

Corticon Studio: Installation Guide

Notices

Copyright agreement

© 2013 Progress Software Corporation and/or its subsidiaries or affiliates. All rights reserved.

These materials and all Progress® software products are copyrighted and all rights are reserved by Progress Software Corporation. The information in these materials is subject to change without notice, and Progress Software Corporation assumes no responsibility for any errors that may appear therein. The references in these materials to specific platforms supported are subject to change.

Apama, Business Empowerment, Business Making Progress, Corticon, Corticon (and design), DataDirect (and design), DataDirect Connect, DataDirect Connect64, DataDirect XML Converters, DataDirect XQuery, Empowerment Center, Fathom, Making Software Work Together, OpenEdge, Powered by Progress, PowerTier, Progress, Progress Control Tower, Progress Dynamics, Progress Business Empowerment, Progress Empowerment Center, Progress Empowerment Program, Progress OpenEdge, Progress Profiles, Progress Results, Progress RPM, Progress Software Business Making Progress, Progress Software Developers Network, ProVision, PS Select, RulesCloud, RulesWorld, SequeLink, SpeedScript, Stylus Studio, Technical Empowerment, WebSpeed, Xcalia (and design), and Your Software, Our Technology—Experience the Connection are registered trademarks of Progress Software Corporation or one of its affiliates or subsidiaries in the U.S. and/or other countries. AccelEvent, Apama Dashboard Studio, Apama Event Manager, Apama Event Modeler, Apama Event Store, Apama Risk Firewall, AppsAlive, AppServer, BusinessEdge, Cache-Forward, DataDirect Spy, DataDirect SupportLink, Future Proof, High Performance Integration, OpenAccess, ProDataSet, Progress Arcade, Progress ESP Event Manager, Progress ESP Event Modeler, Progress Event Engine, Progress RFID, Progress Responsive Process Management, Progress Software, PSE Pro, SectorAlliance, SeeThinkAct, SmartBrowser, SmartComponent, SmartDataBrowser, SmartDataObjects, SmartDataView, SmartDialog, SmartFolder, SmartFrame, SmartObjects, SmartPanel, SmartQuery, SmartViewer, SmartWindow, WebClient, and Who Makes Progress are trademarks or service marks of Progress Software Corporation and/or its subsidiaries or affiliates in the U.S. and other countries. Java is a registered trademark of Oracle and/or its affiliates. Any other marks contained herein may be trademarks of their respective owners. Java is a registered trademark of Oracle and/or its affiliates. Any other marks contained herein may be trademarks of their respective owners.

See Table of Contents for location of Third party acknowledgements within this documentation.

Table of Contents

Preface.....	7
Progress Corticon documentation.....	7
Overview of Progress Corticon.....	9
 Chapter 1: Overview of Corticon Studio installations and upgrades.....	11
 Chapter 2: Downloading and running the Corticon Studio installers and updaters.....	13
Performing a new installation using the Installer Wizard.....	15
Applying a Service Pack update.....	19
Performing Silent Installations.....	21
Uninstalling Corticon Studios installed from downloaded installers.....	21
 Chapter 3: Using the update site to install Corticon into an existing Eclipse.....	23
 Chapter 4: Updating your Corticon license in Studio.....	29
 Chapter 5: Changing the Studio's memory allocation.....	31
 Appendix A: Enabling Studio internationalization.....	33
 Appendix B: Third party acknowledgments	37

Preface

For details, see the following topics:

- [Progress Corticon documentation](#)
- [Overview of Progress Corticon](#)

Progress Corticon documentation

The following documentation, as well as a *What's New in Corticon* document, is included with this Progress Corticon release:

Corticon Tutorials	
<i>Corticon Studio Tutorial: Basic Rule Modeling</i>	Introduces modeling, analyzing, and testing rules and decisions in Corticon Studio. Recommended for evaluators and users getting started. <i>See also the PowerPoint-as-PDF version of this document that is accessed from the Studio for Analysts' Help menu.</i>
<i>Corticon Studio Tutorial: Advanced Rule Modeling</i>	Provides a deeper look into Corticon Studio's capabilities by defining and testing vocabularies, scope, collections, messages, filters, conditions, transient data, and calculations in multiple rulesheets that are assembled into a Ruleflow. <i>See also the PowerPoint-as-PDF version of this document that is accessed from the Studio for Analysts' Help menu.</i>
<i>Corticon Tutorial: Using Enterprise Data Connector (EDC)</i>	Introduces Corticon's direct database access with a detailed walkthrough from development in Studio to deployment on Server. Uses Microsoft SQL Server to demonstrate database read-only and read-update functions.

Corticon Studio Documentation: Defining and Modeling Business Rules	
<i>Corticon Studio: Installation Guide</i>	Step-by-step procedures for installing Corticon Studio and Corticon Studio for Analysts on computers running Microsoft Windows. Also shows how use other supported Eclipse installations for integrated development. Shows how to enable internationalization on Windows.
<i>Corticon Studio: Rule Modeling Guide</i>	Presents the concepts and purposes the Corticon Vocabulary, then shows how to work with it in Rulesheets by using scope, filters, conditions, collections, and calculations. Discusses chaining, looping, dependencies, filters and preconditions in rules. Presents the Enterprise Data Connector from a rules viewpoint, and then shows how database queries work. Provides information on versioning, natural language, reporting, and localizing. Provides troubleshooting and many <i>Test Yourself</i> exercises.
<i>Corticon Studio: Quick Reference Guide</i>	Reference guide to the Corticon Studio user interface and its mechanics, including descriptions of all menu options, buttons, and actions.
<i>Corticon Studio: Rule Language Guide</i>	Reference information for all operators available in the Corticon Studio Vocabulary. A Rulesheet example is provided for many of the operators. Includes special syntax issues, handling arithmetic and character precedence issues.
<i>Corticon Studio: Extensions Guide</i>	Detailed technical information about the Corticon extension framework for extended operators and service call-outs. Describes several types of operator extensions, and how to create a custom extension plug-in.
Corticon Server Documentation: Deploying Rules as Decision Services	
<i>Corticon Server: Deploying Web Services with Java</i>	Details installing the Corticon Server as a Web Services Server, and then deploying and exposing Decision Services as Web Services on Tomcat and other Java-based servers. Presents the features and functions of the browser-based Server Console.
<i>Corticon Server: Deploying Web Services with .NET</i>	Details installing the Corticon Server as a Web Services Server, and then deploying and exposing decisions as Web Services with .NET. Provides installation and configuration information for the .NET Framework and Internet Information Services (IIS) on various supported Windows platforms.
<i>Corticon Server: Integration & Deployment Guide</i>	An in-depth, technical description of Corticon Server deployment methods, including preparation and deployment of Decision Services and Service Contracts through the Deployment Console tool. Discusses relational database concepts and implementation of the Enterprise Data Connector. Goes deep into the server to discuss state, persistence, and invocations by version or effective date. Includes samples, server monitoring techniques, and recommendations for performance tuning.

Overview of Progress Corticon

Progress® Corticon® is the Business Rules Management System with the patented "no-coding" rules engine that automates sophisticated decision processes.

Progress Corticon products

Progress Corticon distinguishes its development toolsets from its server deployment environments.

- **Corticon Studios** are the Windows-based development environment for creating and testing business rules:
 - **Corticon Studio for Analysts.** is a standalone application, a lightweight installation that focuses exclusively on Corticon.
 - **Corticon Studio** is the *Corticon Designer* perspective in the **Progress Developer Studio** (PDS), an industry-standard Eclipse and Java development environment. The PDS enables development of applications integrated with other products, such as Progress OpenEdge.

The functionality of the two Studios is virtually identical, and the documentation is appropriate to either product. Documentation of features that are only in the *Corticon Designer* (such as on integrated application development and Java compilation) will note that requirement. Refer to the *Corticon Studio: Installation Guide* to access, prepare, and install each of the Corticon Studio packages.

Studio Licensing - Corticon embeds a time-delimited evaluation license that enables development of both rule modeling and Enterprise Data Connector (EDC) projects, as well as testing of the projects in an embedded Axis test server. You must obtain studio development licenses from your Progress representative.

- **Corticon Servers** implement web services for business rules defined in Corticon Studios:
 - **Corticon Server for deploying web services with Java** is supported on various application servers, and client web browsers. After installation on a supported Windows platform, that server installation's deployment artifacts can be redeployed on various UNIX and Linux web service platforms as Corticon Decision Services. The guide *Corticon Server: Deploying web services with Java* provides details on the full set of platforms and web service software that it supports, as well as installation instructions in a tutorial format for typical usage.
 - **Corticon Server for deploying web services with .NET** facilitates deployment of Corticon Decision Services on Windows .NET Framework and Microsoft Internet Information Services (IIS). The guide *Corticon Server: Deploying web services with .NET* provides details on the platforms and web service software that it supports, as well as installation instructions in a tutorial format for typical usage.

