

# **NaturalONE**

## **Release Notes**

Version 8.3.7

March 2016

This document applies to NaturalONE Version 8.3.7.

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

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These *Release Notes* pertain to the core functionality of NaturalONE Version 8.3, including Natural for Ajax and Ajax Developer. The following topics are covered:

[What's New in Version 8.3.1?](#)

[What's New in Version 8.3.2?](#)

[What's New in Version 8.3.3?](#)

[What's New in Version 8.3.4?](#)

[What's New in Version 8.3.5?](#)

[What's New in Version 8.3.6?](#)

[What's New in Version 8.3.7?](#)

For important last-minute information, see the readme file that is provided with NaturalONE.



**Note:** The Release Notes for the NaturalONE components which can be installed optionally are provided separately. If available, they can be found in the documentation for the corresponding component.

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# 1 What's New in Version 8.3.1?

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## Basic Functionality for Natural Application Development

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This section describes new features and enhancements in NaturalONE's basic functionality for Natural application development which have been added after the release of NaturalONE Version 8.2.7. It covers the following topics:

- [Custom Build Sequence](#)
- [Consolidating Objects in Private-Mode Libraries](#)
- [Natural Profiler](#)
- [Natural Navigator View](#)
- [Arabic Shaping](#)

### Custom Build Sequence

It is now possible to define a custom build sequence. This sequence is used by the **Build Natural Project** command to upload and stow objects in the Natural environment. For information on the default build sequence, see *Build Sequence* in *Using NaturalONE*.

The default build sequence can be changed for all Natural projects in the Natural preferences (see *Natural > Build Sequence* in *Setting the Preferences*) or for a specific Natural project in the project properties (see *Builder* in *Changing the Project Properties*).

### Consolidating Objects in Private-Mode Libraries

In the **Navigator** view and in the **Natural Navigator** view, it is now possible to show which objects are stored in private-mode libraries and which objects are obsolete in the private-mode libraries because they are identical to those stored in the base libraries. Obsolete objects can now be consolidated. See *Consolidating Objects in Private-Mode Libraries* in *Using NaturalONE*.

Two new label decorations, the private-mode flag (default character "+") and the consolidate flag (default character "-"), have been added to the label decorations which can be set in the Natural preferences. See *Label Decorations* in *Setting the Preferences* which is part of *Using NaturalONE*.

### Natural Profiler

With NaturalONE Version 8.3.1, the Natural profiler is provided as a preview version. There will be no support for this preview version. Any feedback from our customers on this new feature is greatly appreciated. Since the Natural profiler is still under development, a later version of NaturalONE may include substantial changes for the Natural profiler.

The Natural profiler is used to monitor the internal process flow of a Natural application and to collect trace data for selected events that are performed within a Natural application. It helps application programmers, administrators and quality engineers to analyze the logical flow of Natural

applications and to trace the utilization of resources. See *Using the Natural Profiler* in *Using NaturalONE*.

### **Natural Navigator View**

With NaturalONE Version 8.3.1 the **Natural Navigator** view is still provided as a preview version. There will be no support for this preview version. Any feedback from our customers on this new view is greatly appreciated. Since the **Natural Navigator** view is still under development, a later version of NaturalONE may include substantial changes for this view. See *Using the Natural Navigator View* in *Using NaturalONE*.

### **Arabic Shaping**

With NaturalONE Version 8.3.1, support for Arabic shaping is still provided as a preview version. There will be no support for this preview version. Any feedback from our customers on this new feature is greatly appreciated. Since support for Arabic shaping is still under development, a later version of NaturalONE may include substantial changes to this type of support. See *Arabic Shaping* in *Using NaturalONE*.

## **Natural for Ajax / Ajax Developer**

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This section describes new features and enhancements in Natural for Ajax and Ajax Developer which have been added after the release of NaturalONE Version 8.2.7. It covers the following topics:

- [New Property for the NATPAGE Control](#)
- [Custom Layout Templates](#)

### **New Property for the NATPAGE Control**

The NATPAGE control now supports the new property `natkcheck`. This property helps to avoid ambiguous variable names when a check for keywords is performed with the Natural profile parameter `KCHECK`.

## Custom Layout Templates

You can now create your own custom layout templates. Your custom layout templates will then be offered for selection when you create a new layout. See *Creating Custom Layout Templates* in the *Ajax Developer* documentation.

## Optional Components

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Important new features are available with the following optional components. For detailed information on the new features, see the Release Notes in the documentation of the corresponding optional component.

### Application Testing

You can now use the NaturalONE debug attach server to debug a subprogram in the **Test Subprogram** editor.

## Documentation

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The *Travel Approval Sample Application* documentation has been renamed to *Sample Applications*. In addition to the travel approval application, this documentation now also explains how to install and use the Hello World application. These are the NaturalONE sample applications which are available from the welcome page.

## Known Issues

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### Byte Order Marks (BOMs) in Input Files for XML Toolkit

BOMs in XML schema and DTD input files are currently not supported. If the input file contains a BOM, a parsing error will occur. As a workaround, you have to remove the BOM manually. See also *Using the XML Toolkit* in *Using NaturalONE*.

