 3.0</li> <li>• Zendesk 1.0</li> </ul> </li> </ul> <p><b>NOTE:</b> While the <b>Generic SCIM Connector</b> may work with other SCIM 2.0-based Starling Connect connectors, One Identity tested it to work only with these connectors and connector versions.</p> <ul style="list-style-type: none"> <li>• Added new <b>Query only synced attributes</b> setting to support querying only attributes that are specifically defined for synchronization.</li> <li>• Added new <b>Starling cursor-based pagination</b> setting to support Starling Connect connectors using cursor-based pagination instead of the SCIM protocol-defined index-based pagination method.</li> </ul> <p>For more information, see <i>Configuring data synchronization with the Generic SCIM Connector</i> in the <i>Active Roles Synchronization Service Administration Guide</i>.</p>	404915
<p>In preparation for the deprecation of the Remote PowerShell (RPS) protocol in Exchange Online PowerShell, Active Roles Synchronization Service is updated with the following enhancements:</p> <ul style="list-style-type: none"> <li>• Increased the minimum required version of Exchange Online PowerShell</li> </ul>	403476

to v3.0.0.

- Replaced *New-PSSession* cmdlet calls with *Connect-ExchangeOnline* cmdlet calls.
- Updated the **Microsoft 365 Connector** (formerly known as **Office 365 Connector**) and the **Microsoft Azure AD Connector** to support certificate-based authentication and automatic configuration.


For more information on configuring the updated connectors, see *Working with Microsoft 365* and *Working with Microsoft Azure Active Directory* in the *Active Roles Synchronization Service Administration Guide*.

## Resolved issues

The following is a list of issues addressed in Active Roles 8.1.3 SP1 (build 8.1.3.10) and 8.1.3 (build 8.1.3.2).

### Resolved issues in Active Roles 8.1.3 SP1

**NOTE:** The following issues were fixed only in Active Roles 8.1.3 SP1 (build 8.1.3.10). To check the build of your Active Roles 8.1.3 installation:

- In the Active Roles Configuration Center, navigate to  (**Information**) > **Technical Information**.
- Alternatively, open the **Add or Remove Programs** list of the operating system, search for **One Identity Active Roles**, then click its entry.

**Table 3: Active Roles Web Interface resolved issues**

Resolved Issue	Issue ID
Previously, when configuring the <b>Send on Behalf</b> or <b>Forwarding Address</b> settings of a hybrid Azure user in the <b>Exchange Online Properties</b> > <b>Mail flow settings</b> > <b>Delivery Options</b> form, the Web Interface showed the available objects for these settings with their object GUIDs instead of their display names. This issue did not occur when checking the <b>Send on Behalf</b> or <b>Forwarding Address</b> settings of cloud-only Azure users.  This issue is now fixed, so these settings are now much easier to use when configuring them for hybrid Azure users.	415014
Previously, when configuring Full Access permission for a user to an Exchange Online mailbox, it could occur that Active Roles could not save the permission	427713

Resolved Issue	Issue ID
settings. This issue is now fixed.	

### Resolved issues in Active Roles 8.1.3

**NOTE:** The following issues were fixed both in Active Roles 8.1.3 (build 8.1.3.2) and 8.1.3 SP1 (build 8.1.3.10).

**Table 4: General resolved issues**

Resolved Issue	Issue ID
<p>Previously, when creating a new user with an Exchange mailbox either in the Active Roles Console or in the Web Interface, Active Roles did not populate the <b>Mailbox database</b> list if the performance fix described in <a href="#">Knowledge Base Article 4336544</a> was applied with a <b>PerformanceFlag</b> registry key value of 2 or 3.</p> <p>This issue was caused by Active Roles also evaluating the values of 2 and 3 specified for the <b>PerformanceFlag</b> key, even though the key supports only two values: 0 (to deactivate the performance fix) and 1 (to enable it).</p> <p>The issue was solved by making sure that Active Roles accepts only values 0 and 1 for the <b>PerformanceFlag</b> key.</p>	417246
<p>Previously, in Active Roles Log Viewer, the Active Roles verbose log did not use the correct delta request URL to retrieve more objects. This resulted in not all users being listed under <b>Azure Users</b>. This issue is now resolved.</p>	417067
<p>Previously, when checking the OneDrive settings of a hybrid or cloud Azure user, the Active Roles Web Interface and the Active Roles Management Shell:</p> <ul style="list-style-type: none"> <li>• Might not display the OneDrive site URL.</li> <li>• Showed 0 for the used and quota storage sizes.</li> </ul> <p>This issue was caused by incorrect query parameters used for fetching the relevant OneDrive data, and is now fixed.</p>	412967

**Table 5: Active Roles Service resolved issues**

Resolved Issue	Issue ID
<p>Previously, scheduled Active Roles operations could fail with the following error if the Active Directory domain controller (DC) assigned to perform the scheduled operation was unavailable:</p>	407373

Resolved Issue	Issue ID
----------------	----------

The server is not operational.

This issue occurred because Active Roles did not fall back to another working DC in the Disaster Recovery Plan (DRP) process in such cases, and is now fixed.

**Table 6: Configuration Center resolved issues**

Resolved Issue	Issue ID
<p>Previously, when importing a configuration database in the Active Roles Configuration Center, attempting to use a backup encryption key in the <b>Import of the encrypted data</b> tab did not work, and the encryption file could not be used to decrypt the imported database.</p> <p>This issue occurred because even though the Administration Service validated the contents of the encryption file, it did not use it for the actual import process. This issue is now solved, and the key is used properly.</p> <p><b>NOTE:</b> As this issue is now fixed, make sure not to use the encryption file key to manually restore the encryption key after the import with the Restore-AREncryptionKey command. Use the file only when instructed during the import process.</p>	405222
<p>Previously, when opening the Active Roles Configuration Center and selecting the <b>Web Interface</b> tab, the following error could appear:</p> <p>Object reference not set to an instance of an object.</p> <p>This issue occurred due to errors in updating the Web Interface configuration during a product upgrade, and is now fixed.</p>	387283

**Table 7: Console (MMC Interface) resolved issues**

Resolved Issue	Issue ID
<p>Previously, in rare occasions, navigating to <b>Configuration &gt; Server Configuration &gt; Scheduled Tasks &gt; Builtin</b>, and running the Dynamic Group Updater scheduled task could result in Active Roles not being able to communicate with the Domain Controller. The Dynamic Group Updater accidentally removed all members of the dynamic group, and to re-add members, the dynamic group had to be manually rebuilt by clicking <b>Rebuild</b>.</p> <p>The issue is now resolved.</p>	414916
<p>Previously, when navigating to <b>Configuration &gt; Server Configuration &gt;</b></p>	412644

**Scheduled Tasks > Builtin**, opening the **Azure Manual Cache Control Properties** and changing the `Manual clear cache` script parameter to `true` in **Parameters**, manually clearing the cache failed by right-clicking **Azure Manual Cache Control > All Tasks > Execute**. The following event log entry appeared:

```
ScriptModule: AzureCacheControl
An error occurred when executing scheduled task
The method or operation is not implemented.
```

The issue is now resolved: running the tasks is successful, and the `Manual clear cache` script parameter was removed as a result of code refactoring. The `Manual clear cache` script parameter was removed because it only deleted the cache, but did not refill it, which caused significant lag when using Microsoft Azure. To manually clear cache use the `Manual reload cache`, which deletes and refills cache, ensuring smooth functionality.

**NOTE:** If you set the values to `true` of both `Manual delta processing` and `Manual reload cache` script parameters, the script will not run and the following event log entry will appear:

```
More than one actions have been selected for execution in
Scheduled Task parameters.
```

Previously, when applying both an Access Template (AT) using a Full Control permission and another granular AT denying access to certain password-related attributes (such as `PasswordNeverExpires`, `UserCannotChangePassword`, `UserMustChangePasswordAtNextLogon`) to a user, the deny AT did not take effect for the user.

410412

This issue was caused by the AT specifying an explicit deny not taking precedence over the AT using the Full Control permission.

The issue was fixed by ensuring that explicit deny ATs always take precedence over inherited allow permissions.

Previously, in certain environments, Active Roles might not update Dynamic Groups in time when adding a new rule or forcing a rebuild. Also, in case of more than 1,000 changes, the changes were not processed until the nightly scheduled task.

405859

To solve this problem, Active Roles features a rebuilt Dynamic Group logic that removes the 1,000 group member limit for normal group membership changes, and also ensures that changes are now always processed immediately.

Previously, when configuring the mail configuration in **Configuration > Server Configuration > Mail Configuration > Default Mail Settings Properties** to use Exchange Web Services with Exchange Online and send

404659

Resolved Issue	Issue ID
<p>approval responses by email, response emails sent by approvers could stuck indefinitely without being processed by Active Roles. This problem did not affect approval workflows using on-premises Exchange Server mailboxes.</p> <p>The issue was caused by approval notifications not supporting Exchange Web Service modern authentication, and is now fixed.</p>	
<p>Previously, when configuring the mail configuration in <b>Configuration &gt; Server Configuration &gt; Mail Configuration &gt; Default Mail Settings Properties</b> to use Exchange Web Services with Exchange Online and send approval responses by email, the <code>mailto:</code> links of approval workflow notification emails always contained the service account address even if an impersonated account was configured in the mail configuration settings.</p> <p>The issue was caused by approval notifications not supporting Exchange Web Service modern authentication, so Active Roles could not collect emails from the impersonated account. Instead, it was falling back to the service account address.</p> <p>This issue is now fixed, so when you configure an impersonated account address, that email address will appear properly in the approval workflow email messages.</p>	404217
<p>Previously, undoing the deprovision of a user object that was originally licensed via group-based licensing would result in the previous license reassigned to the object directly instead of inheriting it from the group.</p> <p>The issue is fixed and now if a user has a license inherited from a group, after deprovisioning and undo-deprovisioning it, the license will be inherited from the group again instead of being reassigned directly.</p>	388433
<p>Previously, after upgrading Active Roles and importing a configuration that contained a scheduled automation workflow, the workflow schedule was disabled, so the workflow could not run as originally scheduled.</p> <p>The issue was caused by unintended data modification: the scheduled workflow stores the Active Roles Service GUID in a database record, but new installations could change this GUID.</p> <p>The issue is now resolved by replacing the previous service GUID with the current one when importing the configuration, so that automation workflows can run as scheduled even after upgrading or reinstalling Active Roles.</p>	326759

**Table 8: Installer resolved issues**

Resolved Issue	Issue ID
<p>Previously, attempting to install Microsoft OLE DB Driver for SQL Server via the Active Roles installer required users to manually install the prerequisite Microsoft Visual C++ Redistributable for Visual Studio packages, as they were</p>	411389

**Resolved Issue****Issue ID**

not included in the Active Roles installation package.

This issue was fixed by including the packages in the installer.

**Table 9: Management Shell resolved issues****Resolved Issue****Issue ID**

Previously, the Active Roles Management Pack for SCOM showed an incorrect version number.

405577

This issue is now fixed.

**Table 10: Synchronization Service resolved issues****Resolved Issue****Issue ID**

Previously, when synchronizing user licenses using the Azure AD or Microsoft 365 connectors, synchronization could fail. The issue was caused by querying the users' `licenseDetails` attribute as part of the synchronization process. When querying the `licenseDetails` attribute, in some cases, Microsoft Graph API responded with a 404 Not found error message, causing either the Azure AD or the M365 connector to abort the synchronization process.

422136

The issue is now resolved: the users that get stuck in Azure AD are now bypassed during the synchronization process and do not cause any errors.

Previously, when synchronizing Azure user licenses using the Azure AD or Microsoft 365 connectors, the synchronization process could fail with an `Access token is expired` error message.

419838

This issue occurred in case of a very large amount of users because the access token from Microsoft Graph API was only valid for 1 hour, but synchronizing the licenses took longer, and Synchronization Service did not refresh the access token.

The issue is now resolved.

Previously, if you used the Synchronization Service Console with a different user than the one used for running Synchronization Service, the following errors could occur:

418137

- Creating and consenting a new Azure AD Connector or Microsoft 365 Connector with the auto-configuration settings could result in the following error when testing the connection:

Connection failed  
Cannot connect using the specified connection settings.



- Configuring Azure BackSync could fail with the following error:

```
Synchronization Service has returned an error  
Active Roles cannot acquire the access token.
```

This issue occurred because Active Roles Synchronization Service could not properly access the secret used for authenticating these connections when you accessed Synchronization Service with a user other than the one that runs the service.

The issue was fixed by making sure that Synchronization Service can properly access the certification store where the required secret is stored, regardless of the user you use.

Previously, when running Azure BackSync (or any **Update** sync workflow that used the Azure AD Connector) to synchronize group members after making changes to a group, Azure BackSync (or the sync workflow) failed with the following error: 418031

```
One or more added object references already exist for the following  
modified properties: 'members'.
```

This issue occurred because Synchronization Service used expand queries to retrieve Azure group members (and object reference type attributes in general) with two limitations:

- They retrieved only the first 20 member objects.
- They did not support pagination.

As Synchronization Service retrieved only the first 20 member objects, Azure BackSync or the **Update** sync workflow could run into data synchronization anomalies, such as trying to assign an object to a group where it was already a member.

The issue was fixed by removing the previous limitations of the expand query, so that it can retrieve every member of a group (or every other object reference type attribute). This fix affects the following object reference type attributes:

- Members
- MemberOf
- Owners
- TransitiveMembers
- TransitiveMemberOf
- MembersWithLicenseErrors
- ResourceProvisioningOptions

Resolved Issue	Issue ID
<p>Previously, when running a sync workflow that used the Azure AD Connector for group object mapping, Synchronization Service could not map the object reference type attributes on Azure group objects, and showed the following error:</p> <div>Synchronization steps aborted. Details: the given key was not present in the dictionary.</div> <p>This issue occurred because the Azure AD Connector was processing the response incorrectly when querying the affected attributes from Graph API. The issue was fixed by updating the mapping for the following object reference type attributes, so that the Azure AD Connector can process Graph API responses correctly:</p> <ul style="list-style-type: none"> <li>• Members</li> <li>• MemberOf</li> <li>• Owners</li> <li>• TransitiveMembers</li> <li>• TransitiveMemberOf</li> <li>• MembersWithLicenseErrors</li> <li>• ResourceProvisioningOptions</li> </ul>	417804
<p>Previously, the Microsoft 365 Connector (formerly known as Microsoft Office 365 Connector) could only synchronize up to 1,000 mail users. This limitation has been removed.</p>	405966
<p>Previously, when running Azure BackSync with the Azure AD Connector for several thousand users, Synchronization Service did not indicate the number of processed user objects until all user objects were processed. Because of this, it could appear that nothing happened until the on-screen counter jumped to the total number of processed objects. The issue is fixed, and now the counter of processed objects in the Azure AD Connector increases gradually, as expected.</p>	401938
<p>Previously, the Azure BackSync could only synchronize up to 1,000 contacts. The issue is now resolved.</p>	387685

**Table 11: Web Interface resolved issues**

Resolved Issue	Issue ID
Previously, after adding members to an Azure group, the value of the objectClass attribute cleared and the Azure group no longer appeared in the	417068

Resolved Issue	Issue ID
list of groups. This issue is now resolved.	
<p>Previously, in a federated or synchronized identity Azure tenant, creating hybrid users with an Exchange Online Plan 2 license, then adding those hybrid users to a list of users with <b>Full Access</b> resulted in Active Roles not saving the Exchange Online delegation settings, even though the following message appeared when clicking <b>Save</b>:</p> <p>The operation is successfully completed.</p> <p>The issue is now resolved.</p>	416873
<p>Previously, using a personal view to open an Active Directory (AD) Organizational Unit (OU) whose name contains special character(s) resulted in the following error:</p> <p>Administration Service encountered an error when retrieving properties of the object.</p> <p>The issue was caused by special characters in the request URL of the Web Interface and are now resolved, with the exception of the &lt; character. For more information, see issue 415590 in <a href="#">Known issues</a>.</p>	414564
<p>Previously, in <b>Customization &gt; Global Settings</b>, when enabling or disabling quick searches for AD LDS and Azure AD objects, clicking <b>Save</b> did not save your settings.</p> <p>The issue is now resolved.</p>	412961
<p>Previously, when setting a custom global color scheme in <b>Customization &gt; Global settings &gt; Color scheme</b>, the customized Web Interface scheme could appear incorrectly in the user interface, with the sidebar colors, various selected elements and certain panes not following the base color of the scheme.</p> <p>This issue was fixed by adjusting the management of customized Web Interface themes.</p>	412961
<p>Previously, when setting a custom global color scheme in <b>Customization &gt; Global settings &gt; Color scheme</b>, the customized Web Interface scheme could appear incorrectly in the user interface, with the sidebar colors, various selected elements and certain panes not following the base color of the scheme.</p> <p>This issue was fixed by adjusting the management of customized Web Interface themes.</p>	407336
<p>Previously, customizing the Web Interface could negatively impact the functionality and performance of object search queries. Following customization, queries in the Web Interface could return too many objects,</p>	395064

Resolved Issue	Issue ID
<p>and query searches could slow down due to performing complex internal filtering before displaying query results in the Web Interface.</p> <p>This issue is now fixed, so customized Web Interface instances now work without any such problems.</p>	
<p>Previously, searching for Azure objects took approximately 15-20 seconds.</p> <p>The issue has been resolved by modifying Microsoft Graph API pagination to reduce network traffic. As a result, searching for Azure objects is now significantly faster.</p>	389314
<p>Previously, when configuring the <b>Exchange Online Properties</b> for the on-premises account of a remote shared mailbox, the <b>Full Control</b> permissions of the mailbox appeared blank in the Active Roles Web Interface.</p>	388526
<p>Previously, registering a custom primary domain name for the Azure tenant and using it in the -organization parameter in Exchange Online connection strings was not supported by Microsoft and could result in performance issues in the Active Roles Web Interface when fetching tenant information.</p> <p>The issue is now resolved.</p>	387657
<p>Previously, when using the <b>Customization &gt; Directory Objects &gt; Customize Navigation Bar &gt; General</b> option of the Web Interface to open the <b>Item Properties</b> of the <b>Reload</b> button or the <b>Restore Default</b> button, clicking <b>OK</b> to close the dialog without any changes and reloading the configuration resulted in the changed <b>Reload</b> or <b>Restore Default</b> button no longer working.</p> <p>This issue occurred because Active Roles was unable to get the target URL of these buttons, resulting in the <b>Item Properties &gt; URL to open</b> field appearing empty in the Web Interface. If this field was left empty, clicking <b>OK</b> in the dialog to save the button settings broke the button.</p> <p>To fix the issue, the Web Interface now sends a pop-up alert to inform users that the <b>URL to open</b> field cannot be left empty.</p>	322689
<p>Previously, when copying a shared, equipment or room mailbox in the Web Interface, the copied mailbox did not inherit the original mailbox type, and was created as a standard user mailbox instead. In other words, the value of its msExchRecipientDisplayType attribute was always set to 1073741824 instead of inheriting the original value.</p> <p>This issue was caused by a Web Interface infrastructure problem, and was fixed by implementing a switch case to determine the type of mailbox and add the proper attribute during the copy process.</p>	307164

# Known issues

The following is a list of issues, including those attributed to third-party products, known to exist at the time of release.

