software AG

Natural for Ajax

Release Notes

Version 9.1.4

October 2021

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1 About this Documentation

Document Conventions

Convention	Description
Bold	Identifies elements on a screen.
`Monospace font`	Identifies service names and locations in the format *folder.subfolder.service*, APIs, Java classes, methods, properties.
Italic	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

Software AG Documentation Website

You can find documentation on the Software AG Documentation website at **https://documenta-tion.softwareag.com**.

Software AG Empower Product Support Website

If you do not yet have an account for Empower, send an email to empower@softwareag.com with your name, company, and company email address and request an account.

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- Access articles, code samples, demos, and tutorials.

- Use the online discussion forums, moderated by Software AG professionals, to ask questions, discuss best practices, and learn how other customers are using Software AG technology.

- Link to external websites that discuss open standards and web technology.

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.

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Additional Product Information

Beside this product documentation, additional product information is available at the following places:

- The Knowledge Center at *https://empower.softwareag.com/* (for registered users only).

- The Natural for Ajax discussion forum at *http://tech.forums.softwareag.com/techjforum/forums/list.page*.

Prerequisites

For detailed information on the supported operating systems, application servers, web containers, web browsers, and other prerequisites, see *System Requirements*.

Security

This section covers important security information.

- JDOM Vulnerability
- NEWSFEED Control Deprecated

JDOM Vulnerability

The version of JDOM included in Natural for Ajax 9.1.4 contains the following vulnerability:

An XXE issue in SAXBuilder in JDOM through 2.0.6 allows attackers to cause a denial of service via a crafted HTTP request.

https://nvd.nist.gov/vuln/detail/CVE-2021-33813

Natural for Ajax uses the vulnerable SAXBuilder class only for XML created internally in the Natural and/or Natural for Ajax products. It switches off Entity expansion in all places where possible. Consequentially, the vulnerability does not apply, except for one area that needs to be pointed out:

When a Natural screen is exchanged between the Natural Web I/O server and the Natural for Ajax java framework in the application server, the Natural for Ajax java framework will load the XML with Entity expansion switched on.

However, the loaded XML is created from within the Natural/NWO server internally - it is not an external XML file. The vulnerability is only exposed should it be possible to tamper this XML during the exchange between Natural and Natural for Ajax.

In local environments, i.e. when Natural and Natural for Ajax are running on the same machine, this is not the case. An example, in which the vulnerability would not be exposed, is when running NaturalONE with the local runtime and the local Tomcat server.

When running Natural and Natural for Ajax on different machines we highly recommend securing this Natural screen exchange by setting "Use SSL" in the session configuration. A secure connection is then established between Natural for Ajax and the Natural Web I/O Interface server that prevents attackers from exploiting this vulnerability.

NEWSFEED Control Deprecated

The NEWSFEED control is now deprecated. It requires *rome-0.9.jar*. The *rome-0.9.jar* is not packaged with Natural for Ajax anymore. The *rome-0.9.jar* uses JDOM, which in the current versions has the vulnerability as described in the previous section.

New Features in Version 9.1.4

This section describes new features and enhancements in Natural for Ajax which have been added with this release of Natural for Ajax.

- Edge Chromium Browser
- Bootstrap Icons Library
- New Responsive Controls: BMOBILE:COMBOFIX, BMOBILE:COMBODYN
- New Responsive Dropdown Controls
- Responsive Controls with new Properties straighttext
- Responsive Controls with new Properties titlestraighttext
- BMOBILE:SIMPLEGRID: Server-Side Scrolling and Sorting
- BMOBILE:FFIELD: new property withtogglepassword
- ITR with New Property inline

■ REPORT and REPORT2 Controls with New Property nameprop

Edge Chromium Browser

With this version of Natural for Ajax the Edge Chromium Browser is now supported.

Bootstrap Icons Library

The Bootstrap Icons Library is now part of the Natural for AJAX product. It can be used in responsive and non-responsive controls in different ways. See section *Working with Icons*.