## 2 What's New in Version 8.3.2?

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## Installation

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The Software AG Designer 9.5, which includes NaturalONE, now uses Eclipse Version 4.3. If you prefer to use NaturalONE in your existing Eclipse environment, Eclipse Version 4.3 is required. See also *Using Your Own Eclipse* in the *Installation* documentation.

## Basic Functionality for Natural Application Development

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This section describes new features and enhancements in NaturalONE's basic functionality for Natural application development. It covers the following topics:

- [Compare Editor](#)
- [Source Editor](#)
- [Natural Profiler](#)
- [Natural Navigator View](#)
- [Arabic Shaping](#)

### Compare Editor

You can now use the compare editor of Eclipse to compare the sources from your Natural projects in the workspace with the corresponding objects in the Natural environment (for example, with the objects on a mainframe server). The sources can be compared with both, the objects on the server which are stored in the base library (that is, the library which has the same name as in the workspace) and, if private mode has been enabled, with the objects on the server which are stored in a private-mode library. Corresponding commands have been added to the **Compare With** context menu of Eclipse. See *Using the Compare Editor* in *Using NaturalONE*.

### Source Editor

It is now possible to disable the protection of lines in sources generated by Construct or by the Code Generation component of NaturalONE. All lines in the generated sources can then be edited. A new preference page for the source editor is available for this purpose. See *Protection* in *Setting the Preferences* which is part of *Using NaturalONE*.

## Natural Profiler

The Natural profiler is now supported as a regular feature of NaturalONE. Customer feedback on the former preview version has been implemented. However, not all feedback has been implemented yet. Therefore, a later version of NaturalONE may include changes. Any feedback from our customers is still greatly appreciated. See *Using the Natural Profiler* in *Using NaturalONE*.

New features in this version are:

- The Natural profiler can now also be used in UNIX and Windows environments. The prerequisite is that Natural Version 8.3.1 or above is installed on the server.



**Note:** It is currently not possible to use the Natural profiler with the local Natural runtime of NaturalONE Version 8.3.2.

- It is now possible to start the Natural profiler using the **Profile** command, and the Natural profiler now also makes use of the **Default Launch** entry. See *Starting a Profiler Session* in *Using NaturalONE*.
- The profiler output has been redesigned. Two pages with the names **Hot Spots** and **Event Trace** are now provided. For Natural statements that are shown on the **Hot Spots** page, it is now possible to directly go to the corresponding line in the source editor. See *Viewing the Profiler Output* in *Using NaturalONE*.

## Natural Navigator View

With NaturalONE Version 8.3.2 the **Natural Navigator** view is still provided as a preview version. There will be no support for this preview version. Any feedback from our customers on this new view is greatly appreciated. Since the **Natural Navigator** view is still under development, a later version of NaturalONE may include substantial changes for this view. See *Using the Natural Navigator View* in *Using NaturalONE*.

New features in this version are:

- **Printing**

When you print an object source from the **Natural Navigator** view, the printout now also contains the source header. See *Printing Objects* in *Using NaturalONE*.

Using the new **Print line numbers** option in the Natural preferences, you can now determine whether line numbers are to be printed or not. See *Natural Navigator* in *Setting the Preferences* which is part of *Using NaturalONE*.

## Arabic Shaping

With NaturalONE Version 8.3.2, support for Arabic shaping is still provided as a preview version. There will be no support for this preview version. Any feedback from our customers on this new feature is greatly appreciated. Since support for Arabic shaping is still under development, a later version of NaturalONE may include substantial changes to this type of support. See *Arabic Shaping* in *Using NaturalONE*.

## Natural for Ajax / Ajax Developer

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This section describes new features and enhancements in Natural for Ajax and Ajax Developer. It covers the following topics:

- [New Configuration Parameter natuppercase](#)
- [New Built-In Event for Pop-Up Windows](#)
- [New Color Properties for the TEXT Control](#)
- [New Property for the XCIPOPUPMENU Control](#)

### New Configuration Parameter natuppercase

If your Natural program only allows Latin upper-case characters (for example, if you are using the Hebrew codepage CP803), you can now set the parameter `natuppercase="true"` in the *cisconfig.xml* file. In this case, the built-in events are generated in upper case, and URLs to Natural for Ajax pages are handled correctly even if they are specified completely in upper case. See also *Code Pages* in the *Natural for Ajax* documentation.

### New Built-In Event for Pop-Up Windows

The new built-in event `nat:popup.end` can now be raised when the user closes a pop-up window with the Close button in the upper right corner of the pop-up window. To activate this new built-in event, the new property `popupendmethod` of the NATPAGE control has to be set to "true". For more information, see *Built-in Events and User-defined Events* in the *Natural for Ajax* documentation.

### New Color Properties for the TEXT Control

The TEXT control now supports the new properties `bgcolorprop` and `fgcolorprop` which can be used to set the control's background color and foreground color.