**Table 12: General known issues**

Known Issue	Issue ID
Activating the EnableAntiForgery key (<add key="EnableAntiForgery" value="true"/> in web.config) may cause the following error message:  <div>Session timeout due to inactivity. Please reload the page to continue.</div>	91977

## Workaround

Update the **IgnoreValidation** key in the <appSettings> section by adding a property value in lowercase:

1. Open **IIS Manager**.
2. In the left pane, under **Connections**, expand the tree view to **Sites > Default Web Site**.
3. Under **Default Web Site**, click on the Active Roles application (**ARWebAdmin** by default).
4. Double-click **Configuration Editor**.
5. From the **Section** drop-down, select **appSettings**.
6. Find the **IgnoreForValidation** key.
7. Append the comma-separated value to **IgnoreForValidation**, for example: **lowercasecontrolname**.
8. In the right pane, under **Actions**, click **Apply**.
9. Recycle the App pool.

**Table 13: Configuration Center known issues**

Known Issue	Issue ID
When configured for Groups and Contacts, the <b>Office 365 and Azure Tenant Selection</b> policy displays additional tabs.	229031
Tenant selection supports selecting only a single tenant.	229030
In the <b>Starling Connect Connection Settings</b> link, clicking <b>Next</b> displays progress, but the functionality is not affected, so the button is not required.	126892

**Table 14: Console (MMC Interface) known issues**

Known Issue	Issue ID
Azure objects cannot be deleted.	392597
<b>Workaround</b>	
In the Delete Access Templates, grant the user Read right on the ObjectClass property.	
Automation workflows with the Microsoft 365 script fail, if multiple workflows share the same script and the script is scheduled to execute at the same time.	200328
<b>Workaround</b>	
One Identity recommends scheduling the workflows with different scripts or at a different time.	
When a workflow is copied from a built-in workflow, it may not run as expected.	153539
Azure Group Properties are not available if they are added to the Microsoft 365 Portal or Hybrid Exchange Properties from the forwarding address attribute of Exchange online users.	98186
In Active Roles with the <b>Office 365 Licenses Retention</b> policy applied, after deprovisioning the Azure AD user, the Deprovisioning Results for the <b>Office 365 Licenses Retention</b> policy are not displayed in the same window.	91901
<b>Workaround</b>	
To view the deprovisioning results of an Azure AD user:	
<ul style="list-style-type: none"> <li>• In the Active Roles Console, right-click and select <b>Deprovisioning Results</b>.</li> <li>• In the right pane of the Active Roles Web Interface, click <b>Deprovisioning Results</b>.</li> <li>• To refresh the form, press <b>F5</b>.</li> </ul>	

**Table 15: Installer known issues**

Known Issue	Issue ID
After upgrading Active Roles, the pending approval tasks are not displayed in the Active Roles Web Interface.	91933

**Table 16: Language Pack known issues**

Known Issue	Issue ID
In the Active Roles Configuration Center, changing the language in <b>Global</b>	125880

Known Issue	Issue ID
<p><b>settings</b> does not work properly.</p> <p><b>Workaround</b></p> <p>To change the language of the Web Interface, configure the language with the <b>Active Roles 8.1.3 SP1 &gt; Settings &gt; User interface language</b> option of the Web Interface.</p>	
In the Active Roles Console, the <b>O365 script execution configuration</b> activity of the Workflow Designer is not completely localized to German.	151392
In the Active Roles Console, the German localization may contain visual issues and truncated texts.	91946
In the Active Roles Console, some strings are displayed in English instead of German in the German localization.	91942
In the Active Roles Synchronization Service, the <b>Event Viewer</b> messages are not translated to German.	91753
In the Active Roles Synchronization Service, the German localization does not have all connector strings translated.	91709
In the Active Roles Web Interface, some Azure-related strings are translated incorrectly for the supported languages. Translated texts may also contain link inconsistencies.	257995
In Active Roles, several German localization issues are present.	164713
In Active Roles, strings on the notification page are not localized.	153695
In the Language Pack installer, the link of the online EULA agreement in the EULA text does not work.	91925

**Table 17: Synchronization Service known issues**

Known Issue	Issue ID
<p>In the Synchronization Service, the following attributes of the <b>Microsoft Azure AD Connector</b> are currently not supported and cannot be queried via the Microsoft Graph API:</p> <ul style="list-style-type: none"> <li>• <b>user</b> attributes: <ul style="list-style-type: none"> <li>• aboutMe</li> <li>• birthday</li> <li>• contacts</li> <li>• hireDate</li> <li>• interests</li> </ul> </li> </ul>	304074

Known Issue	Issue ID
<ul style="list-style-type: none"> <li>• mySite</li> <li>• officeLocation</li> <li>• pastProjects</li> <li>• preferredName</li> <li>• responsibilities</li> <li>• schools</li> <li>• skills</li> <li>• <b>group</b> attributes: <ul style="list-style-type: none"> <li>• acceptedSenders</li> <li>• allowExternalSenders</li> <li>• autoSubscribeNewMembers</li> <li>• hasMembersWithLicenseErrors</li> <li>• hideFromAddressLists</li> <li>• hideFromOutlookClients</li> <li>• isSubscribedByMail</li> <li>• membersWithLicenseErrors</li> <li>• rejectedSenders</li> <li>• unseenCount</li> </ul> </li> </ul> <p>This means that although these attributes are visible, they cannot be set in a mapping rule.</p>	
After running the <b>get-qcworkflowstatus</b> cmdlet in the Synchronization Service, the workflow status is not accurate.	125768

**Table 18: Web Interface known issues**

Known Issue	Issue ID
<p>Using a personal view to open an Active Directory (AD) Organizational Unit (OU) whose name contains the &lt; special character results in the following error:</p> <div> <p>An error occurred during the last operation.  Error: A potentially dangerous Request.Query.String was detected from the client (DN="OU\&lt;name-property&gt;").</p> </div> <p>The issue is caused by the special character in the request URL of the Web Interface, causing failures in the web functionality of Active Roles.</p> <p><b>Workaround</b></p>	415590



Known Issue	Issue ID
One Identity recommends avoiding the use of the < character in the name property of an AD object.	
When attempting to modify or delete Azure users, contacts, or groups synchronized from an on-premises Active Directory to an Azure Active Directory, the operation either appears to be successful, but silently fails, or the operation fails with a generic error message.	388062, 388063
If the operation appears to be successful, the following message appears:	
The operation is successfully completed.	
However, the operation silently fails, no error message appears, and the Azure user, contact or group is not deleted or modified.	
If the operation fails, the following generic error message appears instead of a specific error message:	
An error occurred during the last operation.	
<b>NOTE:</b> Similar failures with either no error message or a generic error message may occur due to an architectural issue in the Active Roles Web Interface.	
If you click <b>Azure &gt; Resource Mailboxes</b> to query room mailboxes after being idle for approximately 15-20 minutes, the Active Roles Web Interface will not list any room mailboxes.	293380
<b>Workaround</b>	
Restart the Administration Service.	
In the Active Roles Web Interface, Azure roles are not restored automatically after performing an <b>Undo Deprovision</b> action on a user.	172655
<b>Workaround</b>	
After the <b>Undo Deprovision</b> action is completed, assign the Azure roles to the user manually.	
Active Roles does not support creating Azure groups for existing groups.	117015
Active Roles Web Interface does not support setting the <b>Exchange Online Property</b> of the <b>ProhibitSendQuota</b> value in <b>Storage Quotas</b> .	91905

**Table 19: Add-on Manager known issues**

Known Issue	Defect ID
After installing an add-on that creates Web Interface customization items, the Web Interface may not display the customization items created by the add-on.	179835

## Known Issue

## Defect ID

### Workaround

In the Web Interface, click **Reload**.

After installing an add-on that creates a virtual attribute, the virtual attribute may not appear in the **Advanced Properties** dialog of the affected object. 180508

### Workaround

After installing the add-on, reconnect to the Administration Service.

After installing an add-on that creates a virtual attribute and a Web Interface customization item using that virtual attribute, an error may occur when opening any Web Interface site. 180524

### Workaround

Restart Internet Information Services (IIS) on the web server running the Web Interface (for example, by running the `iisreset` command in the Windows command prompt).

If there is a replication group in your Active Roles environment, do the following:

1. After the changes are propagated to all replication partners, click **Reload** in the Web Interface.
2. If the Web Interface does not open, enter the following in the address bar of your browser to reload the Web Interface:  
`<site url>/customization/metadata-Reload.aspx?ReloadFromWorkingCopy=1`
3. After the changes are propagated to all replication partners, restart Internet Information Services (IIS) on the web server running the Web Interface (for example, by running the `iisreset` command in the Windows command prompt).

When you use Add-on Manager to uninstall an add-on, the following error may occur: 180700

Object 'objectDN' was not found.

This error can occur if the add-on modifies an existing object during installation, and then the modified object is deleted by a user after the add-on has been installed.

### Workaround

Uninstall the add-on from the command line using the `/ForceUninstall` parameter. For example:

`AddOnManager.exe /UninstallAddon /AddonName:"my-addon" /ForceUninstall`

## Known Issue

## Defect ID

`/Service:"servicename" /User:"domain\user" /Password:"password"`

After uninstalling an add-on that creates a virtual attribute and a Web Interface customization item that uses that virtual attribute, the Web Interface customization item created by the add-on may not be removed, and the Web Interface may return the following error:

180721

An error occurred during the last operation.

## Workaround

Perform the following steps:

1. In the Web Interface, click the **Reload** command.

If the Web Interface does not open, reload the Web Interface by entering the following URL in the address bar of your browser:

`<site url>/customization/metadata-Reload.aspx?ReloadFromWorkingCopy=1`

**NOTE:** If there is a replication group in your Active Roles environment, reload the Web Interface only after the changes are propagated to all replication partners.

2. Restart Internet Information Services (IIS) on the web server running the Web Interface (for example, by running the `iisreset` command in the Windows command prompt).

**NOTE:** If there is a replication group in your Active Roles environment, restart IIS only after the changes are propagated to all replication partners.

After installing an add-on that creates Web Interface customization items, the Web Interface customization items created by the add-on may not be displayed. 180808

This issue may occur if you provide incorrect user name and password for reloading Web Interface sites.

## Workaround

In the Web Interface, click the **Reload** command.

When you install Add-on Manager from the command-line, you may encounter the following error: 183252

Command line option syntax error. Type Command /? for Help.

This error may occur if one or several parameters of the command contain more than 255 characters.

**Workaround**

Edit the command-line parameters (for example, the path to a file) so that each parameter is not longer than 255 characters.

## System requirements

Before installing Active Roles 8.1.3 SP1, ensure that your system meets the following minimum hardware and software requirements.

**NOTE:** When setting up a virtual environment, carefully consider the configuration aspects such as CPU, memory availability, I/O subsystem, and network infrastructure to ensure the virtual layer has the necessary resources available. Please consult [One Identity's Product Support Policies](#) for more information on environment virtualization.

To manage Azure Active Directory resources, you must install the following prerequisites in the Active Roles Configuration Center.

**TIP:** To run the PowerShell commands of the following modules, use the 64-bit version of Windows PowerShell.

Requirement	Version	Details
NuGet package provider	Minimum: 2.8.5.201  Maximum: 3.0.0.1	You must install the NuGet package provider on the computer(s) running Active Roles Administration Service.  For installation instructions, see <a href="#">Install-PackageProvider</a> in the <i>Microsoft Package Management documentation</i> .
Exchange Online PowerShell V3 module	Minimum: 3.0.0  Maximum: 3.1.0	You must install the Exchange Online PowerShell module on the computer(s) running Active Roles Administration Service.  For installation instructions, see <a href="#">About the Exchange Online PowerShell module</a> in the <i>Microsoft Exchange PowerShell documentation</i> .
Az.Accounts PowerShell module	Maximum: 2.10.3	You must install the Az.Accounts PowerShell module on the computer(s) running Active Roles Administration Service and Active Roles Synchronization Service.  For installation instructions, see <a href="#">Az.Accounts</a> in the <i>Microsoft PowerShell Gallery</i> .
Az.Resources PowerShell module	Maximum: 6.4.1	You must install the Az.Resources PowerShell module on the computer(s) running Active Roles Administration Service.

Requirement	Version	Details
		For installation instructions, see <a href="#">Az.Resources</a> in the <i>Microsoft PowerShell Gallery</i> .
Microsoft Graph PowerShell module	Maximum: 1.17.0	You must install the Microsoft Graph PowerShell module on the computer(s) running Active Roles Administration Service. For installation instructions, see <a href="#">Microsoft Graph</a> in the <i>Microsoft PowerShell Gallery</i> .
Microsoft Edge WebView2 Runtime	N/A	You must install <a href="#">Microsoft Edge WebView2 Runtime</a> on the computer running Active Roles Administration Service. For more information, see <a href="#">Introduction to Microsoft Edge WebView2</a> in the <i>Microsoft Edge Developer documentation</i> .
(Optional) One Identity certificate	N/A	If your organization enforces the AllSigned policy, you must install the One Identity certificate during the installation of Active Roles.

**⚠ CAUTION:** When importing PowerShell modules with the `$context.0365ImportModules` function, they are imported with the versions specified in the configuration of the Azure-specific prerequisites.

However, after importing the specified versions of the required PowerShell modules, running PowerShell cmdlets without passing them as a string to the `$context.0365ImportModules` function can cause inconsistent behavior in Active Roles. This is because if there are multiple versions of the same PowerShell module installed on the computer running the Active Roles server, PowerShell modules containing the script to run can be imported automatically with different versions.

To avoid inconsistent behavior in Active Roles by importing different PowerShell versions, run PowerShell modules only by passing them as a string to the `$context.0365ImportModules` function.

## Hardware requirements

**Table 20: Hardware requirements**

Requirement	Details
Processor <b>NOTE:</b> The number of cores required depends on the size of the environment and the total number of managed objects.	For Administration Service, Web Interface and Synchronization Service, any of the following: <ul style="list-style-type: none"> <li>• Intel 64 (EM64T)</li> <li>• AMD64</li> <li>• Minimum 2 cores</li> <li>• CPU speed: 2.0 GHz or faster</li> </ul>

Requirement	Details
	<p><b>NOTE:</b> For Active Roles Synchronization Service, One Identity recommends using a multi-core CPU for the best performance.</p> <p>For Console, SPML Provider and Management Tools, any of the following:</p> <ul style="list-style-type: none"> <li>• Intel x86</li> <li>• Intel 64 (EM64T)</li> <li>• AMD64</li> <li>• CPU speed: 1.0 GHz or faster.</li> </ul>
Memory	<p>Administration Service: A minimum of 4 GB of RAM.</p> <p>Web Interface, Synchronization Service: A minimum of 2 GB of RAM.</p> <p>Console, SPML Provider and Management Tools: A minimum of 1 GB of RAM.</p>
Hard disk space	<p>Administration Service, Web Interface, Console, SPML Provider and Management Tools: A minimum of 100 MB of free disk space.</p> <p>Synchronization Service: A minimum of 250 MB of free disk space.</p> <p><b>NOTE:</b> If SQL Server and Synchronization Service are installed on the same computer, the amount required depends on the size of the Synchronization Service database.</p>
Operating system	<p>You can install any of the Active Roles components on a computer running:</p> <ul style="list-style-type: none"> <li>• Microsoft Windows Server 2022</li> <li>• Microsoft Windows Server 2019</li> <li>• Microsoft Windows Server 2016</li> </ul> <p>Active Roles supports the Standard or Datacenter edition of these operating systems.</p> <p>In addition, you can install the Active Roles Console and Management Tools on a computer running:</p> <ul style="list-style-type: none"> <li>• Microsoft Windows 10, Professional or Enterprise edition, 32-bit (x86) or 64-bit (x64).</li> </ul>

Requirement	Details
	<ul style="list-style-type: none"> <li>Microsoft Windows 8.1, Professional or Enterprise edition, 32-bit (x86) or 64-bit (x64).</li> </ul>

## Component requirements

**CAUTION:** To avoid inconsistent behavior in Active Roles when managing Azure Active Directory resources, you must enable Transport Layer Security (TLS) protocol version 1.2. For more information, see [TLS 1.2 enforcement for Azure AD Connect](#) in the *Microsoft Azure documentation*.

All Active Roles components require:

- Microsoft .NET Framework 4.7.2. For more information, see [Installing .NET Framework for developers](#) in the *Microsoft .NET documentation*.
- Visual C++ 2017 Redistributable.

