

TIBCO® General Interface - Enterprise Edition

Release Notes

*Software Release 3.9.2
March 2014*

Important Information

SOME TIBCO SOFTWARE EMBEDS OR BUNDLES OTHER TIBCO SOFTWARE. USE OF SUCH EMBEDDED OR BUNDLED TIBCO SOFTWARE IS SOLELY TO ENABLE THE FUNCTIONALITY (OR PROVIDE LIMITED ADD-ON FUNCTIONALITY) OF THE LICENSED TIBCO SOFTWARE. THE EMBEDDED OR BUNDLED SOFTWARE IS NOT LICENSED TO BE USED OR ACCESSED BY ANY OTHER TIBCO SOFTWARE OR FOR ANY OTHER PURPOSE.

USE OF TIBCO SOFTWARE AND THIS DOCUMENT IS SUBJECT TO THE TERMS AND CONDITIONS OF A LICENSE AGREEMENT FOUND IN EITHER A SEPARATELY EXECUTED SOFTWARE LICENSE AGREEMENT, OR, IF THERE IS NO SUCH SEPARATE AGREEMENT, THE CLICKWRAP END USER LICENSE AGREEMENT WHICH IS DISPLAYED DURING DOWNLOAD OR INSTALLATION OF THE SOFTWARE (AND WHICH IS DUPLICATED IN TIBCO GENERAL INTERFACE INSTALLATION) OR IF THERE IS NO SUCH SOFTWARE LICENSE AGREEMENT OR CLICKWRAP END USER LICENSE AGREEMENT, THE LICENSE(S) LOCATED IN THE "LICENSE" FILE(S) OF THE SOFTWARE. USE OF THIS DOCUMENT IS SUBJECT TO THOSE TERMS AND CONDITIONS, AND YOUR USE HEREOF SHALL CONSTITUTE ACCEPTANCE OF AND AN AGREEMENT TO BE BOUND BY THE SAME.

This document contains confidential information that is subject to U.S. and international copyright laws and treaties. No part of this document may be reproduced in any form without the written authorization of TIBCO Software Inc.

TIB, TIBCO, TIBCO Adapter, Predictive Business, Information Bus, The Power of Now, TIBCO General Interface, TIBCO General Interface Framework, TIBCO General Interface Builder, and TIBCO General Interface Test Automation Kit are either registered trademarks or trademarks of TIBCO Software Inc. in the United States and/or other countries.

EJB, Java EE, J2EE, and all Java-based trademarks and logos are trademarks or registered trademarks of Sun Microsystems, Inc. in the U.S. and other countries.

All other product and company names and marks mentioned in this document are the property of their respective owners and are mentioned for identification purposes only.

THIS SOFTWARE MAY BE AVAILABLE ON MULTIPLE OPERATING SYSTEMS. HOWEVER, NOT ALL OPERATING SYSTEM PLATFORMS FOR A SPECIFIC SOFTWARE VERSION ARE RELEASED AT THE SAME TIME. SEE THE README.TXT FILE FOR THE AVAILABILITY OF THIS SOFTWARE VERSION ON A SPECIFIC OPERATING SYSTEM PLATFORM.

THIS DOCUMENT IS PROVIDED "AS IS" WITHOUT WARRANTY OF ANY KIND, EITHER EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, OR NON-INFRINGEMENT.

THIS DOCUMENT COULD INCLUDE TECHNICAL INACCURACIES OR TYPOGRAPHICAL ERRORS. CHANGES ARE PERIODICALLY ADDED TO THE INFORMATION HEREIN; THESE CHANGES WILL BE INCORPORATED IN NEW EDITIONS OF THIS DOCUMENT. TIBCO SOFTWARE INC. MAY MAKE IMPROVEMENTS AND/OR CHANGES IN THE PRODUCT(S) AND/OR THE PROGRAM(S) DESCRIBED IN THIS DOCUMENT AT ANY TIME.

THE CONTENTS OF THIS DOCUMENT MAY BE MODIFIED AND/OR QUALIFIED, DIRECTLY OR INDIRECTLY, BY OTHER DOCUMENTATION WHICH ACCOMPANIES THIS SOFTWARE, INCLUDING BUT NOT LIMITED TO ANY RELEASE NOTES AND "READ ME" FILES.

Copyright © 1999-2014 TIBCO Software Inc. ALL RIGHTS RESERVED.

TIBCO Software Inc. Confidential Information

3/25/14

Contents

| | |
|--------------------------------|----------|
| Release Notes | 1 |
| New Features | 2 |
| Release 3.9.2 | 2 |
| Release 3.9.1 | 2 |
| Release 3.9 | 2 |
| Release 3.8 | 4 |
| Release 3.7.1 | 6 |
| Release 3.7.0 | 6 |
| Release 3.6.2 | 7 |
| Release 3.6.1 | 7 |
| Release 3.6 | 7 |
| Release 3.5.1 | 9 |
| Release 3.5 | 9 |
| Release 3.4.1 | 14 |
| Release 3.4 | 15 |
| Release 3.3 | 21 |
| Release 3.2 | 22 |
| Release 3.1.1 | 32 |
| Release 3.1 | 33 |
| Changes in Functionality | 40 |
| Release 3.9.1 | 40 |
| Release 3.9 | 40 |
| Release 3.8 | 40 |
| Release 3.7.1 | 40 |
| Release 3.7.0 | 40 |
| Release 3.6.2 | 41 |
| Release 3.6.1 | 41 |
| Release 3.6 | 41 |
| Release 3.5.1 | 42 |
| Release 3.5 | 42 |
| Release 3.4.1 | 42 |
| Release 3.4 | 42 |
| Release 3.3 | 42 |
| Release 3.2 | 42 |
| Release 3.1.1 | 43 |
| Release 3.1 | 44 |
| Deprecated Features | 45 |
| Release 3.9.2 | 45 |

| | |
|---|-----|
| Release 3.9.1 | 45 |
| Release 3.9 | 45 |
| Release 3.8 | 45 |
| Release 3.7.1 | 46 |
| Release 3.7.0 | 46 |
| Release 3.6.2 | 46 |
| Release 3.6.1 | 46 |
| Release 3.6 | 46 |
| Release 3.5.1 | 46 |
| Release 3.5 | 46 |
| Release 3.4.1 | 47 |
| Release 3.4 | 47 |
| Release 3.3 | 48 |
| Release 3.2 | 48 |
| Release 3.1.1 | 49 |
| Release 3.1 | 49 |
| Migration and Compatibility | 51 |
| Closed Issues | 52 |
| Asynchronous Modular Platform | 52 |
| Charting | 53 |
| Data Mapping Tools | 55 |
| Deployment | 60 |
| Documentation | 61 |
| Dojo Integration | 63 |
| Firefox | 63 |
| Internet Explorer | 67 |
| General Interface Builder | 68 |
| General Interface Framework | 78 |
| GIPP/GITAK | 87 |
| GUI Components | 87 |
| Installation and Build | 107 |
| L10N | 107 |
| Samples | 108 |
| Known Issues | 109 |
| Browser Limitations and the Margin Property | 109 |
| Browsers - General | 109 |
| Data Mapping Tools | 110 |
| Documentation | 110 |
| Dojo Integration | 111 |
| Firefox | 111 |
| General Interface Builder | 116 |
| General Interface Framework | 119 |
| GUI Components | 119 |
| Safari and Chrome | 120 |

Release Notes

Check the TIBCO Developer Network web site at <http://www.generalinterface.org> for product information that was not available at release time.

Topics

- *New Features, page 2*
- *Changes in Functionality, page 40*
- *Deprecated Features, page 45*
- *Migration and Compatibility, page 51*
- *Closed Issues, page 52*
- *Known Issues, page 109*

New Features

This section lists features added since the last major (3.0) release of this product.

Release 3.9.2

New browser support:

- Internet Explorer 10 and 11 support added.
- GI Framework (runtime only) supports Safari 6 on Mac OSX.
- GI Framework (runtime only) supports Firefox 26+latest and Chrome 31+latest.

Release 3.9.1

This release introduces support for the following

- Internet Explorer 9
- Firefox 4
- Chrome 10 and 11

Release 3.9

This release introduces these new features:

- Redesign of the JavaScript Test Utility as a JavaScript console similar to Safari. (GI-421)
- Online prototype library. (GI-683) The General Interface Builder Prototype Library allows sharing of components across projects and among users, allowing you to do the following:
 - Save a copy of any component to your user component library. (GI-685)
 - Organize the components that you create in your own user component library. (GI-684)
 - Upload components to the online prototype library for subsequent download and use by other developers.
 - Drag and drop components that were previously uploaded by other developers into your projects. (GI-728)

- Support for HTML forms in GI DOM (GI-727). This includes general forms enhancements. Forms are now apparent in the GI DOM, similar to the way that they appear in the HTML DOM. Additional classes have been added to support this, including the following:

- `NativeForm` - extends `Block`, renders as `<form>`
- `Hidden` - for hidden fields
- `FileUpload` - for file upload fields
- `NativeButton` - allows easy submit/reset functionality

This functionality also leverages the previously created classes `NativeSelect`, `TextBox`, and `Label`, and the prototypes `fieldset` and `legend`.

- Exposure of DOM nodes in the active component editor as variables in the script evaluator (GI-705)
- Flexible per-instance CDF schema. This feature addresses the issues that arise with standard data schema due to the fact that few services expose data as CDF unless they are designed specifically for General Interface. (GI-702)
- `Model` support:
 - Support for types that extend `Model` but not `Painted`. (GI-701)
 - Ability of subclasses of `Model` to control their own serialization and deserialization. (GI-700)
- Support for labels to be associated with input controls by allowing a click on a label to move focus to the control, as opposed to losing focus completely. (GI-693)
- Prototypes for HTML elements `label`, `fieldset`, `legend`, `h1-6` to help with accessible applications by taking advantage of native HTML elements. (GI-691)
- Support for a GUI class that uses a native HTML select object to render a select or multi-select control. (GI-690)
- Ability to open the General Interface launch page, runtime, and applications from different domains. (GI-681)

Release 3.8

This release introduces these new features:

- **Test Recorder.** The General Interface Test Recorder is a utility included with General Interface Builder that records user interactions with an application as a replayable test case. The recordings allow you to generate General Interface Performance Profiler (GIPP) or General Interface Test Automation Kit (GITAK) test cases simply by interacting with your application instead of coding test cases by hand.