Server Licensing - Corticon embeds a time-delimited evaluation license that enables evaluation and testing of rule modeling projects on supported platform configurations. You must obtain server deployment licenses and server licenses that enable the Enterprise Data Connector (EDC) from your Progress representative.

Overview of Corticon Studio installations and upgrades

What Corticon Studio installers provide

When you install either Corticon Studio, the installation includes:

- Studio resources and online documentation as plugins
- Java Runtime Environment (JRE)
- Sample projects
- Tutorials

In addition, the full Corticon Studio installs:

- When chosen, the Eclipse Development Environment and Eclipse online documentation. You could choose to install (or apply an update site) into an existing Eclipse such as Progress OpenEdge.
- JavaDoc
- Corticon Server WAR file at `Server\axis.war` file, specifically for use in development of Progress OpenEdge Business Rules.

Supported platforms for Corticon Studio installations

Confirm that your target platform is supported. Connect to the Progress Software web page [Progress Corticon 5.3 - Supported Platforms Matrix](#) for more information to review the currently supported Corticon Studio operating systems, Eclipse versions, and EDC database brands.

Installation options

When you choose the Corticon Studio for Analysts as your download, the installation is straightforward on a supported Windows platform.

However, the full Corticon Studio lets you choose to add Corticon Studio to Progress Developer Studio for Open Edge or other existing Eclipse installation:

Download and Run the Wizard - See [Downloading Corticon Studio installer packages](#) and [Downloading and running the Corticon Studio installers and updaters](#) on page 13.

- Use the downloaded installer to install the Studio with all the required Java and Eclipse resources.
- Use the downloaded installer to install the Studio as a plug-in to an existing installation of Progress Developer Studio for OpenEdge 11.3.

Connect to the Update Site - See [Using the update site to install Corticon into an existing Eclipse](#) on page 23.

- Connect to the update site to install the Studio as a plug-in to an existing 3.7.1 Eclipse installation that does not have Progress Developer Studio for OpenEdge 11.3 installed.

Downloading and running the Corticon Studio installers and updaters

Downloading Corticon Studio installer packages

Corticon Studio products and their respective Service Packs are packaged in executable installer applications:

- The 5.3.0 installers to perform new installations:
 - The full Eclipse-based product, `PROGRESS_CORTICON_5.3_STUDIO.exe`.
 - The standalone application for analysts, `PROGRESS_CORTICON_5.3_STUDIO_FOR_ANALYSTS.exe`
- The corresponding 5.3.4 Service Pack installer to update an existing 5.3.3, 5.3.2, 5.3.1, or 5.3.0 installation:
 - For the full Eclipse-based product, `PROGRESS_CORTICON_5.3.4_STUDIO.exe`.
 - For the standalone application for analysts, `PROGRESS_CORTICON_5.3.4_STUDIO_FOR_ANALYSTS.exe`

To download the required installers:

1. Get credentials to access and download packages on the Progress Software Electronic Software Download (ESD) site.
2. Connect to the ESD, and then navigate to the Corticon 5.3 pages.
3. Locate, download, and save the required installers to a temporary location accessible by the target machine.

Installation type

There are three types of Corticon Studio installations:

- **New 5.3.4 installation** - Perform a [new installation](#), then update it with the corresponding [5.3.4 Service Pack](#).
- **Update a 5.3.3, 5.3.2, 5.3.1, or 5.3.0 installation with the latest Service Pack** - Apply the [5.3.4 Service Pack](#). Note that a higher Service Pack in a version rolls up the features of all preceding Service Packs.
- **Upgrade a 5.2 or earlier installation to the latest 5.3 Service Pack** - An installed version of Corticon Studio 5.2 or earlier installed on the target machine must be [uninstalled](#), then the preferred [Corticon 5.3.0 Studio installed](#), followed by applying its appropriate [5.3.4 Service Pack](#).

Consult with Progress Corticon Support or your Progress representative to consider your migration strategies for existing assets before you take action.

Installation technique

The downloaded installers launch an interactive user interface that steps through the process. See the next topic, *Performing a new installation using the Installer Wizard*, for details. If you prefer an unattended installation, review the choices in the installer GUI panels, and then see the topic [Performing Silent Installations](#) for detailed instructions on creating and using response files to perform silent installations.

Before running installers

To avoid possible constraints on the installer, do the following:

- **Confirm that you have Administrator permissions on the workstation** - Administrator rights allow the installer to copy all the Corticon Studio files to their proper locations. You must have Administrator rights and permissions to install this software. See your system administrator to obtain these rights.
- **Obtain system access** - Several Corticon Studio features write files to the “home” directory structure. If the target machine for the Corticon Studio installation does not have read and write access to this directory, you will need to choose a directory location where the Corticon Studio user will have both read and write access.
- **Disable anti-virus, anti-malware, and anti-spyware protection applications** - Before performing the installation, we highly recommend temporarily disabling any anti-virus and anti-spyware software that may be running on your machine. This software often prevents or interferes with correct installation.

For details, see the following topics:

- [Performing a new installation using the Installer Wizard](#)
- [Applying a Service Pack update](#)
- [Performing Silent Installations](#)
- [Uninstalling Corticon Studios installed from downloaded installers](#)

Performing a new installation using the Installer Wizard

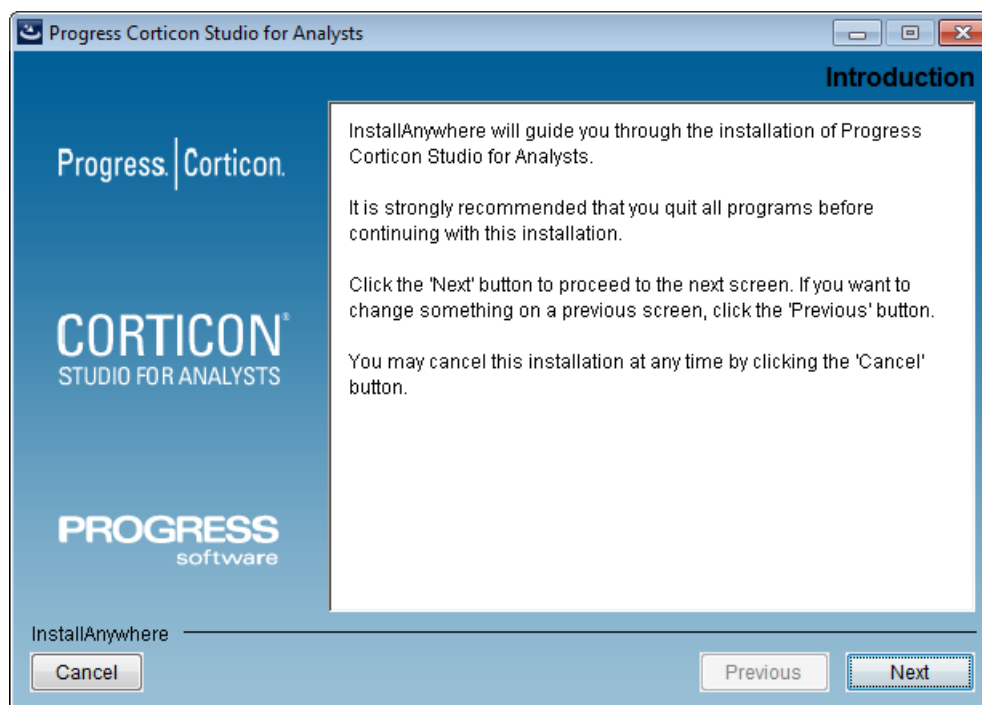
To perform a new installation of Corticon Studio 5.3.0:

1. Double click on the appropriate installer file, `PROGRESS_CORTICON_5.3_STUDIO_FOR_ANALYSTS.exe` or `PROGRESS_CORTICON_5.3_STUDIO.exe`, to launch the Corticon Studio installer.

The installer opens in the installer wizard.