**Table 21: Administration Service requirements**

Requirement	Details
SQL Server	<p>You can host the Active Roles database on the following SQL Server versions:</p> <ul style="list-style-type: none"> <li>Microsoft SQL Server 2022, any edition.</li> <li>Microsoft SQL Server 2019, any edition.</li> <li>Microsoft SQL Server 2017, any edition.</li> <li>Microsoft SQL Server 2016, any edition.</li> <li>Microsoft SQL Server 2014, any edition, 32-bit (x86) or 64-bit (x64), with or without any Service Pack.</li> <li>Azure SQL hosted databases.</li> </ul> <p>To connect Active Roles to a Microsoft SQL Server deployment, install Microsoft OLE DB Driver for SQL Server (MSOLEDBSQL).</p>
Windows Management Framework	Windows Management Framework 5.1 ( <a href="#">available for download</a> ) is required on all supported operating systems.
Operating system on domain controllers	<p>The product retains all of its features and functions when managing Active Directory on domain controllers running any of these operating systems, any edition, with or without any Service Packs:</p> <ul style="list-style-type: none"> <li>Microsoft Windows Server 2022</li> <li>Microsoft Windows Server 2019</li> </ul>

Requirement	Details
	<ul style="list-style-type: none"> <li>Microsoft Windows Server 2016</li> </ul> <p><b>NOTE:</b> The supported domain functional level is Windows Server 2008 R2 or higher.</p>
Exchange Server	<p>Active Roles is capable of managing Exchange recipients on:</p> <ul style="list-style-type: none"> <li>Microsoft Exchange Server 2019</li> <li>Microsoft Exchange Server 2016</li> </ul>

**Table 22: Web Interface requirements**

Requirement	Details
Internet Services	<p>Active Roles Web Interface requires the Web Server (IIS) server role with the following role services:</p> <ul style="list-style-type: none"> <li>Web Server/Common HTTP Features/ <ul style="list-style-type: none"> <li>Default Document</li> <li>HTTP Errors</li> <li>Static Content</li> <li>HTTP Redirection</li> </ul> </li> <li>Web Server/Security/ <ul style="list-style-type: none"> <li>Request Filtering</li> <li>Basic Authentication</li> <li>Windows Authentication</li> </ul> </li> <li>Web Server/Application Development/ <ul style="list-style-type: none"> <li>.NET Extensibility</li> <li>ASP</li> <li>ASP.NET</li> <li>ISAPI Extensions</li> <li>ISAPI Filters</li> </ul> </li> <li>Management Tools/IIS 6 Management Compatibility/ <ul style="list-style-type: none"> <li>IIS 6 Metabase Compatibility</li> </ul> </li> </ul>
Feature delegation	<p>Internet Information Services (IIS) must provide <b>Read/Write</b> delegation for the following features:</p> <ul style="list-style-type: none"> <li>Handler Mappings</li> <li>Modules</li> </ul> <p>To confirm that these features have the <b>Read/Write</b> delegation configured, use the <b>Feature Delegation</b> option of the native Internet</p>



Requirement	Details
	Information Services (IIS) Manager tool of the operating system.
.NET Trust Levels	<p>The .NET Trust Level must be set to <b>Full (internal)</b> on every computer where the Web Interface component is installed.</p> <p>To configure this setting:</p> <ol style="list-style-type: none"> <li>1. In the system-provided Internet Information Services (IIS) Manager tool, under <b>Connections</b>, expand the node of the computer, and navigate to <b>Sites &gt; Default Web Site</b>.</li> <li>2. On the <b>Default Web Site Home</b> page, double-click <b>.NET Trust Levels</b>.</li> <li>3. Under <b>Trust level</b>, select <b>Full (internal)</b>.</li> </ol> <p><b>NOTE:</b> Setting the .NET Trust Level to any other value will result in a failure when attempting to load any of the configured Active Roles Web Interface sites.</p>
Web browser	<p>You can access Active Roles Web Interface using:</p> <ul style="list-style-type: none"> <li>• Mozilla Firefox 36 (or newer) on Windows.</li> <li>• Google Chrome 61 (or newer) on Windows.</li> <li>• Microsoft Edge 79 (or newer), based on Chromium on Windows 10.</li> </ul> <p>You can use a later version of Firefox and Google Chrome to access Active Roles Web Interface. However, the Active Roles Web Interface was tested only with the browser versions listed above.</p>
Minimum screen resolution	<p>Active Roles Web Interface is optimized for screen resolutions of 1280x800 or higher.</p> <p>The minimum supported screen resolution is 1024x768.</p>

**Table 23: Console requirements**

Requirement	Details
Web browser	Active Roles Console requires Microsoft Edge 79 (or newer), based on Chromium.

**Table 24: Management Tools requirements**

Requirement	Details
Windows Management Framework	Windows Management Framework 5.1 ( <a href="#">available for download</a> ) is required on all supported operating systems.
Remote Server	To manage Terminal Services user properties by using Active Roles

Requirement	Details
Administration Tools (RSAT)	<p>Management Shell, Active Roles Management Tools requires Remote Server Administration Tools (RSAT) for Active Directory.</p> <p>For more information on installing the RSAT version applicable to your operating system, see <a href="#">Remote Server Administration Tools (RSAT) for Windows</a> in the <i>Microsoft Windows Server documentation</i>.</p>

**Table 25: Synchronization Service requirements**

Requirement	Details
Operating system on domain controllers	<p>The product retains all of its features and functions when managing Active Directory on domain controllers running any of these operating systems, any edition, with or without any Service Packs:</p> <ul style="list-style-type: none"> <li>• Microsoft Windows Server 2022</li> <li>• Microsoft Windows Server 2019</li> <li>• Microsoft Windows Server 2016</li> </ul> <p><b>NOTE:</b> The supported domain functional level is Windows Server 2008 R2 or higher.</p>
SQL Server	<p>You can host the Active Roles Synchronization Service database on:</p> <ul style="list-style-type: none"> <li>• Microsoft SQL Server 2022, any edition.</li> <li>• Microsoft SQL Server 2019, any edition.</li> <li>• Microsoft SQL Server 2017, any edition.</li> <li>• Microsoft SQL Server 2016, any edition.</li> <li>• Microsoft SQL Server 2014, any edition, 32-bit (x86) or 64-bit (x64), with or without any Service Pack.</li> </ul> <p><b>NOTE:</b> Active Roles Synchronization Service does not support Azure SQL hosted databases.</p>
Windows Management Framework	<p>Windows Management Framework 5.1 (<a href="#">available for download</a>) is required on all supported operating systems.</p>
Supported connections	<p>Active Roles Synchronization Service can connect to the following data systems:</p> <ul style="list-style-type: none"> <li>• Data sources accessible via an OLE DB provider.</li> <li>• Delimited text files.</li> <li>• IBM AS/400, IBM Db2, and IBM RACF systems.</li> <li>• LDAP directory service.</li> <li>• Micro Focus NetIQ Directory systems.</li> <li>• The following Microsoft services and resources:</li> </ul>

Requirement	Details
	<ul style="list-style-type: none"> <li>• Active Directory Domain Services (AD DS) with the domain or forest functional level of Windows Server 2016 or higher.</li> <li>• Active Directory Lightweight Directory Services (AD LDS) running on any Windows Server operating system supported by Microsoft.</li> <li>• Azure Active Directory (Azure AD) using Microsoft Graph API version 1.0.</li> <li>• Exchange Online services.</li> <li>• Exchange Server with the following versions: <ul style="list-style-type: none"> <li>• Microsoft Exchange Server 2019</li> <li>• Microsoft Exchange Server 2016</li> </ul> </li> <li>• Lync Server version 2013 with limited support.</li> <li>• SharePoint 2019, 2016, or 2013.</li> <li>• SharePoint Online service.</li> <li>• Skype for Business 2019, 2016 or 2015.</li> <li>• Skype for Business Online service.</li> <li>• SQL Server, any version supported by Microsoft.</li> <li>• One Identity Active Roles version 7.4.3, 7.4.1, 7.3, 7.2, 7.1, 7.0, and 6.9.</li> <li>• One Identity Manager version 8.0 and 7.0 (D1IM 7.0).</li> <li>• OpenLDAP directory service.</li> <li>• Oracle Database, Oracle Database User Accounts, and Oracle Unified Directory data systems.</li> <li>• MySQL databases.</li> <li>• Salesforce systems.</li> <li>• SCIM-based data systems.</li> <li>• ServiceNow systems.</li> </ul>
Legacy Active Roles ADSI Provider	To connect to Active Roles version 6.9, install the Active Roles ADSI Provider. For more information, see <i>Installing additional components</i> in the <i>Active Roles Quick Start Guide</i> .
One Identity Manager API	To connect to One Identity Manager 7.0, install One Identity Manager Connector on the computer running Active Roles Synchronization Service. This connector works with the RESTful web service and no SDK installation is required.
Internet connection	To connect to cloud directories or online services, the machine running Active Roles Synchronization Service must have a stable Internet connection.

**Table 26: Synchronization Service Capture Agent requirements**

Requirement	Details
Operating system	<p>The DCs on which you install Active Roles Synchronization Service Capture Agent must run one of the following operating systems with or without any Service Pack:</p> <ul style="list-style-type: none"> <li>• Microsoft Windows Server 2022</li> <li>• Microsoft Windows Server 2019</li> <li>• Microsoft Windows Server 2016</li> </ul> <p>For more information, see the <i>Active Roles Synchronization Service Administration Guide</i>.</p>

**Table 27: Language Pack requirements**

Requirement	Details
Active Roles version	<p>The Active Roles 8.1.3 SP1 Language Pack requires Active Roles version 8.1.3 SP1 of the Administration Service, Configuration Center, Console, Synchronization Service or the Web Interface installed on the target machine.</p> <p>The Active Roles 8.1.3 SP1 Language Pack will not work properly with earlier versions of Active Roles.</p>
Operating system	You can install the Active Roles Language Pack on 64-bit operating systems only.

**Table 28: Add-on Manager requirements**

Requirement	Details
Processor	<p>Any of the following:</p> <ul style="list-style-type: none"> <li>• Intel 64 (EM64T)</li> <li>• AMD64</li> <li>• CPU speed: 1.0 GHz or faster</li> </ul>
Memory	A minimum of 1 GB of RAM.
Hard Disk Space	A minimum of 100 MB of free disk space.
Operating System	<p>Any of the following Windows Server operating systems:</p> <ul style="list-style-type: none"> <li>• Microsoft Windows Server 2022</li> <li>• Microsoft Windows Server 2019</li> <li>• Microsoft Windows Server 2016</li> </ul> <p>In addition, you can also install Add-on Manager on a computer running:</p>

Requirement	Details
	<ul style="list-style-type: none"> <li>Microsoft Windows 10, Professional or Enterprise edition, 64-bit (x64)</li> </ul>
Active Roles Console	Add-on Manager requires Active Roles 8.1.3 SP1 Console installed.
Microsoft Windows PowerShell	Windows PowerShell 5.1 or later
Web Browser	Microsoft Edge 79 or newer (based on Chromium)

**Table 29: Diagnostic Tools requirements**

Requirement	Details
Processor	1.0 GHz or faster 32-bit (x86) or 64-bit (x64) CPU.
Memory	A minimum of 1 GB of RAM. <b>NOTE:</b> The amount of RAM required depends on the size of the log file opened with the Log Viewer tool.
Hard disk space	A minimum of 10 MB of free disk space.
Operating system	Any of the following Windows Server operating systems: <ul style="list-style-type: none"> <li>Microsoft Windows Server 2022</li> <li>Microsoft Windows Server 2019</li> <li>Microsoft Windows Server 2016</li> </ul>

**Table 30: Data Collector and Reporting Pack requirements**

Requirement	Details
Processor	Any of the following: <ul style="list-style-type: none"> <li>Intel x86</li> <li>Intel 64 (EM64T)</li> <li>AMD64</li> <li>CPU speed: 2.0 GHz or faster.</li> </ul>
Memory	A minimum of 2 GB of RAM.
Hard disk space	<ul style="list-style-type: none"> <li>12 MB for the Data Collector and Reporting Pack.</li> </ul>

Requirement	Details
	<ul style="list-style-type: none"> <li>• 10 GB for the SQL Server Reporting Services.</li> </ul>
Operating system	<p>Any of the following Windows Server operating systems:</p> <ul style="list-style-type: none"> <li>• Microsoft Windows Server 2022</li> <li>• Microsoft Windows Server 2019</li> <li>• Microsoft Windows Server 2016</li> </ul>
SQL Server and SQL Server Reporting Services	<p>You can host the Active Roles Data Collector and Reporting Pack on the following SQL Server versions:</p> <ul style="list-style-type: none"> <li>• Microsoft SQL Server 2022, any edition.</li> <li>• Microsoft SQL Server 2019, any edition.</li> <li>• Microsoft SQL Server 2017, any edition.</li> <li>• Microsoft SQL Server 2016, any edition.</li> <li>• Microsoft SQL Server 2014, any edition, 32-bit (x86) or 64-bit (x64), with or without any Service Pack.</li> <li>• Azure SQL hosted databases.</li> </ul> <p>To connect Active Roles to a Microsoft SQL Server deployment, install Microsoft OLE DB Driver for SQL Server (MSOLEDBSQL).</p>
Active Roles ADSI Provider	Active Roles 8.1.3 SP1 Management Tools must be installed.

## Product licensing

Use of this software is governed by the Software Transaction Agreement found at <https://www.oneidentity.com/legal/sta.aspx>. This software does not require an activation or license key to operate.

## Upgrade and installation instructions

This section contains information about the upgrade and installation changes affecting Active Roles 8.1.3 SP1.

**NOTE:** You must run the Active Roles installer with administrator privileges.

### Supported Active Roles upgrade paths

You can upgrade the following versions of Active Roles to Active Roles 8.1.3 SP1:

- Active Roles 7.5
- Active Roles 7.5.3
- Active Roles 7.5.4
- Active Roles 7.6.1
- Active Roles 7.6.2
- Active Roles 7.6.3
- Active Roles 8.0 LTS
- Active Roles 8.0.1 LTS
- Active Roles 8.1.1
- Active Roles 8.1.2
- Active Roles 8.1.3
- For instructions on how to upgrade from an earlier version of Active Roles, see the *Active Roles Quick Start Guide*.
- For instructions on how to install the Active Roles Language Pack, see *Active Roles Language Pack* in the *Active Roles Administration Guide*.
- For special considerations regarding the installation of Active Roles 8.1.3 SP1, see the following information.

**NOTE:** Consider the following before upgrading to a new version of Active Roles:

- Components of an earlier Active Roles version may not work with the components of the new version you are upgrading to.
- Custom solutions (scripts or other modifications) that rely on Active Roles features may fail to work after an upgrade due to compatibility issues. Therefore, before starting the upgrade, test your existing solutions with the new version of Active Roles in a lab environment to verify that your custom solutions will continue to work.

**TIP:** When upgrading to a new Active Roles version, One Identity recommends upgrading the Active Roles Administration Service first, and the client components (Active Roles Console and Active Roles Web Interface) afterwards.

## Changes related to Azure tenants

**NOTE:** If your organization has any Azure tenants that are managed with Active Roles, you need to reauthenticate and reauthorize them after installing Active Roles 8.1.3 SP1. Otherwise, Active Roles will not receive the required permissions for managing existing Azure tenants, and tenant administration in Active Roles 8.1.3 SP1 will not work correctly. For more information, see *Reconfiguring Azure tenants during upgrade configuration* in the *Active Roles Quick Start Guide*.

## Upgrade information related to Active Roles Synchronization Service

**NOTE:** Active Roles 7.5 introduced support for Modern Authentication in the Azure BackSync workflows of the Active Roles Synchronization Service. After upgrading to Active Roles 8.1.3 SP1 from an earlier version, if you previously had an Azure BackSync workflow configured, you will be prompted to reconfigure it in the Active Roles Synchronization Service Console.

**CAUTION:** If you previously had an Azure BackSync workflow configured in Active Roles Synchronization Service, and you use more than one Azure Active Directory (Azure AD) service in your deployment, you must specify the Azure AD for which you want to configure Azure BackSync. Failure to do so may either result in directory objects not synchronized at all, or synchronized to unintended locations.

For more information on how to specify the Azure AD used for back-synchronization, see *Configuring automatic Azure BackSync in the Active Roles Synchronization Service Administration Guide*.

If you have sync workflows configured and run by Quick Connect (the predecessor of Synchronization Service), or earlier versions of Active Roles Synchronization Service, then you can transfer those sync workflows to the current version of Active Roles Synchronization Service.

You can transfer sync workflows from the following Quick Connect or Active Roles Synchronization Service versions:

- Quick Connect for Active Directory 6.1
- Quick Connect for AS400 1.4
- Quick Connect for Base Systems 2.4
- Quick Connect for Cloud Services 3.7
- Quick Connect for RACF 1.3
- Quick Connect Sync Engine 5.5 and 6.1
- Synchronization Service 7.5 and later

For more information, see *Transferring sync workflows from Quick Connect* in the *Active Roles Synchronization Service Administration Guide*.

## Rolling back the 8.1.3 SP1 installation

Active Roles 8.1.3 SP1 is delivered as a full Active Roles product installation instead of a patch or hotfix. Because of this, if you upgraded Active Roles 8.1.3 to 8.1.3 SP1, you cannot roll back 8.1.3 SP1 to Active Roles 8.1.3.

## More resources

Additional information is available from the following:



- Online product documentation (<https://support.oneidentity.com/active-roles/>)
- Active Roles community (<https://www.oneidentity.com/community/active-roles>)

## Globalization

This section contains information about installing and operating this product in non-English configurations, such as those needed by customers outside of North America. This section does not replace the materials about supported platforms and configurations found elsewhere in the product documentation.

This release is Unicode-enabled and supports any character set. It supports simultaneous operation with multilingual data. This release is targeted to support operations in the following regions: North America, Western Europe and Latin America, Central and Eastern Europe, Far-East Asia, Japan.

## Active Roles Language Pack

Available for download from the [One Identity Support Portal](#), the Active Roles Language Pack provides product localization for Active Roles. To enable localization, install the Language Pack on the machine(s) running the Active Roles Administration Service, Configuration Center, Console, Synchronization Service or Web Interface components.

The Active Roles Language Pack supports the following languages:

- For the Active Roles Administration Service, Configuration Center, Console and Synchronization Service components, the Language Pack provides support for German language.
- For the Active Roles Web Interface component, the Language Pack provides support for the following languages:
  - Chinese (Simplified and Traditional)
  - French
  - German
  - Portuguese (Brazilian and European)
  - Spanish

For more information on the features, limitations and installation steps of the Language Pack, see *Active Roles Language Pack* in the *Active Roles Administration Guide*.

## About us

One Identity solutions eliminate the complexities and time-consuming processes often required to govern identities, manage privileged accounts and control access. Our solutions enhance business agility while addressing your IAM challenges with on-premises, cloud and hybrid environments.

## Contacting us

For sales and other inquiries, such as licensing, support, and renewals, visit <https://www.oneidentity.com/company/contact-us.aspx>.

## Technical support resources

Technical support is available to One Identity customers with a valid maintenance contract and customers who have trial versions. You can access the Support Portal at <https://support.oneidentity.com/>.

The Support Portal provides self-help tools you can use to solve problems quickly and independently, 24 hours a day, 365 days a year. The Support Portal enables you to:

- Submit and manage a Service Request
- View Knowledge Base articles
- Sign up for product notifications
- Download software and technical documentation
- View how-to videos at [www.YouTube.com/OneIdentity](http://www.YouTube.com/OneIdentity)
- Engage in community discussions
- Chat with support engineers online
- View services to assist you with your product

## Third-party contributions

This product contains some third-party components (listed below). Copies of their licenses may be found at referencing <https://www.oneidentity.com/legal/license-agreements.aspx>. Source code for components marked with an asterisk (\*) is available at <http://opensource.quest.com>.

