

NaturalONE

Installation

Version 9.3.3

October 2025

This document applies to NaturalONE Version 9.3.3 and all subsequent releases.

Specifications contained herein are subject to change and these changes will be reported in subsequent release notes or new editions.

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Preface

This documentation is organized under the following headings:

General Information	About this documentation.
System Requirements	Supported operating system platforms and browsers. Java prerequisites and hardware requirements.
Important Information	Important information that you should be aware of before you start the installation.
Installing NaturalONE	Describes how to install NaturalONE, how to proceed after the installation, and how to uninstall NaturalONE.
Using Your Own Eclipse	Describes how to proceed if you want to use NaturalONE in your existing Eclipse environment.
Using an Existing Natural Development Server Environment	Lists the requirements if you prefer to use your own Natural Development Server (NDV) environment instead of the local Natural runtime that is installed with NaturalONE.
Using an EntireX RPC Environment	Describes how to proceed if you want to configure an EntireX RPC environment (Broker and Natural RPC server) instead of using the default configuration of the one that is installed with NaturalONE.

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About this Documentation

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Document Conventions

Convention	Description
Bold	Identifies elements on a screen.
Monospace font	Identifies service names and locations in the format <i>folder.subfolder.service</i> , APIs, Java classes, methods, properties.
<i>Italic</i>	Identifies: Variables for which you must supply values specific to your own situation or environment. New terms the first time they occur in the text. References to other documentation sources.
Monospace font	Identifies: Text you must type in. Messages displayed by the system. Program code.
{ }	Indicates a set of choices from which you must choose one. Type only the information inside the curly braces. Do not type the { } symbols.
	Separates two mutually exclusive choices in a syntax line. Type one of these choices. Do not type the symbol.
[]	Indicates one or more options. Type only the information inside the square brackets. Do not type the [] symbols.
...	Indicates that you can type multiple options of the same type. Type only the information. Do not type the ellipsis (...).

Online Information and Support

Product Documentation

You can find the product documentation on our documentation website at <https://documentation.softwareag.com>.

Product Training

You can find helpful product training material on our Learning Portal at <https://learn.software-ag.com>.

Tech Community

You can collaborate with Software GmbH experts on our Tech Community website at <https://tech-community.softwareag.com>. From here you can, for example:

- Browse through our vast knowledge base.
- Ask questions and find answers in our discussion forums.
- Get the latest Software GmbH news and announcements.
- Explore our communities.
- Go to our public GitHub and Docker repositories at <https://github.com/softwareag> and <https://hub.docker.com/publishers/softwareag> and discover additional Software GmbH resources.

Product Support

Support for Software GmbH products is provided to licensed customers via our Empower Portal at <https://empower.softwareag.com>. Many services on this portal require that you have an account. If you do not yet have one, you can request it at <https://empower.softwareag.com/register>. Once you have an account, you can, for example:

- Download products, updates and fixes.
- Search the Knowledge Center for technical information and tips.
- Subscribe to early warnings and critical alerts.
- Open and update support incidents.
- Add product feature requests.

Data Protection

Software AG products provide functionality with respect to processing of personal data according to the EU General Data Protection Regulation (GDPR). Where applicable, appropriate steps are documented in the respective administration documentation.

2 General Information

NaturalONE is installed using the Installer, which you download from <https://empower.software-ag.com/>.

This documentation provides product-specific instructions for installing NaturalONE. It is intended for use with the *Software AG Installer* documentation, which explains how to prepare your machine to use the Installer, and how to use the Installer and Uninstaller to install and uninstall your products. You can find it at <https://documentation.softwareag.com/>.

For important last-minute information, see the readme file that is provided with NaturalONE. You can find it in the NaturalONE product documentation at <https://documentation.software-ag.com/>.

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System Requirements

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Supported Operating System Platforms

NaturalONE supports the following operating system platforms:

Microsoft Windows 10 Enterprise (LTSC 2021) EOS – until end of support
Microsoft Windows Server 2019 (x64)
Microsoft Windows Server 2022 (64bit)
Microsoft Windows Server 2025 (64bit)
Red Hat Enterprise Linux 9
SUSE Linux Enterprise Server 15
z/OS 3.1
z/OS 2.5

Home Editions of Microsoft Windows are not supported !