New Responsive Controls: BMOBILE:COMBOFIX, BMOBILE:COMBODYN

The `BMOBILE:COMBOFIX` and `BMOBILE:COMBODYN` are light-weight selection controls.

For details, see section *Responsive Page Layout and Controls > Responsive Controls*

New Responsive Dropdown Controls

The controls `BMOBILE:DROPDOWN`, `BMOBILE:DROPDOWNLIST`, `BMOBILE:DROPDOWNHEADER`, `BMOBILE:DROPDOWNITEM`, `BMOBILE:DROPDOWNSEPARATOR` support various dropdown functionality such as dropdown menus and dropdown forms.

For details, see section *Responsive Page Layout and Controls > Responsive Controls*

Responsive Controls with new Properties straighttext

All responsive controls with a `name/nameprop` property now also support a `straighttext` property. Via this property, the name value can be rendered either as html or as straight text.

Responsive Controls with new Properties titlestraighttext

All responsive controls with a `title/titleprop` property now also support a `titlestraighttext` property. Via this property, the tooltips can be rendered either as html or as straight text.

BMOBILE:SIMPLEGRID: Server-Side Scrolling and Sorting

The responsive grid `BMOBILE:SIMPLEGRID` now supports Server-Side Scrolling and Sorting.

BMOBILE:FFIELD: new property withtogglepassword

For password fields you can now add an icon to toggle the password visibility.

ITR with New Property inline

ITR controls now support inline rendering via the new `inline` property. This improves the rendering when zooming pages in Google Chrome or Edge Chromium browsers. See section *Working with Containers > Positioning of Controls inside a Container > ITR in Google Chrome and Edge Chromium*.

REPORT and REPORT2 Controls with New Property nameprop

The REPORT and REPORT2 controls now also support to set the name dynamically at runtime via the property `nameprop`.

New Features in Version 9.1.3

This section describes new features and enhancements in Natural for Ajax which have been added with this release of Natural for Ajax.

- Responsive NatLogon and NatDisconnect Pages Supported
- Bootstrap 4 Supported in Responsive Pages
- Support for Natural-specific Properties like njx:natname in Responsive Controls
- PAGEBODY Container obsolete for Responsive Controls
- New Template for Responsive Pages with Sidebar
- Major Enhancements of Responsive Forms
- Enhanced Tooltip Support for Responsive Controls
- BMOBILE:COL: visisbleprop now supported
- Enhanced Testing Support for Responsive Controls
- New Responsive Containers: BMOBILE:SIDEBAR*, BMOBILE:HORIZONTALBAR, BMOBILE:CONTENT
- Help IDs supported in Responsive Input Controls
- Page Pop-Ups Fit to Parent
- FIELD Control: New Value in Property formautocomplete Supported
- FIELD Control With New properties onclickmethod and ondblclickmethod
- RPIECHART With New Property animateselection
- Several Responsive Modal Enhancements

- Natural Web I/O Pages Support Additional JavaScript file

Responsive NatLogon and NatDisconnect Pages Supported

Responsive and non-responsive NatLogon and NatDisconnect pages are now supported.

Bootstrap 4 Supported in Responsive Pages

Bootstrap 4 is now supported for responsive controls. Bootstrap 4 is the default. If you still need to use Bootstrap 3, you can use the attribute `uselatestbootstrap` in *cisconfig.xml* to run all pages with Bootstrap 3 or use the property `uselatestbootstrap` in the NATPAGE control to run a single page with Bootstrap 3

See *Ajax Configuration* for details.

Support for Natural-specific Properties like njx:natname in Responsive Controls

Most responsive controls now support Natural-specific properties like `njx:natname` in the same way as non responsive controls.

PAGEBODY Container obsolete for Responsive Controls

The `PAGEBODY` tag is now obsolete for responsive controls. The templates for responsive pages do not contain the `PAGEBODY` tag anymore. Responsive pages with `PAGEBODY` tags are still supported but contain obsolete HTML code.