**Table 31: List of Third-Party Contributions**

Component	License or Acknowledgment
Active Directory Authentication Library 3.13.1	Copyright (c) Microsoft Corporation. All rights reserved. Licensed under the MIT License (the "License");  Open Source Initiative OSI - The MIT License (MIT) 2012
AngleSharpCss 0.16.1	Licensed under MIT  For the component license, see: <a href="https://www.nuget.org/packages/AngleSharp/0.16.0?_src=template">https://www.nuget.org/packages/AngleSharp/0.16.0?_src=template</a>
ASP.NET Ajax 4.0	Microsoft Permissive License (Ms-PL) N/A
Azure.Core 1.24.0.0	MIT Template 2020
Azure.Identity 1.4.1	MIT Template 2020
Azure.Identity 1.6.0	MIT Template 2020
Bootstrap 3.2	MIT N/A
BouncyCastle 1.8.9	MIT N/A
ComponentArt Web.UI for ASP.NET 2011.1.1134.35	Component Art Web.UI Suite Enterprise License
ExchangeOnlineManagement 3.0.0	Licensed under Apache 2.0
HtmlSanitizer 6.0.4	MIT Template 2020
jquery 3.4.1	Copyright JS Foundation and other contributors, <a href="https://js.foundation/">https://js.foundation/</a>  The above copyright notice and this permission notice shall be included in all copies or substantial portions of the Software.  MIT N/A
jQuery UI 1.12.1	Copyright 2007, 2014 jQuery Foundation and other contributors, <a href="https://jquery.org/">https://jquery.org/</a>  MIT N/A
MediatR 9.0.0	Licensed under Apache 2.0  License terms can be found at: <a href="https://index.whitesourcesoftware.com/gri/app/reader/resource/content/asString/4409aafb-02af-45e7-9db1-ec9f906652a2">https://index.whitesourcesoftware.com/gri/app/reader/resource/content/asString/4409aafb-02af-45e7-9db1-ec9f906652a2</a>

Component	License or Acknowledgment
	<p>License terms can be found at:  <a href="https://licenses.nuget.org/Apache-2.0">https://licenses.nuget.org/Apache-2.0</a></p> <p>Copyright © Jimmy Bogard</p>
MediatR.Extensions.Microsoft.DependencyInjection 9.0.0	<p>Licensed under Apache 2.0</p> <p>License terms can be found at:  <a href="https://index.whitesourcesoftware.com/gri/app/reader/resource/content/asString/4409aafb-02af-45e7-9db1-ec9f906652a2">https://index.whitesourcesoftware.com/gri/app/reader/resource/content/asString/4409aafb-02af-45e7-9db1-ec9f906652a2</a></p> <p>License terms can be found at:  <a href="https://licenses.nuget.org/Apache-2.0">https://licenses.nuget.org/Apache-2.0</a></p> <p>Copyright © Jimmy Bogard</p>
Microsoft.AspNet.WebApi 5.0.0	<p>© Microsoft Corporation. All rights reserved.</p> <p>Microsoft .Net Framework 4.5</p>
Microsoft.Exchange.Web.Services (EWS) Managed API 2.2	<p>Microsoft Exchange Web Services Managed API 2.2</p>
Microsoft.Unity 3.5	<p>© Microsoft Corporation. All rights reserved.</p> <p>Apache 2.0</p>
Microsoft.aspNet.SignalR.Core 2.3.0	<p>© Microsoft Corporation. All rights reserved.</p> <p>MICROSOFT .NET LIBRARY 1.0</p>
Microsoft.AspNetCore 2.2.0	<p>Licensed under Apache 2.0</p> <p>License terms can be found at:  <a href="https://index.whitesourcesoftware.com/gri/app/reader/resource/content/asString/e03487cb-0399-4b87-9853-b66753ce391b">https://index.whitesourcesoftware.com/gri/app/reader/resource/content/asString/e03487cb-0399-4b87-9853-b66753ce391b</a></p> <p>License terms can be found at:  <a href="https://raw.githubusercontent.com/aspnet/AspNetCore/2.0.0/LICENSE.txt">https://raw.githubusercontent.com/aspnet/AspNetCore/2.0.0/LICENSE.txt</a></p> <p>Copyright © Microsoft Corporation</p>
Microsoft.Bcl.AsyncInterfaces 6.0.0	<p>Licensed under MIT</p> <p>License terms can be found at:  <a href="https://github.com/dotnet/core-setup/blob/master/LICENSE.TXT">https://github.com/dotnet/core-setup/blob/master/LICENSE.TXT</a></p> <p>License terms can be found at:  <a href="https://index.whitesourcesoftware.com/gri/app/reader/resource/content/asString/18a59c19-102f-4948-8085-e9ff9a09637a">https://index.whitesourcesoftware.com/gri/app/reader/resource/content/asString/18a59c19-102f-4948-8085-e9ff9a09637a</a></p>

Component	License or Acknowledgment
	Copyright 2015 .NET Foundation Copyright © Microsoft Corporation
Microsoft.DotNet.PlatformAbstractions 2.1.0	Licensed under MIT License terms can be found at: <a href="https://github.com/dotnet/core-setup/blob/master/LICENSE.TXT">https://github.com/dotnet/core-setup/blob/master/LICENSE.TXT</a> License terms can be found at: <a href="https://index.whitesourcesoftware.com/gri/app/reader/resource/content/asString/18a59c19-102f-4948-8085-e9ff9a09637a">https://index.whitesourcesoftware.com/gri/app/reader/resource/content/asString/18a59c19-102f-4948-8085-e9ff9a09637a</a> Copyright 2015 .NET Foundation Copyright © Microsoft Corporation
Microsoft.Extensions.Caching.Abstractions 2.2.0	Copyright © .NET Foundation and Contributors Licensed under Apache 2.0.
Microsoft.Extensions.Caching.Memory 2.2.0	Copyright © .NET Foundation and Contributors Licensed under Apache 2.0.
Microsoft.Extensions.Configuration 2.2.0	Copyright © Microsoft Corporation Licensed under Apache 2.0.
Microsoft.Extensions.Configuration.Abstractions 2.2.0	Copyright © Microsoft Corporation Licensed under Apache 2.0.
Microsoft.Extensions.Configuration.Binder 2.2.0	Copyright © Microsoft Corporation Licensed under Apache 2.0.
Microsoft.Extensions.Configuration.CommandLine 2.2.0	Copyright © .NET Foundation and Contributors Licensed under Apache 2.0.
Microsoft.Extensions.Configuration.EnvironmentVariables 2.2.0	Licensed under Apache 2.0 License terms can be found at: <a href="https://index.whitesourcesoftware.com/gri/app/reader/resource/content/asString/65cde14b-1ebb-46bf-8141-e3e2ea7c094b">https://index.whitesourcesoftware.com/gri/app/reader/resource/content/asString/65cde14b-1ebb-46bf-8141-e3e2ea7c094b</a> License terms can be found at: <a href="https://raw.githubusercontent.com/aspnet/AspNetCore/2.0.0/LICENSE.txt">https://raw.githubusercontent.com/aspnet/AspNetCore/2.0.0/LICENSE.txt</a> Copyright © Microsoft Corporation
Microsoft.Extensions.Configuration.FileExtensions 2.2.0	Copyright © Microsoft Corporation

Component	License or Acknowledgment
	Licensed under Apache 2.0.
Microsoft.Extensions.Configuration.Json 2.2.0	Copyright © Microsoft Corporation Licensed under Apache 2.0.
Microsoft.Extensions.Configuration.UserSecrets 2.2.0	Licensed under Apache 2.0 License terms can be found at: <a href="https://index.whitesourcesoftware.com/gri/app/reader/resource/content/asString/4cc9ac4c-7aa2-45c0-86e2-5f1e212a4865">https://index.whitesourcesoftware.com/gri/app/reader/resource/content/asString/4cc9ac4c-7aa2-45c0-86e2-5f1e212a4865</a> License terms can be found at: <a href="https://raw.githubusercontent.com/aspnet/AspNetCore/2.0.0/LICENSE.txt">https://raw.githubusercontent.com/aspnet/AspNetCore/2.0.0/LICENSE.txt</a> Copyright © Microsoft Corporation
Microsoft.Extensions.DependencyInjection 2.2.0	Copyright © .NET Foundation and Contributors Licensed under Apache 2.0.
Microsoft.Extensions.DependencyInjection.Abstractions 2.2.0	Copyright © .NET Foundation and Contributors Licensed under Apache 2.0.
Microsoft.Extensions.DependencyModel 2.1.1	Copyright © Microsoft Corporation Licensed under MIT 1.0
Microsoft.Extensions.FileProviders.Abstractions 2.2.0	Copyright © Microsoft Corporation Licensed under Apache 2.0.
Microsoft.Extensions.FileProviders.Composite 2.2.0	Licensed under Apache 2.0 License terms can be found at: <a href="https://index.whitesourcesoftware.com/gri/app/reader/resource/content/asString/22b07873-ca8c-4771-81d3-98f39d378d2c">https://index.whitesourcesoftware.com/gri/app/reader/resource/content/asString/22b07873-ca8c-4771-81d3-98f39d378d2c</a> License terms can be found at: <a href="https://raw.githubusercontent.com/aspnet/AspNetCore/2.0.0/LICENSE.txt">https://raw.githubusercontent.com/aspnet/AspNetCore/2.0.0/LICENSE.txt</a> Copyright © Microsoft Corporation
Microsoft.Extensions.FileProviders.Physical 2.2.0	Copyright © Microsoft Corporation Licensed under Apache 2.0.
Microsoft.Extensions.FileSystemGlobbing 2.2.0	Copyright © Microsoft Corporation Licensed under Apache 2.0.
Microsoft.Extensions.Hosting.Abstractions	Licensed under Apache 2.0

Component	License or Acknowledgment
stractions 2.2.0	<p>License terms can be found at:  <a href="https://index.whitesourcesoftware.com/gri/app/reader/resource/content/asString/45e0e44c-c6aa-44b5-96f5-917b30c77318">https://index.whitesourcesoftware.com/gri/app/reader/resource/content/asString/45e0e44c-c6aa-44b5-96f5-917b30c77318</a></p> <p>License terms can be found at:  <a href="https://raw.githubusercontent.com/aspnet/AspNetCore/2.0.0/LICENSE.txt">https://raw.githubusercontent.com/aspnet/AspNetCore/2.0.0/LICENSE.txt</a></p> <p>Copyright © Microsoft Corporation</p>
Microsoft.Extensions.Http.Polly 6.0.3	<p>Copyright (c) .NET Foundation and Contributors</p> <p>The above copyright notice and this permission notice shall be included in all copies or substantial portions of the Software.</p> <p>Licensed under MIT Template 2020</p>
Microsoft.Extensions.Localization 2.2.0	<p>Licensed under Apache 2.0</p> <p>License terms can be found at:  <a href="https://index.whitesourcesoftware.com/gri/app/reader/resource/content/asString/5b68d285-4f14-400e-8acd-daedbbf29d40">https://index.whitesourcesoftware.com/gri/app/reader/resource/content/asString/5b68d285-4f14-400e-8acd-daedbbf29d40</a></p> <p>License terms can be found at:  <a href="https://raw.githubusercontent.com/aspnet/AspNetCore/2.0.0/LICENSE.txt">https://raw.githubusercontent.com/aspnet/AspNetCore/2.0.0/LICENSE.txt</a></p> <p>Copyright © Microsoft Corporation</p>
Microsoft.Extensions.Localization.Abstractions 2.2.0	<p>Licensed under Apache 2.0</p> <p>License terms can be found at:  <a href="https://index.whitesourcesoftware.com/gri/app/reader/resource/content/asString/c4244b4c-bbe0-4fc8-9402-bb9987b323ba">https://index.whitesourcesoftware.com/gri/app/reader/resource/content/asString/c4244b4c-bbe0-4fc8-9402-bb9987b323ba</a></p> <p>License terms can be found at:  <a href="https://raw.githubusercontent.com/aspnet/AspNetCore/2.0.0/LICENSE.txt">https://raw.githubusercontent.com/aspnet/AspNetCore/2.0.0/LICENSE.txt</a></p> <p>Copyright © Microsoft Corporation</p>
Microsoft.Extensions.Logging 2.2.0	<p>Copyright (c) .NET Foundation and Contributors</p> <p>Licensed under Apache 2.0.</p>
Microsoft.Extensions.Logging.Abstractions 2.2.0	<p>Copyright (c) .NET Foundation and Contributors</p> <p>Licensed under Apache 2.0.</p>
Microsoft.Extensions.Logging.Configuration 2.2.0	<p>Licensed under Apache 2.0</p> <p>License terms can be found at:</p>

Component	License or Acknowledgment
	<a href="https://index.whitesourcesoftware.com/gri/app/reader/resource/content/asString/d6f63af0-0fad-4dba-80dc-a44a51a9d02c">https://index.whitesourcesoftware.com/gri/app/reader/resource/content/asString/d6f63af0-0fad-4dba-80dc-a44a51a9d02c</a>  License terms can be found at: <a href="https://raw.githubusercontent.com/aspnet/AspNetCore/2.0.0/LICENSE.txt">https://raw.githubusercontent.com/aspnet/AspNetCore/2.0.0/LICENSE.txt</a>  Copyright © Microsoft Corporation
Microsoft.Extensions.Logging.Console 2.2.0	Copyright © Microsoft Corporation  Licensed under Apache 2.0.
Microsoft.Extensions.Logging.Debug 2.2.0	Licensed under Apache 2.0  License terms can be found at: <a href="https://index.whitesourcesoftware.com/gri/app/reader/resource/content/asString/d165a68a-24ed-47e5-89e3-27e5c92f0827">https://index.whitesourcesoftware.com/gri/app/reader/resource/content/asString/d165a68a-24ed-47e5-89e3-27e5c92f0827</a>  License terms can be found at: <a href="https://raw.githubusercontent.com/aspnet/AspNetCore/2.0.0/LICENSE.txt">https://raw.githubusercontent.com/aspnet/AspNetCore/2.0.0/LICENSE.txt</a>  Copyright © Microsoft Corporation
Microsoft.Extensions.Logging.EventSource 2.2.0	Licensed under Apache 2.0  License terms can be found at: <a href="https://index.whitesourcesoftware.com/gri/app/reader/resource/content/asString/f17d1f57-d5e1-4794-bd20-beef08a2f665">https://index.whitesourcesoftware.com/gri/app/reader/resource/content/asString/f17d1f57-d5e1-4794-bd20-beef08a2f665</a>  License terms can be found at: <a href="https://raw.githubusercontent.com/aspnet/AspNetCore/2.0.0/LICENSE.txt">https://raw.githubusercontent.com/aspnet/AspNetCore/2.0.0/LICENSE.txt</a>  Copyright © Microsoft Corporation
Microsoft.Extensions.ObjectPool 2.2.0	Licensed under Apache 2.0  License terms can be found at: <a href="https://index.whitesourcesoftware.com/gri/app/reader/resource/content/asString/7927ec3a-b276-4800-ace4-104bb2d79791">https://index.whitesourcesoftware.com/gri/app/reader/resource/content/asString/7927ec3a-b276-4800-ace4-104bb2d79791</a>  License terms can be found at: <a href="https://raw.githubusercontent.com/aspnet/AspNetCore/2.0.0/LICENSE.txt">https://raw.githubusercontent.com/aspnet/AspNetCore/2.0.0/LICENSE.txt</a>  Copyright © Microsoft Corporation
Microsoft.Extensions.Options 2.2.0	Copyright © Microsoft Corporation



Component	License or Acknowledgment
	Licensed under Apache 2.0.
Microsoft.Extensions.Options.ConfigurationExtensions 2.2.0	<p>Licensed under Apache 2.0</p> <p>License terms can be found at:  <a href="https://index.whitesourcesoftware.com/gri/app/reader/resource/content/asString/d2357cda-bebf-41fd-bdf9-87bdbd3e2c5d">https://index.whitesourcesoftware.com/gri/app/reader/resource/content/asString/d2357cda-bebf-41fd-bdf9-87bdbd3e2c5d</a></p> <p>License terms can be found at:  <a href="https://raw.githubusercontent.com/aspnet/AspNetCore/2.0.0/LICENSE.txt">https://raw.githubusercontent.com/aspnet/AspNetCore/2.0.0/LICENSE.txt</a></p> <p>Copyright © Microsoft Corporation</p>
Microsoft.Extensions.Primitives 2.2.0	<p>Copyright © .NET Foundation and Contributors</p> <p>Licensed under Apache 2.0.</p>
Microsoft.Extensions.WebEncoders 2.2.0	<p>Licensed under Apache 2.0</p> <p>License terms can be found at:  <a href="https://index.whitesourcesoftware.com/gri/app/reader/resource/content/asString/e9f6e0df-d6d2-4175-be2a-a59f1fe4e0b6">https://index.whitesourcesoftware.com/gri/app/reader/resource/content/asString/e9f6e0df-d6d2-4175-be2a-a59f1fe4e0b6</a></p> <p>License terms can be found at:  <a href="https://raw.githubusercontent.com/aspnet/AspNetCore/2.0.0/LICENSE.txt">https://raw.githubusercontent.com/aspnet/AspNetCore/2.0.0/LICENSE.txt</a></p> <p>Copyright © Microsoft Corporation</p>
Microsoft.Graph 4.37.0	MIT N/A
Microsoft.Identity.Client 4.46.1	MIT Template 2020
Microsoft.IdentityModel.Abstractions 6.22.0	<p>Licensed under MIT</p> <p>License terms can be found at:  <a href="https://github.com/AzureAD/azure-activedirectory-identitymodel-extensions-for-dotnet.git">https://github.com/AzureAD/azure-activedirectory-identitymodel-extensions-for-dotnet.git</a></p> <p>License terms can be found at:  <a href="https://index.whitesourcesoftware.com/gri/app/reader/resource/content/asString/522b7f02-7e6f-42a4-ab23-743b2c4f9401">https://index.whitesourcesoftware.com/gri/app/reader/resource/content/asString/522b7f02-7e6f-42a4-ab23-743b2c4f9401</a></p> <p>Copyright © Microsoft Corporation</p>
Microsoft.IdentityModel.Clients.ActiveDirectory 3.19.8	<p>Copyright © Microsoft Corporation</p> <p>MIT N/A</p>
Microsoft.IdentityModel.JsonWebTokens 6.22.0	<p>Licensed under MIT</p> <p>License terms can be found</p>