## **New Property for the XCIPOPUPMENU Control**

The XCIPOPUPMENU control now supports the new property `withinactiveodes` which can be used to disable single context menu items. The default value is "false". If set to "true", the adapter is generated with an additional `INACTIVE` field. By default, the value of the `INACTIVE` field is "false". If you set it to "true", the corresponding menu item is shown as inactive, that is, it is greyed out and cannot be selected.

## **Known Issues**

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### **Lifecycle Manager**

With the current version of NaturalONE, the Lifecycle Manager is not offered for installation. Please continue to use your existing installation which runs with CentraSite Version 8.2.



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## What's New in Version 8.3.3?

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## Installation

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The folder structure of the Software AG Designer has changed as indicated in the following table:

Old Folder Name	New Folder Name
<code>&lt;your-installation-directory&gt;/eclipse/&lt;version&gt;/</code>	<code>&lt;your-installation-directory&gt;/Designer/eclipse/</code>
<code>&lt;your-installation-directory&gt;/eclipse/updates/</code>	<code>&lt;your-installation-directory&gt;/Designer/updates/</code>

## Supported Web Browsers

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NaturalONE now supports Internet Explorer 11. However, with the current version of NaturalONE, applications running in RTL (right-to-left) mode cannot be executed under Internet Explorer 11.

For a list of the currently supported web browsers, see *Supported Browsers* in the *Installation* documentation.

## Basic Functionality for Natural Application Development

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This section describes new features and enhancements in NaturalONE's basic functionality for Natural application development. It covers the following topics:

- [Task Tags](#)
- [DDM Object Names](#)
- [Natural Profiler](#)
- [Natural Navigator View](#)
- [Details View](#)
- [Arabic Shaping](#)

### Task Tags

It is now possible to add task tags such as `TODO` or `FIXME` to your source code. NaturalONE uses the task tags that are used for the Java compiler. See *Working with Tasks* in *Using NaturalONE*.

In the Natural preferences (see *Setting the Preferences* in *Using NaturalONE*), the following new items are available for task tags:

- **Task Tags** syntax element on the **Source Editor > Syntax Coloring** page.
- **Task Tags** tab on the **Parser** page.

## DDM Object Names

It is no longer possible to change the object name of a DDM with NaturalONE. This functionality has been removed because Natural Development Server for Windows, UNIX and OpenVMS does not support any combination of DDM long name and DDM object name. The object name is now generated automatically from the long name that you specify when creating a DDM.

Moreover, the object name for a new DDM is finally defined on the server. NaturalONE tries to anticipate the name, but this works only if all objects from the server library are also contained in the Natural project.



**Note:** With Natural Development Server for mainframes, the object name is irrelevant.

## Natural Profiler

It is now possible to use the Natural profiler with the local Natural runtime of NaturalONE.

The **Profile As** command is no longer used to define the event types for which trace data is to be collected on the server. Instead, this can now be defined in the Natural preferences. In addition, it is now possible to reduce the number of events sent by the trace session. See *Profiler* in *Setting the Preferences* which is part of *Using NaturalONE*.

## Natural Navigator View

The **Natural Navigator** view is now supported as a regular feature of NaturalONE. Customer feedback on the former preview version has been implemented. However, not all feedback has been implemented yet. Therefore, a later version of NaturalONE may include changes. Any feedback from our customers is still greatly appreciated. See *Using the Natural Navigator View* in *Using NaturalONE*.

New features in this version are:

- **Default View**

The **Natural Navigator** view is now a default view of the NaturalONE perspective. This means, it is automatically shown each time you reset the NaturalONE perspective.

- **View Menu**

The view menu of the **Natural Navigator** view (drop-down menu at the top right of the view) now contains the corresponding menu commands for the toggle buttons that are shown in the local toolbar of the **Natural Navigator** view.

- **Natural Filters**

It is now possible to define Natural filters for the nodes of the **Natural Navigator** view. See *Filtering Natural Objects and Libraries* in *Using NaturalONE*.

### ■ **Properties View**

The **Properties** view now shows enhanced, Natural-specific information for a node which is currently selected in the **Natural Navigator** view. Such information is not shown when working with the standard **Navigator** view of Eclipse. See *Quickly Viewing the Properties in Using NaturalONE*.

### ■ **More Commands**

Many context menu commands which were missing in previous versions can now be executed from the **Natural Navigator** view.

## **Details View**

The new **Details** view is a default view of the NaturalONE perspective. It shows detailed information on the children of the project, library or folder that is currently selected in the **Navigator** view or in the **Natural Navigator** view. See *Using the Details View in Using NaturalONE*.

## **Arabic Shaping**

With NaturalONE Version 8.3.3, support for Arabic shaping is still provided as a preview version. There will be no support for this preview version. Any feedback from our customers on this new feature is greatly appreciated. Since support for Arabic shaping is still under development, a later version of NaturalONE may include substantial changes to this type of support. See *Arabic Shaping in Using NaturalONE*.