For Windows, the runtime components of NaturalONE are always 32-bit applications, even on 64-bit platforms.



Note: We suggest that you install all of the recommended and important Microsoft Windows updates before you start the installation.

Supported Browsers

Supported browsers in this version are:

Microsoft Edge (Chromium) - current versions
Mozilla Firefox Extended Support Release – current versions⁽¹⁾
Google Chrome – current versions⁽²⁾

Notes:

⁽¹⁾ Only the Extended Support Releases of Mozilla Firefox are explicitly supported. Due to frequent upgrades of the Mozilla Firefox consumer release, the compatibility of Natural for AjaxNaturalONENatural Web I/O Interface client with future versions of Mozilla Firefox cannot be fully guaranteed. Possible incompatibilities will be removed during the regular maintenance process of Natural for AjaxNaturalONENatural Web I/O Interface client.

⁽²⁾ Due to frequent version upgrades of Google Chrome, compatibility of Natural for AjaxNaturalONENatural Web I/O Interface client with future versions of Google Chrome cannot be fully guaranteed. Possible incompatibilities will be removed during the regular maintenance process of Natural for AjaxNaturalONENatural Web I/O Interface client.



Important: Cookies and JavaScript must be enabled in the browser.

Supported Natural Servers

To get the complete functionality of NaturalONE, specific Natural versions are required. For further information, see [Using an Existing Natural Development Server Environment](#).

Eclipse Prerequisites

NaturalONE is based on Eclipse Version 4.34.

If you prefer to use NaturalONE in your existing Eclipse environment, Eclipse Version 4.34 is required. For further information, see [Using Your Own Eclipse](#).

Java Prerequisites

Java 21 is automatically installed with NaturalONE when you start the Installer GUI using the `.exe` file on Windows or the `.bin` file on Linux. No further steps are required.

You can download Azul Zulu Builds of OpenJDK from <https://www.azul.com/downloads/?package=jdk#zulu>.



Note: IBM Java, Oracle Java or the GCJ Java should not be used with our products for Linux x86 and x86-64 platforms. Use only Azul Java for our products on Linux x86 and x86-64.

Hardware Requirements

Up to 1.7 GB of hard disk space are required for a full installation of NaturalONE.



Important: These hardware requirements are for NaturalONE only. They do not include any additions such as RDBMSs. You must determine the overall hardware requirements depending on your development scenario.

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Installation Directory

During the installation, you are asked to specify an installation directory. If you are installing NaturalONE on Linux, the user that you are using to install must have full read and write permissions to this directory.



Important: It is recommended that you do not install into a directory which is a subdirectory of a previous installation. Such a previous installation may have been created either with the Installer or by an installation tool that was used in the past.

Side-by-Side Installations

It is possible to install side-by-side versions of NaturalONE on one machine. In this case, you have to install each version into a separate directory.

Updating or Upgrading NaturalONE

For NaturalONE version upgrades, it is only possible to do side-by-side installations where each version is installed into a separate directory.

For the new version, you can either create a new workspace or reuse and migrate an existing workspace of a previous NaturalONE version.

- [Creating a New Workspace](#)
- [Migrating an Existing Workspace](#)

Creating a New Workspace

As default at NaturalONE startup, you can select a new workspace folder that is created.

After creation, if needed you can import Natural projects and settings from a workspace of a previous NaturalONE version.



Important: When importing your old projects to the new workspace, make sure to enable the **Copy projects into workspace** option.

Migrating an Existing Workspace

To migrate, open an existing workspace with your new NaturalONE version. You can also copy your workspace to a different location before opening it.

At NaturalONE startup, you will be informed and asked multiple times about the new version and workspace upgrade. This should be confirmed if you want to continue.

Migration will preserve all your Natural projects and settings in the workspace.



Important: Opening a migrated workspace must not be done using an old version of NaturalONE. Using an old version for opening a migrated workspace may cause unpredictable errors.

Any plug-ins that are not provided with our products must be reinstalled in Eclipse via **Help > Install New Software**.

Installing EntireX with NaturalONE

NaturalONE's Service Development and Application Testing functionalities require EntireX. If you plan to install EntireX together with NaturalONE, see *Installation > Installing NaturalONE > [Installing EntireX](#)*.