Component	License or Acknowledgment
	<p>at:<a href="https://github.com/AzureAD/azure-activedirectory-identitymodel-extensions-for-dotnet.git">https://github.com/AzureAD/azure-activedirectory-identitymodel-extensions-for-dotnet.git</a></p> <p>License terms can be found at:  <a href="https://index.whitesourcesoftware.com/gri/app/reader/resource/content/asString/062c9f07-b34f-425b-b511-0639197ff289">https://index.whitesourcesoftware.com/gri/app/reader/resource/content/asString/062c9f07-b34f-425b-b511-0639197ff289</a></p> <p>Copyright Microsoft Corporation</p>
Microsoft.IdentityModel.Logging 6.22.0	<p>Copyright © Microsoft Corporation. All rights reserved.</p> <p>MIT Template 2020</p>
Microsoft.IdentityModel.Protocols 6.22.0	<p>Licensed under MIT</p> <p>License terms can be found at:  <a href="https://github.com/AzureAD/azure-activedirectory-identitymodel-extensions-for-dotnet.git">https://github.com/AzureAD/azure-activedirectory-identitymodel-extensions-for-dotnet.git</a></p> <p>License terms can be found at:  <a href="https://index.whitesourcesoftware.com/gri/app/reader/resource/content/asString/131ecfc7-988e-45c2-873e-f7a2227fa279">https://index.whitesourcesoftware.com/gri/app/reader/resource/content/asString/131ecfc7-988e-45c2-873e-f7a2227fa279</a></p> <p>Copyright © Microsoft Corporation</p>
Microsoft.IdentityModel.Protocols.OpenIdConnect 6.22.0	MIT Template 2020
Microsoft.IdentityModel.Tokens 5.2.2	MIT N/A
Microsoft.IdentityModel.Tokens 6.22.0	<p>Licensed under MIT</p> <p>License terms can be found at:  <a href="https://github.com/AzureAD/azure-activedirectory-identitymodel-extensions-for-dotnet.git">https://github.com/AzureAD/azure-activedirectory-identitymodel-extensions-for-dotnet.git</a></p> <p>License terms can be found at:  <a href="https://index.whitesourcesoftware.com/gri/app/reader/resource/content/asString/dd7bf642-f354-4d25-8b63-6a5f90b12cd2">https://index.whitesourcesoftware.com/gri/app/reader/resource/content/asString/dd7bf642-f354-4d25-8b63-6a5f90b12cd2</a></p> <p>Copyright © Microsoft Corporation</p>
Microsoft.Net.Http.Headers 2.2.0	<p>Licensed under Apache 2.0</p> <p>License terms can be found at:  <a href="https://index.whitesourcesoftware.com/gri/app/reader/resource/content/asString/4739b706-7639-4311-">https://index.whitesourcesoftware.com/gri/app/reader/resource/content/asString/4739b706-7639-4311-</a></p>

Component	License or Acknowledgment
	<a href="#">ba74-6fb799b073d2</a> License terms can be found at: <a href="https://raw.githubusercontent.com/aspnet/AspNetCore/2.0.0/LICENSE.txt">https://raw.githubusercontent.com/aspnet/AspNetCore/2.0.0/LICENSE.txt</a> Copyright © Microsoft Corporation
Microsoft.OpenApi 1.2.3	Licensed under MIT License terms can be found at: <a href="https://index.whitesourcesoftware.com/gri/app/reader/resource/content/asString/0e772bfe-cb66-4f44-b181-c6f57b29fd77">https://index.whitesourcesoftware.com/gri/app/reader/resource/content/asString/0e772bfe-cb66-4f44-b181-c6f57b29fd77</a> License terms can be found at: <a href="https://raw.githubusercontent.com/Microsoft/OpenAPI.NET/master/LICENSE">https://raw.githubusercontent.com/Microsoft/OpenAPI.NET/master/LICENSE</a> Copyright © Microsoft Corporation
Microsoft.SharePointOnline.CSOM 16.1.21610.12000	MS-.NET-Library-JS License N/A
Microsoft.Win32.Registry 4.6.0	Copyright © .NET Foundation and Contributors MIT N/A
MSTest.TestAdapter 2.2.10	MIT Template 2020
MSTest.TestFramework 2.2.10	MIT Template 2020
Newtonsoft.Json 13.0.1	Copyright © James Newton-King 2008 MIT Template 2020
Newtonsoft.Json.Bson 1.0.0	MIT Template 2020
NLog 4.7.15	BSD 3-Clause License N/A
Polly 7.2.3	BSD 3-Clause for App vNext 1.0
Polly.Extensions.Http 3.0.0	BSD - Polly 7.1
Swashbuckle.AspNetCore 6.4.0	MIT Template 2020
Swashbuckle.AspNetCore.Annotations 6.4.0	MIT Template 2020
Swashbuckle.AspNetCore.Swagger 6.4.0	MIT Template 2020
Swashbuckle.AspNetCore.SwaggerGen 6.4.0	MIT Template 2020

Component	License or Acknowledgment
System.Text.Json 6.0.3	MIT Template 2020
WCF Data Services 5.8.4	Copyright (c) 2018 Microsoft. All rights reserved. OData .NET Libraries - ODataLib The above copyright notice and this permission notice shall be included in all copies or substantial portions of the Software. MICROSOFT WCF DATA SERVICES N/A

## Open Source Initiative OSI - The MIT License (MIT) 2012

Copyright <year> <copyright holders>

Permission is hereby granted, free of charge, to any person obtaining a copy of this software and associated documentation files (the "Software"), to deal in the Software without restriction, including without limitation the rights to use, copy, modify, merge, publish, distribute, sublicense, and/or sell copies of the Software, and to permit persons to whom the Software is furnished to do so, subject to the following conditions:

The above copyright notice and this permission notice shall be included in all copies or substantial portions of the Software.

THE SOFTWARE IS PROVIDED "AS IS", WITHOUT WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT. IN NO EVENT SHALL THE AUTHORS OR COPYRIGHT HOLDERS BE LIABLE FOR ANY CLAIM, DAMAGES OR OTHER LIABILITY, WHETHER IN AN ACTION OF CONTRACT, TORT OR OTHERWISE, ARISING FROM, OUT OF OR IN CONNECTION WITH THE SOFTWARE OR THE USE OR OTHER DEALINGS IN THE SOFTWARE.

### MIT AngleSharp 0.16.1

License URL is on this page: [https://www.nuget.org/packages/AngleSharp/0.16.0?\\_src=template](https://www.nuget.org/packages/AngleSharp/0.16.0?_src=template)

SPDX identifier

MIT

License text

MIT License \_\_\_\_\_

Permission is hereby granted, free of charge, to any person obtaining a copy of \_\_\_\_\_ (the "Software"), to deal in the Software without restriction, including without limitation the rights to use, copy, modify, merge, publish, distribute, sublicense, and/or sell copies of the Software, and to permit persons to whom the Software is furnished to do so, subject to the following conditions:

The above copyright notice and this permission notice (including the next paragraph) shall be included in all copies or substantial portions of the Software.

THE SOFTWARE IS PROVIDED "AS IS", WITHOUT WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE WARRANTIES OF MERCHANTABILITY,

FITNESS FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT. IN NO EVENT SHALL \_\_\_\_ BE LIABLE FOR ANY CLAIM, DAMAGES OR OTHER LIABILITY, WHETHER IN AN ACTION OF CONTRACT, TORT OR OTHERWISE, ARISING FROM, OUT OF OR IN CONNECTION WITH THE SOFTWARE OR THE USE OR OTHER DEALINGS IN THE SOFTWARE.

### **Microsoft Permissive License (Ms-PL) N/A**

Microsoft AJAX Library

Microsoft Permissive License (Ms-PL)

This license governs use of the accompanying software. If you use the software, you accept this license. If you do not accept the license, do not use the software.

#### **1. Definitions**

The terms “reproduce,” “reproduction,” “derivative works,” and “distribution” have the same meaning here as under U.S. copyright law.

A “contribution” is the original software, or any additions or changes to the software.

A “contributor” is any person that distributes its contribution under this license.

“Licensed patents” are a contributor’s patent claims that read directly on its contribution.

#### **2. Grant of Rights**

(A) Copyright Grant- Subject to the terms of this license, including the license conditions and limitations in section 3, each contributor grants you a non-exclusive, worldwide, royalty-free copyright license to reproduce its contribution, prepare derivative works of its contribution, and distribute its contribution or any derivative works that you create.

(B) Patent Grant- Subject to the terms of this license, including the license conditions and limitations in section 3, each contributor grants you a non-exclusive, worldwide, royalty-free license under its licensed patents to make, have made, use, sell, offer for sale, import, and/or otherwise dispose of its contribution in the software or derivative works of the contribution in the software.

#### **3. Conditions and Limitations**

(A) No Trademark License- This license does not grant you rights to use any contributors’ name, logo, or trademarks.

(B) If you bring a patent claim against any contributor over patents that you claim are infringed by the software, your patent license from such contributor to the software ends automatically.

(C) If you distribute any portion of the software, you must retain all copyright, patent, trademark, and attribution notices that are present in the software.

(D) If you distribute any portion of the software in source code form, you may do so only under this license by including a complete copy of this license with your distribution. If you distribute any portion of the software in compiled or object code form, you may only do so under a license that complies with this license.

(E) The software is licensed “as-is.” You bear the risk of using it. The contributors give no express warranties, guarantees or conditions. You may have additional consumer rights under your local laws which this license cannot change. To the extent permitted under your local laws, the contributors exclude the implied warranties of merchantability, fitness for a particular purpose and non-infringement.

(F) If you distribute the software or derivative works with programs you develop, you agree to indemnify, defend, and hold harmless all contributors from any claims, including attorneys' fees, related to the distribution or use of your programs. For clarity, you have no such obligations to a contributor for any claims based solely on the unmodified contributions of that contributor.

(G) If you make any additions or changes to the original software, you may only distribute them under a new namespace. In addition, you will clearly identify your changes or additions as your own.

### **MIT Template 2020**

Copyright <YEAR> <COPYRIGHT HOLDER>

Permission is hereby granted, free of charge, to any person obtaining a copy of this software and associated documentation files (the "Software"), to deal in the Software without restriction, including without limitation the rights to use, copy, modify, merge, publish, distribute, sublicense, and/or sell copies of the Software, and to permit persons to whom the Software is furnished to do so, subject to the following conditions:

The above copyright notice and this permission notice shall be included in all copies or substantial portions of the Software.

THE SOFTWARE IS PROVIDED "AS IS", WITHOUT WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT. IN NO EVENT SHALL THE AUTHORS OR COPYRIGHT HOLDERS BE LIABLE FOR ANY CLAIM, DAMAGES OR OTHER LIABILITY, WHETHER IN AN ACTION OF CONTRACT, TORT OR OTHERWISE, ARISING FROM, OUT OF OR IN CONNECTION WITH THE SOFTWARE OR THE USE OR OTHER DEALINGS IN THE SOFTWARE.

### **MIT N/A**

Copyright (c) <year> <copyright holders>

Permission is hereby granted, free of charge, to any person obtaining a copy of this software and associated documentation files (the "Software"), to deal in the Software without restriction, including without limitation the rights to use, copy, modify, merge, publish, distribute, sublicense, and/or sell copies of the Software, and to permit persons to whom the Software is furnished to do so, subject to the following conditions:

The above copyright notice and this permission notice shall be included in all copies or substantial portions of the Software.

THE SOFTWARE IS PROVIDED "AS IS", WITHOUT WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT. IN NO EVENT SHALL THE AUTHORS OR COPYRIGHT HOLDERS BE LIABLE FOR ANY CLAIM, DAMAGES OR OTHER LIABILITY, WHETHER IN AN ACTION OF CONTRACT, TORT OR OTHERWISE, ARISING FROM,

OUT OF OR IN CONNECTION WITH THE SOFTWARE OR THE USE OR OTHER DEALINGS IN THE SOFTWARE.

### **Component Art Web.UI Suite Enterprise License N/A**

Please review the following license agreement before installing or using the Web.UI suite, any individual ComponentArt software component or other software product, and/or all

related materials. If you agree to the terms herein then you must click the "YES" button during the software installation process as confirmation before you are permitted to use this software and related documents.

#### Definitions:

This ComponentArt Inc. End-User Software License Agreement ("EULA") is a legal agreement between you (either as an individual user, corporation or single entity) and ComponentArt Inc. ("ComponentArt") for the Web.UI suite or individual software product - which includes computer software, and may include associated media, printed materials, and "online" or electronic documentation ("SOFTWARE PRODUCT" or "SOFTWARE"). By exercising your rights to install the SOFTWARE PRODUCT, you agree to be bound by the terms of this End User License Agreement ("EULA"), including the limitations and warranty disclaimers. If you do NOT agree to the terms of this EULA, you may not install nor use the SOFTWARE PRODUCT; If this is the case, please uninstall the SOFTWARE PRODUCT from your system immediately, and destroy all copies of the SOFTWARE PRODUCT and all of its component parts, source code, associated documentation, and related materials.

#### SOFTWARE PRODUCT LICENSE:

The SOFTWARE PRODUCT is protected by copyright laws and international copyright treaties, as well as other intellectual property laws and treaties.

#### 1. GRANT OF LICENSE.

This is a license agreement, and NOT an agreement for sale. ComponentArt retains ownership of the copy of THE SOFTWARE in your possession, and all copies you may be licensed to make. ComponentArt retains all rights not expressly granted to you in this LICENSE. ComponentArt hereby grants to you, and you accept, a non-exclusive, non-transferable license to use, copy and modify THE SOFTWARE only as authorized below.

Provided that you have accepted these terms contained herein by clicking the "YES" button at the end of this Agreement, this EULA grants you the following rights:

#### Installation and Use:

**DEVELOPER LICENSE:** For single-version licenses, you are granted a license as a single developer (individual) to the particular licensed version of the SOFTWARE PRODUCT. For subscription-based licenses, you are granted a license as a single developer (individual) to all versions of the particular product released during the period of the subscription.

For the version(s) you are licensed for, you are granted a license as a single individual to distribute the SOFTWARE PRODUCT royalty-free with an unlimited number of different solutions to an unlimited number of web servers, provided they are developed solely by you. The term "different solutions" is understood to mean non-identical, non-"shrink-wrapped" applications to be resold or re-licensed by you. You may not distribute the product with more than 10 copies of an identical or similarly-functioning ("shrink-wrapped") solution or application. For royalty-free distribution of more than 10 identical or similarly-functioning copies of a solution or application, you must purchase a subscription-level license or higher, and are required to modify the SOFTWARE PRODUCT code as per ComponentArt's instructions.

At no time may the SOFTWARE PRODUCT be used by more than one individual at the same time for development purposes -- nor may the SOFTWARE PRODUCT be distributed for use with applications other than those developed by you.



For subscription-based licenses, you are further licensed as a single individual to distribute the SOFTWARE PRODUCT royalty-free with an unlimited number of solutions or applications to an unlimited number of web servers, provided they are developed solely by you. This includes royalty-free distribution of multiple copies of identical or similarly-functioning ("shrink-wrapped") solutions or applications. For royalty-free distribution of more than 10 identical or similarly-functioning copies of a solution or application, you are required to modify the SOFTWARE PRODUCT code as per ComponentArt's instructions to ensure it cannot be re-used for any purpose outside of your distributed application.

For subscription-based licenses, you are also further licensed to view the source code to the SOFTWARE PRODUCT or part thereof, as permitted by the licensor, and modify it for your own needs. You may only re-distribute the source code as part of a compiled solution that adds significant functionality to THE SOFTWARE PRODUCT, and may not redistribute it in non-compiled form.

For Developer and Subscription-based licenses, you are required to reasonably ensure that the SOFTWARE PRODUCT is not reused by or with any application other than those with which you distribute it. For example, if you install the Menu for ASP.NET control along with a packaged application on a customer's server, that customer is not permitted to use the control independent of your application, and must be informed as such.

**CORPORATE SITE LICENSE:** You are granted a license for all developers/individuals who are part an entire single collective entity, organization, enterprise, or corporation AT A SINGLE PHYSICAL LOCATION - or up to ten (10) developers/individuals AT SEPARATE PHYSICAL LOCATIONS who are still part of a single collective entity, organization, enterprise or corporation - to all versions of the particular product released during the period of the Corporate Site License subscription.

For the version(s) you are licensed for, you are granted a license to distribute the SOFTWARE PRODUCT royalty-free with an unlimited number of solutions or applications to an unlimited number of web servers, provided they are developed solely within the single organization. The SOFTWARE PRODUCT may be used by an unlimited (or limited, as defined above) number of individuals employed by or belonging to the single organization, at the same time, for development purposes -- and the SOFTWARE PRODUCT may be distributed for use with an unlimited number of applications developed by the collective entity, organization, enterprise or corporation. This includes royalty-free distribution of multiple copies of identical or similarly-functioning ("shrink-wrapped") solutions or applications.

For applications distributed outside of the licensed organization, you are required to reasonably ensure that the SOFTWARE PRODUCT is not reused by or with any application other than those with which you distribute it. For example, if you install the Menu for ASP.NET control along with a packaged application on a customer's server, that customer is not permitted to use the control independent of your application, and must be informed as such.

For royalty-free distribution of more than 10 identical or similarly-functioning copies of a solution or application, you are required to modify the SOFTWARE PRODUCT code as per ComponentArt's instructions to ensure it cannot be re-used for any purpose outside of your distributed application.

You are further licensed to view the source code to the SOFTWARE PRODUCT or part thereof, as permitted by the licensor, and modify it for your own needs. You may only re-



distribute the source code as part of a compiled solution that adds significant functionality to THE SOFTWARE PRODUCT, and may not redistribute it in non-compiled form.

FOR ALL LICENSES: In no case shall you rent, lease, lend, redistribute nor re-license THE SOFTWARE PRODUCT or any related source code to a 3rd party individual or entity, except as outlined above. In no case shall you grant further redistribution rights for THE SOFTWARE PRODUCT to the end-users of your solution.

UNDER NO CIRCUMSTANCES MAY THE SOURCE CODE OR THE COMPILED PRODUCT BE USED AS THE BASIS FOR CREATING A PRODUCT THAT CONTAINS THE SAME, OR SUBSTANTIALLY THE SAME, FUNCTIONALITY AS ANY COMPONENTART INC. PRODUCT.

## 2. DESCRIPTION OF OTHER RIGHTS AND LIMITATIONS.

MICROSOFT OFFICE 2007 USER INTERFACE: Some code and examples included with the ComponentArt Web.UI software mimic the look and behaviour of the interface introduced in the 2007 release of Microsoft Office. ComponentArt has officially licensed this UI from Microsoft for use in the Web.UI product line. Developers and organizations using Web.UI who wish to create their own products that utilize the Microsoft Office UI must similarly obtain a license from Microsoft. Detailed information on this licensing program is available at <http://msdn.microsoft.com/officeui>.