## **Natural for Ajax / Ajax Developer**

---

This section describes new features and enhancements in Natural for Ajax and Ajax Developer. It covers the following topics:

- [New ROWTABLEAREA3 Control](#)
- [New NJX:REQUESTCONTEXT Control](#)
- [New Properties for the TEXT Control](#)
- [GOOGLEMAP Control Adapted to Current Google Maps Technology](#)
- [Support of LEFT and TOP for Page Pop-Ups](#)

- [Focus Handling During Flush Events](#)

### **New ROWTABLEAREA3 Control**

The ROWTABLEAREA3 control is used to bind a two-dimensional Natural array to a grid. This grid separates the data structure for the business data from the data structure for the rendering data.

### **New NJX:REQUESTCONTEXT Control**

With the NJX:REQUESTCONTEXT control, the Natural application can access context information regarding the request.

### **New Properties for the TEXT Control**

The TEXT control now supports the new properties `maxrows`, `maxrowsprop`, `maxrowlength` and `maxrowlengthprop` which can be used to limit the number of rows and the length of the rows.

### **GOOGLEMAP Control Adapted to Current Google Maps Technology**

This type of support was already available with NaturalONE Version 8.3.2. Due to an early documentation deadline, this fact could not be announced in the Release Notes for version 8.3.2.

The GOOGLEMAP control now supports the Google Maps JavaScript API v3. An API key is not needed any more, but when used in production, an API key should be used.

### **Support of LEFT and TOP for Page Pop-Ups**

This type of support was already available with NaturalONE Version 8.3.2. Due to an early documentation deadline, this fact could not be announced in the Release Notes for version 8.3.2.

The elements `LEFT` and `TOP` of the NJX:XCIOPENPOPUP control are now also supported for page pop-ups. These elements were previously only supported for browser pop-ups.

It was not possible to introduce this feature without producing the following incompatibility as compared with previous handling of page pop-ups: In order to open a centered page pop-up, the elements `LEFT` and `TOP` need to be set to -1. If `LEFT` and `TOP` are set to 0, the page pop-up is opened in the upper left corner of the browser output area.

## Focus Handling During Flush Events

Previous versions contained an inconsistency in the focus handling during flush events. When a flush event was specified for a FIELD and the user moved the focus away from that FIELD, the following happened while the flush method was executed:

- If `alwaysflush="false"` (default) was defined for the FIELD, the Natural system variable `*CURS-FIELD` contained the value of the Natural system function `POS` for the FIELD that *lost* the focus.
- On the other hand, if `alwaysflush="true"` was defined for the FIELD, the Natural system variable `*CURS-FIELD` contained the value of the Natural system function `POS` for the FIELD that *received* the focus.

This inconsistency has been removed. Now when the user moves the focus away from one input control to another, `*CURS-FIELD` contains during the flush event the `POS` value of the input control that *received* the focus. This allows an application to identify both the input control that lost the focus (by means of the flush event) and the input control that received the focus (by means of `*CURS-FIELD`).



**Note:** If an application relies on `*CURS-FIELD` containing the `POS` value of the input control that *lost* the focus, it can achieve this behavior by setting the parameter `flushreceivespreviousfocused="true"` in the configuration file `cisconfig.xml`.

## Documentation

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A new section, *The Development Lifecycle: Step by Step*, is available in the *NaturalONE in a Nutshell* documentation. It summarizes the required steps for the preferred development scenario.

## Removed Features

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### Lifecycle Manager

The Lifecycle Manager is no longer offered for installation. The Lifecycle Manager documentation has been removed from the documentation set for NaturalONE Version 8.3.3. Please continue to use your existing installation which runs with CentraSite Version 8.2.

# 4 What's New in Version 8.3.4?

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## Basic Functionality for Natural Application Development

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This section describes new features and enhancements in NaturalONE's basic functionality for Natural application development. It covers the following topics:

- [Natural Profiler](#)
- [Deployment Wizard for Natural Applications](#)
- [Arabic Shaping](#)

### Natural Profiler

When a profiler session has been started, the profiler monitoring can now be paused and restarted from the profiled Natural application by calling the application programming interface (API) `USR8210N`. The API can also be used to get the current state of the monitoring process. See *Application Programming Interface* in *Using the Natural Profiler* which is part of *Using NaturalONE*.

In addition, it is now possible to collect trace data for the new event type "Monitor Pause". This event occurs when event collection is temporarily interrupted. See *Profiler* in *Setting the Preferences* which is part of *Using NaturalONE*.

### Deployment Wizard for Natural Applications

The deployment wizard for Natural applications now also supports the library steplibs for secured environments.

The deployment file now contains information on whether it has been created for a secured or unsecured environment. This setting cannot be changed after the deployment file has been created. Thus, if you change a project from secured to unsecured (or vice versa), you have to create a new deployment file.

See *Using the Deployment Wizard for Natural Applications* in *Using NaturalONE*.

### Arabic Shaping

With NaturalONE Version 8.3.4, support for Arabic shaping is still provided as a preview version. There will be no support for this preview version. Any feedback from our customers on this new feature is greatly appreciated. Since support for Arabic shaping is still under development, a later version of NaturalONE may include substantial changes to this type of support. See *Arabic Shaping* in *Using NaturalONE*.