New Template for Responsive Pages with Sidebar

The Layout Painter supports a new page template for development of responsive pages with sidebars. See also *Responsive Page Layout and Controls* for further details.

Major Enhancements of Responsive Forms

A more flexible and lightweight `BMOBILE:FORM` container is now supported. The `BMOBILE-FORMGROUP` containers now supports horizontal and vertical forms. For the usage in bar controls - like the `BMOBILE:HORIZONTALBAR` and the `BMOBILE:SIDEBAR` - a `BMOBILE:FORMINLINE` container is supported. A `BMOBILE:FTEXTOUT` control has been added to support plain read-only text in forms.

Enhanced Tooltip Support for Responsive Controls

Bootstrap 4 tooltip support is now used to render tooltips. The rendering can be customized via CSS style classes. All form controls now also support setting the tooltip text dynamically from within Natural. Use the property `titleprop` in the corresponding controls.

BMOBILE:COL: visisbleprop now supported

The `BMOBILE:COL` container now supports a `visibleprop` property.

Enhanced Testing Support for Responsive Controls

Most responsive containers and controls now support a `testtoolid` property.

New Responsive Containers: BMOBILE:SIDEBAR*, BMOBILE:HORIZONTALBAR, BMOBILE:CONTENT

The new responsive containers `BMOBILE:SIDEBAR*`, `BMOBILE:HORIZONTALBAR` and `BMOBILE:CONTENT` support frequently used patterns for modern responsive pages.

Additional controls like `BMOBILE:TOGGLER`, `BMOBILE:SIDEBARGROUP`, `BMOBILE:BARTEXT` support corresponding functionality for flexible rendering.

Help IDs supported in Responsive Input Controls

Responsive input controls like `BMOBILE:FFIELD` now support a `helpid` property in the same way as non-responsive controls.

Page Pop-Ups Fit to Parent

The file *cisconfig.xml* now supports the new settings `pagepopuponresize`, `pagepopuphorizontal` and `pagepopupvertical`. Use these settings to fit a page pop-up to its parent.

See *Ajax Configuration* for details.

FIELD Control: New Value in Property formautocomplete Supported

The `formautocomplete` property of the `FIELD` and `BMOBILE:FFIELD` controls now supports the value `new-password`. In the current versions of Chrome, this can be used to prevent Chrome from autofilling form fields.

FIELD Control With New properties onclickmethod and ondblclickmethod

Natural programs can now react to click and/or double click events. Refer to the description of the `FIELD` control properties for details.

RPIECHART With New Property animateselection

Use the new `RPIECHART` property `animateselection` if you want to render the selected slice with a bigger radius (= move out effect).

Several Responsive Modal Enhancements

A new `BMOBILE:HELPMODAL` dialog shows help texts for specified help IDs. All responsive modal dialogs - `BMOBILE:MODAL`, `BMOBILE:INTMODAL`, `BMOBILE:HELPMODAL` - are now draggable and resizable.

For `BMOBILE:MODAL`, the page URL can now be specified dynamically at runtime.

Natural Web I/O Pages Support Additional JavaScript file

You can add own JavaScript to Natural Web I/O pages in a file *usernatunicscript.js*. See section *Natural Web I/O Style Sheets* for details.

New Features in Version 9.1.2

This section describes new features and enhancements in Natural for Ajax which have been added with this release of Natural for Ajax.

- New Ajax Configuration Parameter urlopenstreetmapgeocoder
- AUTOCOMPLETE supports limiting the results shown in a drop-down box
- DATEINPUT2 with new Properties stylevariant and displayprop
- New Control REPORT2
- New Ajax Configuration Parameter maxserverlogage
- Support for editable columns in BMOBILE:SIMPLEGRID
- ROWTABLEAREA2 supports Export to Clipboard and File
- ROWTABLEAREA2 supports Icon Bars
- Layout Generation Enhancements
- Switch off Server Logging
- New Responsive Control BMOBILE:ICONCOL
- Responsive Modal Controls

- Icon Support in Responsive Controls

New Ajax Configuration Parameter urlopenstreetmapgeocoder

You can now adapt the third party geocoder URL in the Ajax configuration file if needed. See *Ajax Configuration* for details.