By simplifying test case development, the Test Recorder dramatically reduces the barriers to creating comprehensive test suites for your General Interface applications.

- **Jabber Chat.** General Interface Builder includes a Jabber client, allowing you to participate in chats from within Builder. The client is implemented on top of the Dojo XMPP library. It works with Jabber servers that support the Jabber HTTP Bind protocol, such as OpenFire.
- **Dojo Integration and Dojo Widgets (Dijits).** General Interface 3.8 introduces first-rate integration between General Interface and the Dojo Toolkit. Builder includes prototypes for a variety of Dojo widgets. Dojo widgets operate in the same way as other General Interface widgets and can be dragged and dropped onto the Builder canvas during application development. You can also configure Dojo widgets using the Properties Editor and Events Editor.
- **Support for Firefox 3.5, Chrome 2.0, and Safari 4.0.**

API Changes

The following new method is included in Release 3.8:

```
jsx3.app.Model selectDescendants(strExpr : String, bSingle :
boolean)
```

This method selects objects from the DOM using a CSS3-like selection syntax. This method considers the DOM tree whose root is this object. The following constructs are supported:

- `jsx3_gui_ClassName` — Matches objects by their exact class. Replace "." with "_" in the selector.
- `*` — Matches any object
- `#id` — Matches objects whose name equals id
- `.class-name` — Matches objects for which `getClassName()` is defined and returns a string that contains the token class-name
- `:first` and `:last` — Matches objects that are their parents' first and last children
- `:nth(n)` and `nth-child(n)` — Matches objects whose child index is equal to n
- `:instanceof(ClassName)` — Matches objects that are instances of the class or interface `ClassName`
- `[prop="value"]` and `[prop*="value"]` — Matches objects whose value for field `prop` equals value
- `or`, with `"*"`, contains value. The quotes around value are optional.
- `[getter()="value"]` and `[getter()*="value"]` — Matches objects whose return value for method `getter` equals value
- `AB` — Matches objects that match both A and B
- `A B` — Matches descendants of objects matching A that match B
- `A > B` — Matches immediate children of objects matching A that match B

Release 3.7.1

This release introduces support for the following

- Internet Explorer 8 and Safari 3.2.2.
- Double-click on matrix column dividers to auto-size column width.
- International locales.
- Firebug console log handler.
- Memory statistics in benchmarking code.

Release 3.7.0

This release introduces these new features:

- Asynchronous Modular Platform (AMP), an Eclipse-inspired plug-in architecture for building advanced modular and high-performing enterprise AJAX applications.
 - Manage component files so they do not burden the overall code base.
 - Allow decomposition of applications into constituent parts.
 - Make working with asynchronously loaded resources as easy as working with synchronously loaded ones.
 - Enforce asynchronous behavior by providing only asynchronous APIs.
 - Provide declarative definitions of component publish-subscribe interface.
 - Enable extensible General Interface applications based on a modular framework.
 - Reduce complexity in designing large and scalable applications.
 - Generate testable applications with modular framework, generous log coverage, and benchmark statistics.
- General Interface Builder IDE based on AMP.
 - New modular and fully asynchronous architecture.
 - Extensible IDE with build-in extension points.
 - Project creation wizard.
 - Re-usable AMP modules.
 - Ability to run on browser platforms that do not support native file access.

- General Interface Builder syntax highlighting script editor.
 - XML, XSL and JavaScript resource editor now provides language based syntax highlighting.
- Locale format input control.
 - Provide subclass of `jsx3.gui.TextBox` with `NumberFormat` property that formats values and parses input according to the number format.
- Support for the Google Chrome 1.0 browser.

Release 3.6.2

This release includes fixes to known issues. See Closed Issues on page 52.

Release 3.6.1

This release adds support for Safari 3.1.2+ and Firefox 3.

Release 3.6

This release introduces these new features:

- General Interface Template Language on page 7
- CDF Form Mapping on page 8
- JSON mapping on page 9

General Interface Template Language

Pre-built General Interface components enable quick, easy development of web applications. However, developers who need controls that aren't available in the pre-defined component library have faced a development challenge because of the complex interactions required by the General Interface run-time engine.

With Release 3.6, General Interface introduces the template language feature to address the difficulty of creating re-usable custom components.

The General Interface template language simplifies the creation of custom GUI components by using a technique that is already familiar to web developers—it builds on your knowledge of HTML and JavaScript.

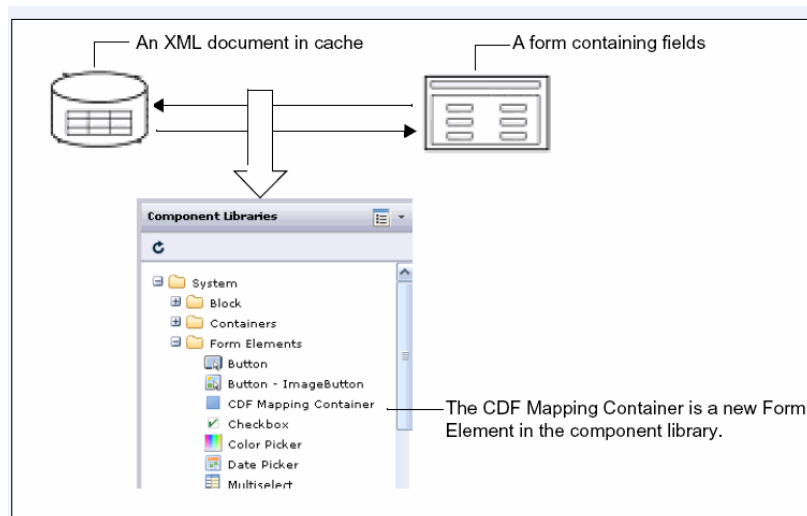
Using the General Interface template language, you can convert a single snippet of HTML—a widget—into a re-usable component.

This means that if you've developed user interface components that combine HTML and JavaScript code, you can convert the functional user interface HTML elements into a General Interface template for custom usage.

CDF Form Mapping

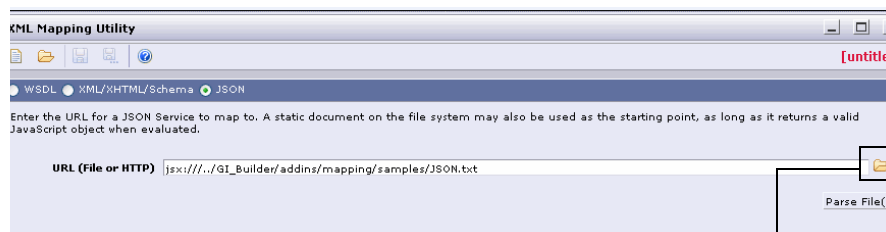
TIBCO General Interface 3.6 introduces a new CDF form mapping class, `jsx3.gui.CDF`. This new class enables developers to map a CDF document in the local cache to on-screen form fields.

By combining the features of `jsx3.gui.Block` and `jsx3.xml.Cacheable`, this new class enables developers to read and write cache data without the need to author additional JavaScript code. In other words, this new class is a visual container that knows how to bind the form fields it contains to values in a CDF document.



JSON Mapping

The General Interface Mapping utility now supports mapping to JSON-based services. Similar to mapping to WSDL and XML, the new JSON mapping feature provides a visual tree to which the developer can assign mapping rules. JSONP is supported by default, which gets around cross-domain security problems when accessing data from other sites.



Browse your local workspace for a local copy of the JSON file.

Release 3.5.1

This release includes fixes to known issues. See Closed Issues on page 52.

Release 3.5

This release introduces these performance improvements and new features:

- Faster performance in Internet Explorer 6
- New `jsx3.gui.Table` class and prototype
- New asynchronous loading features
- More useful Vector APIs
- Support for context-sensitive help in TIBCO General Interface Framework and TIBCO General Interface™ Builder
- API Enhancements

Read these topics to learn more about the new features and enhancements in this release:

- Performance Enhancements on page 10
- Deployment on page 11
- GUI Components on page 12
- XML Mapping Utility on page 12

- TIBCO General Interface Builder on page 13
- Documentation and Help on page 13
- API Changes on page 14

Performance Enhancements

This release includes these performance enhancements:

- Faster overall performance, particularly in Internet Explorer 6
- New properties for asynchronous loading of XML in GUI controls that implement Cacheable: `xmlAsync`, `xmlBind`, and `xslAsync`. For more information, see *TIBCO General Interface API Reference*, *TIBCO General Interface GUI Property Reference*, and “Loading Components and XML URLs” in *TIBCO General Interface Component Guide*.
- New `loadType` property for asynchronous deserializing and painting of GUI components. For more information, see “Loading Components and XML Data Sources” in *TIBCO General Interface Component Guide*.
- Options for reducing the size of the General Interface payload by omitting `messages.xml` and `locales.xml` from system initialization. Use the `jsx_no_messages` and `jsx_no_locale` deployment parameters to configure the runtime of your deployed applications. For more information, see “Deployment Parameters” in *TIBCO General Interface Developer Guide*.
- General Interface Builder displays these statistics for all open components in the bottom left of the work area status bar: component file size, component object count, time to unmarshal (deserialize), time to paint, and HTML size.
- A custom General Interface - Professional Edition debug build that can be used during development to detect and report such performance issues as multiple repaints, multiple box recalculations, times to perform various operations, and so on. Visit TIBCO Developer Network at <http://www.generalinterface.org> to download the debug build.