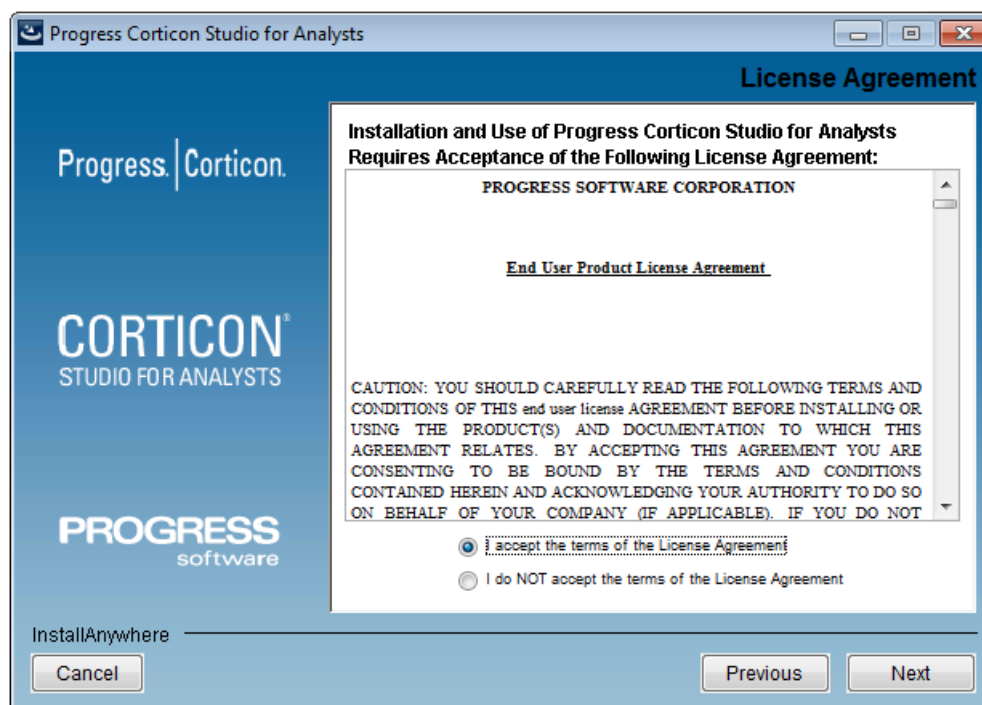
Note: The following panels capture the Corticon Studio for Analysts installation except for the two panels that are unique to the full Corticon Studio installer.

2. The first installer panel opens with information about the installer.



3. Click **Next** to continue.

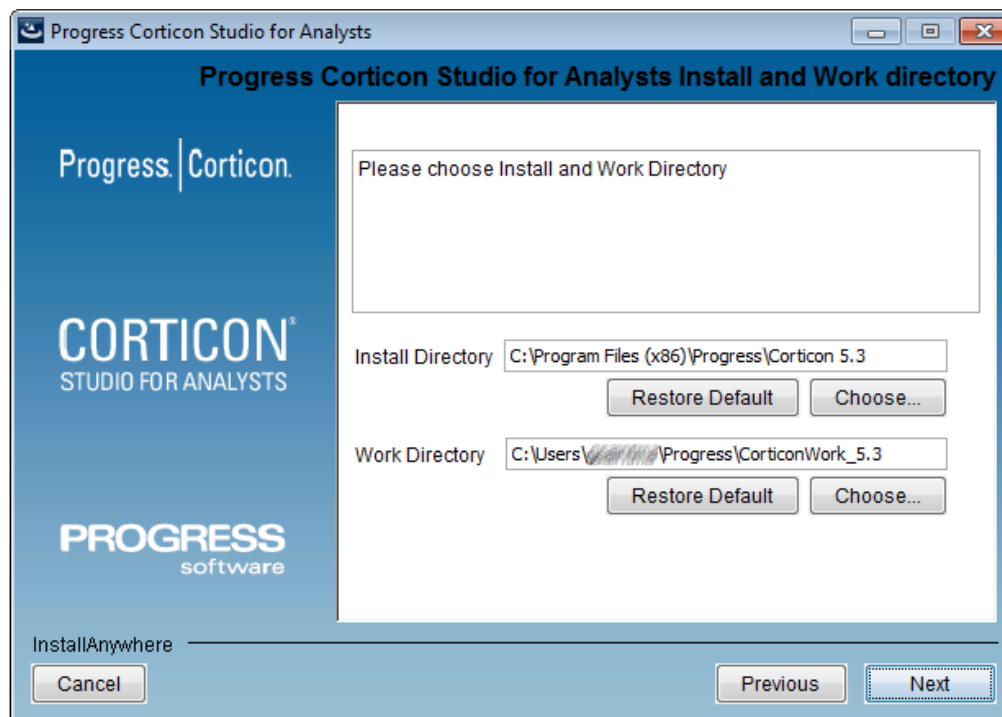
The **License Agreement** panel opens.



This screen displays the Progress Software End User License Agreement (EULA). Use the scroll bar at the right of the screen to read the agreement content.

4. When you understand and agree to the terms, choose **I accept the terms in the license agreement**, and then click **Next** to continue.

The **Choose Install Folder** panel opens.

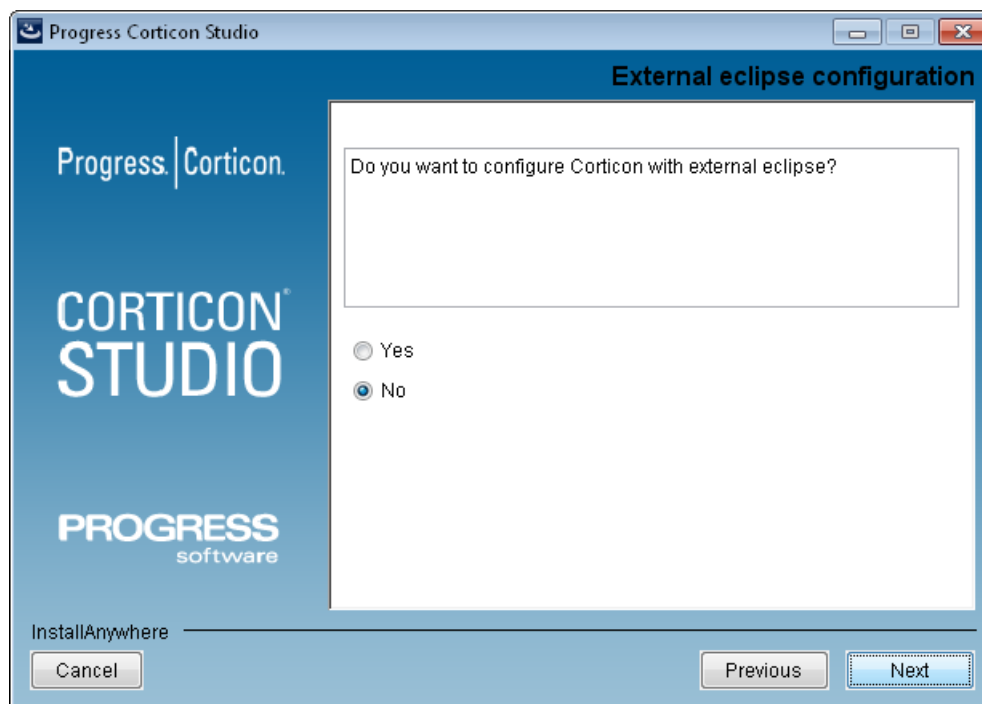


5. Specify the installation location. The default location for the installation directory and the work directory are as shown above. (For the work directory, the default subdirectory under `Users` is the current username.) Either accept the default locations, or specify each preferred (and different) location.

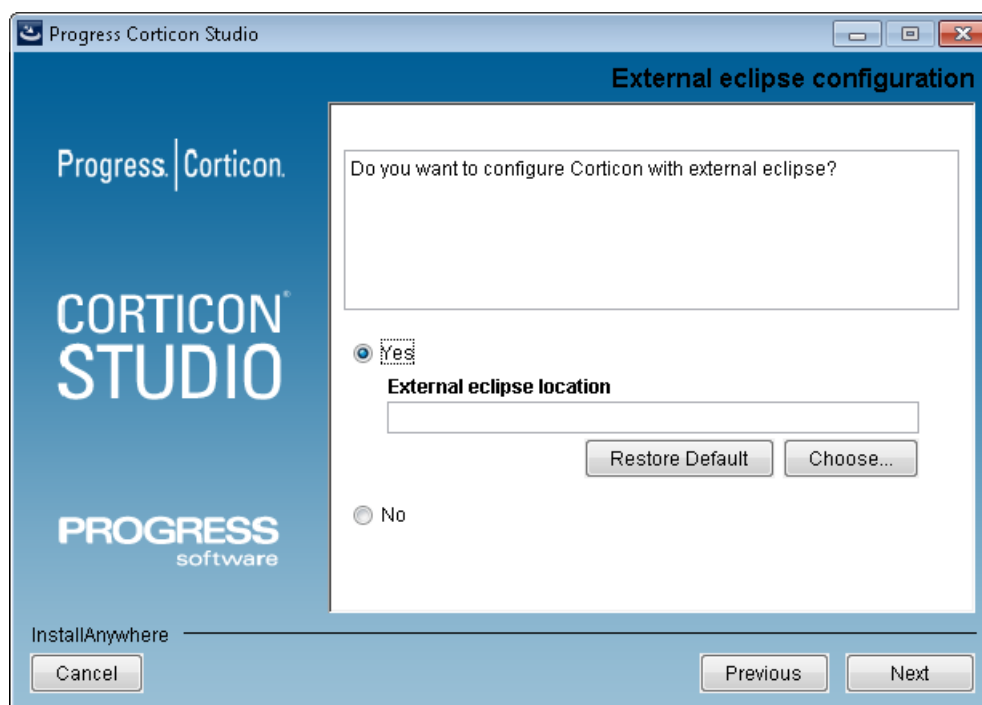
When you have the locations specified, click **Next** to continue.