AUTOCOMPLETE supports limiting the results shown in a drop-down box

The AUTOCOMPLETE control now enables you to limit the results shown in the drop-down box. The AUTOCOMPLETE control now also has a new property `maxresults`. The FIELD control now has a new property `autocompleteresultsref`.

DATEINPUT2 with new Properties stylevariant and displayprop

DATEINPUT2 now supports the properties `stylevariant` and `displayprop` in the same way as the FIELD control.

New Control REPORT2

The REPORT2 control supports PDF report generation in responsive and non-responsive design. In difference to the REPORT control, it does not require to additionally render the data in the HTML pages.

New Ajax Configuration Parameter maxserverlogage

Automatic cleanup of *ServerLog*.log* files is now supported. You can configure the maximum storage age of *ServerLog*.log* files in days. See *Ajax Configuration* for details.

Support for editable columns in BMOBILE:SIMPLEGRID

BMOBILE:SIMPLEGRID now fully supports editable columns also on small devices.

ROWTABLEAREA2 supports Export to Clipboard and File

In ROWTABLEAREA2, all or just the selected items can now be copied to the clipboard or exported to a file. See *Export to Clipboard and File* in the description of the ROWTABLEAREA2 control grid for further details.

ROWTABLEAREA2 supports Icon Bars

ROWTABLEAREA2 supports the new controls ICONBAR, ICONBARLINE, TOCLIPBOARDICON, TOFILEICON and BLOCKSCROLLINGBAR. See *Icon Bars* in the description of the ROWTABLEAREA2 control grid for further details.

Layout Generation Enhancements

Performance of Layout generation has been improved. Also the analysis of generation errors has been simplified. See *Generating HTML Pages Using the Command Line* and the new attribute `htmlgeneratorlog` in the *Ajax Configuration* section.

Switch off Server Logging

You can now switch off writing log information to the server log. See `loglevel` in the *Ajax Configuration* section.

New Responsive Control BMOBILE:ICONCOL

BMOBILE:SIMPLEGRID now supports icon columns. See BMOBILE:ICONCOL for details.

Responsive Modal Controls

A set of responsive modal controls has been added:

- BMOBILE:INTMODAL,
- BMOBILE:INTMODALHEADER,
- BMOBILE:INTMODALBODY,
- BMOBILE:INTMODALFOOTER.

Icon Support in Responsive Controls

Many responsive controls now support icons as values for `name/nameprop` or as value for other text based properties. For examples see the Natural for Ajax Demos.

New Features in Version 9.1

This section describes new features and enhancements in Natural for Ajax which have been added with this release of Natural for Ajax.

- Responsive Tab Controls
- BMOBILE:ALERT with new Property duration
- BMOBILE:PANEL with new Property foldedprop
- BMOBILE:FORMAREA with new Properties legendprop, visibleprop and invisiblemode
- BMOBILE:FORMAREA with new Properties textid and nameprop
- BMOBILE:FORMGROUP with new Properties visibleprop and invisiblemode
- BMOBILE:CHECKBOX with new properties
- New Responsive Control BMOBILE:RADIOBUTTON
- New Responsive MEDIA Controls
- New Responsive Side Navigation Controls
- BMOBILE:NAVBAR with new Property brandstraighttext
- BMOBILE:SIMPLEGRID with Editable Columns
- DATEINPUT2: Custom Holiday Rendering
- DATEINPUT2 with new Property popuponF4F7
- DATEINPUT and DATEINPUT2 support Property testtoolid
- NaturalAjax Samples
- PDF Reports - Upgrade to Version FOP 2.2
- CSVCOLUMN now supports Properties njx:natname and njx:natstringtype
- Responsive Style Guide
- Standalone SWT Client with Java Web Start
- Password Length 128

Responsive Tab Controls

A set of responsive tab controls has been added:

- BMOBILE:TABPANE,

- BMOBILE:VERTICALTABPANE,

- BMOBILE:TAB,

- BMOBILE:TABSUBPAGES,

- BMOBILE:VERTICALTABSUBPAGES,

- BMOBILE:STRAIGHTTAB,

- BMOBILE:PAGER.