Benchmarking information is reported through the General Interface logging system. Run you application in General Interface Builder or deploy your application with an active application monitor. These operations are reported:

- Loading any file with the `jsx3.xml.Document` class
- Requesting any resource with the `jsx3.net.Request` class
- Loading any JavaScript file asynchronously
- Loading any JavaScript file synchronously with `jsx3.require()`
- Deserializing any component file loaded with `Model.load()` and its variants

- Deserializing any asynchronously loaded component file referenced from another component file
- The initial paint of a loaded component file
- Paints caused by calls to `Painted.repaint()`
- Paints caused by calls to `Paint.paintChild()`
- Parsing of any dynamic properties file
- Box recalculations caused by `setLeft/Top/Height/Width()`
- XSL transformations in `Template.transform()`

Additionally, these warnings are issued:

- Multiple calls to `repaint()` on a single General Interface DOM node in a single thread
- Multiple box recalculations on a single General Interface DOM node in a single thread

Deployment

This release includes these deployment enhancements:

- New `jsx_browsers` deployment parameter that can be used in the script tag of the launch page to configure the runtime of your deployed applications to override the default parameters for each browser. For more information, see “Deployment Parameters” in *TIBCO General Interface Developer Guide*.
- To prevent General Interface progress bars from overlapping when deploying multiple applications in the same page, add `position:relative` in the `<div>` tag of both deployed applications. For example,

```
<div style="width:100%;height:400px;position:relative;">
<script type="text/javascript" src="/3.5/GI/JSX/js/JSX30.js"
  jsxapppath="/3.5/GIApps/JSXAPPS/chart/">
</script>
</div>
```

```
<div style="width:100%;height:300px;position:relative;">
<script type="text/javascript" src="/3.5/GI/JSX/js/JSX30.js"
  jsxapppath="/3.5/GIApps/JSXAPPS/WSDL_Mapping_1/">
</script>
</div>
```

GUI Components

This release includes these enhancements to GUI components:

- A new `jsx3.gui.Table` class and Table prototype – a lightweight table component for fast, read-only rendering of large data sets (Component Libraries palette > Miscellaneous). For more information, see *TIBCO General Interface Component Guide*.
- Matrix now supports range selection when using the paginated paging model
- A new Multiselect prototype – a Matrix that allows one or more items in a list to be selected. To define the list of items, associate it with an XML string, file, or cache document (Component Libraries palette > Form Elements)
- Charting

New vector class, `jsx3.vector.Block`, which extends `jsx3.gui.Block` and defines a base class for GUI controls that implement both the cross-platform box profile painting introduced in 3.2 and the cross-platform (VML/SVG) vector painting, also introduced in 3.2. See the `jsx3.vector` package in *TIBCO General Interface API Reference*.

- Support for context-sensitive help in General Interface Framework and General Interface Builder. For more information, see “Implementing Context-Sensitive Help” in *TIBCO General Interface Developer Guide* and Documentation and Help on page 13

XML Mapping Utility

The XML Mapping Utility has these new features:

- Ability to clone a mapping rule. Right-click a rule in the Rules Tree panel and choose Clone from the context menu.
- Improvements to the XML Mapping Utility XPath

The XPath statement has been improved and now references a `targetNamespace` to identify a Schema, not its ordinal position. This makes the Reparse feature for the XML Mapping Utility more useful, because a change to the WSDL is less likely to corrupt the bindings.

- The XML Mapping Utility now supports recursive rules, where one rule that maps to a CDF record can point to another rule that maps to a CDF record and hand off message processing. The `jsx3.net.Service.compile()` method also supports recursion.

Previous versions of the XML Mapping Utility did not support hierarchical, recursive structures when creating a rules file. This meant that converting deeply nested XML documents that contained repeating structures resulted in

very large rules files or rules files that were simply too difficult to create and manage.

To point one rule to another rule, enter the jsxid (Rule ID) of the rule that you wish to call in the Path/Value field of the Mapping table in the XML Mapping Utility. To find the jsxid (Rule ID), select the rule in the Rules Tree panel and click the Rule Node Profile radio button.

TIBCO General Interface Builder

This release includes these enhancements to General Interface Builder:

- Automatic version check in General Interface Builder shows when new versions of TIBCO General Interface are available. To manually check for updates, choose **Help > Check for Updates**.
- Links to TIBCO Developer Network and TIBCO General Interface Open Source Project (Help menu)
- Download link to TIBCO General Interface Test Automation Kit, which can be used to test General Interface applications (Tools menu)
- Additional documentation and help. See Documentation and Help on page 13

Documentation and Help

This release includes these enhancements to documentation and access to help:

- A new Welcome screen in General Interface Builder provides easy access to projects and links to TIBCO Developer Network, General Interface Open Source Project, and community forums. The Welcome screen loads at General Interface Builder startup and is also available from the Help menu.
- Context-sensitive help in General Interface Builder links directly to HTML documentation. Move focus to an area of the IDE, such as a dialog, editor, or palette, and press **Alt+F1** or click the Help button (?), if available.

For more information, see “TIBCO General Interface Documentation” in *TIBCO General Interface Developer Guide*.

- Compiled documentation for properties, events, and XSL parameters:
 - *TIBCO General Interface GUI Property Reference* (Help > API Documentation > GUI Property Reference)
 - *TIBCO General Interface GUI Event Reference* (Help > API Documentation > GUI Event Reference)
 - *TIBCO General Interface XSL Parameter Reference* (Help > API Documentation > XSL Parameter Reference)

API Changes

New APIs in this release include:

- `jsx3.app.Cache.ADD`
- `jsx3.app.Cache.ASYNC_TIMEOUT`
- `jsx3.app.Cache.CHANGE`
- `jsx3.app.Cache.getOrOpenAsync`
- `jsx3.app.Cache.REMOVE`
- `jsx3.app.Cache.XSDNS`
- `jsx3.app.Model.getHelpId`
- `jsx3.app.Model.getLoadType`
- `jsx3.app.Model.LT_SHOW_DESER`
- `jsx3.app.Model.LT_SHOW_PAINT`
- `jsx3.app.Model.LT_SLEEP_DESER`
- `jsx3.app.Model.LT_SLEEP_PAINT`
- `jsx3.app.Model.LT_SLEEP_PD`
- `jsx3.app.Model.onChangeServer`
- `jsx3.app.Model.setHelpId`
- `jsx3.app.Model.setLoadType`
- `jsx3.app.Server.invokeHelp`
- `jsx3.app.Server.HELP`
- `jsx2.gui.Table`
- `jsx3.lang.Class.addMethodMixin`
- `jsx3.lang.Object.jsxmix`
- `jsx3.xml.Cacheable.getXmlAsync`
- `jsx3.xml.Cacheable.getXmlBind`
- `jsx3.xml.Cacheable.onXmlBinding`
- `jsx3.xml.Cacheable.setXmlAsync`
- `jsx3.xml.Cacheable.setXmlBind`

For more information, see *TIBCO General Interface API Reference*.

For deprecated APIs in 3.5, see *Deprecated APIs* on page 49.

Release 3.4.1

This release includes fixes to known issues. See *Closed Issues* on page 52.

Release 3.4

This release includes several performance improvements and many productivity enhancements including:

- Faster startup load performance
- Support for one-way WSDL operations
- Multi-selection of components in the Component Hierarchy palette (drag-and-drop and multiple property editing)
- Optional workspace path for local HTTP server
- New IFrame component
- GUI component enhancements
- API Enhancements
- Localization enhancements

Read these topics to learn more about the new features and enhancements in the release:

- Performance Enhancements on page 10
- XML Mapping Utility on page 12
- TIBCO General Interface Builder on page 13
- API Changes on page 14
- GUI Components on page 19
- Internationalization and Localization on page 20
- Samples on page 20

Performance Enhancements

Performance enhancements include:

- The General Interface Load Performance Optimization script, `util/gi-merge.sh`, allows you to create custom builds for your deployed applications that are optimized for load performance. See “Optimizing Load Performance” in the *TIBCO General Interface Developer Guide*.
- More efficient loading of the General Interface Framework due to maximized asynchronous parallel loading in the system bootstrapper.
- Optimizations to various APIs including deserialization of components, paint, and resize of GUI controls.

XML Mapping Utility

The XML Mapping Utility has these new features and improvements in 3.4:

- Support for one-way (request, no response) WSDL operations.
- The menu command for opening the XML Mapping Utility has changed to Tools > XML Mapping Utility.
- Ability to edit the SOAP Use (encoded or literal) and SOAP Encoding (<http://schemas.xmlsoap.org/soap/encoding/>) fields in the Rule Profile panel of the XML Mapping Utility. To edit these fields, select an output or input rule in the XML Mapping Utility and select the Rule Node Profile radio button. Previously, whatever encoding was stated in the WSDL could only be changed by hand-editing the CXF.

TIBCO General Interface Builder

General Interface Builder has these new features and improvements in 3.4:

- Ability to abort loading of the previously open editors when starting General Interface Builder. Press the **Cancel** button in the Opening Project dialog to stop loading any open editors.
- The Properties Editor palette now supports typing a dynamic property key (ID) in a Value cell, as well as selecting dynamic properties from the context menu. Dynamic properties in resource bundle files must be typed in the Value cell, because they don't display on the context menu.
- Multiple components can be selected in the Component Hierarchy palette. This new feature provides these enhancements:
 - Support for drag-and-drop of multiple selections in the Component Hierarchy palette.

- Allow for drop-in-place adding and rearranging of components in the Component Hierarchy palette. Children are added where dropped, not below their peers.
- Ability to drag and move groups of absolutely positioned components in the work area.
- Ability to clone multiple components.
- Context menu operates on multiple selections in the Component Hierarchy palette.
- When multiple components are selected in the Component Hierarchy palette, other General Interface Builder palettes display this behavior:
 - Properties Editor palette displays properties that are common to all selected components, allowing you to modify these properties in a single step.
 - Events Editor palette is active if all selected nodes are of the same class, allowing you to set events for multiple components.
 - Attributes Editor palette displays attributes common to all selected components, allowing you to modify attributes in a single step.
 - XSL Parameters palette displays parameters common to all selected components if they are instances of `Cacheable`. This feature allows you to modify these parameters in a single step. The Name combo box is pre-filled only if all selected components are of the same class.
 - All palettes display the text, `[multiple values]`, if the values for the selected components are different.
- Ability to set the workspace path when running the project from a local HTTP server (Project > Run Project From HTTP). This is useful if the relative path to your workspace isn't the same on the HTTP server as on disk. To set the workspace path, choose **Tools > IDE Settings > Paths** and enter the path in the WS Path field.
- A new Properties Bundle editor for authoring single-file formatted, properties bundle files has been added for localization of strings. See Internationalization and Localization on page 20.