A Corticon Studio for Analysts installation is now ready to run, so skip ahead to [7](#) on page 18

A full Corticon Studio opens the **External eclipse configuration** panel:



6. You can select **Yes** on this panel to expose the entry area for the External Eclipse location where you want to plug in the Corticon Studio:

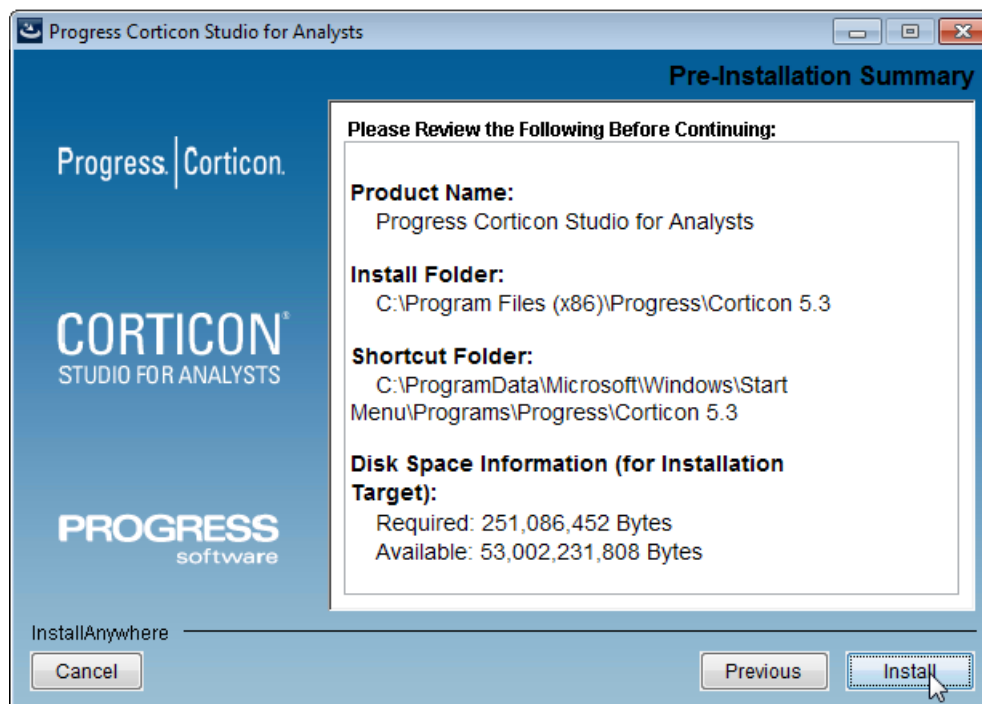


If you leave the selection as **No**, the required Java and Eclipse will be installed.

Note: If you elect to use an existing Eclipse, you must perform the tasks in [Using the update site to install Corticon into an existing Eclipse](#) on page 23 to complete the integration.

When you have decided which path to take, click **Next** to continue.

7. The **Pre-Installation Summary** panel opens.



In the Pre-Installation Summary, confirm that your installation location has adequate disk space for the Corticon Studio components as well as 100 MB of workspace.

8. Click **Install** to continue.

An installation status window opens to display the state of the installation process.



When the process has finished, the **Install Complete** panel opens.

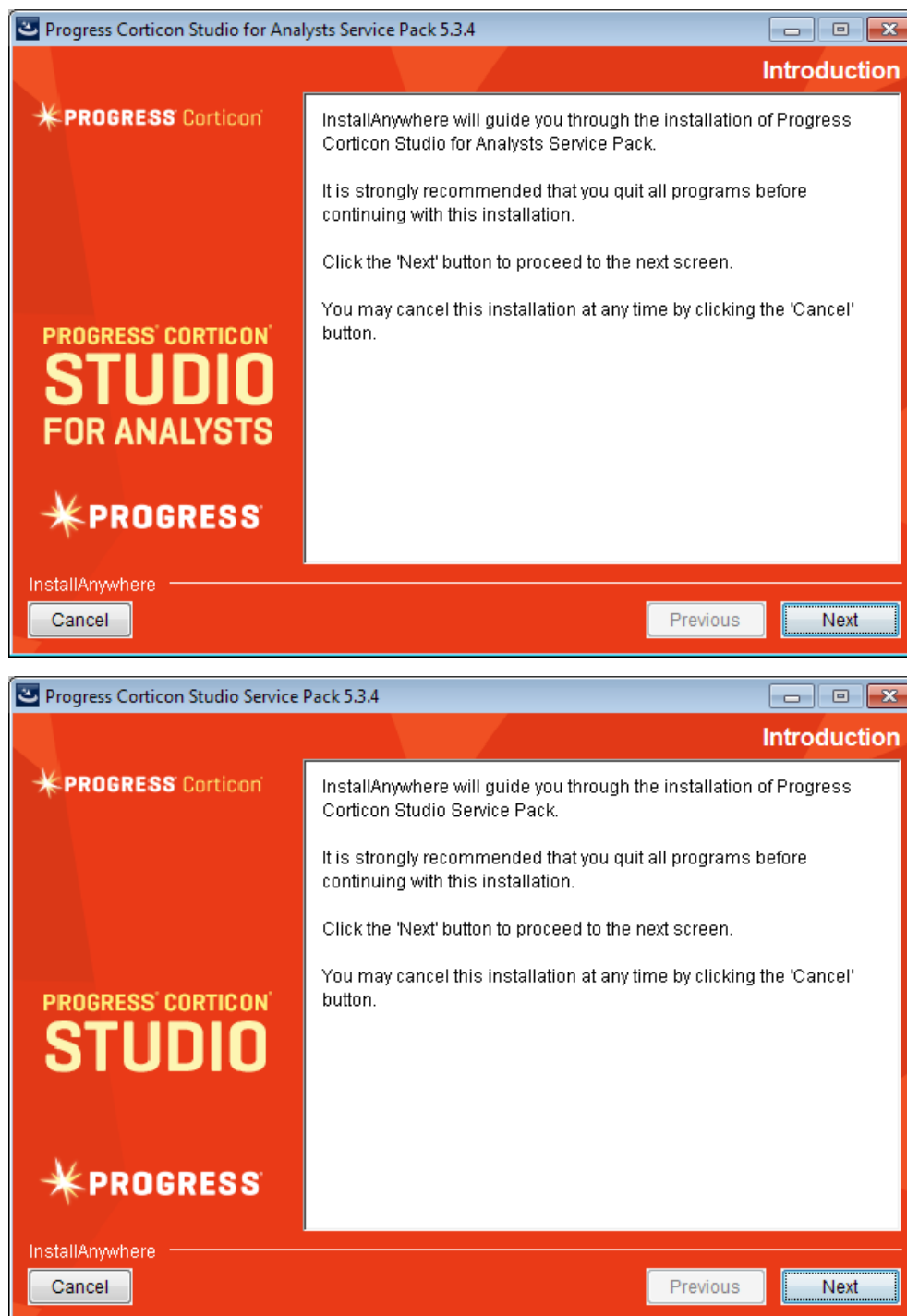
9. Click **Done** to quit and close the installer.

Applying a Service Pack update

To update a 5.3.3, 5.3.2, 5.3.1, or 5.3.0 installation of Corticon Studio to this Service Pack:

1. If the installed Corticon Studio you want to update is running, stop it now.
2. Double click on the appropriate update installer file, `PROGRESS_CORTICON_5.3.4_STUDIO_FOR_ANALYSTS.exe` or `PROGRESS_CORTICON_5.3.4_STUDIO.exe`, to launch the Corticon Studio updater.