BMOBILE:ALERT with new Property duration

For the BMOBILE:ALERT control, you can now define the duration after which the alert box will disappear.

BMOBILE:PANEL with new Property foldedprop

For the BMOBILE:PANEL container, you can now control the folded state dynamically from your Natural program.

BMOBILE:FORMAREA with new Properties legendprop, visibleprop and invisiblemode

For the BMOBILE:FORMAREA container, you can now control the visible state and the name of the legend dynamically from your Natural program.

BMOBILE:FORMAREA with new Properties textid and nameprop

For the BMOBILE:FORMAREA container, you can now dynamically define the name from your Natural program and from multilanguage files.

BMOBILE:FORMGROUP with new Properties visibleprop and invisiblemode

For the BMOBILE:FORMGROUP container, you can now control the visible state and the name of the legend dynamically from your Natural program.

BMOBILE:CHECKBOX with new properties

Some advanced properties have been added to the BMOBILE:CHECKBOX control.

New Responsive Control BMOBILE:RADIOBUTTON

A responsive radio button control BMOBILE:RADIOBUTTON is now available.

New Responsive MEDIA Controls

The responsive controls BMOBILE:VIDEO, BMOBILE:MEDIAUPLOAD and corresponding sub-controls have been added to integrate and upload media objects.

New Responsive Side Navigation Controls

The controls BMOBILE:SIDENAV, BMOBILE:NAVTREE and BMOBILE:SIDENAVCONTENT support the implementation of responsive side navigation using a responsive navigation tree.

BMOBILE:NAVBAR with new Property brandstraighttext

For the BMOBILE:NAVBAR control, you can now set text and images as value of the `brandprop` property. Via the new property `brandstraighttext` you can distinguish between the representation.

BMOBILE:SIMPLEGRID with Editable Columns

The BMOBILE:SIMPLEGRID control now supports editable columns. See the corresponding sample in the Natural Ajax Demos for details.

DATEINPUT2: Custom Holiday Rendering

Support to render custom holidays in different style has been added to the DATEINPUT2 control. For details, please refer to the new properties `HOLIDAYS*` and the corresponding sample in the Natural Ajax Demos.

DATEINPUT2 with new Property popuponF4F7

For the DATEINPUT2 control, you can now customize whether or not the calendar should open on using the F4 or F7 key.

DATEINPUT and DATEINPUT2 support Property testtoolid

The DATEINPUT and DATEINPUT2 controls now support the property `testtoolid`.

NaturalAjax Samples

The samples now contain an additional user interface component with performance hints for non-responsive layouts and containers.

PDF Reports - Upgrade to Version FOP 2.2

FOP 2.2. is now used for the PDF report generation in Natural for Ajax. This version requires more Java memory. When using this feature you might have to increase the configuration settings for Java memory in your web application server.

For details concerning Java memory settings, please refer to the documentation of your web application server.

CSVCOLUMN now supports Properties njx:natname and njx:natstringtype

The CVSCOLUMN control now supports the properties `njx:natname` and `njx:natstringtype`.

Responsive Style Guide

For responsive pages a style guide is now available. You find the latest version in the NaturalAjaxDemos NaturalONE project.

Standalone SWT Client with Java Web Start

The standalone SWT Client, which is based on Java Web Start, is not part of the delivery anymore. Until October 2019 you can request the client in case you require it.

Password Length 128

Natural for Ajax now supports a password length of 128 for Natural servers which also support a password length of 128.