TERMINATION: Without prejudice to any other rights, ComponentArt Inc. may terminate this EULA if you fail to comply with the terms and conditions of this EULA. In such event, you must destroy all copies of the SOFTWARE PRODUCT and all of its component parts, source code, associated documentation, and related materials.

## 3. COPYRIGHT.

All title and copyrights in and to the SOFTWARE PRODUCT (including but not limited to any images, photographs, animations, video, audio, music, text, and "applets" incorporated into the SOFTWARE PRODUCT), the accompanying printed materials, and any copies of the SOFTWARE PRODUCT are owned by ComponentArt Inc. The SOFTWARE PRODUCT is protected by Canadian and U.S. copyright laws and international treaty provisions. Therefore, you must treat the SOFTWARE PRODUCT like any other copyrighted material.

## 4. LIMITED WARRANTY.

NO WARRANTIES. ComponentArt Inc. expressly disclaims any warranty for the SOFTWARE PRODUCT. The SOFTWARE PRODUCT and any related documentation is provided "as is" without warranty of any kind, either expressed or implied, including, without limitation, the implied warranties of merchantability, fitness for a particular purpose, or non-infringement. The entire risk arising out of use or performance of the SOFTWARE PRODUCT remains with you.

## 5. LIMITATION OF LIABILITY.

NO LIABILITY FOR CONSEQUENTIAL DAMAGES. In no event shall ComponentArt Inc. or its distributors be liable for any damages whatsoever (including, without limitation, damages for loss of business profits, business interruption, loss of business information, or any other pecuniary loss) arising out of the use of or inability to use this ComponentArt Inc. product (THE SOFTWARE PRODUCT) and related materials, even if ComponentArt Inc. has been advised of the possibility of such damages. Because some states do not allow the exclusion or limitation of liability for consequential or incidental damages, the above limitation may not apply to you.

If you have any questions regarding this End User License Agreement, please write to:

ComponentArt Inc.  
511 King Street West, Suite 400  
Toronto, Ontario M5V 1K4  
Canada

## **Apache 2.0**

Apache License

Version 2.0, January 2004

<http://www.apache.org/licenses/>

### TERMS AND CONDITIONS FOR USE, REPRODUCTION, AND DISTRIBUTION

#### 1. Definitions.

"License" shall mean the terms and conditions for use, reproduction, and distribution as defined by Sections 1 through 9 of this document.

"Licensor" shall mean the copyright owner or entity authorized by the copyright owner that is granting the License.

"Legal Entity" shall mean the union of the acting entity and all other entities that control, are controlled by, or are under common control with that entity. For the purposes of this definition, "control" means (i) the power, direct or indirect, to cause the direction or management of such entity, whether by contract or otherwise, or (ii) ownership of fifty percent (50%) or more of the outstanding shares, or (iii) beneficial ownership of such entity.

"You" (or "Your") shall mean an individual or Legal Entity exercising permissions granted by this License.

"Source" form shall mean the preferred form for making modifications, including but not limited to software source code, documentation source, and configuration files.

"Object" form shall mean any form resulting from mechanical transformation or translation of a Source form, including but

not limited to compiled object code, generated documentation, and conversions to other media types.

"Work" shall mean the work of authorship, whether in Source or Object form, made available under the License, as indicated by a copyright notice that is included in or attached to the work (an example is provided in the Appendix below).

"Derivative Works" shall mean any work, whether in Source or Object form, that is based on (or derived from) the Work and for which the editorial revisions, annotations, elaborations, or other modifications represent, as a whole, an original work of authorship. For the purposes of this License, Derivative Works shall not include works that remain separable from, or merely link (or bind by name) to the interfaces of, the Work and Derivative Works thereof.

"Contribution" shall mean any work of authorship, including the original version of the Work and any modifications or addition to that Work or Derivative Works thereof, that is intentionally submitted to Licensor for inclusion in the Work by the copyright owner or by an individual or Legal Entity authorized to submit on behalf of the copyright owner.

For the purposes of this definition, "submitted" means any form of electronic, verbal, or written communication sent to the Licensor or its representatives, including but not limited to communication on electronic mailing lists, source code control systems, and issue tracking systems that are managed by, or on behalf of, the Licensor for the purpose of discussing and improving the Work, but excluding communication that is conspicuously marked or otherwise designated in writing by the copyright owner as "Not a Contribution."

"Contributor" shall mean Licensor and any individual or Legal Entity on behalf of whom a Contribution has been received by Licensor and subsequently incorporated within the Work.

## 2. Grant of Copyright License.

Subject to the terms and conditions of this License, each Contributor hereby grants to You a perpetual, worldwide, non-exclusive, no-charge, royalty-free, irrevocable copyright license to reproduce, prepare Derivative Works of, publicly display, publicly perform, sublicense, and distribute the Work and such Derivative Works in Source or Object form.

## 3. Grant of Patent License.

Subject to the terms and conditions of this License, each Contributor hereby grants to You a perpetual, worldwide, non-exclusive, no-charge, royalty-free, irrevocable (except as stated in this section) patent license to make, have made, use, offer to sell, sell, import, and otherwise transfer the Work, where such license applies only to those patent claims licensable by such Contributor that are necessarily infringed by their Contribution(s) alone or by combination of their Contribution(s) with the Work to which such Contribution(s) was submitted. If You institute patent litigation against any entity (including a cross-claim or counterclaim in a lawsuit) alleging that the Work or a Contribution incorporated within the Work constitutes direct or contributory patent infringement, then any patent licenses granted to You under this License for that Work shall terminate as of the date such litigation is filed.

## 4. Redistribution.

You may reproduce and distribute copies of the Work or Derivative Works thereof in any medium, with or without modifications, and in Source or Object form, provided that You meet the following conditions:

(a) You must give any other recipients of the Work or Derivative Works a copy of this License; and

(b) You must cause any modified files to carry prominent notices stating that You changed the files; and

(c) You must retain, in the Source form of any Derivative Works that You distribute, all copyright, patent, trademark, and attribution notices from the Source form of the Work, excluding those notices that do not pertain to any part of the Derivative Works; and

(d) If the Work includes a "NOTICE" text file as part of its distribution, then any Derivative Works that You distribute must include a readable copy of the attribution notices contained within such NOTICE file, excluding those notices that do not pertain to any part of the Derivative Works, in at least one of the following places: within a NOTICE text file distributed as part of the Derivative Works; within the Source form or documentation, if provided along with the Derivative Works; or, within a display generated by the Derivative Works, if and wherever such third-party notices normally appear. The contents of the NOTICE file are for informational purposes only and do not modify the License. You may

add Your own attribution notices within Derivative Works that You distribute, alongside or as an addendum to the NOTICE text from the Work, provided that such additional attribution notices cannot be construed as modifying the License.

You may add Your own copyright statement to Your modifications and may provide additional or different license terms and conditions for use, reproduction, or distribution of Your modifications, or for any such Derivative Works as a whole, provided Your use, reproduction, and distribution of the Work otherwise complies with the conditions stated in this License.

#### 5. Submission of Contributions.

Unless You explicitly state otherwise, any Contribution intentionally submitted for inclusion in the Work by You to the Licensor shall be under the terms and conditions of this License, without any additional terms or conditions. Notwithstanding the above, nothing herein shall supersede or modify the terms of any separate license agreement you may have executed with Licensor regarding such Contributions.

6. Trademarks. This License does not grant permission to use the trade names, trademarks, service marks, or product names of the Licensor, except as required for reasonable and customary use in describing the origin of the Work and reproducing the content of the NOTICE file.

#### 7. Disclaimer of Warranty.

Unless required by applicable law or agreed to in writing, Licensor provides the Work (and each Contributor provides its Contributions) on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied, including, without limitation, any warranties or conditions of TITLE, NON-INFRINGEMENT, MERCHANTABILITY, or FITNESS FOR A PARTICULAR PURPOSE. You are solely responsible for determining the appropriateness of using or redistributing the Work and assume any risks associated with Your exercise of permissions under this License.

#### 8. Limitation of Liability.

In no event and under no legal theory, whether in tort (including negligence), contract, or otherwise, unless required by applicable law (such as deliberate and grossly negligent acts) or agreed to in writing, shall any Contributor be liable to You for damages, including any direct, indirect, special, incidental, or consequential damages of any character arising as a result of this License or out of the use or inability to use the Work (including but not limited to damages for loss of goodwill, work stoppage, computer failure or malfunction, or any and all other commercial damages or losses), even if such Contributor has been advised of the possibility of such damages.

#### 9. Accepting Warranty or Additional Liability.

While redistributing the Work or Derivative Works thereof, You may choose to offer, and charge a fee for, acceptance of support, warranty, indemnity, or other liability obligations and/or rights consistent with this License. However, in accepting such obligations, You may act only on Your own behalf and on Your sole responsibility, not on behalf of any other Contributor, and only if You agree to indemnify, defend, and hold each Contributor harmless for any liability incurred by, or claims asserted against, such Contributor by reason of your accepting any such warranty or additional liability.

END OF TERMS AND CONDITIONS

**Microsoft .Net Framework 4.5**

## MICROSOFT SOFTWARE SUPPLEMENTAL LICENSE TERMS

### .NET FRAMEWORK 4.5 FOR MICROSOFT WINDOWS OPERATING SYSTEM AND ASSOCIATED LANGUAGE PACKS

Microsoft Corporation (or based on where you live, one of its affiliates) licenses this supplement to you. If you are licensed to use Microsoft Windows operating system software (the "software"), you may use this supplement. You may not use it if you do not have a license for the software. You may use this supplement with each validly licensed copy of the software.

The following license terms describe additional use terms for this supplement. These terms and the license terms for the software apply to your use of the supplement. If there is a conflict, these supplemental license terms apply.

By using this supplement, you accept these terms. If you do not accept them, do not use this supplement.

If you comply with these license terms, you have the rights below.

1. DISTRIBUTABLE CODE. The supplement is comprised of Distributable Code. "Distributable Code" is code that you are permitted to distribute in programs you develop if you comply with the terms below.

a. Right to Use and Distribute.

- You may copy and distribute the object code form of the supplement.
- Third Party Distribution. You may permit distributors of your programs to copy and distribute the Distributable Code as part of those programs.

b. Distribution Requirements. For any Distributable Code you distribute, you must

- add significant primary functionality to it in your programs;
- for any Distributable Code having a filename extension of .lib, distribute only the results of running such Distributable Code through a linker with your program;
- distribute Distributable Code included in a setup program only as part of that setup program without modification;
- require distributors and external end users to agree to terms that protect it at least as much as this agreement;
- display your valid copyright notice on your programs; and
- indemnify, defend, and hold harmless Microsoft from any claims, including attorneys' fees, related to the distribution or use of your programs.

c. Distribution Restrictions. You may not

- alter any copyright, trademark or patent notice in the Distributable Code;
- use Microsoft's trademarks in your programs' names or in a way that suggests your programs come from or are endorsed by Microsoft;
- distribute Distributable Code to run on a platform other than the Windows platform;
- include Distributable Code in malicious, deceptive or unlawful programs; or

- modify or distribute the source code of any Distributable Code so that any part of it becomes subject to an Excluded License. An Excluded License is one that requires, as a condition of use, modification or distribution, that
- the code be disclosed or distributed in source code form; or
- others have the right to modify it.

2. SUPPORT SERVICES FOR SUPPLEMENT. Microsoft provides support services for this software as described at [www.support.microsoft.com/common/international.aspx](http://www.support.microsoft.com/common/international.aspx).

3. MICROSOFT .NET FRAMEWORK BENCHMARK TESTING. The software includes one or more components of the .NET Framework (.NET Components). You may conduct internal benchmark testing of those components. You may disclose the results of any benchmark test of those components, provided that you comply with the conditions set forth at <http://go.microsoft.com/fwlink/?LinkID=66406>. Notwithstanding any other agreement you may have with Microsoft, if you disclose such benchmark test results, Microsoft shall have the right to disclose the results of benchmark tests it conducts of your products that compete with the applicable .NET Component, provided it complies with the same conditions set forth at <http://go.microsoft.com/fwlink/?LinkID=66406>.

## **Microsoft Exchange Web Services Managed API 2.2**

### **MICROSOFT SOFTWARE LICENSE TERMS**

#### **MICROSOFT EXCHANGE WEB SERVICES MANAGED API 2.0**

These license terms are an agreement between Microsoft Corporation (or based on where you live, one of its affiliates) and You. Please read them. They apply to the software named above, which includes the media on which You received it, if any. The terms also apply to any Microsoft

- updates,
- supplements,
- Internet-based services, and
- support services

for this software, unless other terms accompany those items. If so, those terms apply.

BY INSTALLING, ACCESSING OR OTHERWISE USING THE SOFTWARE, YOU ACCEPT THE TERMS OF THIS LICENSE AGREEMENT. IF YOU DO NOT AGREE TO THE TERMS OF THIS LICENSE AGREEMENT, DO NOT INSTALL, ACCESS OR USE THE SOFTWARE.

YOU MAY USE THE SOFTWARE SOLELY IN PROGRAMS DEVELOPED BY YOU THAT INTEROPERATE WITH MICROSOFT EXCHANGE SERVER (REFERRED TO AS "AUTHORIZED PROGRAMS").

If You comply with these license terms, You have the rights below.

1. INSTALLATION AND USE. You may install and use any number of copies of the software on Your devices solely to design, develop and test Authorized Programs.

2. ADDITIONAL LICENSING REQUIREMENTS AND/OR USE RIGHTS.

a. Distributable Code. The software contains code that You are permitted to include in Authorized Programs if You comply with the terms below.

i. Right to Use and Distribute. The code and text files listed below are "Distributable Code."



- REDIST.TXT Files. You may copy and distribute the object code form of code listed in REDIST.TXT files.
- Redistribution. You may permit the distributors of Authorized Programs to copy and distribute the Distributable Code as part of those programs.

ii. Distribution Requirements. For any Distributable Code You distribute, You must

- add significant primary functionality to it in Authorized Programs;
- for any Distributable Code having a filename extension of .lib, distribute only the results of running such Distributable Code through a linker with your program;
- distribute Distributable Code included in a setup program only as part of that setup program without modification;
- require distributors and external end users to agree to terms that protect it at least as much as this agreement;
- display Your valid copyright notice on Authorized Programs; and
- indemnify, defend, and hold harmless Microsoft from any claims, including attorneys' fees, related to the distribution or use of Authorized Programs.

iii. Distribution Restrictions. You may not

- alter any copyright, trademark or patent notice in the Distributable Code;
- use Microsoft's trademarks in Your programs' names or in a way that suggests Your programs come from or are endorsed by Microsoft;
- include Distributable Code in malicious, deceptive or unlawful programs; or
- modify, distribute or convey any Distributable Code so that the Distributable Code or any application to which it links, or of which it is a part, becomes subject to an Excluded License. An Excluded License is any other license that requires, as a condition of use, modification, distribution or conveyance that,
- the code be disclosed or distributed in source code form; or
- others have the right to modify or create derivative works of it.

3. INTERNET-BASED SERVICES. Microsoft provides Internet-based services with the software. It may change or cancel them at any time.

4. SCOPE OF LICENSE. You may only use the software in Authorized Programs. The software is licensed, not sold. This agreement only gives You some rights to use the software. Microsoft reserves all other rights. Unless applicable law gives You more rights despite this limitation, You may use the software only as expressly permitted in this agreement. You may not:

- work around any explicit instructions in the software that limit or restrict their use;
- reverse engineer, decompile or disassemble the software, except and only to the extent that applicable law expressly permits, despite this limitation;
- use the software in any way that intentionally harms services provided by Microsoft or impairs anyone else's use of such services;

- use the software to try to gain unauthorized access to any service, data, account or network by any means;
- make more copies of the software than reasonably necessary for You to exercise Your rights under this agreement;
- publish the software for others to copy;
- rent, lease or lend the software or
- publish the software as a hosted service without adding significant primary functionality to them in Authorized Programs.

5. **TRANSFER TO A THIRD PARTY.** The first user of the software may transfer them and this agreement directly to a third party. Before the transfer, that party must agree that this agreement applies to the transfer and use of the software. The first user must uninstall the software before transferring them separately from the device. The first user may not retain any copies.

6. **EXPORT RESTRICTIONS.** The software is subject to United States export laws and regulations. You must comply with all domestic and international export laws and regulations that apply to the software. These laws include restrictions on destinations, end users and end use. For additional information, see [www.microsoft.com/exporting](http://www.microsoft.com/exporting).

7. **SUPPORT.** Microsoft is not obligated to provide any technical or other support under this agreement ("Support Services") for the software to You. However, if Microsoft chooses to provide any Support Services to You, Your use of such Support Services will be governed by then-current Microsoft policies (i.e. terms separate from this agreement). With respect to any technical or other information You provide to Microsoft in connection with the Support Services, You agree that Microsoft has an unrestricted right to use such information for its business purposes, including for product support and development. Microsoft will not use such information in a form that personally identifies You.

8. **RESERVATION OF RIGHTS.** Except for the licenses expressly granted under this license, Microsoft and its suppliers retain all right, title and interest in and to the software, and all intellectual property rights therein. You are not authorized to alter, modify, copy, edit, format, create derivative works of or otherwise use any materials, content or technology provided under this license except as explicitly provided in this license or approved in advance in writing by Microsoft.

9. **ENTIRE AGREEMENT.** This agreement, and the terms for supplements, updates, Internet-based services and Support Services that You use, are the entire agreement with respect to the software.

10. **APPLICABLE LAW.**

a. **United States.** If You acquired the software in the United States, Washington state law governs the interpretation of this agreement and applies to claims for breach of it, regardless of conflict of laws principles. The laws of the state where You live govern all other claims, including claims under state consumer protection laws, unfair competition laws, and in tort.

b. **Outside the United States.** If You acquired the software in any other country, the laws of that country apply.

11. **LEGAL EFFECT.** This agreement describes certain legal rights. You may have other rights under the laws of Your country. You may also have rights with respect to the party



from whom You acquired the software. This agreement does not change Your rights under the laws of Your country if the laws of Your country do not permit it to do so.

**12. DISCLAIMER OF WARRANTY.** The software is licensed “as-is.” You bear the risk of using them. Microsoft gives no express warranties, guarantees or conditions. You may have additional consumer rights under Your local laws which this agreement cannot change. To the extent permitted under Your local laws, Microsoft excludes the implied warranties of merchantability, fitness for a particular purpose and non-infringement.

**13. LIMITATION ON AND EXCLUSION OF REMEDIES AND DAMAGES.** You can recover from Microsoft and its suppliers only direct damages up to U.S. \$5.00. You cannot recover any other damages, including consequential, lost profits, special, indirect or incidental damages.