The installer prepares, and then opens the update wizard. Note the revised Progress branding scheme in the 5.3.4 update wizards:



3. Click **Next** through the panels, and then click **Install**.

When the appropriate 5.3 installation is detected, and it is determined that this Service Pack has not already been applied, the updater proceeds to complete the update of the installation.

Performing Silent Installations

An unattended (silent) install requires that you first run an installation or updater in the installer wizard to capture the selected options, and then use the captured response file on other targets to 'playback' the responses into the installer without any user interaction.

To perform silent installations for either Studio:

1. Run the installer with your preferred locations and options to capture a response file, using the syntax `installer.exe -r file` where *installer* is the preferred Studio installer or updater, and *file* is the response file you will reuse. For example,
`PROGRESS_CORTICON_5.3_STUDIO_FOR_ANALYSTS.exe -r C:\S4A_530.responses`
2. On other target machines, access the installer executable and the response file.
3. Run the installer using the syntax `installer.exe -i silent -f file` where *installer* is the preferred Studio installer or updater, and *file* is your response file. For example,
`PROGRESS_CORTICON_5.3_STUDIO_FOR_ANALYSTS.exe -i silent -f C:\S4A_530.responses.`

Uninstalling Corticon Studios installed from downloaded installers

To remove a version of Corticon Studio that was installed by the installer to prepare for a new installation (or if you want to fully remove it), use this procedure. The major.minor product version and all applied service packs are removed by the uninstaller.

To uninstall any version of Corticon Studio for Analysts:

To remove a version of the Studio to prepare for a new installation (or if you want to fully remove it), use this procedure.

Note: This applies only to a Corticon Studio that you installed with the installer, not an installation added to an existing Eclipse through the Update Site technique.

To uninstall any version of Corticon Studio:

1. Backup any files you want to retain.
2. Navigate to `[CORTICON_HOME]\Uninstall Progress Corticon Studio`.
3. Run `Uninstall Progress Corticon Studio.exe`.

The installed files are removed. Note that files you created are NOT removed or replaced during this process.

If the Uninstaller program is unable to fully remove components (usually because they are open), it will display messages, and might require a reboot to complete the process.

Using the update site to install Corticon into an existing Eclipse

These instructions apply when you want to install Corticon functionality into your own Eclipse IDE. For example, you can install Corticon plug-ins into the Eclipse Classic platform for Java developers, or any custom Eclipse platform (Eclipse 3.6.0 or later).

Note: Where the product installers require that you install 5.3.0 and then apply 5.3.4, this technique requires only one step as the 5.3.4 update site package is the complete package.

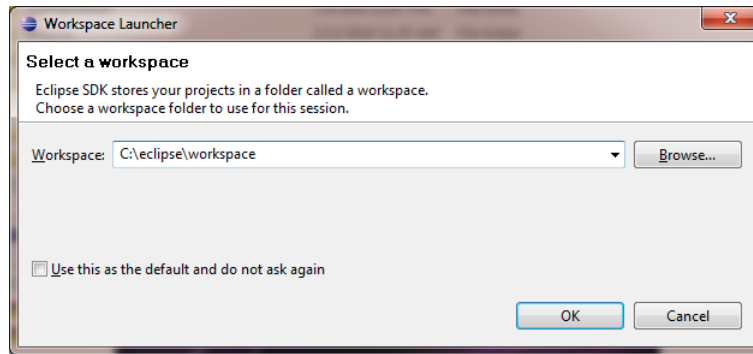
Tasks to complete Corticon Studio plug-in installation

1. A Java Software Development Kit is required. If you do not have one installed locally, download and install a version specified in the preceding table from the Oracle Java website <http://www.oracle.com/technetwork/java>

Note: A complete JDK is required, not just a Java Runtime Environment (JRE).

2. If you do not have an Eclipse installation locally, download the "Indigo" version of Eclipse from www.eclipse.org. Unzip the file into your Eclipse directory (for example, C:\eclipse).
3. Login to the Progress Software Electronic Software Download (ESD) site, and then navigate to the Corticon 5.3 release. Download `PROGRESS_CORTICON_5.3.4_UPDATESITE.zip`, and then unpack into a clean temporary installation directory, such as C:\CorticonLocalSite).

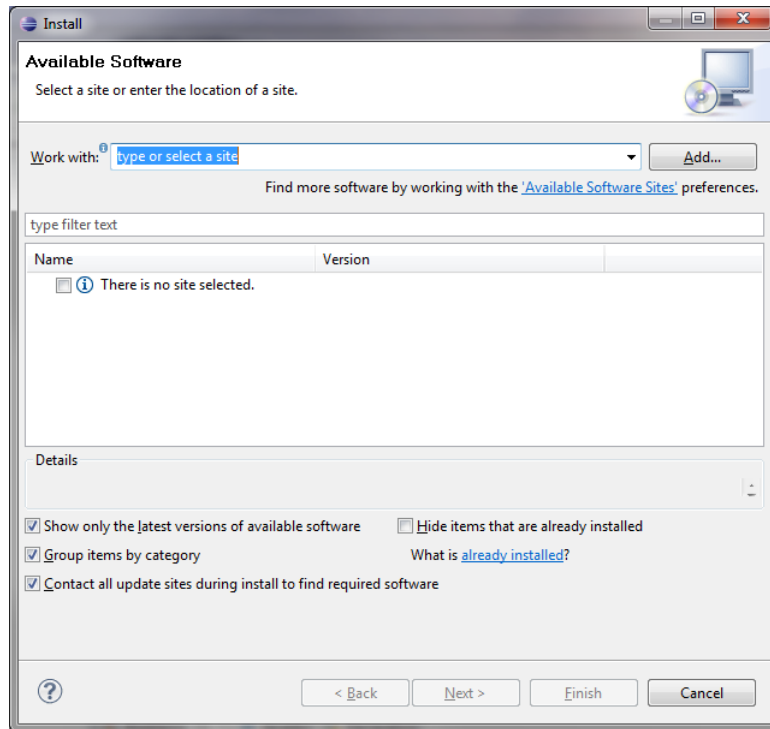
4. Start the Eclipse IDE by double-clicking on `eclipse.exe` in the `C:\eclipse` directory. The system will prompt for a workspace location



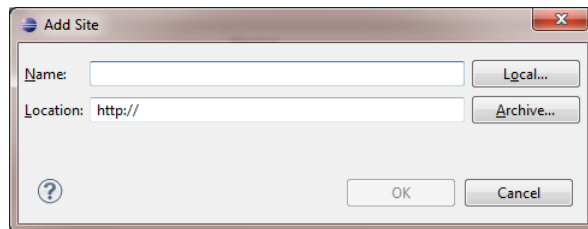
5. Either accept the default location, or choose a preferred location. Click **OK** to continue. Eclipse opens to the Welcome View.



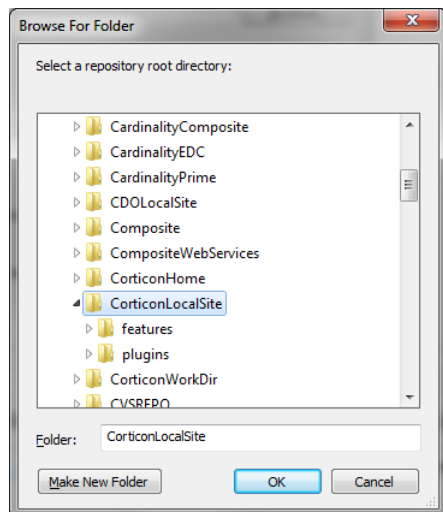
6. Close the Welcome View, then select menu command **Help > Install New Software**



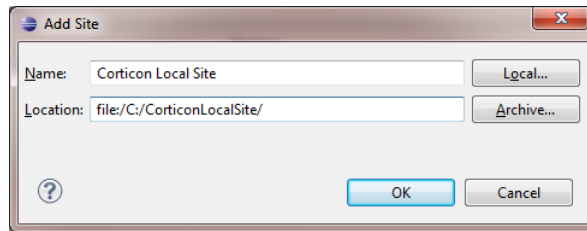
7. Click the **Add...** button. Eclipse opens the **Add Site** dialog:



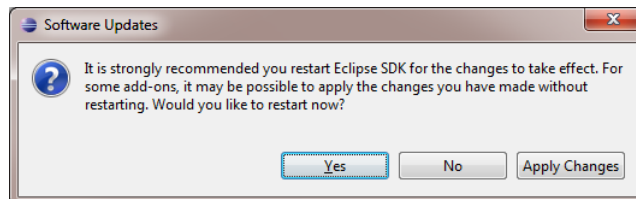
8. Click **Local** and navigate to the `C:\CorticonLocalSite` directory :