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## Natural for Ajax / Ajax Developer

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This section describes new features and enhancements in Natural for Ajax and Ajax Developer. It covers the following topics:

- [Natural for Ajax Demos](#)
- [New Properties for the ROWTABAREA and COLTABAREA Controls](#)
- [Rendering of Numeric Data Types in TEXTOUT Controls](#)

### Natural for Ajax Demos

It is now possible to install the Natural for Ajax demos from the welcome page. A collection of small Natural for Ajax samples will then be available as a new Natural project in the **Navigator** view. These samples demonstrate how to use the different controls and how to bind them to Natural server-side processing. See also *Natural for Ajax Demos* in *Sample Applications*.

### New Properties for the ROWTABAREA and COLTABAREA Controls

The ROWTABAREA and COLTABAREA controls now support the new properties `disabledprop1` through `disabledprop16` which can be used to dynamically disable and enable tabs from within a Natural application at runtime.

In addition, the ROWTABAREA and COLTABAREA controls now support the following new properties which can be used to dynamically set the style per tab at runtime:

`tabselectedstyleprop1` through `tabselectedstyleprop16`  
`tabunselectedstyleprop1` through `tabunselectedstyleprop16`  
`tabdisabledstyleprop1` through `tabdisabledstyleprop16`

### Rendering of Numeric Data Types in TEXTOUT Controls

For TEXTOUT controls, the count of rendered decimal digits now matches the decimal digits specified in the bound Natural data type.



# 5 What's New in Version 8.3.5?

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## Installation

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The Software AG Designer 9.8, which includes NaturalONE, now uses Eclipse Version 4.4. If you prefer to use NaturalONE in your existing Eclipse environment, Eclipse Version 4.4 is required. In addition, Java 1.8 is now required. See also *Using Your Own Eclipse* in the *Installation* document-ation.

## Basic Functionality for Natural Application Development

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This section describes new features and enhancements in NaturalONE's basic functionality for Natural application development. It covers the following topics:

- [Renumber Line Numbers in Constants](#)
- [Natural Profiler](#)
- [Arabic Shaping](#)

### Renumber Line Numbers in Constants

The new **Renumber line numbers in constants** option in the project properties, which was already available with NaturalONE Version 8.3.3, is now documented. See *Editor* in *Changing the Project Properties* which is part of *Using NaturalONE*.

### Natural Profiler

It is now possible to display the event data of a Natural mainframe batch application which has been written to a Natural Profiler resource file (extension *.nprf*). For this purpose, the new command **Open with Natural Profiler** is available in the **Natural Server** view. See *Displaying Natural Batch Profiler Data* in *Using the Natural Profiler* which is part of *Using NaturalONE*.

### Arabic Shaping

With NaturalONE Version 8.3.5, support for Arabic shaping is still provided as a preview version. There will be no support for this preview version. Any feedback from our customers on this new feature is greatly appreciated. Since support for Arabic shaping is still under development, a later version of NaturalONE may include substantial changes to this type of support. See *Arabic Shaping* in *Using NaturalONE*.

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## Natural for Ajax / Ajax Developer

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This section describes new features and enhancements in Natural for Ajax and Ajax Developer. It covers the following topics:

- [New AUTOCOMPLETE Control](#)
- [Custom Value Help Keys in FIELD Controls](#)
- [Deployment Support for Customized Logon and Disconnect Pages](#)
- [Browser Standards Mode and HTML5](#)
- [Documentation for Test Automation](#)
- [Documentation for the Styling of User Interfaces](#)
- [Documentation for Customization of Grids](#)

### New AUTOCOMPLETE Control

While typing, it is now possible to select a value from a pre-populated list of values. With the new AUTOCOMPLETE control, you can add this functionality to a FIELD control.

### Custom Value Help Keys in FIELD Controls

For FIELD controls, it is now possible to customize the keys which open the pop-up and/or combo box for the value help. The new parameter `valuehelpkeys` is supported in the `cisconfig.xml` configuration file. You specify the keys in the same way as hot keys. Example:

```
valuehelpkeys = "ctrl-65;ctrl-alt-66"
```

See also *Configuration* in the Application Designer documentation, which is available separately.

### Deployment Support for Customized Logon and Disconnect Pages

When generating a WAR deployment file for your project, this file will now contain all required rules for deploying your customized NatLogon and NatDisconnect page layouts. See also *Developing Customized Logon and Disconnect Pages* in the *Natural for Ajax* documentation.

## **Browser Standards Mode and HTML5**

With Internet Explorer 11, Firefox and Chrome, Natural for Ajax applications now run in standards mode in the browsers. This mode supports HTML5 and CSS3. For information on how to upgrade your applications and environments, see *Browser Standards Mode and HTML5* in the *Natural for Ajax* documentation.

With Internet Explorer 10, Natural for Ajax applications now run in the Internet Explorer 10 quirks mode, which already supports many HTML5 and CSS3 features.

## **Documentation for Test Automation**

A new chapter *Test Automation of Natural for Ajax Applications* is now available in the *Natural for Ajax* documentation. It explains how to use stable identifiers for automated tests.