API Changes

The new API features and improvements in 3.4 include:

Classes

- `jsx3.app.PropsBundle` class supports localized properties. See Internationalization and Localization on page 20.
- `jsx3.xml.Template` class replaces the deprecated `jsx3.xml.Processor` class. The Processor API isn't compatible with persisting a compiled XSL template, which causes inefficiencies.

Methods

- `jsx3.gui.DatePicker.focusCalendar()` - for opening a calendar .
- `jsx3.gui.Dialog.constrainPosition()` has been modified for parameterized snap behavior. This method allows you to adjust the default 32 pixel minimum amount to be displayed for a dialog after a move.
- `jsx3.gui.LayoutGrid` class has new methods and properties to extend it to two dimensions: `getRows()`, `setRows()`, `getCols()`, and `setCols()`.
- `jsx3.gui.Select.doValidate()` now verifies against the selectable value (valid jsxid in the CDF) instead of considering all non-null values to be valid.
- `jsx3.xml.Entity.getAttributeNames()` - returns the names of all the attributes of this node. More performant than using the `getAttributes()` method.
- `jsx3.xml.Entity.getChildIterator()` - returns an iterator that iterates over the child nodes of this node. More performant than `getChildNodes().iterator()`.
- `jsx3.xml.Entity.selectNodeIterator()` - returns an iterator that iterates over the the result of an XPath query. More performant than `selectNodes().iterator()`.

For more information, see *TIBCO General Interface API Reference*.

For deprecated APIs in 3.4, see *Deprecated APIs* on page 49.

GUI Components

The new features and improvements for 3.4 GUI components include:

- Timeout limit for asynchronously loaded components is increased to 60 seconds and is configurable. Use `Model.ASYNC_LOAD_TIMEOUT` to set to an optimal value for your deployment. See *TIBCO General Interface API Reference*.
- A new `jsx3.gui.IFrame` class and IFrame component in the Component Libraries palette makes it easier to use iframes with General Interface.
- Improved support for multiple selection in Tree, which includes:
 - Support for range selection using Shift+click and multiple selection using Ctrl+click.
 - Support for drag-and-drop of multiple records.
 - `CHANGE` model event replaces the deprecated `SELECT` event.
 - Context menu can operate on multiple rows.
 - All model events include plural forms of context variables if the action can occur on multiple records. For example, the `strDRAGIDS` context variable, which accepts string arrays, has been added for the `DRAG` event.
- Tree supports drag-and-drop insertion between nodes and insertion as last child of node.
- Matrix data area now responds to the scroll wheel.
- `LayoutGrid` is extended to two dimensions - column and row. Use the new `Columns Array` and `Rows Array` properties to specify column and row size. See `jsx3.gui.LayoutGrid` in *TIBCO General Interface API Reference*.
- Long menus now render with auto-scroll arrows instead of with scroll bars.
- `TabbedPane` now provides an automatic right and left scrolling mechanism for navigating through tabs that are hidden when they exceed the viewable space. Hover over the right or left arrow icons to scroll through the hidden tabs. You can also navigate tabs using the right and left arrow keys.
- `DatePicker` event interface enhancements:
 - `INPUT` event allows massaging of free form text input.
 - `SHOW` event allows the shown month to be overridden.
- `Time Picker` now responds to the number pad of the keyboard.

Internationalization and Localization

The new internationalization and localization features and improvements in 3.4 include:

- A new Properties Bundle editor for authoring single-file formatted, properties bundle files has been added for localization of strings. To create a properties bundle, choose **File > New > Properties Bundle**.
- Various locales are now included in General Interface in the `JSX/locale/` directory.
- Five GUI controls are now internationalized in General Interface: `DatePicker`, `TimePicker`, `Select`, `Menu`, and `Matrix`. `DatePicker` and `TimePicker` are localized for the locales included in General Interface. `Select`, `Menu`, and `Matrix` are localized only for English

For more information, see *Internationalizing and Localizing Applications in TIBCO General Interface Developer Guide*.

Samples

Product samples have been updated to the current version. These include `Chart`, `WSDL_Mapping_1`, and `WSDL_Mapping_2`.



Create a new workspace to get the updated 3.4 sample applications. Choosing an existing workspace doesn't replace previous sample applications with updated 3.4 sample applications. This built-in functionality is designed to prevent workspace files from getting overwritten.

More samples are available at the TIBCO Developer Network at <http://www.generalinterface.org>.

WSDL_Mapping_2

Because Xignite now requires registration for access to the service, the sample has been modified to run in Static mode. To receive live data, you must register with Xignite and modify the sample to run in Live mode.

Release 3.3

This release introduces these updates:

Web Browsers

Browsers for Deployment

TIBCO General Interface applications and TIBCO General Interface Framework can be deployed to these browsers:

- Internet Explorer 7.0 and 6.0.x for Windows
- Firefox 2.0 and 1.5.x for Windows, Linux, and Mac OS X

Browsers for TIBCO General Interface Builder

TIBCO General Interface Builder runs in these browsers:

- Internet Explorer 7.0 and 6.0.x for Windows
- Firefox 2.0 and 1.5.x for Windows

TIBCO General Interface Documentation

These documents form the TIBCO General Interface documentation set:

- *TIBCO General Interface Installation* Read this manual for General Interface installation instructions.
- *TIBCO General Interface Getting Started* Read this manual for overview information and a tutorial that explains how to build a TIBCO General Interface application.
- *TIBCO General Interface Developer Guide* Refer to this manual for in-depth information about developing and deploying TIBCO General Interface applications.
- *TIBCO General Interface Component Guide* Refer to this manual to learn more about components and the Charting add-in, as well as component properties and events.
- *TIBCO General Interface API Reference* Refer to this online help content for descriptions of the TIBCO General Interface JavaScript API functions and methods.
- *TIBCO General Interface Migration* Read this manual for instructions on migrating applications from previous General Interface releases.

- *TIBCO General Interface Release Notes* See this document for a list of new and changed features, as well as the known and closed issues for this release.

To open the documentation in TIBCO General Interface Builder, choose **Help > Help Contents**. Documentation is also available online at <http://www.generalinterface.org>.

Release 3.2

This release introduces these new features and updates:

- TIBCO Developer Network on page 22
- Web Browsers on page 22
- General Enhancements on page 23
- XML Mapping Utility on page 24
- Application Deployment on page 25
- Development Productivity on page 26
- General Interface Framework on page 28
- API Changes on page 29
- GUI Components on page 30
- Localization on page 31
- Samples on page 32
- Documentation on page 32

TIBCO Developer Network

The TIBCO Developer Network has moved to a new location. Visit <http://www.generalinterface.org>.

Web Browsers

Browsers for Deployment

TIBCO General Interface applications and TIBCO General Interface Framework can be deployed to these browsers:

- Internet Explorer 6.0.x for Windows
- Firefox 1.5.x for Windows, Linux, and Mac OS X

Browsers for TIBCO General Interface Builder

TIBCO General Interface Builder runs in these browsers:

- Internet Explorer 6.0.x for Windows
- Firefox 1.5.x for Windows

Browser Limitations

Some limitations in web browsers could restrict the kinds of applications which can be deployed. For known issues with browsers, see Known Issues on page 109.

General Interface APIs

Methods that are implementable only in specific browsers are specified in the TIBCO General Interface API documentation. Search for Firefox and Internet Explorer in the API documentation.

Charting Add-in

The Charting add-in is supported on these browsers and platforms in XHTML and HTML pages:

- Internet Explorer 6.0.x (VML) on Windows
- Firefox 1.5.x (SVG) on Mac OS X, Linux, and Windows

For supported platform versions, see `readme.txt` in the `GL_HOME` directory.

General Enhancements

General enhancements include:

- Improvements to the `jsx3.gui.Select` class include:
 - Support for `@jsxstyle` and `@jsximg` CDF attributes

Use `@jsxstyle` to apply a CSS style to a record. Specify any CSS code. For example, `jsxstyle="font-weight:bold;"`.

Use `@jsximg` to reference a graphic file to use as an icon. Specify the file path relative to the project directory, for example, `images/icon.gif`. Image position depends on the component. For best results, use a 16x16 transparent GIF file.
 - Vetoable Before Select model event
- Menu hot key accelerators follow user interface guidelines for Mac OS X and Windows.

- Support for the Command key on Mac OS X has been added. Actions that require Ctrl+click on Windows translate to Command+click on Mac OS X (Ctrl+click is equivalent to right-click on Mac).
- When General Interface Builder opens XSL and XML files for editing, it honors their encoding.

XML Mapping Utility

The XML Mapping Utility includes these enhancements:

- Re-parse part of the rules tree. To recreate deleted nodes, right-click a node in the Rules Tree and choose Reparse to re-parse from that node down.
- Ability to choose a specific prototype for DOM projection.
- Log messages in the Mapper Log are color coded. For example, errors are red, traces are gray, and so on.
- JavaScript code generated by the XML Mapping Utility has changed due to a signature change in the `jsx3.net.Service` class. Rules files IDs are now passed as an argument instead of URLs. See General Interface Framework on page 28.

WSDL File Browsing

The XML Mapping Utility now resolves paths to WSDLs relative to the project. It's recommended that you copy WSDLs to a `wsdl` directory in your project. Then enter `wsdl/wsdl_file.xml` in the URL field of the XML Mapping Utility.

However, if you need to resolve a path to a WSDL outside of your project, use an absolute resolver, such as `jsxuser:///` and `jsxapp:///`.

- `jsxuser:///...` Resolves relative to the parent of the `JXSAPPS` directory, which is the workspace. When General Interface Builder is running, this URI resolves relative to the workspace directory.
- `jsxapp://app/...` If the Server instance corresponding to the host portion of the URI is loaded into memory, the URI is resolved relative to the application base directory (`jsxappbase`).

jsx3.net.Service

These enhancements have been made to the `jsx3.net.Service` class. For more information, see the API documentation.

- Added a new `compile()` method that allows the output mapping rules (those that handle the server's response) to be compiled into an equivalent XSLT document, which increases performance. This allows the `Service` class

to use the native XSLT processor as opposed to JavaScript in order to convert the server's response to CDF. The Sample performance difference to convert 400 records from SOAP to CDF is as follows: Firefox: 0.09 seconds vs 4.0 seconds and Internet Explorer: 0.13 seconds vs 10.1 seconds.