Online Help on Linux

In order to display the NaturalONE online help in Eclipse, it is required to set the Linux environment variable `no_proxy` in `/etc/sysconfig/proxy` to "localhost".

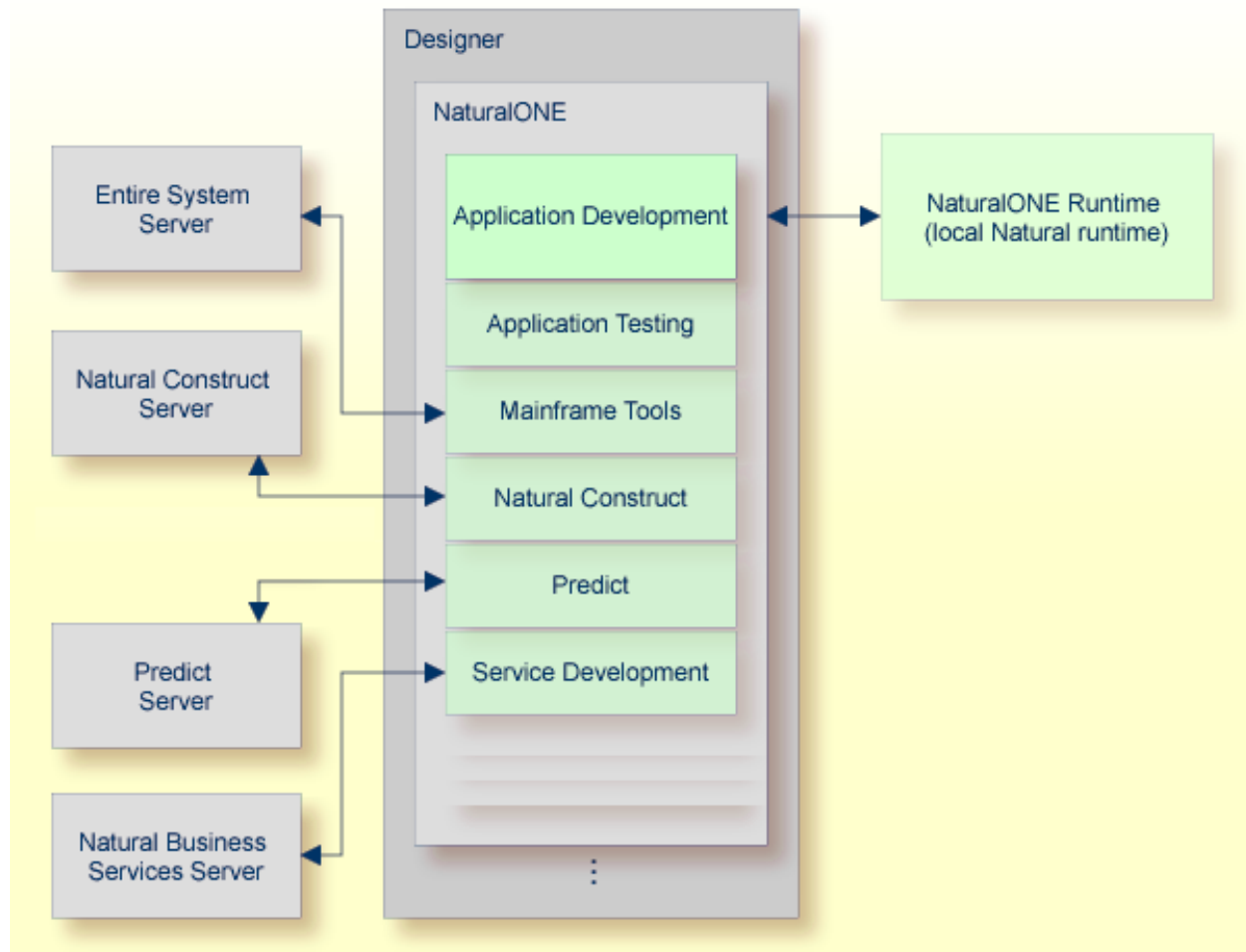
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Installing NaturalONE

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Typical Development Installation

The following graphic shows the NaturalONE components that can be installed with NaturalONE. The Application Development functionality is mandatory; NaturalONE cannot be installed without this. The other components are optional. Some of the optional components require that additional software is installed on a server. See also *What is NaturalONE?* in the *Introduction*.