- Click **OK**, and then assign your new site a name you want:

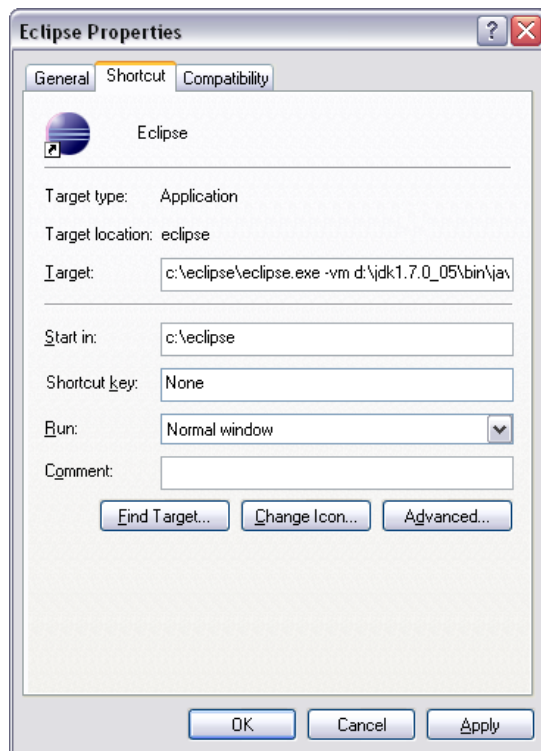


- Click **OK** again to add the new site
- Select **Corticon > Progress Corticon Studio**
- Click **Next >**. Eclipse analyzes the dependencies and shows the complete set of features to be installed, including GMF, GEF and EMF
- Click **Next >** to review the licenses.
- Select **I accept the terms of the license agreement** and click **Finish**
- When Eclipse displays the Security Warning dialog box, click **OK**
- When the system prompts regarding certifications, select `Eclipse.org` and click **OK**
- Eclipse installs all of the necessary plug-ins. When the system is finished, click **Yes** to restart the Eclipse session



- Once Eclipse restarts, verify the installation by selecting menu item **Help > About Eclipse SDK**, then press the **Installation Details** button
- Note that *Corticon Studio* has been successfully installed

-
20. Exit from Eclipse and create a Windows icon shortcut on your Windows desktop to make it easier to launch `eclipse.exe`. Update the **Target** and **Start In** fields as shown:



21. The Target field command line parameters should specify the proper JDK (for example, `-vm c:\jdk1.7.0_05\bin`), and should increase the memory heap settings for optimal performance (for example, `-vmargs -Xms256m -Xmx1024m`). Example:
- ```
C:\eclipse\eclipse.exe -vm c:\jdk1.7.0_05\bin -vmargs -Xms256m -Xmx1024m
```
22. Use your new shortcut to restart Corticon Studio. You can now switch to the "Rule Modeling" Perspective to create your first Rule Project.



---

## Updating your Corticon license in Studio

---

Progress Corticon embeds an evaluation license in its products to help you get started.

- Corticon Studio evaluation licenses let you use database access (Enterprise Data Connector or "EDC"), and are timed to expire on a preset date. While you typically do not need to acquire a license for Studio during evaluation and early stage development, in the event that you are alerted that your license is invalid or expired, contact your Progress Corticon representative to obtain a workable license.
- Corticon Server evaluation licenses do not enable use of Enterprise Data Connector, and limit the number of decision services, rules, and pools in use. They too are timed to expire on a preset date. You will need to obtain a license that enables EDC on Corticon Server for that section of the EDC tutorial.

This document focuses on the Corticon Studio procedures for updating a license. See the Corticon Server and EDC tutorials for the procedures on their registration of the license for the Corticon Server and its Deployment Console.

---

**Note:** Locate your Corticon license JAR on the target machine or at a location that is network-accessible to the installation. In this example, the license file, `CcLicense.jar`, that both Studio and Server will use is placed at `C:\licenses`. Some users prefer to locate the license files within the product installation location, typically the installation's `/lib` directory.

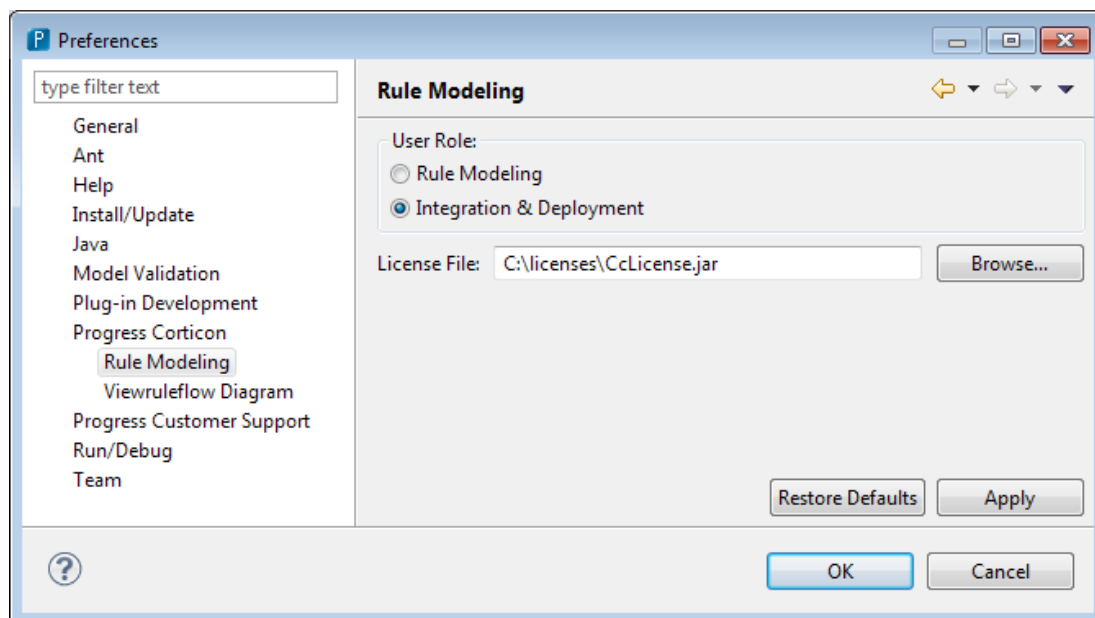
---

### To configure Corticon Studio for database access:

1. Start Corticon Studio by choosing **Start>All Programs>Progress>Corticon 5.3>Corticon Studio for Analysts**.
2. Select the menu command **Window > Preferences**.
3. Expand the **Progress Corticon** group, then click on **Rule Modeling**.
4. Choose the **User Role** option **Integration and Deployment**.

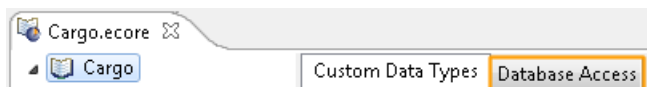
- If you have been issued a license file, enter its location into the **License File** entry area, or browse to its location, as in this example:

**Figure 1: For Studio, Setting the User Role for EDC and the License Path**



- Click **OK**.
- Restart the Studio.

When EDC is enabled, a Vocabulary in Corticon Studio displays its **Database Access** tab, as shown:



## Licensing of Corticon Server embedded in the Corticon Studio's OpenEdge distribution

To facilitate the integration of OpenEdge with Corticon, Corticon Studio includes the WAR file to enable running Corticon Server from the Studio. The embedded Studio license for Corticon Server has the following constraints:

- Corticon Server requests must originate on the machine where the server is running -- in other words, all on `localhost`. Requests from any other machine or host are not allowed.
- Corticon Server allows only one reactor for execution of one instance of a specified Decision Service. As a developer, you can locally deploy many Decision Services simultaneously, and you can use administrative functions, such as service availabilities. When you are ready for production system testing, you must obtain a Corticon Server deployment license, and then locate it in Corticon Server installations.

## Changing the Studio's memory allocation

---

To change the studio memory allocation:

- In a Corticon Studio for Analysts installation, edit the command file named `Studio.ini` in `[CORTICON_HOME]\Studio`
- In a full Corticon Studio installation, edit the command file named `eclipse.ini` in `[CORTICON_HOME]\Studio\eclipse`

Change (typically, increase) the `Xmx` value (maximum memory setting). The default `Xmx` setting is 350 megabytes, specified as `Xmx350m`.