- Updated the `doCall()` method to accept a parameter, allowing the developer to cancel the send if the outgoing message did not pass the validation rules.
- Updated the `jsx3.net.Service.setInboundURL()` and `jsx3.net.Service.setOutboundStubURL()` methods to support paths that are relative to the project directory.

For example, if the project directory for the context server is `test`, then these valid inputs are equivalent:

- `xml/typical.xml`
- `jsxapp://test/xml/typical.xml`
- `JSXAPPS/test/xml/typical.xml`

- Added additional debug statements for more detailed debugging capabilities when running in trace mode. Error handling has also been expanded. Added a new event type that is published each time a rule in the rules file is executed, providing even greater control over how each node in a message is created or processed.

Application Deployment

These deployment enhancements have been added:

- Accelerated load time
 - Class loading improvements

Payload size is reduced as applications now dynamically load ("lazy loading") only those classes which are needed. Classes now fall into three categories. (1) Required classes are always loaded. (2) Optional classes introduced in General Interface 3.2 classes are dynamically loaded. For example, `jsx3.gui.ColorPicker`. (3) Optional classes introduced prior to General Interface 3.2 are dynamically loaded only if the `jsxlt` deployment parameter is set to `true` in the web page that launches the application. This improves backwards compatibility. See Deployment Parameters in the Deploying Applications chapter of *TIBCO General Interface Migration*.

Use the `jsx3.require()` method to explicitly load classes synchronously. For example, debugger classes are now dynamically loaded and need to be called using the `require()` method.

```
jsx3.require("jsx3.ide.Debugger");
```

Specify the classpath to your classes on the Classpath panel of the Project Settings dialog (Project > Project Settings).

- Changes to how add-ins are loaded improve the load time for TIBCO General Interface Builder and General Interface applications.
- Simplified portal deployment
 - Separation of *GL_HOME* from the workspace allows for easier application deployment. Choose your own workspace or use the default. Modify the workspace directory in the Workspace field on the Paths panel of the IDE Settings dialog (Tools > IDE Settings).
 - Application resources are specified using relative paths, which allows for easier portability of code from one project to another and simplifies the relocating of applications in the *JSXAPPS* folder hierarchy.
 - Applications can be loaded multiple times on a single portlet page with the *jsxapps* (namespace) deployment parameter that overrides the namespace in the configuration files. See Deployment Parameters in *TIBCO General Interface Migration*.
- A loading progress indicator now displays when the General Interface Framework loads. For multiple applications loading in the same page, only one indicator shows the loading of the General Interface Framework, which is shared by all portlet applications. Subordinate progress indicators show the loading of each portlet application.

To specify the type of progress indicator displayed, add the *jsxapploader* deployment parameter to the *HTML script* element on the web page that launches the application(s). For example, setting *jsxapploader=1*, is a good choice for portlets, because this would load a subordinate progress indicator. See Deployment Parameters in *TIBCO General Interface Migration*.

Development Productivity

TIBCO General Interface Builder includes these productivity enhancements:

- The Common Interface Format (CIF) can be used to create GUI definition files on-the-fly or manually. The CIF format provides improved readability and smaller file size. TIBCO General Interface transforms these files to the current GUI XML structure for rendering. Currently, General Interface Builder can read but **not** save CIF files. Any edits made to a CIF file are saved in the standard serialization format. See Custom TIBCO General Interface Formats in *TIBCO General Interface Migration*.
- The XML/XSL Merge Tool supports opening multiple instances of the tool.

- Reorganization of options and preferences.
 - The Deployment Options dialog has been renamed to Project Settings dialog (Project > Project Settings). Project settings include deployment, add-ins, class path settings, and legacy settings.
 - The Preferences dialog has been renamed to IDE Settings (Tools > IDE Settings). Settings include IDE settings, hot keys, and user home.
- Writing and debugging code
 - The `logger.xml` file has been moved to the root of `GI_HOME` and now supports a configurable location. Use the environment variable, `jsx_logger_config`, in the `script` element of the launch page to specify its location. See Logging and the Application Monitor in *TIBCO General Interface Migration*.
 - Color coding of messages in the System Log palette, Application Monitor, and the Mapper Log in the XML Mapping Utility. For example, error messages are displayed in red and traces in gray.
 - A configurable, optional sound can be triggered when messages are printed to the System Log palette. To enable sound for messages, change the `beepLevel` property in `GI_HOME\logger.xml` from `jsx3.util.Logger.OFF` to a message logging level, such as `jsx3.util.Logger.ERROR`. Sound is played for the specified logging level and higher. Firefox requires a plug-in that can play .wav files.
 - JavaScript type-ahead lists (Ctrl+spacebar) are available in any code window and text areas with blue grid backgrounds. Type-ahead lists display the General Interface APIs and allow you to automatically insert package names, class names, methods, and fields.
 - Component Hierarchy features: (1) Right-click a component and choose **Copy Name to Clipboard** to get the object name. (2) Right-click a component and choose **Copy Getter Code to Clipboard** to copy code for getting a handle to the object (`getJSXByName`).
 - General Interface Builder now traps the Tab key in main stage code editors as 4 spaces. This is a General Interface Builder feature and does not affect runtime.
 - When restoring a child component from the Recycle Bin, if the parent is gone, the child is restored to `<ROOT>`.
- General Interface Builder has been rearchitected for improved load performance.
- General Interface Builder keyboard shortcuts can be configured in the IDE Settings dialog (Tools > IDE Settings > IDE Hot Keys).

- Running General Interface Builder and projects
 - Ability to launch General Interface Builder in XHTML or HTML mode. Choose `GI_Builder.xhtml` or `GI_Builder.html` from `GI_HOME`. Running in XHTML mode is useful for developing and testing applications that run in XHTML pages, such as portlet applications.
 - When General Interface Builder is run in XHTML mode, an error message is output when the Text/Html property contains non-compliant code.
 - Choosing Project > Run Project, runs the project in the same mode as TIBCO General Interface Builder. For example, if General Interface Builder is running in XHTML mode, the project also runs in XHTML mode.
 - Run your project from a local HTTP server. Choose **Project > Run Project from HTTP**. The deployed project relative path must match the local drive relative path to `shell.html` for this run option to work.
 - Run Project warning displays if any open tabs have unsaved changes. A dialog displays a warning that some files are not saved and allows you to Run Without Saving, Cancel, or Save and Run.

General Interface Framework

TIBCO General Interface Framework includes these changes:

- The `persistall` argument has been added to the `toXML()` method of the `jsx3.app.Model` class, which causes the returned serialized form to include DOM nodes with transient persistence. This is useful when you want to save the exact state of the application for troubleshooting purposes.
- Rules file IDs are now passed as an argument to `jsx3.net.Service` instead of URLs. If rules files are moved to new locations, there's no need to update the URL, because the ID is used instead. The `objService` variable generated by the XML Mapping Utility has a signature change and now accepts three arguments: server, resource ID, and operation name. The new syntax is:

```
var objService = ServerName.loadResource(Project_Resource_File_Id);
objService.setOperation(Operation Name);
```

- The new Matrix component provides an `insertBefore()` method and a visual control for dragging and dropping multiple records to a new location.
- Instantiate CDFs directly without using a GUI control with the new `jsx3.xml.CDF.Document` class. See API Changes on page 14.
- User-defined XSL properties, `jsx1` through `jsx10`, have been added to `jsx3.gui.Matrix`.
- Performance improvements to the `Array.join()` method instead of String concatenation for the `String.fromBase64()` and `String.toBase64()`.

- The `Form` class provides an API that allows you to see the hidden iframe where the HTML for the form post is being built and where the response comes back from the server.

API Changes

These changes have been made to the TIBCO General Interface API. Search for “3.2” in *TIBCO General Interface API Reference* in the online help.

- `jsx3.app`
 - `jsx3.app.AddIn` A class that represents a JSX add-in. The JSX system creates an instance of this class for every add-in that is loaded.
 - `jsx3.app.Properties` Represents a repository of dynamic properties. Dynamic properties are simply name-value pairs. Dynamic properties can be loaded from an XML file in the CDF dynamic property format.
- `jsx3.gui`
 - `ColorPicker` A GUI class that allows the user to pick a color using an HSB (hue-saturation-brightness) picker. See `jsx3.gui.ColorPicker` in the API documentation.
 - `HotKey` Encapsulates a keydown event listener that is invoked by a certain combination of keys pressed simultaneously.
 - `Image` Renders an image. See `jsx3.gui.Image` in the API documentation.
 - `Matrix` and `Matrix.Column`
 - `TimePicker`
 - `Window` Allows for rendering a branch of the DOM of an application in a separate browser window. This is similar to the implementation of the TIBCO General Interface Builder API documentation window.
- `jsx3.net.Service`
- `jsx3.net.URIResolver` interface An interface specifying the methods necessary to define a context against which URIs are resolved.

- `jsx3.util`
 - `DateFormat` Formats and parses dates according to a token-based string format. This class is fully localized.
 - `Locale` Represents a region of the world. Other classes may be localized, meaning that their behavior depends on their assigned locale.
 - `MessageFormat` Constructs localized messages from a pattern and parameters. A message format takes a list of arguments, formats them, and inserts them into the pattern at specific places.
 - `NumberFormat` Formats and parses numbers.
- `jsx3.xml.CDF.Document` A subclass of `jsx3.xml.Document` that implements the CDF interface. This class exposes the CDF convenience methods on an XML document and allows you to work directly with a CDF document, without needing to work with a GUI list control. Use this class for adding records and so on.
- `jsx3.xml.Cacheable` XML Transformers replace XSL ID, XSL URL, and XSL String:
 - `getXMLTransformers()`
 - `setXMLTransformers()`

GUI Components

The classes, `jsx3.gui.Grid`, `jsx3.gui.Column`, and `jsx3.gui.List`, have been deprecated and are not supported in Firefox. The new Matrix classes, `jsx3.gui.Matrix` and `jsx3.gui.Matrix.Column`, have replaced the deprecated classes. New Matrix prototypes are available in the Component Libraries palette. See [Deprecated APIs](#) on page 49.

Tree Component

The Tree prototype has been moved to the Miscellaneous folder of the Component Libraries palette.