Installing NaturalONE Using the Installer GUI

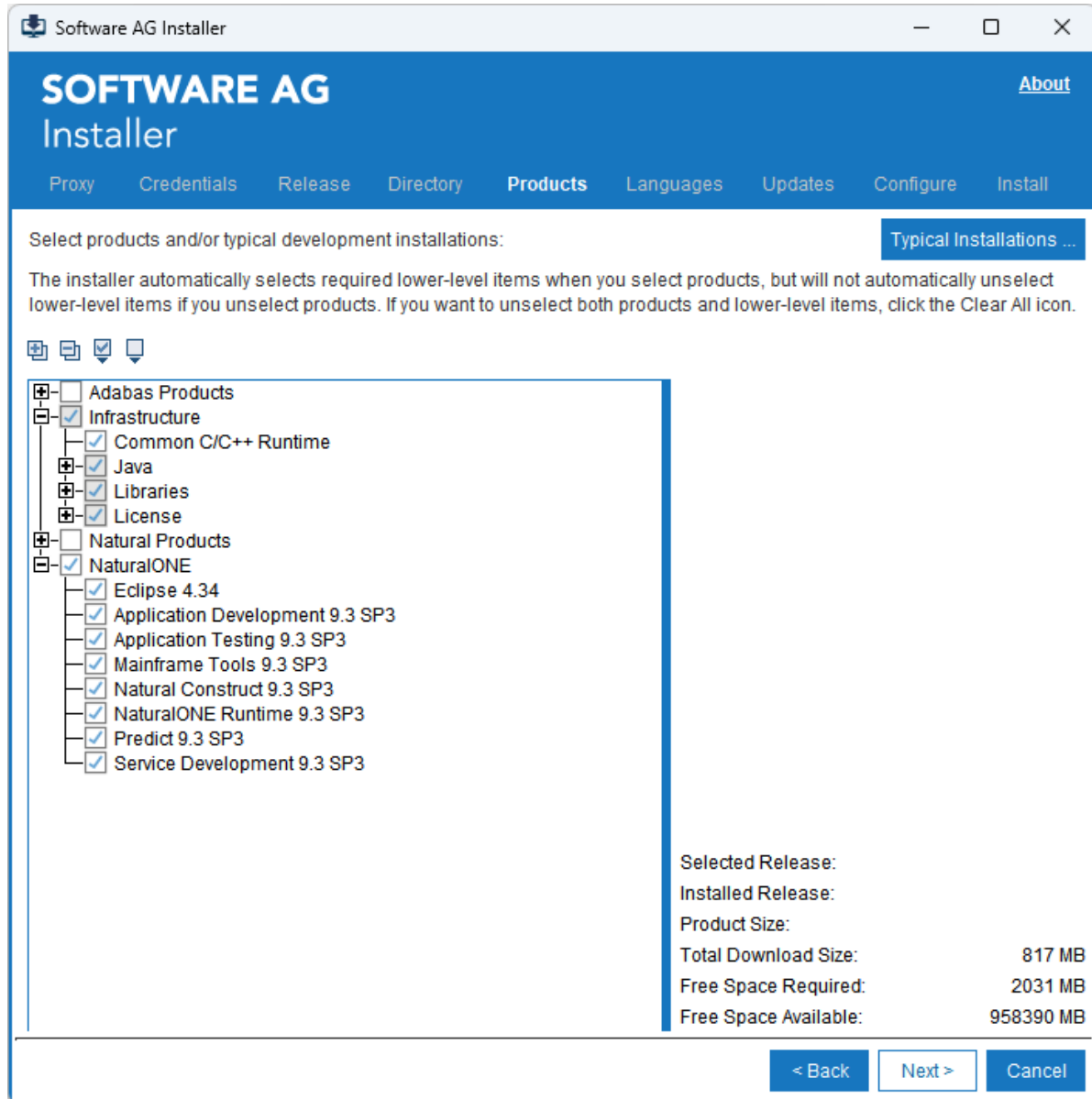
This installation documentation provides just a brief description on how to install NaturalONE directly on the target machine using the Installer GUI. For detailed information, see the *Software AG Installer* documentation.