## **Documentation for the Styling of User Interfaces**

A new chapter *Styling the User Interface* is now available in the *Natural for Ajax* documentation. It explains how to use the Style Sheet Editor tool to develop your own application-specific style sheet.

## **Documentation for Customization of Grids**

A new chapter *Styling Grids* is now available in the *Natural for Ajax* documentation. It provides hints on the most frequent customizations of grids.

# 6 What's New in Version 8.3.6?

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## Basic Functionality for Natural Application Development

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This section describes new features and enhancements in NaturalONE's basic functionality for Natural application development. It covers the following topics:

- [Mark Occurrences](#)
- [Support of Adabas Short Names](#)

### Mark Occurrences

You can now mark occurrences of the selected called object in the current source.

This also applies when an object is opened from the passive references of the Dependencies view. If the **Mark occurrences of the selected called object in the current source** option in the Source Editor preferences is enabled, the cursor is positioned to the first occurrence of the corresponding called object and all references are marked.

See *Mark Occurrences* in *Setting the Preferences* which is part of *Using NaturalONE* for details.

### Support of Adabas Short Names

Natural now also supports lowercase characters in database short names for DDM fields generated from an Adabas file on Windows and UNIX platforms. For detailed information, see *Using the DDM Editor* in the *Editors* documentation corresponding to your Natural platform and the ADAFDU utility in the *Adabas Utilities* documentation.

## Natural Profiler

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This section describes new features and enhancements in NaturalONE's profiler functionality. It covers the following topics:

- [Consolidated Resource File Support](#)

- [Enhanced Performance](#)

## Consolidated Resource File Support

The new, consolidated Natural Profiler resource files (extension *.nprc*) can now be read and displayed. For more information, see [Displaying Natural Profiler Resource Data](#) in *Using the Natural Profiler* which is part of *Using NaturalONE* for details.

## Enhanced Performance

Data volumes and transfer times have been significantly reduced in the case where event tracing is not enabled in the Preferences and the program is being profiled in a non-mainframe environment.

## Natural for Ajax / Ajax Developer

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This section describes new features and enhancements in Natural for Ajax and Ajax Developer. It covers the following topics:

- [Poodle Safe SSL Connections](#)
- [Extended Year Range in Date and Calendar Pop-Ups](#)
- [Styling of Complex Controls](#)
- [GRIDCOLHEADER with new Property resizable](#)
- [TR with new Property asheadline](#)
- [IMAGEVIEWER with new Property withscrollbar](#)
- [REPORT with new property name](#)
- [FIELD Control with new Property formautocomplete](#)
- [ROWTABLEAREA and COLTABLEAREA with new Property titleprop](#)
- [Navigation Using Cursor Keys in Natural Web I/O Screens](#)
- [Support of Inactive Items in MENU Control](#)
- [Support of Drop Down Items in DLMENU Control on Hover](#)
- [New Samples in NaturalAjaxDemos](#)
- [New Configuration Parameter urlbackbuttonpressed](#)
- [Development Support of Ajax Configuration Settings](#)
- [Support Resetting the STATUSBAR Before Server Roundtrips](#)
- [Enhancement of Layout Painter](#)
- [Map Conversion](#)
- [Style Sheet Development in User Interface Components](#)
- [New Configuration Parameter completedateinput](#)
- [New Configuration Parameter popupparentdisabled](#)
- [Enabling and Disabling of User Interface Components](#)
- [Context Menu available for User-Interface-Components Root Folder](#)

- [Documentation for Customization of Grids](#)

### **Poodle Safe SSL Connections**

The SSL connection between the Natural Web I/O server and Natural for Ajax client is now Poodle-safe. The Poodle ("Padding Oracle On Downgraded Legacy Encryption") vulnerability can be exploited by possible attackers to break the cryptographic security of SSL Version 3.

To counter this, the clients and server no longer allow to be forced back to SSL Version 3. Only TLS Version 1.0 and upwards is possible.

Further information can be found in the [Software AG Security Advisory on Poodle](#) in Empower.

### **Extended Year Range in Date and Calendar Pop-Ups**

In the date and calendar pop-ups, the year range can now be edited. This allows for fast switching back and forth for instance hundreds of years in one go. See *DATEINPUT* and *FIELD* for further details.

### **Styling of Complex Controls**

Documentation and Examples for styling of complex controls like *Grids* added. New style class `TRHeadLine`.

### **GRIDCOLHEADER with new Property resizable**

Using the design time property `resizable` you can set for each `GRIDCOLHEADER` if you want the corresponding column to be resizable.

### **TR with new Property asheadline**

The new property `asheadline` supports the usage of the new style class `TRHeadLine` to style grid header rows.

### **IMAGEVIEWER with new Property withscrollbar**

The control `IMAGEVIEWER` now has a new property `withscrollbar`. When this property is set to true, vertical and horizontal scrollbars are displayed next to the `IMAGEVIEWER`. With these scrollbars it is possible to move the visible part of the image and the user sees which part of the image he is currently viewing.