Matrix Components

New Matrix components, which are composites of the List, Grid, and Tree components, provide richer functionality. Matrix is fully supported in Firefox and Internet Explorer. It's recommended that you use Matrix instead of Grid, Column, and List as they have been deprecated.

These components support such features as dynamic loading of lists for better performance, tree rendering of 100 levels deep, hierarchical lists that behave like trees, multi-column trees that behave like lists, and many other features. For more information, see `jsx3.gui.Matrix` and `jsx3.gui.Matrix.Column` in *TIBCO General Interface API Reference* and *Using Matrix Components in TIBCO General Interface Migration*.

Time Picker Component

The new `TimePicker` component, `jsx3.gui.TimePicker`, is a clock for selecting the hour, minute, and AM or PM. Seconds, milliseconds, and a 24 hour clock can also be displayed. This control is localized.

New GUI Controls and Behaviors

- Color Picker allows the user to pick a color using an HSB (hue-saturation-brightness) picker.
- Date and Time Picker support keyboard navigation into and out of controls, as well as within the controls.
- Date Picker permits typing of date value into the `DatePicker` box as an alternative entry method.
- Paint methods are now XHTML compliant.
- Drop-downs for combos and selects can be wider than the unexpanded control.
- Insert stack and tab children in a specific location. See these methods of the `jsx3.app.Model` class in the API documentation: `insertBefore()`, `getFirstChild()`, `getLastChild()`, `getNextSibling()`, and `getPreviousSibling()`.
- Combo now has a `maxLength` property and method.

Localization

This release includes several new localization features:

- Date, time and number formats are now externalized in the `MessageFormat`, `NumberFormat` and `DateFormat` classes. For more information, see the new `jsx3.util` API classes for localization in *General Interface Framework* on page 28.
- A new deployment option, `Default Locale`, for setting language and country codes for localizing applications.

Samples

Product samples have been updated to the current version. These include Chart, WSDL_Mapping_1, and WSDL_Mapping_2.



Choosing an existing workspace doesn't replace previous sample applications with updated 3.2 sample applications. This built-in functionality is designed to prevent workspace files from getting overwritten. Create a new workspace to get the updated sample applications.

More samples are available at the TIBCO Developer Network at <http://www.generalinterface.org>.

Documentation

This release includes these changes to documentation:

- *TIBCO General Interface Builder GUI Reference* has been updated and included in this release.
- *TIBCO General Interface Builder Chart User's Guide*:
 - Chapter 1, Working with Charts, has been moved to *TIBCO General Interface Builder Getting Started Guide*.
 - Chapter 2, Chart Components, has been moved to *TIBCO General Interface Builder GUI Reference*.
 - *TIBCO General Interface Builder Chart User's Guide* has been removed.
- Class property descriptions have been added to the Properties Editor palette. Hover over a property, such as Padding, to see a description of it in the spyglass.

Release 3.1.1

This release introduces these enhancements:

- The XML Mapping Utility's Generate Code button is now a menu button, which introspects for the available operations. If the rule file has not been saved, selecting an operation triggers an alert which says to save the file. Only when the rule file has been saved does the code generator put the code on the clipboard and alert the user to paste the code to the desired location.
- The signature for the `Model.loadXML()` method now accepts `jsx3.xml.Document` as well as `string`. Without this method the developer cannot pre-cache GUI components in the cache to avoid run-time reloading.

Release 3.1

This release introduces a wide variety of new features in these categories:

- XML Mapping Utility on page 33
- Package Reorganization on page 34
- Usability Enhancements on page 36
- Logging on page 37
- Event Model on page 37
- GUI Components on page 37
- Help on page 39

XML Mapping Utility

- Expanded support, including:
 - WSDL (Document-Literal and RPC-Encoded)
 - Schema (2001)
 - XML/XHTML (including RSS, REST, and so on)
- Step-through tester with detailed logging, describing each node as it is processed by the XML Mapping Utility.
- Automatic UI projection. Fields described in a WSDL (or any other source format) can be leveraged by the XML Mapping Utility to create the auto-generate the GUI.
- Improved logging support with detailed information about why a mapping may have failed, including unsupported schema nodes, malformed XML, improper imports, and so on.
- Support for offline testing and configuration, allowing the mappings to be built and tested without accessing the live services.
- Automatic migration of 3.0 maps to the new 3.1 format.
- Test message generator, capable of simulating the live service.

See the *TIBCO General Interface Builder Getting Started Guide* for information on many of these features.

Package Reorganization

jsx3 The `jsx3` package contains the deprecated classes from General Interface 3.0. Most of these classes have been moved into one of these packages: `app`, `gui`, `net`, `util`, and `xml`. These classes can still be referred to by their old names; however this is deprecated and not guaranteed to work in future versions.

jsx3.app The `jsx3.app` package contains classes related to General Interface applications. Classes in this package are used extensively in application JavaScript code.

The `Server` class is the controller in the JSX architecture. An instance of this class is created by the JSX runtime for each loaded application. `Server` provides access to the application DOM (`getRootBlock()`, `getDOM()`, `getJSX()`, and so on), the application cache (`getCache()`), and application settings (`getSettings()`).

The `Monitor` class, new in 3.1, is a vital tool in debugging running applications. It brings the power of the TIBCO General Interface Builder system log to running applications by displaying logging messages in a separate browser window.

jsx3.chart The `jsx3.chart` package contains all the classes contained in the General Interface Charting add-in. It provides a collection of GUI controls that render charts, such as bar, column, area, line, plot, bubble, pie, and doughnut.

The General Interface Charting add-in provides these features:

- Prototype charts effortlessly in TIBCO General Interface Builder, just like any other GUI control
- Render from any standard CDF data source as a chart
- A rich event model for implementing interactive charts
- Offload chart rendering to the client browser, no plug-in required

jsx3.gui The `jsx3.gui` package contains all the GUI controls available by default in the JSX runtime. Classes in this package are typically not instantiated by the developer. Rather they are prototyped in TIBCO General Interface Builder, serialized to component files, and deserialized at application runtime by the JSX runtime. TIBCO General Interface Builder provides at least one prototype for each class in this package.

General Interface 3.1 contains these new GUI controls:

- `ImageButton` A simple button class comprised of a separate image file for each state of the button.
- `Slider` A form control comprised of a track and a handler that is draggable along the track.
- `Sound` Provides a standard interface for playing sounds of different formats.

jsx3.lang The `jsx3.lang` package contains the classes that comprise the General Interface class, inheritance, and introspection model. This model, introduced in General Interface 3.1, extends JavaScript 1.5 with these features:

- A simple syntax for declaring classes, with support for “extends” and “implements”
- Mixin interfaces
- An extended base class, `jsx3.lang.Object`, from which all other classes descend
- Fully introspectable classes, interfaces, packages, and methods
- A base exception class, `jsx3.lang.Exception`, with stack tracing facilities
- Access to the overridden method determined by context, with the `jsxsuper()` and `jsxsupermix()` methods

Developers who use this package, rather than the typical facilities provided by JavaScript 1.5 to define custom classes will tap the significant developer-friendly features provided by this package.

jsx3.net The `jsx3.net` package contains various classes related to HTTP communication. Applications that use the data mapper and/or communicate with web services or legacy HTTP forms will use the classes in this package extensively.

`Form` allows a General Interface application to submit to legacy HTTP forms by either GET or POST and allows for file upload to such forms. `Request` is a platform independent wrapper of the browser XMLHTTP control. It allows any XML data source to be fetched either synchronously or asynchronously. `Service` is the programmatic interface onto the data mapping utility. `URI` is a simple utility class that is useful for parsing and resolving URIs.

jsx3.util The `jsx3.util` package contains various utility classes.

`EventDispatcher` is a mixin interface that when implemented by a class provides functionality according to the publish-subscribe design pattern. The `Logger` class, new in General Interface 3.1, is the primary interface of the General Interface logging system.

jsx3.xml The `jsx3.xml` package contains various classes related to XML processing.

The `Document`, `Entity`, and `Processor` classes provide platform independent interfaces onto the native browser XML DOM and XSLT libraries. `CDF` is a mixin interface, implemented by all CDF GUI controls, that provides an object-oriented interface onto the CDF XML format. `Cacheable`, also implemented by many GUI controls, is a mixin interface that provides functionality related to fetching and storing XML and XSL documents in the application cache.

Usability Enhancements

- TIBCO General Interface Builder can now be launched using `GI_Builder.hta` file in `GI_HOME`. When launched using this file, the browser menus and browser toolbars are hidden, leaving maximum screen area for development tasks.
- Tree components now support selecting multiple nodes. A new Multi-Select property for enabling or disabling this feature was added. When the property is set to Multi-Select, users can press the Ctrl+click to select multiple nodes in the hierarchy.

This change also allows you to select multiple items in the Local Data Cache palette and Project Files palette in TIBCO General Interface Builder, as well as the Rules Tree in the XML Mapping Utility.

- **Palette features** The XSL Parameters and Attributes Editor palettes are now hidden by default. You can display these palettes by manually selecting them in the Palettes menu.

The state and position of floating palettes is now stored as a project setting in TIBCO General Interface Builder, and preserved across project sessions. If a palette is floating when a project is closed, when the project is reopened the palette is still floating in the same position.

Projects

- TIBCO General Interface Builder projects can now be located in subfolders. In the Create New Project dialog, specify the project name as *project_path/project_name*, where *project_path* is one or more directory names under the `GI_HOME/JSXAPPS` directory. Separate directory names with forward slash characters (/).
- A new option for specifying whether TIBCO General Interface Builder automatically opens the last project on startup was added to Tools menu.
- Project files that begin with the string `jsx` are now supported in TIBCO General Interface Builder.
- A new Watermark field for moving the `Powered By TIBCO` text string to the left, center, or right side of your application window was added to the Project Deployment Options dialog.

Logging

This release contains a new logging system defined in the `jsx3.util.Logger` class and a new `jsx3.app.Monitor` class for displaying logging messages in a separate browser window. For details, see the online API help in TIBCO General Interface Builder.

For more information and code samples, check the TIBCO General Interface Developer Community at <http://www.generalinterface.org>. See the document *Advanced Logging*.

Event Model

This release introduces significant changes to the way that application components handle events. The global event object (`jsx3.EVENT`) is deprecated. For API calls and user interactions that interact with events, the new model requires explicitly passing the event object, an instance of `jsx3.gui.Event`. For more information and code samples, check the TIBCO General Interface Developer Community at <http://www.generalinterface.org>. See the document *Model Events*.