➤ To install NaturalONE

A license file is provided for NaturalONE; the installer will prompt you during installation to install the NaturalONE runtime. Copy the license file to the machine on which you want to install NaturalONE. You can copy it to any temporary location. The installer will ask for the location of your license file and will then copy it to the *common/conf* directory of your installation directory.

- 1 Start the Installer GUI as described in the *Software AG Installer* documentation.
- 2 When the first page of the Installer GUI (the so-called Welcome panel) is shown, choose the **Next** button repeatedly (and specify all required information on the shown panels as described in the *Software AG Installer* documentation) until the panel containing the product selection tree appears. This tree lists the products you have licensed and which can be installed on the operating system of the machine on which you are installing.
- 3 To install the full functionality of NaturalONE, you need to use **Typical Installations** and the option **NaturalONE Application Development Full Installation** (see the description below).

All required items are automatically selected.



Or:

Expand **NaturalONE** and select the product components that you want to install.

Application Development is always required. NaturalONE cannot be installed without this item. It contains the core functionality of NaturalONE which consists of the basic functionality for Natural application development plus the possibility to create rich internet applications that use the Ajax technology. All other items under **NaturalONE** are optional components for NaturalONE. See also *What is NaturalONE?* in the *Introduction*.

NaturalONE Runtime installs the integrated NaturalONE runtime environment (which is also referred to as the "local Natural runtime"). If you want to use an already installed Natural

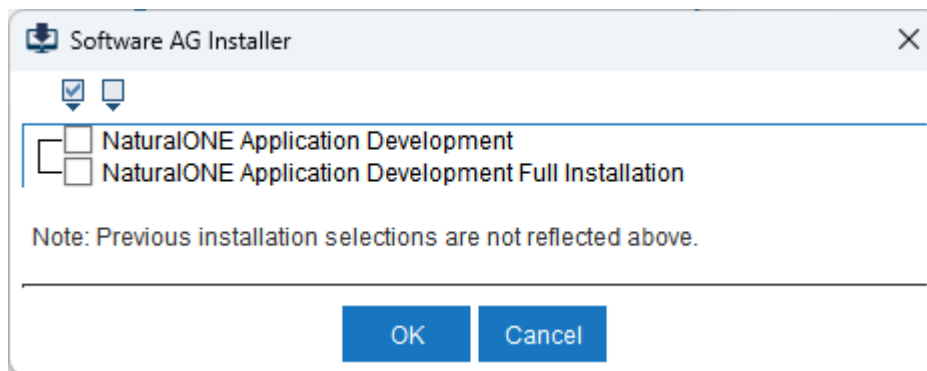
runtime on the local machine or on a remote machine, see also [Using an Existing Natural Development Server Environment](#).



Note: During installation, it is not mandatory to specify a license file for the integrated NaturalONE runtime environment to install this component successfully. You can skip the license dialog and later specify the local runtime license file in NaturalONE. For more information, see *Using NaturalONE > Setting the Preferences > Local Runtime License*.

Or:

Choose the **Typical Installations** button to display the following dialog box.



Select one of the following and choose the **OK** button:

■ **NaturalONE Application Development**

This installs the following, in addition to the Application Development core functionality:

Application Testing

■ **NaturalONE Application Development Full Installation**

This installs the following, in addition to the Application Development core functionality:

Application Testing
Mainframe Tools
Natural Construct
NaturalONE Runtime
Predict
Service Development

- 4 Choose the **Next** button.
- 5 Read the license agreement, select the check box to agree to the terms of the license agreement, and choose the **Next** button.
- 6 Enter the full path to the NaturalONE license file (or use the **Browse** button to select it from a dialog box), and choose the **Next** button.

- 7 On the last panel, review the items you have selected for installation. If the list is correct, choose the **Next** button to start the installation process.