This limitation applies to:

- anything related to the software, content (including code) on third party Internet sites, or third party programs; and
- claims for breach of contract, breach of warranty, guarantee or condition, strict liability, negligence, or other tort to the extent permitted by applicable law.

It also applies even if Microsoft knew or should have known about the possibility of the damages. The above limitation or exclusion may not apply to You because Your country may not allow the exclusion or limitation of incidental, consequential or other damages.

## **MICROSOFT .NET LIBRARY 1.0**

### **MICROSOFT SOFTWARE LICENSE TERMS**

#### **MICROSOFT .NET LIBRARY**

These license terms are an agreement between Microsoft Corporation (or based on where you live, one of its affiliates) and you. Please read them. They apply to the software named above, which includes the media on which you received it, if any. The terms also apply to any Microsoft

- updates,
- supplements,
- Internet-based services, and
- support services

for this software, unless other terms accompany those items. If so, those terms apply.

**BY USING THE SOFTWARE, YOU ACCEPT THESE TERMS. IF YOU DO NOT ACCEPT THEM, DO NOT USE THE SOFTWARE.**

**IF YOU COMPLY WITH THESE LICENSE TERMS, YOU HAVE THE PERPETUAL RIGHTS BELOW.**

#### **1. INSTALLATION AND USE RIGHTS.**

a. **Installation and Use.** You may install and use any number of copies of the software to design, develop and test your programs.

b. **Third Party Programs.** The software may include third party programs that Microsoft, not the third party, licenses to you under this agreement. Notices, if any, for the third party program are included for your information only.

## 2. ADDITIONAL LICENSING REQUIREMENTS AND/OR USE RIGHTS.

a. **DISTRIBUTABLE CODE.** The software is comprised of Distributable Code. "Distributable Code" is code that you are permitted to distribute in programs you develop if you comply with the terms below.

### i. Right to Use and Distribute.

- You may copy and distribute the object code form of the software.
- **Third Party Distribution.** You may permit distributors of your programs to copy and distribute the Distributable Code as part of those programs.

### ii. Distribution Requirements. For any Distributable Code you distribute, you must

- add significant primary functionality to it in your programs;
- require distributors and external end users to agree to terms that protect it at least as much as this agreement;
- display your valid copyright notice on your programs; and
- indemnify, defend, and hold harmless Microsoft from any claims, including attorneys' fees, related to the distribution or use of your programs.

### iii. Distribution Restrictions. You may not

- alter any copyright, trademark or patent notice in the Distributable Code;
- use Microsoft's trademarks in your programs' names or in a way that suggests your programs come from or are endorsed by Microsoft;
- include Distributable Code in malicious, deceptive or unlawful programs; or
- modify or distribute the source code of any Distributable Code so that any part of it becomes subject to an Excluded License. An Excluded License is one that requires, as a condition of use, modification or distribution, that
  - the code be disclosed or distributed in source code form; or
  - others have the right to modify it.

3. **SCOPE OF LICENSE.** The software is licensed, not sold. This agreement only gives you some rights to use the software. Microsoft reserves all other rights. Unless applicable law gives you more rights despite this limitation, you may use the software only as expressly permitted in this agreement. In doing so, you must comply with any technical limitations in the software that only allow you to use it in certain ways. You may not

- work around any technical limitations in the software;
- reverse engineer, decompile or disassemble the software, except and only to the extent that applicable law expressly permits, despite this limitation;
- publish the software for others to copy;
- rent, lease or lend the software;
- transfer the software or this agreement to any third party; or
- use the software for commercial software hosting services.

4. **BACKUP COPY.** You may make one backup copy of the software. You may use it only to reinstall the software.

5. **DOCUMENTATION.** Any person that has valid access to your computer or internal network may copy and use the documentation for your internal, reference purposes.

6. **EXPORT RESTRICTIONS.** The software is subject to United States export laws and regulations. You must comply with all domestic and international export laws and regulations that apply to the software. These laws include restrictions on destinations, end users and end use. For additional information, see [www.microsoft.com/exporting](http://www.microsoft.com/exporting).

7. **SUPPORT SERVICES.** Because this software is “as is,” we may not provide support services for it.

8. **ENTIRE AGREEMENT.** This agreement, and the terms for supplements, updates, Internet-based services and support services that you use, are the entire agreement for the software and support services.

9. **APPLICABLE LAW.**

a. **United States.** If you acquired the software in the United States, Washington state law governs the interpretation of this agreement and applies to claims for breach of it, regardless of conflict of laws principles. The laws of the state where you live govern all other claims, including claims under state consumer protection laws, unfair competition laws, and in tort.

b. **Outside the United States.** If you acquired the software in any other country, the laws of that country apply.

10. **LEGAL EFFECT.** This agreement describes certain legal rights. You may have other rights under the laws of your country. You may also have rights with respect to the party from whom you acquired the software. This agreement does not change your rights under the laws of your country if the laws of your country do not permit it to do so.

11. **DISCLAIMER OF WARRANTY.** THE SOFTWARE IS LICENSED “AS-IS.” YOU BEAR THE RISK OF USING IT. MICROSOFT GIVES NO EXPRESS WARRANTIES, GUARANTEES OR CONDITIONS. YOU MAY HAVE ADDITIONAL CONSUMER RIGHTS OR STATUTORY GUARANTEES UNDER YOUR LOCAL LAWS WHICH THIS AGREEMENT CANNOT CHANGE. TO THE EXTENT PERMITTED UNDER YOUR LOCAL LAWS, MICROSOFT EXCLUDES THE IMPLIED WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NON-INFRINGEMENT.

FOR AUSTRALIA – YOU HAVE STATUTORY GUARANTEES UNDER THE AUSTRALIAN CONSUMER LAW AND NOTHING IN THESE TERMS IS INTENDED TO AFFECT THOSE RIGHTS.

12. **LIMITATION ON AND EXCLUSION OF REMEDIES AND DAMAGES.** YOU CAN RECOVER FROM MICROSOFT AND ITS SUPPLIERS ONLY DIRECT DAMAGES UP TO U.S. \$5.00. YOU CANNOT RECOVER ANY OTHER DAMAGES, INCLUDING CONSEQUENTIAL, LOST PROFITS, SPECIAL, INDIRECT OR INCIDENTAL DAMAGES.

This limitation applies to

- anything related to the software, services, content (including code) on third party Internet sites, or third party programs; and
- claims for breach of contract, breach of warranty, guarantee or condition, strict liability, negligence, or other tort to the extent permitted by applicable law.

It also applies even if Microsoft knew or should have known about the possibility of the damages. The above limitation or exclusion may not apply to you because your country may not allow the exclusion or limitation of incidental, consequential or other damages.

Please note: As this software is distributed in Quebec, Canada, some of the clauses in this agreement are provided below in French.

Remarque : Ce logiciel étant distribué au Québec, Canada, certaines des clauses dans ce contrat sont fournies ci-dessous en français.

**EXONÉRATION DE GARANTIE.** Le logiciel visé par une licence est offert « tel quel ». Toute utilisation de ce logiciel est ? votre seule risque et péril. Microsoft n'accorde aucune autre garantie expresse. Vous pouvez bénéficier de droits additionnels en vertu du droit local sur la protection des consommateurs, que ce contrat ne peut modifier. La ou elles sont permises par le droit locale, les garanties implicites de qualité marchande, d'adéquation ? un usage particulier et d'absence de contrefaçon sont exclues.

**LIMITATION DES DOMMAGES-INTÉR?TS ET EXCLUSION DE RESPONSABILITÉ POUR LES DOMMAGES.** Vous pouvez obtenir de Microsoft et de ses fournisseurs une indemnisation en cas de dommages directs uniquement ? hauteur de 5,00 \$ US. Vous ne pouvez prétendre ? aucune indemnisation pour les autres dommages, y compris les dommages spéciaux, indirects ou accessoires et pertes de bénéfices.

Cette limitation concerne :

- tout ce qui est relié au logiciel, aux services ou au contenu (y compris le code) figurant sur des sites Internet tiers ou dans des programmes tiers ; et
- les réclamations au titre de violation de contrat ou de garantie, ou au titre de responsabilité stricte, de négligence ou d'une autre faute dans la limite autorisée par la loi en vigueur.

Elle s'applique également, m?me si Microsoft connaissait ou devrait connaître l'éventualité d'un tel dommage. Si votre pays n'autorise pas l'exclusion ou la limitation de responsabilité pour les dommages indirects, accessoires ou de quelque nature que ce soit, il se peut que la limitation ou l'exclusion ci-dessus ne s'appliquera pas ? votre égard.

**EFFET JURIDIQUE.** Le présent contrat décrit certains droits juridiques. Vous pourriez avoir d'autres droits prévus par les lois de votre pays. Le présent contrat ne modifie pas les droits que vous conf?rent les lois de votre pays si celles-ci ne le permettent pas.

## **MS-.NET-Library-JS License N/A**

### **MICROSOFT SOFTWARE LICENSE TERMS**

#### **MICROSOFT .NET LIBRARY**

These license terms are an agreement between Microsoft Corporation (or based on where you live, one of its affiliates) and you. Please read them. They apply to the software named above, which includes the media on which you received it, if any. The terms also apply to any Microsoft

- updates,
- supplements,
- Internet-based services, and
- support services

for this software, unless other terms accompany those items. If so, those terms apply.

BY USING THE SOFTWARE, YOU ACCEPT THESE TERMS. IF YOU DO NOT ACCEPT THEM, DO NOT USE THE SOFTWARE.

IF YOU COMPLY WITH THESE LICENSE TERMS, YOU HAVE THE PERPETUAL RIGHTS BELOW.

#### 1. INSTALLATION AND USE RIGHTS.

a. Installation and Use. You may install and use any number of copies of the software to design, develop and test your programs. You may modify, copy, distribute or deploy any .js files contained in the software as part of your programs.

b. Third Party Programs. The software may include third party programs that Microsoft, not the third party, licenses to you under this agreement. Notices, if any, for the third party program are included for your information only.

#### 2. ADDITIONAL LICENSING REQUIREMENTS AND/OR USE RIGHTS.

a. DISTRIBUTABLE CODE. In addition to the .js files described above, the software is comprised of Distributable Code. Distributable Code is code that you are permitted to distribute in programs you develop if you comply with the terms below.

##### i. Right to Use and Distribute.

- You may copy and distribute the object code form of the software.
- Third Party Distribution. You may permit distributors of your programs to copy and distribute the Distributable Code as part of those programs.

##### ii. Distribution Requirements. For any Distributable Code you distribute, you must

- use the Distributable Code in your programs and not as a standalone distribution;
- require distributors and external end users to agree to terms that protect it at least as much as this agreement;
- display your valid copyright notice on your programs; and
- indemnify, defend, and hold harmless Microsoft from any claims, including attorneys' fees, related to the distribution or use of your programs.

##### iii. Distribution Restrictions. You may not

- alter any copyright, trademark or patent notice in the Distributable Code;
- use Microsoft's trademarks in your programs' names or in a way that suggests your programs come from or are endorsed by Microsoft;
- include Distributable Code in malicious, deceptive or unlawful programs; or
- modify or distribute the source code of any Distributable Code so that any part of it becomes subject to an Excluded License. An Excluded License is one that requires, as a condition of use, modification or distribution, that
  - the code be disclosed or distributed in source code form; or
  - others have the right to modify it.

3. SCOPE OF LICENSE. The software is licensed, not sold. This agreement only gives you some rights to use the software. Microsoft reserves all other rights. Unless applicable law

gives you more rights despite this limitation, you may use the software only as expressly permitted in this agreement. In doing so, you must comply with any technical limitations in the software that only allow you to use it in certain ways. You may not

- work around any technical limitations in the software;
- reverse engineer, decompile or disassemble the software, except and only to the extent that applicable law expressly permits, despite this limitation;
- publish the software for others to copy;
- rent, lease or lend the software; or
- transfer the software or this agreement to any third party.

4. **BACKUP COPY.** You may make one backup copy of the software. You may use it only to reinstall the software.

5. **DOCUMENTATION.** Any person that has valid access to your computer or internal network may copy and use the documentation for your internal, reference purposes.

6. **EXPORT RESTRICTIONS.** The software is subject to United States export laws and regulations. You must comply with all domestic and international export laws and regulations that apply to the software. These laws include restrictions on destinations, end users and end use. For additional information, see [www.microsoft.com/exporting](http://www.microsoft.com/exporting).

7. **SUPPORT SERVICES.** Because this software is “as-is,” we may not provide support services for it.

8. **ENTIRE AGREEMENT.** This agreement, and the terms for supplements, updates, Internet-based services and support services that you use, are the entire agreement for the software and support services.

9. **APPLICABLE LAW.**

a. **United States.** If you acquired the software in the United States, Washington state law governs the interpretation of this agreement and applies to claims for breach of it, regardless of conflict of laws principles. The laws of the state where you live govern all other claims, including claims under state consumer protection laws, unfair competition laws, and in tort.

b. **Outside the United States.** If you acquired the software in any other country, the laws of that country apply.

10. **LEGAL EFFECT.** This agreement describes certain legal rights. You may have other rights under the laws of your country. You may also have rights with respect to the party from whom you acquired the software. This agreement does not change your rights under the laws of your country if the laws of your country do not permit it to do so.

11. **DISCLAIMER OF WARRANTY.** THE SOFTWARE IS LICENSED “AS IS.” YOU BEAR THE RISK OF USING IT. MICROSOFT GIVES NO EXPRESS WARRANTIES, GUARANTEES OR CONDITIONS. YOU MAY HAVE ADDITIONAL CONSUMER RIGHTS OR STATUTORY GUARANTEES UNDER YOUR LOCAL LAWS WHICH THIS AGREEMENT CANNOT CHANGE. TO THE EXTENT PERMITTED UNDER YOUR LOCAL LAWS, MICROSOFT EXCLUDES THE IMPLIED WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NON-INFRINGEMENT.

FOR AUSTRALIA – YOU HAVE STATUTORY GUARANTEES UNDER THE AUSTRALIAN CONSUMER LAW AND NOTHING IN THESE TERMS IS INTENDED TO AFFECT THOSE RIGHTS.

12. LIMITATION ON AND EXCLUSION OF REMEDIES AND DAMAGES. YOU CAN RECOVER FROM MICROSOFT AND ITS SUPPLIERS ONLY DIRECT DAMAGES UP TO U.S. \$5.00. YOU CANNOT RECOVER ANY OTHER DAMAGES, INCLUDING CONSEQUENTIAL, LOST PROFITS, SPECIAL, INDIRECT OR INCIDENTAL DAMAGES.

This limitation applies to

- anything related to the software, services, content (including code) on third party Internet sites, or third party programs; and
- claims for breach of contract, breach of warranty, guarantee or condition, strict liability, negligence, or other tort to the extent permitted by applicable law.

It also applies even if Microsoft knew or should have known about the possibility of the damages. The above limitation or exclusion may not apply to you because your country may not allow the exclusion or limitation of incidental, consequential or other damages.

Please note: As this software is distributed in Quebec, Canada, some of the clauses in this agreement are provided below in French.

Remarque : Ce logiciel étant distribué au Québec, Canada, certaines des clauses dans ce contrat sont fournies ci-dessous en français.

EXONÉRATION DE GARANTIE. Le logiciel visé par une licence est offert « tel quel ». Toute utilisation de ce logiciel est à votre seule risque et péril. Microsoft n'accorde aucune autre garantie expresse. Vous pouvez bénéficier de droits additionnels en vertu du droit local sur la protection des consommateurs, que ce contrat ne peut modifier. La ou elles sont permises par le droit locale, les garanties implicites de qualité marchande, d'adéquation à un usage particulier et d'absence de contrefaçon sont exclues.

LIMITATION DES DOMMAGES-INTÉRÊTS ET EXCLUSION DE RESPONSABILITÉ POUR LES DOMMAGES. Vous pouvez obtenir de Microsoft et de ses fournisseurs une indemnisation en cas de dommages directs uniquement à hauteur de 5,00 \$ US. Vous ne pouvez prétendre à aucune indemnisation pour les autres dommages, y compris les dommages spéciaux, indirects ou accessoires et pertes de bénéfices.

Cette limitation concerne :

- tout ce qui est relié au logiciel, aux services ou au contenu (y compris le code) figurant sur des sites Internet tiers ou dans des programmes tiers ; et
- les réclamations au titre de violation de contrat ou de garantie, ou au titre de responsabilité stricte, de négligence ou d'une autre faute dans la limite autorisée par la loi en vigueur.

Elle s'applique également, même si Microsoft connaissait ou devrait connaître l'éventualité d'un tel dommage. Si votre pays n'autorise pas l'exclusion ou la limitation de responsabilité pour les dommages indirects, accessoires ou de quelque nature que ce soit, il se peut que la limitation ou l'exclusion ci-dessus ne s'appliquera pas à votre égard.

EFFET JURIDIQUE. Le présent contrat décrit certains droits juridiques. Vous pourriez avoir d'autres droits prévus par les lois de votre pays. Le présent contrat ne modifie pas les droits que vous confèrent les lois de votre pays si celles-ci ne le permettent pas.

**MIT Json.NET N/A**



## The MIT License (MIT)

Copyright (c) 2007 James Newton-King

Permission is hereby granted, free of charge, to any person obtaining a copy of this software and associated documentation files (the "Software"), to deal in the Software without restriction, including without limitation the rights to use, copy, modify, merge, publish, distribute, sublicense, and/or sell copies of the Software, and to permit persons to whom the Software is furnished to do so, subject to the following conditions:

The above copyright notice and this permission notice shall be included in all copies or substantial portions of the Software.

THE SOFTWARE IS PROVIDED "AS IS", WITHOUT WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT. IN NO EVENT SHALL THE AUTHORS OR COPYRIGHT HOLDERS BE LIABLE FOR ANY CLAIM, DAMAGES OR OTHER LIABILITY, WHETHER IN AN ACTION OF CONTRACT, TORT OR OTHERWISE, ARISING FROM, OUT OF OR IN CONNECTION WITH THE SOFTWARE OR THE USE OR OTHER DEALINGS IN THE SOFTWARE.

## BSD - Kowalski 2011

Copyright (c) 2004-2011 Jaroslaw Kowalski <jaak@jkowalski.net>

All rights reserved.

Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:

- Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer.
- Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution.
- Neither the name of Jaroslaw Kowalski nor the names of its contributors may be used to endorse or promote products derived from this software without specific prior written permission.