---

## Enabling Studio internationalization

---

Localizing your rule modeling and processing environment involves three related functions:

- Displaying the Studio **program** in your locale of choice. This means switching the Corticon Studio user interface (menus, operators, system messages, etc.) to a new language. This part is described here.
- Displaying your Studio **assets** in your locale of choice. This means switching your Vocabularies, Rulesheets, Ruleflows, and Ruletests to a new language. See *"Localizing Corticon Studio" in the Rule Modeling Guide*.
- Requests submitted to a Corticon Server can specify an execution property that indicates the **locale of the incoming payload** so that the server can transform the payload's decimal and date values to the decimal delimiter and month literal names of the server, run the rules, and return the output formatted to the submitter's preference. See *"Handling requests and replies across locales" in the Server Integration and Deployment Guide*.

### Displaying Studio in your locale of choice

When localized, Corticon Studio can:

- Display its full user interface in localized languages and fonts.
- Display all operators in the Operator Vocabulary in localized languages and fonts.
- Process XML messages (or Test inputs) containing data comprised of non-Latin characters (for example, Japanese, Chinese or Korean).
- Post Rule Statements that contain non-Latin characters.

In order for Studio to display its user interface in your chosen locale, two requirements must be satisfied:

1. A language "bundle" or template must be created for your chosen language and installed in `CcI18nBundles.jar`, both *Studio* and all deployed Server installations.
2. Your operating system must be running in your chosen locale when Studio starts up.

### Creating a new language bundle

To create a new language bundle for Corticon Studio, you need to download the Localization Toolkit for your version. Toolkits are available for all versions of Corticon Studio, and are normally available from the Corticon Support Site. The Toolkit contains a ReadMe that describes how to create a new bundle, save it, and install it.

### Switching operating system locales

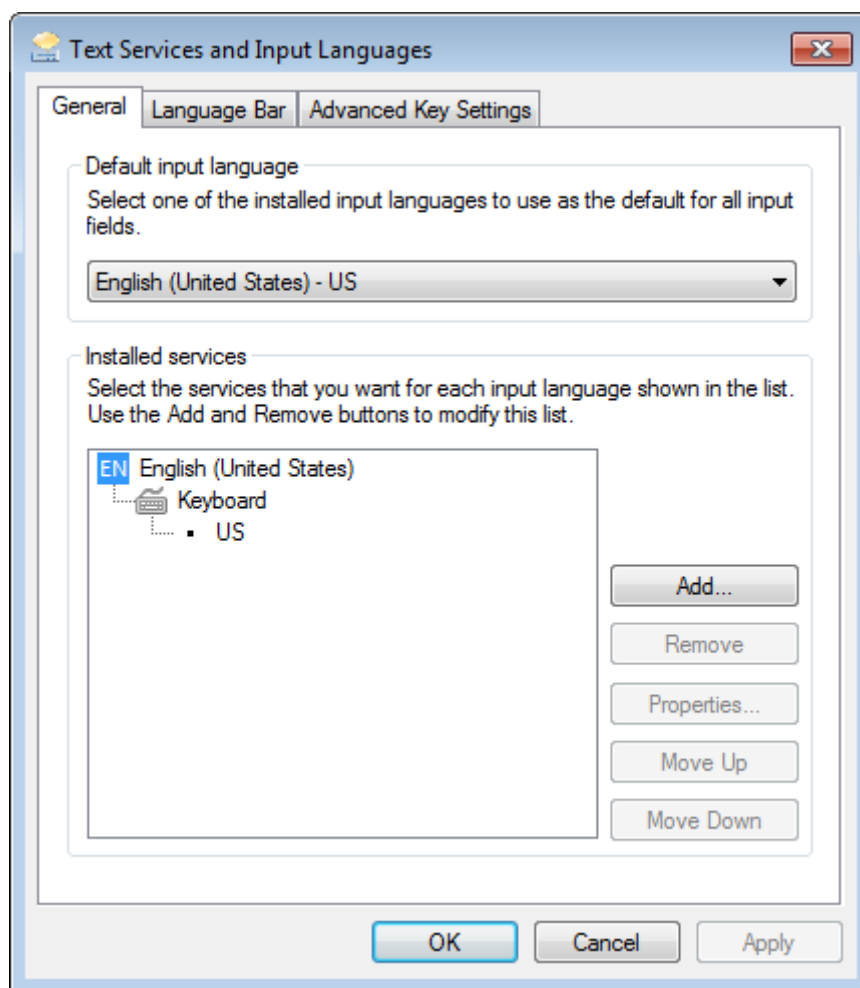
Before switching to a different locale, you may need to install necessary language support into the Windows operating system and set the appropriate Regional Settings in the Regional and Language Options.

### Installing language support in Windows

You must add the preferred input languages into the Windows operating system. This procedure follows the Windows 7 control panel interface. Other operating systems might vary.

1. From the **Start** menu, choose **Control Panel**.
2. In the **Region and Language** section, choose the **Keyboards and Languages** tab, and then click **Change keyboards**.
3. Click **Change Languages**.

The Text Services and Input Languages dialog box opens:

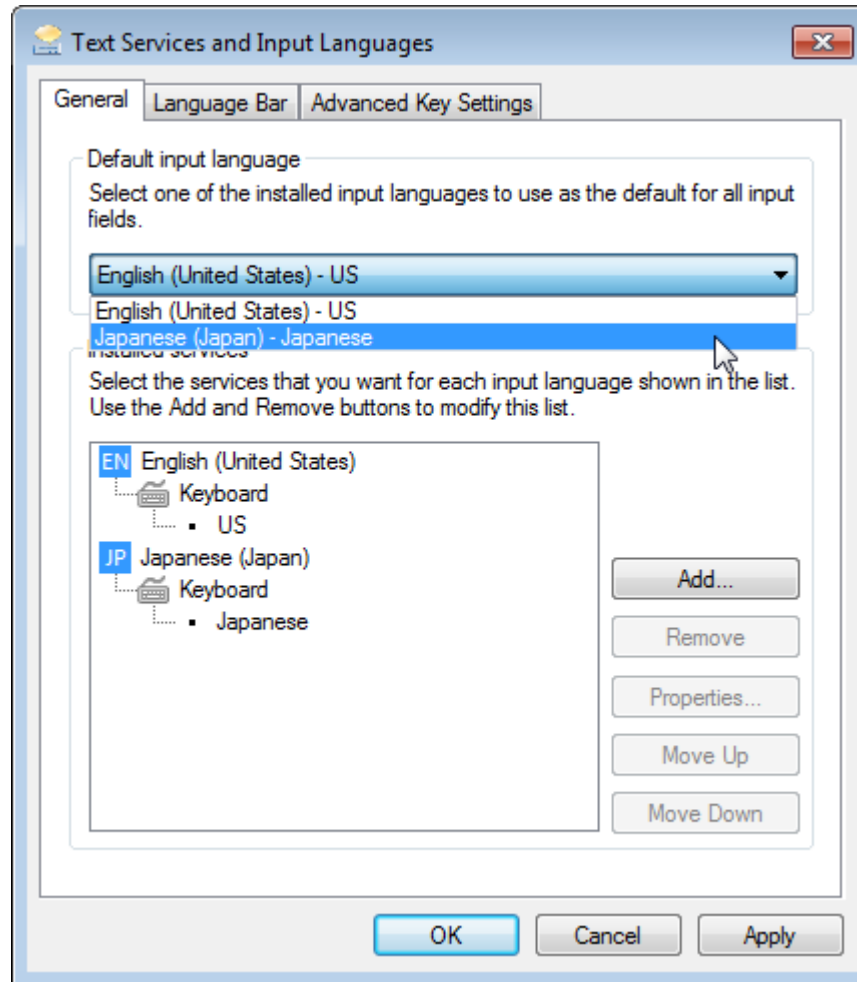


4. The installed languages are listed. Click **Add** to select preferred languages and their features.

## Changing your machine's region

Next, you must change your regional settings so that your machine's locale specifies a non-English language that you have installed. You must change it in both the **Keyboards and Languages** specification and the **Location** specification.

For example, to enable Japanese, choose the specifications shown below:



## Testing the setup

Start Corticon Studio in the normal manner, and invoke the open dialog window by selecting menu option `File > Open`.

If the installation was successful, buttons on the dialog (and other key static text labels) should be presented in the selected region's language.