Completing the Installation

After NaturalONE has been installed, you can start it as described in *Starting NaturalONE* which is part of *Using NaturalONE*. NaturalONE's core functionality can be used without further configuration. Additional configuration steps, however, are required in the following cases:

- You want to use an Eclipse other than the Eclipse installed with NaturalONE. See [Using Your Own Eclipse](#).
- You installed a complete development installation, with or without the NaturalONE runtime, and you also want to use an existing Natural Development Server (NDV). See [Using an Existing Natural Development Server Environment](#).
- You installed the Mainframe Tools component. This component includes Mainframe Navigation, which requires an Entire System Server environment. See *Installation and Configuration* in the *Mainframe Navigation* documentation.
- You installed the Natural Construct component, which requires a Natural Construct server environment. See *Requirements* in the *Using Natural Construct* section of the *Code Generation* documentation.
- You installed the Predict component, which requires a Predict server environment. See *Setting Up a Predict Environment* in the *Predict Description and Generation* documentation.
- You installed the Service Development component, which requires a Natural Business Services server environment. See *Prerequisites* in the *Business Services* documentation.

Preparing a Deployment Package

After installing NaturalONE and applying all current fixes to the installed version, you can prepare a compressed package of NaturalONE. The idea is to simplify and speed up the deployment of NaturalONE to additional development stations. No installation step is required, and these stations do not need access to the internet. Another advantage is that you can install additional Eclipse plug-ins which are distributed as well.

By copying and uncompressing this package into a directory on the development station, the "installation" of NaturalONE is finalized.

The required scripts are available at ...

`<installdir>/naturalone/scripts/<platform>/ReducedFootprint`

For example, on Windows, within this directory, start the script `create_package.cmd`. The result is a compressed file named `ONE-<vers.no>small.tgz`, along with the script `extract_package.cmd`.

Copy both the script and archive into the appropriate directory on the other development station and execute the script. NaturalONE is now operable.



Note: If NaturalONE Runtime is also part of the package on Windows, the latest Microsoft C++ Runtime (x86) must be installed on the target system.

The created package works only if you have installed the Application Development and Application Testing components. If you want to use service generation locally, you still have to do a NaturalONE full installation.



Note: It is not possible to install fixes with the Update Manager in this directory on the development station. You must install the fixes in the original environment installed by the Installer that you used to build the deployment package. You must create a new deployment package, which includes the fixes.

Installing EntireX

If you need EntireX in your NaturalONE Application Development environment, which provides the full Application Testing and Service Development functionality, you have to install the EntireX plugins via **Eclipse Help > Install New Software**.

For information on where to obtain the EntireX plugins, refer to the documentation of IBM EntireX <https://www.ibm.com/docs/en/entirex> > *Installing > Installing EntireX design-time outside the designer*.

Uninstalling NaturalONE

You uninstall NaturalONE using the Uninstaller. For information on how to use the uninstaller, see the *Software AG Installer* documentation.

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Using Your Own Eclipse

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Installing NaturalONE via the Software AG Installer is a prerequisite for using NaturalONE in your existing Eclipse environment. This installation provides the plugins of NaturalONE in the directory `<your-installation-directory>/naturalone/updates`.

Installing NaturalONE in your Own Eclipse Environment

The typical way to install NaturalONE is via the Software AG Installer. However, you may prefer to use an already existing Eclipse environment. In this case, specific versions of Eclipse and Java are required. See [Eclipse Prerequisites](#) and [Java Prerequisites](#) in the section System Requirements.

Install the plugins via **Eclipse Help > Install New Software**.

Important before you start your installation:

1. During installation on the very first **Available Software** dialog, deselect the item **Contact all update sites during install to find required software**, as this option may lead to unintended updates on other Eclipse plugins.
2. The NaturalONE plugins are not signed. Therefore, you will see a warning dialog.

Choose **Select All** and then **Trust Selected** on this dialog.

Step 1 - Install the NaturalONE Eclipse plugins in your own Eclipse

The following plugin installation order is mandatory:

1. `com.softwareag.cis.ide-<version>.zip`
2. `com.softwareag.naturalone.natural.ide-one<version>.zip`



Important: Should you intend to install Application Testing, Business Services, or Code Generation, then the following plugin must be installed before all other *gen* plugins:

`com.softwareag.naturalone.gen.testing-one<version>.zip`

All other plugins can then be installed in any order.

Step 2 - Copy `naturalone.properties`

Copy the file `naturalone.properties` from the directory `<your-installation-directory>/naturalone/updates` of the NaturalONE installation to the directory of your own Eclipse installation that contains the file `eclipse.exe`. Normally, this is the root folder of the Eclipse installation.

If the installation from the Software AG Installer is on the same machine on which your own Eclipse installation is located, then you are done, and you can use NaturalONE from within your own Eclipse environment.