THIS SOFTWARE IS PROVIDED BY THE COPYRIGHT HOLDERS AND CONTRIBUTORS "AS IS" AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE COPYRIGHT OWNER OR CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

## BSD 3-Clause for App vNext 1.0

New BSD License

=



Copyright (c) 2015-2020, App vNext

All rights reserved.

Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:

- Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer.
- Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution.
- Neither the name of App vNext nor the names of its contributors may be used to endorse or promote products derived from this software without specific prior written permission.

THIS SOFTWARE IS PROVIDED BY THE COPYRIGHT HOLDERS AND CONTRIBUTORS "AS IS" AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL <COPYRIGHT HOLDER> BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

### **BSD - Polly 7.1**

Copyright (c) 2015-2018, App vNext

All rights reserved.

Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:

- Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer.
- Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution.
- Neither the name of App vNext nor the names of its contributors may be used to endorse or promote products derived from this software without specific prior written permission.

THIS SOFTWARE IS PROVIDED BY THE COPYRIGHT HOLDERS AND CONTRIBUTORS "AS IS" AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL <COPYRIGHT HOLDER> BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY,

OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

## **MICROSOFT WCF DATA SERVICES N/A**

### **MICROSOFT SOFTWARE LICENSE TERMS**

#### **MICROSOFT WCF DATA SERVICES**

These license terms are an agreement between Microsoft Corporation (or based on where you live, one of its affiliates) and you. Please read them. They apply to the software named above, which includes the media on which you received it, if any. The terms also apply to any Microsoft

- updates,
- supplements,
- Internet-based services, and
- support services

for this software, unless other terms accompany those items. If so, those terms apply.

By using the software, you accept these terms. If you do not accept them, do not use the software.

If you comply with these license terms, you have the perpetual rights below.

1. **INSTALLATION AND USE RIGHTS.** You may install and use any number of copies of the software on your devices.

2. **ADDITIONAL LICENSING REQUIREMENTS AND/OR USE RIGHTS.**

a. **Distributable Code.** The software contains code that you are permitted to distribute in programs you develop if you comply with the terms below.

i. **Right to Use and Distribute.** The code and text files listed below are "Distributable Code."

- **REDIST.TXT Files.** You may copy and distribute the object code form of code listed in REDIST.TXT files.
- **Third Party Distribution.** You may permit distributors of your programs to copy and distribute the Distributable Code as part of those programs.

ii. **Distribution Requirements.** For any Distributable Code you distribute, you must

- add significant primary functionality to it in your programs;
- for any Distributable Code having a filename extension of .lib, distribute only the results of running such Distributable Code through a linker with your program;
- distribute Distributable Code included in a setup program only as part of that setup program without modification;
- require distributors and external end users to agree to terms that protect it at least as much as this agreement;
- display your valid copyright notice on your programs; and
- indemnify, defend, and hold harmless Microsoft from any claims, including attorneys' fees, related to the distribution or use of your programs.

iii. **Distribution Restrictions.** You may not

- alter any copyright, trademark or patent notice in the Distributable Code;
- use Microsoft's trademarks in your programs' names or in a way that suggests your programs come from or are endorsed by Microsoft;
- distribute Distributable Code to run on a platform other than the Windows platform;
- include Distributable Code in malicious, deceptive or unlawful programs; or
- modify or distribute the source code of any Distributable Code so that any part of it becomes subject to an Excluded License. An Excluded License is one that requires, as a condition of use, modification or distribution, that
  - the code be disclosed or distributed in source code form; or
  - others have the right to modify it.

3. **SCOPE OF LICENSE.** The software is licensed, not sold. This agreement only gives you some rights to use the software. Microsoft reserves all other rights. Unless applicable law gives you more rights despite this limitation, you may use the software only as expressly permitted in this agreement. In doing so, you must comply with any technical limitations in the software that only allow you to use it in certain ways. You may not

- work around any technical limitations in the software;
- reverse engineer, decompile or disassemble the software, except and only to the extent that applicable law expressly permits, despite this limitation;
- make more copies of the software than specified in this agreement or allowed by applicable law, despite this limitation;
- publish the software for others to copy;
- rent, lease or lend the software; or
- use the software for commercial software hosting services.

4. **BACKUP COPY.** You may make one backup copy of the software. You may use it only to reinstall the software.

5. **DOCUMENTATION.** Any person that has valid access to your computer or internal network may copy and use the documentation for your internal, reference purposes.

6. **TRANSFER TO A THIRD PARTY.** The first user of the software may transfer it and this agreement directly to a third party. Before the transfer, that party must agree that this agreement applies to the transfer and use of the software. The first user must uninstall the software before transferring it separately from the device. The first user may not retain any copies.

7. **EXPORT RESTRICTIONS.** The software is subject to United States export laws and regulations. You must comply with all domestic and international export laws and regulations that apply to the software. These laws include restrictions on destinations, end users and end use. For additional information, see [www.microsoft.com/exporting](http://www.microsoft.com/exporting).

8. **SUPPORT SERVICES.** Because this software is "as is," we may not provide support services for it.

9. **ENTIRE AGREEMENT.** This agreement, and the terms for supplements, updates, Internet-based services and support services that you use, are the entire agreement for the software and support services.

10. **APPLICABLE LAW.**

a. United States. If you acquired the software in the United States, Washington state law governs the interpretation of this agreement and applies to claims for breach of it, regardless of conflict of laws principles. The laws of the state where you live govern all other claims, including claims under state consumer protection laws, unfair competition laws, and in tort.

b. Outside the United States. If you acquired the software in any other country, the laws of that country apply.

11. LEGAL EFFECT. This agreement describes certain legal rights. You may have other rights under the laws of your country. You may also have rights with respect to the party from whom you acquired the software. This agreement does not change your rights under the laws of your country if the laws of your country do not permit it to do so.

12. DISCLAIMER OF WARRANTY. The software is licensed "as-is." You bear the risk of using it. Microsoft gives no express warranties, guarantees or conditions. You may have additional consumer rights or statutory guarantees under your local laws which this agreement cannot change. To the extent permitted under your local laws, Microsoft excludes the implied warranties of merchantability, fitness for a particular purpose and non-infringement.

FOR AUSTRALIA – You have statutory guarantees under the Australian Consumer Law and nothing in these terms is intended to affect those rights.

13. LIMITATION ON AND EXCLUSION OF REMEDIES AND DAMAGES. You can recover from Microsoft and its suppliers only direct damages up to U.S. \$5.00. You cannot recover any other damages, including consequential, lost profits, special, indirect or incidental damages.

This limitation applies to

- anything related to the software, services, content (including code) on third party Internet sites, or third party programs; and
- claims for breach of contract, breach of warranty, guarantee or condition, strict liability, negligence, or other tort to the extent permitted by applicable law.

It also applies even if Microsoft knew or should have known about the possibility of the damages. The above limitation or exclusion may not apply to you because your country may not allow the exclusion or limitation of incidental, consequential or other damages.

### **Component Art Web.UI Suite Enterprise license**

Please review the following license agreement before installing or using the Web.UI suite, any individual ComponentArt software component or other software product, and/or all related materials. If you agree to the terms herein then you must click the "YES" button during the software installation process as confirmation before you are permitted to use this software and related documents.

Definitions:

This ComponentArt Inc. End-User Software License Agreement ("EULA") is a legal agreement between you (either as an individual user, corporation or single entity) and ComponentArt Inc. ("ComponentArt") for the Web.UI suite or individual software product - which includes computer software, and may include associated media, printed materials, and "online" or electronic documentation ("SOFTWARE PRODUCT" or "SOFTWARE"). By exercising your rights to install the SOFTWARE PRODUCT, you agree to be bound by the

terms of this End User License Agreement ("EULA"), including the limitations and warranty disclaimers. If you do NOT agree to the terms of this EULA, you may not install nor use the SOFTWARE PRODUCT; If this is the case, please uninstall the SOFTWARE PRODUCT from your system immediately, and destroy all copies of the SOFTWARE PRODUCT and all of its component parts, source code, associated documentation, and related materials.

#### SOFTWARE PRODUCT LICENSE:

The SOFTWARE PRODUCT is protected by copyright laws and international copyright treaties, as well as other intellectual property laws and treaties.

#### 1. GRANT OF LICENSE.

This is a license agreement, and NOT an agreement for sale. ComponentArt retains ownership of the copy of THE SOFTWARE in your possession, and all copies you may be licensed to make. ComponentArt retains all rights not expressly granted to you in this LICENSE. ComponentArt hereby grants to you, and you accept, a non-exclusive, non-transferable license to use, copy and modify THE SOFTWARE only as authorized below.

Provided that you have accepted these terms contained herein by clicking the "YES" button at the end of this Agreement, this EULA grants you the following rights:

##### Installation and Use:

**DEVELOPER LICENSE:** For single-version licenses, you are granted a license as a single developer (individual) to the particular licensed version of the SOFTWARE PRODUCT. For subscription-based licenses, you are granted a license as a single developer (individual) to all versions of the particular product released during the period of the subscription.

For the version(s) you are licensed for, you are granted a license as a single individual to distribute the SOFTWARE PRODUCT royalty-free with an unlimited number of different solutions to an unlimited number of web servers, provided they are developed solely by you. The term "different solutions" is understood to mean non-identical, non-"shrink-wrapped" applications to be resold or re-licensed by you. You may not distribute the product with more than 10 copies of an identical or similarly-functioning ("shrink-wrapped") solution or application. For royalty-free distribution of more than 10 identical or similarly-functioning copies of a solution or application, you must purchase a subscription-level license or higher, and are required to modify the SOFTWARE PRODUCT code as per ComponentArt's instructions.

At no time may the SOFTWARE PRODUCT be used by more than one individual at the same time for development purposes -- nor may the SOFTWARE PRODUCT be distributed for use with applications other than those developed by you.

For subscription-based licenses, you are further licensed as a single individual to distribute the SOFTWARE PRODUCT royalty-free with an unlimited number of solutions or applications to an unlimited number of web servers, provided they are developed solely by you. This includes royalty-free distribution of multiple copies of identical or similarly-functioning ("shrink-wrapped") solutions or applications. For royalty-free distribution of more than 10 identical or similarly-functioning copies of a solution or application, you are required to modify the SOFTWARE PRODUCT code as per ComponentArt's instructions to ensure it cannot be re-used for any purpose outside of your distributed application.

For subscription-based licenses, you are also further licensed to view the source code to the SOFTWARE PRODUCT or part thereof, as permitted by the licensor, and modify it for your own needs. You may only re-distribute the source code as part of a compiled solution that

adds significant functionality to THE SOFTWARE PRODUCT, and may not redistribute it in non-compiled form.

For Developer and Subscription-based licenses, you are required to reasonably ensure that the SOFTWARE PRODUCT is not reused by or with any application other than those with which you distribute it. For example, if you install the Menu for ASP.NET control along with a packaged application on a customer's server, that customer is not permitted to use the control independent of your application, and must be informed as such.

**CORPORATE SITE LICENSE:** You are granted a license for all developers/individuals who are part an entire single collective entity, organization, enterprise, or corporation AT A SINGLE PHYSICAL LOCATION - or up to ten (10) developers/individuals AT SEPARATE PHYSICAL LOCATIONS who are still part of a single collective entity, organization, enterprise or corporation - to all versions of the particular product released during the period of the Corporate Site License subscription.

For the version(s) you are licensed for, you are granted a license to distribute the SOFTWARE PRODUCT royalty-free with an unlimited number of solutions or applications to an unlimited number of web servers, provided they are developed solely within the single organization. The SOFTWARE PRODUCT may be used by an unlimited (or limited, as defined above) number of individuals employed by or belonging to the single organization, at the same time, for development purposes -- and the SOFTWARE PRODUCT may be distributed for use with an unlimited number of applications developed by the collective entity, organization, enterprise or corporation. This includes royalty-free distribution of multiple copies of identical or similarly-functioning ("shrink-wrapped") solutions or applications.

For applications distributed outside of the licensed organization, you are required to reasonably ensure that the SOFTWARE PRODUCT is not reused by or with any application other than those with which you distribute it. For example, if you install the Menu for ASP.NET control along with a packaged application on a customer's server, that customer is not permitted to use the control independent of your application, and must be informed as such.

For royalty-free distribution of more than 10 identical or similarly-functioning copies of a solution or application, you are required to modify the SOFTWARE PRODUCT code as per ComponentArt's instructions to ensure it cannot be re-used for any purpose outside of your distributed application.

You are further licensed to view the source code to the SOFTWARE PRODUCT or part thereof, as permitted by the licensor, and modify it for your own needs. You may only re-distribute the source code as part of a compiled solution that adds significant functionality to THE SOFTWARE PRODUCT, and may not redistribute it in non-compiled form.

**FOR ALL LICENSES:** In no case shall you rent, lease, lend, redistribute nor re-license THE SOFTWARE PRODUCT or any related source code to a 3rd party individual or entity, except as outlined above. In no case shall you grant further redistribution rights for THE SOFTWARE PRODUCT to the end-users of your solution.

**UNDER NO CIRCUMSTANCES MAY THE SOURCE CODE OR THE COMPILED PRODUCT BE USED AS THE BASIS FOR CREATING A PRODUCT THAT CONTAINS THE SAME, OR SUBSTANTIALLY THE SAME, FUNCTIONALITY AS ANY COMPONENTART INC. PRODUCT.**

## 2. DESCRIPTION OF OTHER RIGHTS AND LIMITATIONS.



**MICROSOFT OFFICE 2007 USER INTERFACE:** Some code and examples included with the ComponentArt Web.UI software mimic the look and behaviour of the interface introduced in the 2007 release of Microsoft Office. ComponentArt has officially licensed this UI from Microsoft for use in the Web.UI product line. Developers and organizations using Web.UI who wish to create their own products that utilize the Microsoft Office UI must similarly obtain a license from Microsoft. Detailed information on this licensing program is available at <http://msdn.microsoft.com/officeui>.

**TERMINATION:** Without prejudice to any other rights, ComponentArt Inc. may terminate this EULA if you fail to comply with the terms and conditions of this EULA. In such event, you must destroy all copies of the SOFTWARE PRODUCT and all of its component parts, source code, associated documentation, and related materials.

### 3. COPYRIGHT.

All title and copyrights in and to the SOFTWARE PRODUCT (including but not limited to any images, photographs, animations, video, audio, music, text, and "applets" incorporated into the SOFTWARE PRODUCT), the accompanying printed materials, and any copies of the SOFTWARE PRODUCT are owned by ComponentArt Inc. The SOFTWARE PRODUCT is protected by Canadian and U.S. copyright laws and international treaty provisions. Therefore, you must treat the SOFTWARE PRODUCT like any other copyrighted material.

### 4. LIMITED WARRANTY.

**NO WARRANTIES.** ComponentArt Inc. expressly disclaims any warranty for the SOFTWARE PRODUCT. The SOFTWARE PRODUCT and any related documentation is provided "as is" without warranty of any kind, either expressed or implied, including, without limitation, the implied warranties of merchantability, fitness for a particular purpose, or non-infringement. The entire risk arising out of use or performance of the SOFTWARE PRODUCT remains with you.

### 5. LIMITATION OF LIABILITY.

**NO LIABILITY FOR CONSEQUENTIAL DAMAGES.** In no event shall ComponentArt Inc. or its distributors be liable for any damages whatsoever (including, without limitation, damages for loss of business profits, business interruption, loss of business information, or any other pecuniary loss) arising out of the use of or inability to use this ComponentArt Inc. product (THE SOFTWARE PRODUCT) and related materials, even if ComponentArt Inc. has been advised of the possibility of such damages. Because some states do not allow the exclusion or limitation of liability for consequential or incidental damages, the above limitation may not apply to you.

If you have any questions regarding this End User License Agreement, please write to:

ComponentArt Inc.

511 King Street West, Suite 400

Toronto, Ontario M5V 1K4

Canada

**Copyright 2023 One Identity LLC.**

**ALL RIGHTS RESERVED.**

This guide contains proprietary information protected by copyright. The software described in this guide is furnished under a software license or nondisclosure agreement. This software may be used or copied only in accordance with the terms of the applicable agreement. No part of this guide may be reproduced or transmitted in any form or by any means, electronic or mechanical, including photocopying and recording for any purpose other than the purchaser's personal use without the written permission of One Identity LLC .

The information in this document is provided in connection with One Identity products. No license, express or implied, by estoppel or otherwise, to any intellectual property right is granted by this document or in connection with the sale of One Identity LLC products. EXCEPT AS SET FORTH IN THE TERMS AND CONDITIONS AS SPECIFIED IN THE LICENSE AGREEMENT FOR THIS PRODUCT, ONE IDENTITY ASSUMES NO LIABILITY WHATSOEVER AND DISCLAIMS ANY EXPRESS, IMPLIED OR STATUTORY WARRANTY RELATING TO ITS PRODUCTS INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTY OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, OR NON-INFRINGEMENT. IN NO EVENT SHALL ONE IDENTITY BE LIABLE FOR ANY DIRECT, INDIRECT, CONSEQUENTIAL, PUNITIVE, SPECIAL OR INCIDENTAL DAMAGES (INCLUDING, WITHOUT LIMITATION, DAMAGES FOR LOSS OF PROFITS, BUSINESS INTERRUPTION OR LOSS OF INFORMATION) ARISING OUT OF THE USE OR INABILITY TO USE THIS DOCUMENT, EVEN IF ONE IDENTITY HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES. One Identity makes no representations or warranties with respect to the accuracy or completeness of the contents of this document and reserves the right to make changes to specifications and product descriptions at any time without notice. One Identity does not make any commitment to update the information contained in this document.

If you have any questions regarding your potential use of this material, contact:

One Identity LLC.  
Attn: LEGAL Dept  
4 Polaris Way  
Aliso Viejo, CA 92656

Refer to our Web site (<http://www.OneIdentity.com>) for regional and international office information.

**Patents**

One Identity is proud of our advanced technology. Patents and pending patents may apply to this product. For the most current information about applicable patents for this product, please visit our website at <http://www.OneIdentity.com/legal/patents.aspx>.

**Trademarks**

One Identity and the One Identity logo are trademarks and registered trademarks of One Identity LLC. in the U.S.A. and other countries. For a complete list of One Identity trademarks, please visit our website at [www.OneIdentity.com/legal/trademark-information.aspx](http://www.OneIdentity.com/legal/trademark-information.aspx). All other trademarks are the property of their respective owners.

**Legend**

 **WARNING:** A WARNING icon highlights a potential risk of bodily injury or property damage, for which industry-standard safety precautions are advised. This icon is often associated with electrical hazards related to hardware.

 **CAUTION:** A CAUTION icon indicates potential damage to hardware or loss of data if instructions are not followed.