These changes are implemented in a backward-compatible manner, so that immediate migration is not necessary. Existing projects and applications run seamlessly without modification. However, new projects use the new event protocol unless the Event Protocol field is set to 3.0 in the Deployment Options dialog.

GUI Components

- TextBox and Password prototype components have a new Max Length property for specifying the maximum number of characters a user can type in a text box or password field.
- Select and Combo components support for the XSL attribute `jsxshallowfrom` for specifying a portion of a CDF structure to render in the component. Previously, any hierarchy information in CDF data was not shown by these components. You can add this parameter using the XSL Parameters palette, which can be accessed using the Palettes menu. To display only CDF records that are children of the root element, specify `jsxroot`.
- Tree components support a new `jsxdeepfrom` XSL parameter for specifying the `jsxid` value of the first visible node in the tree. All descendants of this node are also displayed, while the root node remains hidden.
- Support for the `insertHTML` method was added to the `jsx3.gui.Stack` and `jsx3.gui.StackGroup` classes for more efficient painting.

- Select and Combo components now support the `jsxtip` system attribute in the CDF document. This attribute provides tooltip text when the user hovers the mouse cursor over the component.
- The Block and BlockX components now support a double-click event, which allows images and labels to be used as buttons. The `setTip()` method was also enhanced to automatically repaint tooltip text. For information on descendant components, see the description of `jsx3.gui.Block` in the online API help.
- A new class, `jsx3.gui.ImageButton`, was added with support for image rollover, and for relevant events. A different image can be used for each button state. For details, see the class description in the online API help.
- Other new API classes in this release include `jsx3.util.Sound` and `jsx3.gui.Event`.
- **List and Grid components** The List and Grid prototype components have been enhanced as follows:

- **New events** The Before Sort and After Sort events fire just before or after a user sorts the contents of a List or Grid component. Before Sort also allows the index value of the clicked column to be modified before the data is sorted. After Sort can be used to perform cleanup tasks after data is repainted.

Similarly, the Before Resize and After Resize events fire when a user resizes the component. Resizing a component with many data rows can be canceled, or on-screen dimensions can be modified to optimize the display.

- **Attributes for XSL parameters** Support for 4 new XSL attributes was added. You can add these parameters using the XSL Parameters palette, which can be accessed using the Palettes menu.

`jsxshallowfrom` allows you to specify a portion of a CDF structure for rendering in non-hierarchical GUI components, such as List and Grid. Previously, any hierarchy information in CDF data was not shown by these components. Specify the name of the immediate parent element for this attribute. To display only CDF records that are children of the root element, specify `jsxroot`.

`jsxbg1` allows you to specify the background color of odd-numbered rows, beginning with the first row. `jsxbg2` allows you to specify the background color of even-numbered rows, beginning with the second row.

`jsxstyle` allows you to specify any valid CSS style for a record. Only the record that includes this attribute uses the specified style.

- **Additional checkbox state** CheckBox components can be selected, unselected, or partially selected. The new partially selected state can be programmatically set, for example to select a parent object in a nested list when a child object is explicitly selected. To indicate the partial selection state, the checkbox displays a minus sign (-) character.
- **Select and Combo components** The tab and arrow keys can now be used to navigate in the list of values and select a value. The type-ahead feature can be used for narrowing the list of values in a Combo component, provided the `jsxid` and `jsxtext` attributes have identical values in the CDF file used by the component.
- **Slider component** A new class, `jsx3.gui.Slider` and a new prototype component, `Slider (H)` were added. Use a slider to allow users to set a numerical value in a defined range. Clicking in the slider bar moves the handle to the clicked location. Dragging the handle changes the slider value.
- **API methods for masking** The `showMask` and `hideMask` methods were added to the `jsx3.gui.Block` class. These methods can be used to hide or disable any area of the screen. An optional message can be displayed.

Help

- A link to information on writing regular expressions was added to the Help menu in TIBCO General Interface Builder. To access this web page, select **Help > Internet Resources > Regular Expressions Guide**.
- **API reference**
 - Better visibility of JavaScript native functions, navigable type links, and automatic search cancellation when the window is closed during a search operation.
 - A menu in the API help window was added with a existing option, Show Inherited Members, and a new option, Show Deprecated Classes and Members.
 - An HTML version, displaying in a separate browser window, is now available.

Changes in Functionality

This section discusses changes in functionality since the last major release of this product.

Release 3.9.1

There are no changes in functionality for this release.

Release 3.9

The General Interface Builder built-in debugger for Internet Explorer has been removed.

Release 3.8

There are no changes in functionality in this release.

Release 3.7.1

The behavior of `URIResolver.getResolver("JSXAPPS/...")` has reverted back to the behavior in Release 3.5.

In Release 3.6, `URIResolver.getResolver("JSXAPPS/...")` returned `URIResolver.USER` rather than `URIResolver.DEFAULT`. As a result, projects that mixed `JSXAPPS/...` and project-relative URIs did not function in Release 3.6. Moreover, deployment layouts in which the launch page and `JSXAPPS/` were siblings did not work properly.

The default behavior in Release 3.7.1 matches that of Release 3.5. If you require Release 3.6-3.7.0 behavior, use the system deployment parameter, `jsxurirslv="3.6"`, which turns on the Release 3.6 behavior. For information on system deployment parameters, see the *TIBCO General Interface Developer Guide, Release 3.7*.

Release 3.7.0

General Interface 3.4 includes the following changes in functionality.

Type-Ahead

The type-ahead feature is no longer provided in the script, XML and XSL editors.

meta.xml

The <resourcename>.meta.xml file functionality has been dropped in General Interface 3.6/3.7, so that localized applications that use the file will fail to display localized text.

If you use <resourcename>.meta.xml in your application, update the application to add the locales specification in the main resource properties file.

For example:

```
<data jsxid="jsxroot" jsxnamespace="propsbundle"
locales="fr,zh_TW">
<locale>
<record jsxid="Line1" jsxtext="This old village"
type="jsxtext"/>
<record jsxid="Line2" jsxtext="not a single house"
type="jsxtext"/>
<record jsxid="Line3" jsxtext="without persimmon trees"
type="jsxtext"/>
<record jsxid="Dialog1" jsxtext="Dialog Title (No Chinese or
French value available)" type="jsxtext"/>
<record jsxid="Tools1" jsxtext="Tools" type="jsxtext"/>
<record jsxid="Display English" jsxtext="Display English"/>
<record jsxid="Display Chinese" jsxtext="Display Chinese"/>
<record jsxid="Display French" jsxtext="Display French"/>
<record jsxid="Display Default" jsxtext="Display Default"/>
<!-- demonstrates fall-through >
</locale>
</data>
```

Release 3.6.2

There are no changes in functionality for this release.

Release 3.6.1

There are no changes in functionality for this release.

Release 3.6

There are no changes in functionality for this release.

Release 3.5.1

There are no changes in functionality for this release.

Release 3.5

There are no changes in functionality for this release.

Release 3.4.1

There are no changes in functionality for this release.

Release 3.4

General Interface 3.4 includes the following changes in functionality.

Application Deployment

This deployment feature has been removed in 3.4.

Release 3.3

In some versions of Internet Explorer 6 and 7, XML, XSL, and component serialization files may not always be refetched from an HTTP/S server even if they have changed on the server.

For more information on Internet Explorer caching and best practices, see “Understanding Internet Explorer Caching” at <http://www.generalinterface.org> in the Tips and Techniques section.

Release 3.2

Every effort has been made to provide backward compatibility from General Interface 3.2 to 3.1. However, some migration steps are required. For migration instructions, see *TIBCO General Interface Migration*.

TIBCO General Interface Framework

- For more flexibility in project deployment, these changes have been made:
 - Projects are now saved to a workspace directory. The *workspace* is the directory that contains your projects, custom add-ins, custom prototypes, and your user settings for General Interface Builder. You can create a new

workspace, choose an existing directory, or use the default directory. To change the workspace, choose **Tools > IDE Settings > Paths** and specify the path in the Workspace field.

- The launch page and `JSXAPPS` and `JSX` folders can each be in any location on the server.

See Application Deployment on page 25.

- Debugging

- Debugger classes are now dynamically loaded. You must use the `jsx3.require()` method before any `jsx3.ide.debug()` statements to load debugger classes. For example,

```
jsx3.require("jsx3.ide.Debugger");
```

- Add-ins

To accelerate TIBCO General Interface Builder and TIBCO General Interface application load time, add-ins are only loaded when required.

- By default, add-ins, such as Charting, are no longer loaded automatically. Add-ins must be enabled in the project to have access to those features. To enable add-ins, choose **Project > Project Settings > Add-ins**. Select the add-in, Save, and restart TIBCO General Interface Builder.
- The Mapping add-in is always available and doesn't need to be enabled in the Project Settings dialog.
- An `addin` directory has been added to the workspace for storing any custom add-ins you create. These add-ins aren't loaded unless enabled in the project.

- How some properties are specified has changed. Left, Top, Width, and Height properties can be specified in implied pixels or in percentages. Padding, Margin, and Border properties have also been updated. Use the abbreviated TIBCO General Interface syntax for better performance or use the CSS2 syntax. See Entering CSS Values in *TIBCO General Interface Migration*.

TIBCO General Interface Builder

The Deployment Options dialog and the Preferences dialog have been renamed and some new options added.

Release 3.1.1

There are no changes in functionality for this release.

Release 3.1

Every effort has been made to provide backward compatibility from General Interface 3.1 to 3.0. In most cases applications will work with no changes. For more information on migrating 3.0 projects to 3.1, see *Migrating 3.0 Applications to 3.1* on the TIBCO Developer Network web site at <http://www.generalinterface.org>.

Deprecated Features

This section describes deprecated features and lists equivalent features that accomplish the same result, if relevant. Any use of a deprecated feature should be discontinued as it may be removed in a future release. You should avoid becoming dependent on deprecated features and become familiar with the equivalent feature.