---

## Third party acknowledgments

---

One or more products in the Progress Corticon v5.3.4 release includes third party components covered by licenses that require that the following documentation notices be provided:

Progress Corticon v5.3.4 incorporates Apache Commons Discovery v0.2 from The Apache Software Foundation. Such technology is subject to the following terms and conditions: The Apache Software License, Version 1.1 - Copyright (c) 1999-2001 The Apache Software Foundation. All rights reserved. Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:

1. Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer.
2. 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.
3. The end-user documentation included with the redistribution, if any, must include the following acknowledgement: "This product includes software developed by the Apache Software Foundation (<http://www.apache.org/>).\" Alternately, this acknowledgement may appear in the software itself, if and wherever such third-party acknowledgements normally appear.
4. The names "The Jakarta Project", "Commons", and "Apache Software Foundation" must not be used to endorse or promote products derived from this software without prior written permission. For written permission, please contact [apache@apache.org](mailto:apache@apache.org).
5. Products derived from this software may not be called "Apache" nor may "Apache" appear in their names without prior written permission of the Apache Group.

THIS SOFTWARE IS PROVIDED "AS IS" AND ANY EXPRESSED 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 APACHE SOFTWARE FOUNDATION OR ITS 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.

This software consists of voluntary contributions made by many individuals on behalf of the Apache Software Foundation. For more information on the Apache Software Foundation, please see <<http://www.apache.org/>>.

Progress Corticon v5.3.4 incorporates Apache SOAP v2.3.1 from The Apache Software Foundation. Such technology is subject to the following terms and conditions: The Apache Software License, Version 1.1 Copyright (c) 1999 The Apache Software Foundation. All rights reserved. Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met: 1. Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer. 2. 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. 3. The end-user documentation included with the redistribution, if any, must include the following acknowledgment: "This product includes software developed by the Apache Software Foundation (<http://www.apache.org/>)." Alternately, this acknowledgment may appear in the software itself, if and wherever such third-party acknowledgments normally appear. 4. The names "SOAP" and "Apache Software Foundation" must not be used to endorse or promote products derived from this software without prior written permission. For written permission, please contact [apache@apache.org](mailto:apache@apache.org). 5. Products derived from this software may not be called "Apache", nor may "Apache" appear in their name, without prior written permission of the Apache Software Foundation. THIS SOFTWARE IS PROVIDED ``AS IS" AND ANY EXPRESSED 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 APACHE SOFTWARE FOUNDATION OR ITS 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. This software consists of voluntary contributions made by many individuals on behalf of the Apache Software Foundation. For more information on the Apache Software Foundation, please see <<http://www.apache.org/>>.

Progress Corticon v5.3.4 incorporates DOM4J v1.6.1. Such technology is subject to the following terms and conditions: Project License BSD style license Copyright 2001-2005 (C) MetaStuff, Ltd. All Rights Reserved.

Redistribution and use of this software and associated documentation ("Software"), with or without modification, are permitted provided that the following conditions are met:

1. Redistributions of source code must retain copyright statements and notices. Redistributions must also contain a copy of this document.
2. 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.

---

3. The name "DOM4J" must not be used to endorse or promote products derived from this Software without prior written permission of MetaStuff, Ltd. For written permission, please contact [dom4j-info@metastuff.com](mailto:dom4j-info@metastuff.com).

4. Products derived from this Software may not be called "DOM4J" nor may "DOM4J" appear in their names without prior written permission of MetaStuff, Ltd. DOM4J is a registered trademark of MetaStuff, Ltd.

5. Due credit should be given to the DOM4J Project - <http://www.dom4j.org>

THIS SOFTWARE IS PROVIDED BY METASTUFF, LTD. AND CONTRIBUTORS ``AS IS" AND ANY EXPRESSED 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 METASTUFF, LTD. OR ITS 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.

Progress Corticon v5.3.4 incorporates Jaxen v1.0. Such technology is subject to the following terms and conditions: JAXEN License - \$Id: LICENSE,v 1.3 2002/04/22 11:38:45 jstrachan Exp \$ - Copyright (C) 2000-2002 bob mcwhirter and James Strachan. All rights reserved. Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:

1. Redistributions of source code must retain the above copyright notice, this list of conditions, and the following disclaimer.

2. Redistributions in binary form must reproduce the above copyright notice, this list of conditions, and the disclaimer that follows these conditions in the documentation and/or other materials provided with the distribution.

3. The name "Jaxen" must not be used to endorse or promote products derived from this software without prior written permission. For written permission, please contact [license@jaxen.org](mailto:license@jaxen.org).

4. Products derived from this software may not be called "Jaxen", nor may "Jaxen" appear in their name, without prior written permission from the Jaxen Project Management ([pm@jaxen.org](mailto:pm@jaxen.org)).

In addition, we request (but do not require) that you include in the end-user documentation provided with the redistribution and/or in the software itself an acknowledgement equivalent to the following: "This product includes software developed by the Jaxen Project (<http://www.jaxen.org/>)."

Alternatively, the acknowledgment may be graphical using the logos available at <http://www.jaxen.org/>. THIS SOFTWARE IS PROVIDED ``AS IS" AND ANY EXPRESSED 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 Jaxen AUTHORS OR THE PROJECT 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. This software consists of voluntary contributions made by many individuals on behalf of the Jaxen Project and was originally created by bob mcwhirter <[bob@werken.com](mailto:bob@werken.com)> and James Strachan <[jstrachan@apache.org](mailto:jstrachan@apache.org)>. For more information on the Jaxen Project, please see <<http://www.jaxen.org/>>.

Progress Corticon v5.3.4 incorporates JDOM v1.0 GA. Such technology is subject to the following terms and conditions: \$Id: LICENSE.txt,v 1.11 2004/02/06 09:32:57 jhunter Exp \$ - Copyright (C) 2000-2004 Jason Hunter and Brett McLaughlin. All rights reserved. Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:

1. Redistributions of source code must retain the above copyright notice, this list of conditions, and the following disclaimer.
2. Redistributions in binary form must reproduce the above copyright notice, this list of conditions, and the disclaimer that follows these conditions in the documentation and/or other materials provided with the distribution.
3. The name "JDOM" must not be used to endorse or promote products derived from this software without prior written permission. For written permission, please contact <request\_AT\_jdom\_DOT\_org>.
4. Products derived from this software may not be called "JDOM", nor may "JDOM" appear in their name, without prior written permission from the JDOM Project Management <request\_AT\_jdom\_DOT\_org>.

In addition, we request (but do not require) that you include in the end-user documentation provided with the redistribution and/or in the software itself an acknowledgement equivalent to the following: "This product includes software developed by the JDOM Project (<http://www.jdom.org/>)."

Alternatively, the acknowledgment may be graphical using the logos available at <http://www.jdom.org/images/logos>. THIS SOFTWARE IS PROVIDED ``AS IS'' AND ANY EXPRESSED 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 JDOM AUTHORS OR THE PROJECT 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. This software consists of voluntary contributions made by many individuals on behalf of the JDOM Project and was originally created by Jason Hunter <jhunter\_AT\_jdom\_DOT\_org> and Brett McLaughlin <brett\_AT\_jdom\_DOT\_org>. For more information on the JDOM Project, please see <<http://www.jdom.org/>>.

Progress Corticon v5.3.4 incorporates Saxpath v1.0. Such technology is subject to the following terms and conditions: Copyright (C) 2000-2002 werken digital. All rights reserved. Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:

1. Redistributions of source code must retain the above copyright notice, this list of conditions, and the following disclaimer.
2. Redistributions in binary form must reproduce the above copyright notice, this list of conditions, and the disclaimer that follows these conditions in the documentation and/or other materials provided with the distribution.
3. The name "SAXPath" must not be used to endorse or promote products derived from this software without prior written permission. For written permission, please contact [license@saxpath.org](mailto:license@saxpath.org).
4. Products derived from this software may not be called "SAXPath", nor may "SAXPath" appear in their name, without prior written permission from the SAXPath Project Management ([pm@saxpath.org](mailto:pm@saxpath.org)).

---

In addition, we request (but do not require) that you include in the end-user documentation provided with the redistribution and/or in the software itself an acknowledgement equivalent to the following: "This product includes software developed by the SAXPath Project (<http://www.saxpath.org/>)."

Alternatively, the acknowledgment may be graphical using the logos available at <http://www.saxpath.org/> THIS SOFTWARE IS PROVIDED ``AS IS" AND ANY EXPRESSED 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 SAXPath AUTHORS OR THE PROJECT 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. This software consists of voluntary contributions made by many individuals on behalf of the SAXPath Project and was originally created by bob mcwhirter <[bob@werken.com](mailto:bob@werken.com)> and James Strachan <[jstrachan@apache.org](mailto:jstrachan@apache.org)>. For more information on the SAXPath Project, please see <<http://www.saxpath.org/>>.