Step 3 - Adjustments if the original installation is not accessible

1. Copy the following directories from *<your-installation-directory>/naturalone* to a new directory that is accessible from your own Eclipse environment:

/apache-tomcat
/nfx
/samples

2. Adjust the corresponding paths in the file *naturalone.properties* accordingly.

Installing NaturalONE Fixes in your Own Eclipse Environment

Step 1 - Install fixes with the Update Manager

Use the Software AG Update Manager to install the latest fixes of NaturalONE into your installation from the Software AG Installer.

After the update installation you will find the directory *<your-installation-directory>/install/fix/backup/Designer/repo* from where the fixes can be installed.

Step 2 - Add a local Software Site

If your installation from the Software AG Installer is on the same machine, as your own Eclipse environment you can define this directory as local Software Site for your Eclipse.

If your installation from the Software AG Installer is on a different machine, copy this directory with all its subfolders to your machine and define it there as local Software Site.

Step 3 - Install updates in your Eclipse

Choose **Help > Check for Updates**, deselect all other sites and select the NaturalONE update site. Then install the update.

Step 4 - Copy other updated directories

Copy the following directories from *<your-installation-directory>/naturalone* to the according directory of your Eclipse:

/apache-tomcat
/nfx

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Using an Existing Natural Development Server Environment




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Prerequisites

NaturalONE runs with your own Natural Development Server (NDV) environment as an alternative to the local Natural runtime installed with NaturalONE. We recommend upgrading your Natural Development Server environment to the newest supported version. Only with the latest version will you get the complete functionality of NaturalONE.

All supported versions of the Natural Development Server can be found [here](#):

System Requirements

-  **Important:** When Natural Development Server runs on a z/OS, Unicode and code page support must be enabled (with the Natural profile parameters CFICU and CP).
-  **Important:** When Natural Development Server runs on Windows, the NaturalONE license file has to be copied to the common/conf directory of your Natural Development Server installation directory.
-  **Note:** Apache Tomcat is required by Ajax Developer. However, execution and debugging of rich internet applications can be done with any application server or servlet container supported by Natural for Ajax.

Startup Transactions

When a NaturalONE client connects to a Natural server, any startup transaction program executed on the server must meet the following conditions:

- It must not perform any screen I/Os.
- It must be executed only once (that is, the Natural system variable *STARTUP must be reset to blank within the startup transaction).
- It must terminate properly.

You have to check the source code of each startup transaction in question and, if necessary, change it to meet these conditions.

If you adjust the relevant source-code sections within a startup transaction - in dependency of the client type - you can use the Natural application programming interface (API) USR4218N in the library SYSEXT. This API has to be invoked from within the startup transaction and provides you with the client type.

Natural Security

When Natural Security is active in your Natural server environment, several actions in the **Natural Server** view and in the **Project Explorer** view (such as upload and download) are controlled by Natural Security. A utility profile for `SYSMAIN` is then required in Natural Security which has the appropriate settings. For detailed information, see *Protecting the Natural Development Environment in Eclipse* in the Natural Security documentation, which is part of the Natural documentation.

If the Natural Security settings are not appropriate, you may not be able, for example, to add projects from the Natural server to the NaturalONE workspace.

Library Statistical Records on Mainframes

In order to reduce the number of Adabas calls and to improve the performance, it is highly recommended that you create a so-called "library statistical record" for every Natural library on the mainframe. This ensures that data which is often used is kept persistently. Thus, when using NaturalONE, there is no need to retrieve this specific information many times. To initialize the statistical records, you have to invoke the program `NDVCSTAR` which is available on the mainframe. For further information, see *SPoD-Specific Limitations and Considerations* in the Natural Development Server documentation for the appropriate platform.

Database Access

You can access Adabas databases when they are in the same environment as your NaturalONE installation.

However, remote access to Adabas database systems requires either Adabas TCP/IP communication (adatcp) or Entire Net-Work.

8 Using an EntireX RPC Environment

EntireX is required if you want to develop Natural business services and RPC clients with NaturalONE. Testing Natural Business Services clients, also requires an additional Natural Business Services installation as described under *Prerequisites* in the *Business Services* documentation.

For information on installation of EntireX see *Installation > Installing NaturalONE > [Installing EntireX](#)*