## **REPORT with new property name**

You can now use the design time property `name` to define a file name when downloading the report as a PDF file.

## **FIELD Control with new Property `formautocomplete`**

This property only has effects if the `withformtag` property in the `PAGEBODY` is activated. In this case, you can switch on and off the browser's autocomplete behavior for HTML form tags in single `FIELD` controls.

## **ROWTABLEAREA and COLTABLEAREA with new Property `titleprop`**

In `ROWTABLEAREA` and `COLTABLEAREA` tooltips can now be set dynamically from within the Natural programs. This is supported via the new property `titleprop`.

## **Navigation Using Cursor Keys in Natural Web I/O Screens**

In Natural Web I/O screens, it is now possible to jump from one input field to another using the cursor keys up, down, right and left.

## **Support of Inactive Items in MENU Control**

`MENU` controls can now have inactive items. In the same way as in context menus, you need to set the property `withinactiveitems`. When set to true, a field `INACTIVE` is generated into the Natural adapter. This allows you to set the value dynamically at runtime from within the Natural program.

## **Support of Drop Down Items in `DLMENU` Control on Hover**

When setting the property `onlyoneline` to true, the second line of a `DLMENU` is automatically rendered as drop down menu. Drop down menus are opened when hovering over a top node.

## **New Samples in `NaturalAjaxDemos`**

Many new samples have been added to the `NaturalAjaxDemos` examples (see Welcome Page). The samples in the `NaturalAjaxDemos` project can now be either grouped by Natural for Ajax version or by control functionality.

## **New Configuration Parameter `urlbackbuttonpressed`**

When the browser back button is pressed, in some cases the page is not synchronized with the server anymore and a default page is shown. You can use the new parameter `urlbackbuttonpressed` in the *cisconfig.xml* to define the URL of a custom page that is to be shown instead of the default page.

## **Development Support of Ajax Configuration Settings**

The Ajax *cisconfig.xml* configuration files can now be adapted, automatically activated and used in the NaturalONE development environment when building and running Ajax applications.

## **Support Resetting the STATUSBAR Before Server Roundtrips**

Optionally, the STATUSBAR can now reset texts before a server round trip is done. This can either be done via STATUSBAR control using the new property `resetbefore` or for the whole application with the new *cisconfig.xml* parameter `resetstatusbarbefore`.

## **Enhancement of Layout Painter**

In the layout painter it is now possible to paste nodes on the same level as the selected node.

## **Map Conversion**

Example rules for the conversion of CV variables have been added. See *Sample Conversion Rules Files*.

Enhancements for the mapping to Array Grids (= ROWTABLEAREA3) have been done. A new chapter with hints for the conversion of Array data has been added to the documentation. See *Array Data*.

## **Style Sheet Development in User Interface Components**

Major enhancements to the development of style sheets within user interface components have been made. Examples are: Automatic regeneration of styles, easy creation of own style sheets, opening a style sheet in the Style Sheet Editor in a single click. See *Style Sheet Editor* in the *Ajax Developer* documentation for details.

### **New Configuration Parameter `completedateinput`**

The default behavior of the `DATEINPUT` control is to automatically complete partial input. The new `completedateinput` parameter now supports forcing the end-users to always enter the complete date.

### **New Configuration Parameter `popparentdisabled`**

For page pop-ups you can now configure whether or not disabled rendering is shown for the parent page. For more information see `popparentdisabled`.

### **Enabling and Disabling of User Interface Components**

Major enhancements when disabling and enabling user interface components have been made. No restart of Tomcat is required anymore. All user interface components of a project can be disabled and enabled again in a single click.

### **Context Menu available for User-Interface-Components Root Folder**

As for single user interface components, the **Ajax Developer** context menu is now also available for the User-Interface-Components root folder. Use this to clean, build or refresh all user interface components in your project.

### **Documentation for Customization of Grids**

The chapter *Styling Grids* in the *Natural for Ajax* documentation has been updated. It provides hints on the most frequent customizations of grids.

## **Notice of Future Changes**

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### **Change of Default Port for Apache Tomcat**

Effective with the next NaturalONE version, NaturalONE will change the default port of its internal Apache Tomcat application server to a port number other than 8080.



# 7 What's New in Version 8.3.7?

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## Basic Functionality for Natural Application Development

---

This section describes new features and enhancements in NaturalONE's basic functionality for Natural application development. It covers the following topics:

- [Change of Default Port for Apache Tomcat](#)
- [Set Iterations for Update or Build in Preferences](#)
- [New Preference User name](#)
- [Execute, Debug or Profile Natural Applications](#)
- [Private Mode Handling](#)
- [New Preference Update project properties automatically on .natural file modification](#)

### Change of Default Port for Apache Tomcat

As already announced with NaturalONE 8.3.6, the default Apache Tomcat port has now been changed to 28080. The old default port was 8080.

The old default port 8080 is also used as default by Apache Tomcat, Wildfly (formerly JBoss) and other web servers. This sometimes resulted in conflicts due to concurrent use of the same port number. Such conflicts should no longer occur now.

### Set Iterations for Update or Build in Preferences

It is now possible to specify the number of iterations for the **Update** or **Build Natural Project** command on the Natural server. Please refer to *Builder* in *Setting the Preferences* which is part of *Using NaturalONE* for details.

### New Preference User name

It is possible to specify a user name to determine the name that is used as user ID in Natural projects. In the Natural preferences the new option **User name** is now available. Please refer to *Options > User name* in *Setting the Preferences* which is part of *Using NaturalONE* for details.

## Execute, Debug or Profile Natural Applications

### Internal Browser

For easier navigation, the Natural I/O preferences now contain a link to the Eclipse **Web Browser** preferences. In addition, the **Internal browser** option of the Natural Launch configuration has been dropped. The main reason for this is an Eclipse limitation in terms that an external browser will always be launched when activated in the **Web Browser** preferences regardless of whether **Internal browser** has been set in the Natural Launch configuration.

### Parameters in Natural Launch Configuration

It is now possible to pass parameters to a Natural application. The Natural Launch configuration has been extended with a new **Parameter** field where the individual parameters for an application can be added.

### Modified NaturalONE Menu

The NaturalONE menu does not contain the commands **Execute**, **Debug** and **Profile** any more. Instead, the existing Eclipse menu infrastructure **Run As**, **Debug As** and **Profile As** is used. In conjunction with the **Natural Application** shortcut exposed in these menus, the commands can also be applied inside the Natural Source Editor.

Please refer to *Launching Natural Applications* which is part of *Using NaturalONE* for further details.

### Private Mode Handling

When a Natural project is running in private mode and the runtime environment is changed, the private libraries generated on the source platform can now be deleted. On environment change a dialog box is issued where the user can decide whether the private libraries should be deleted or not. The dialog can be suppressed with the newly introduced preference **Always delete private libraries without prompt** which is available as an option in the dialog but can also be set in the Builder preferences.

In addition, the preference option **Scratch server objects** was refined in such a way, that it is now possible to control on which library type (shared library when working in shared mode and/or private library when working in private mode) this command is applicable.

## New Preference Update project properties automatically on .natural file modification

The Natural project preferences now contain a new preference **Update project properties automatically on .natural file modification**. The setting of this option controls whether or not an automatic update of the Natural project properties is made on a .natural file modification. Please refer to *Natural > Project > Properties* in *Setting the Preferences* which is part of *Using NaturalONE* for details.

## Natural for Ajax / Ajax Developer

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This section describes new features and enhancements in Natural for Ajax and Ajax Developer. It covers the following topics:

- Support for Microsoft Browser Edge
- Support for Internet Explorer 10
- New Calendar Control DATEINPUT2
- Automatic Import of the webconfig Folder
- FIELD Control Now Supports Style Variants
- ROWTABLEAREA2 Now Supports Dynamically Setting the Style per ROW
- Hotkey Support for Switching Between Workplace Activities
- Mobile Controls Preview
- LABEL and GRIDCOLHEADER Controls with new Property nameprop
- ICONLIST Control with new Property withinvisibleprop

### Support for Microsoft Browser Edge

Microsoft's Browser Edge is now supported.

### Support for Internet Explorer 10

Internet Explorer 10 is no longer supported.

### New Calendar Control DATEINPUT2

A new calendar control DATEINPUT2 has been added. This control does not require browser pop-ups. A corresponding example is available in the NaturalAjaxDemos examples.

### **Automatic Import of the webconfig Folder**

During Ajax enabling and via project properties a *webconfig* folder can now be added automatically to a project.

### **FIELD Control Now Supports Style Variants**

The new property `stylevariant` in the `FIELD` controls allows you to define several different style variants for the `FIELD` control and simply apply the style by setting the variant name.

### **ROWTABLEAREA2 Now Supports Dynamically Setting the Style per ROW**

The new properties `trstyleprop` of the `TR` control and `strstyleprop` of the `STR` control allow you to set the style for single rows dynamically at runtime.

### **Hotkey Support for Switching Between Workplace Activities**

The workplace framework now supports the definition of hot keys to switch forwards and backwards between activities in a workplace.

### **Mobile Controls Preview**

This version contains a set of mobile controls as preview. A corresponding running example is included in the Natural Ajax Demos.

### **LABEL and GRIDCOLHEADER Controls with new Property nameprop**

The name in a `LABEL` and in a `GRIDCOLHEADER` control can now be dynamically set from within Natural programs via the new property `nameprop`.

### **ICONLIST Control with new Property withinvisibleprop**

The new property `withinvisibleprop` enables you to dynamically make single icons invisible from within Natural programs.

## Notice of Future Changes

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### Administration Using System Management Hub

NaturalONE requires certain EntireX Broker functionality for testing purposes. EntireX Broker can currently be administrated with System Management Hub (SMH).

However, administration with SMH (including the batch interface `argbatch`) will be dropped in the next version of EntireX. The most important functionality (for example the EntireX Broker administration) will be provided by Command Central. This change will be reflected in an upcoming version of NaturalONE.