Release 3.9.2

Deprecated browsers and features:

- Internet Explorer 6 and 7 are deprecated (IE 8 and 9 are still supported).
- GI Builder IDE for Firefox is deprecated (GI Builder is supported on IE 8-11).
- GI Builder IDE for Firefox requires Firefox 10ESR or Firefox 12.
- Dojo integration has been deprecated. The gi-3.9.2-Dojo package is supported only on IE9 and lower.

Release 3.9.1

There are no deprecated features in this release.

Release 3.9

The following browsers are deprecated in this release:

- Firefox 2.0, 1.5
- Chrome 3.0, 2.0
- Internet Explorer 6.0
- Safari 3.1 on Mac OSX
- Safari 3.2, 3.1 on Windows

Release 3.8

There are no deprecated features in this release.

Release 3.7.1

There are no deprecated features in this release.

Release 3.7.0

There are no deprecated features in this release.

Release 3.6.2

There are no deprecated features in this release.

Release 3.6.1

There are no deprecated features in this release.

Release 3.6

The `<resourcename>.meta.xml` file functionality has been dropped in this release.



If your localized application uses the `<resourcename>.meta.xml` file, you must modify the application to enable localized text to display. See the General Interface Migration Guide for instructions on how to modify your application.

Release 3.5.1

This feature is deprecated in this release:

- `get/setSelectionLanguage` is deprecated, as it only applies to Internet Explorer.

Release 3.5

This feature is deprecated in this release.

Deprecated APIs

These APIs are deprecated in 3.5. For more information, see *TIBCO General Interface API Reference*.

- `jsx3.gui.Menu.clearCachedContent()`
- `jsx3.gui.Select.DEFAULTBACKGROUNDCOLOR`

Release 3.4.1

There are no deprecated features in this release.

Release 3.4

This feature is deprecated in the 3.4 release:

- `SELECT` event for Tree is deprecated and replaced with the `CHANGE` model event.

Deprecated APIs

These APIs are deprecated in 3.4. For more information, see *TIBCO General Interface API Reference*.

Deprecated Classes

- `jsx3.xml.Processor` - use `jsx3.xml.Template`

Deprecated Fields

- `jsx3.app.Settings.DOMAIN_SYSTEM`
- `jsx3.gui.LayoutGrid.ABSOLUTE`
- `jsx3.gui.LayoutGrid.ADAPTIVE`
- `jsx3.gui.LayoutGrid.DEFAULTDIMENSIONS`
- `jsx3.gui.LayoutGrid.DEFAULTORIENTATION`
- `jsx3.gui.LayoutGrid.DEFAULTTREPEAT`
- `jsx3.gui.LayoutGrid.ORIENTATIONCOL`
- `jsx3.gui.LayoutGrid.ORIENTATIONROW`
- `jsx3.gui.List.DEFAULTXSLURL`
- `jsx3.gui.Matrix.DEFAULT_INFO_LABEL` - value is now localized
- `jsx3.gui.Matrix.DEFAULT_XSL_URL` - renamed to `DEFAULTXSLURL`
- `jsx3.gui.Menu.DEFAULTXSLCACHEID`
- `jsx3.gui.Menu.NODATAMESSAGE`
- `jsx3.gui.Select.COMBOXSLID`
- `jsx3.gui.Select.COMBOXSLURL` - renamed to `DEFAULTXSLURL`
- `jsx3.gui.Select.SELECTXSLID`
- `jsx3.gui.Select.SELECTXSLURL` - renamed to `DEFAULTXSLURL`

- `jsx3.gui.StackGroup.DEFAULTDIMENSIONS`
- `jsx3.gui.StackGroup.DEFAULTSTACKCOUNT`
- `jsx3.gui.Tab.DEFAULTHIGHLIGHT`
- `jsx3.gui.Tab.DEFAULTSHADOW`
- `jsx3.gui.TextBox.OVERFLOWAUTO`
- `jsx3.gui.TextBox.OVERFLOWNORMAL`
- `jsx3.gui.TextBox.OVERFLOWSCROLL`
- `jsx3.gui.Tree.DEFAULTXSLID`
- `jsx3.gui.Tree.ONDROPBGIMAGE`
- `jsx3.xml.Cacheable.DEFAULTXSLCACHEID`

Deprecated Methods

- `jsx3.gui.LayoutGrid.getBestGuess()`
- `jsx3.gui.LayoutGrid.getDimensionArray()` - use `getRows()` and `getCols()`
- `jsx3.gui.LayoutGrid.getOrientation()` - use `getRows()` and `getCols()`
- `jsx3.gui.LayoutGrid.getRepeat()`
- `jsx3.gui.LayoutGrid.setBestGuess()`
- `jsx3.gui.LayoutGrid.setDimensionArray()` - use `setRows()` and `setCols()`
- `jsx3.gui.LayoutGrid.setOrientation()` - use `setRows()` and `setCols()`
- `jsx3.gui.LayoutGrid.setRepeat()`
- `jsx3.gui.Tree.getText()`
- `jsx3.net.Request.getReadyState()` - use the event publisher interface instead to track the state of the request.
- `jsx3.xml.Entity.getXML()` - use `toString()`

Release 3.3

There are no deprecated features in this release.

Release 3.2

The following features are deprecated in this release.

Deprecated APIs

These APIs are deprecated in 3.2:

- These `jsx3.xml.Cacheable` properties are deprecated:
 - XSL URL getters and setters
 - XSL ID getters and setters
 - XSL String getters and setters

Instead of these properties, use the XML transformers functionality: `getXMLTransformers()` and `setXMLTransformers()`.

- `jsx3.gui.insertHTML()` is replaced by `paintChild()`

Deprecated Prototypes

Grid, List, Column, and MultiSelect have been deprecated and moved to the **Deprecated** folder in the Component Libraries palette. Matrix and Matrix Column components replace Grid, List, and Column.

Release 3.1.1

There are no deprecated features in this release.

Release 3.1

These features are deprecated in this release:

- **Class Structure** The class hierarchy has been completely reorganized in this release. This has resulted in the deprecation of many classes. Refer to the API documentation for the list of deprecated classes and their replacements.
- `jsx3.out` is replaced by `jsx3.log()` and class `jsx3.util.Logger`. For information on these features, see *General Interface Logging* at the TIBCO Developer Network web site at <http://www.generalinterface.org>.
- **Event Model** Static access to the current event object (`jsx3.EVENT`) was deprecated. In addition, in order to support both the 3.0 and 3.1 model event protocols simultaneously, many methods have been either deprecated or made to branch based on which event protocol is in use. Methods have been deprecated or renamed when they existed solely to generate a model event or when their names implied that they generated a model event. Preexisting methods that have different behavior based on the model event protocol are considered branching methods. For more information, see *Model Events* on the TIBCO Developer Network web site at <http://www.generalinterface.org>.

- **Various Methods and Fields** Consult the API documentation in General Interface Builder Help for other deprecated methods and fields. Deprecated members are indicated with a strike-through font.

Migration and Compatibility

To migrate projects from previous General Interface releases, see *TIBCO General Interface Migration* in the General Interface documentation.

Closed Issues

The tables in this section list issues that were closed in the named releases.

Asynchronous Modular Platform

| Closed in Release | JIRA # | Defect # | Summary |
|-------------------|--------|----------|--|
| 3.9.1 | GI-914 | | <subscribe when="load"> not compatible with "handler" attribute for no good reason. |
| 3.9.1 | GI-837 | | Inline propsbundle in AMP plugin.xml is broken due to typo. |
| 3.9 | GI-781 | | Deregistering a plug-in should not deregister extensions in other plug-ins. |
| 3.9 | GI-714 | | Provide support to create an extension-point/extension dynamically at runtime as follows: (extPoint) plugin.addExtPoint(<String>localId, <jsx3.xml.Entity> objXMLElement, <jsx3.lang.Class>jsxclass); (ext) plugin.addExt(<String>localId, <String>pointId, <jsx3.xml.Entity> objXMLElement, <jsx3.lang.Class>jsxclass); |
| 3.8.0 | GI-544 | | Extensions of auto-registered and manually-registered plug-ins should be ordered correctly. |
| 3.7.1 | GI-515 | | JavaScript resources inlined by AMP build tools should be evaluated once, not for each application. |
| 3.7.1 | GI-514 | 1-9QWIO7 | Instead of failing silently, AMP should log proper error messages if a required plug-in is not already registered. |

Charting

| Closed in Release | JIRA # | Defect # | Summary (Sheet 1 of 2) |
|-------------------|---------|----------|---|
| 3.9.2 | GI-1000 | | IE11 charting sample event chart fails. |
| 3.9.1 | GI-925 | | IE9 should use the SVG implementation of charting. |
| 3.9.1 | GI-912 | | Charts not compatible with IE8 + Standards mode (HTML5/XHTML doctype). |
| 3.9.1 | GI-883 | | Send record index as well as value to Axis.labelFunction |
| 3.8.0 | GI-545 | | CSS rules do not work in charting in Firefox or Safari. |
| 3.8.0 | GI-549 | | Application code may load before add-in code when multiple applications require the same add-in. |
| 3.7.0 | | 1-9D1MPB | When the chart title color is changed, it takes effect only when the <code>bgcolor</code> property changes. In 3.5, the change in title color took effect immediately. |
| 3.7.0 | GI-412 | 1-9KW3QL | The function assigned to <code>colorFunction/tooltipFunction</code> for <code>jsx3.chart.BarSeries</code> (and others) cannot have closures in it. It is also always evaluated in the context of window. This restricts its usefulness. |
| 3.5.0 | | 1-8CK43C | Changing the type of Area chart from 'Overlay' to any other Stacked or Stacked 100% property threw an error. |
| 3.3.0 | | 1-7XM18V | Any change to a chart's axis property that resulted in a negative computed value of the axis Left position ran the risk of generating -1INF (negative infinity) on Internet Explorer. This caused deserialization to fail. |

| Closed in Release | JIRA # | Defect # | Summary (Sheet 2 of 2) |
|-------------------|--------|----------|--|
| 3.1.1 | | 1-6YXIXS | <p>Events on chart series (and possibly other chart components) fired twice. The event handlers were incorrectly painted in the group containing the category shapes.</p> <p>They should have only been painted in the category shapes themselves.</p> |
| 3.1.0 | | 1-5ZWDAG | <p>When an empty area chart was created, an error was generated.</p> <p>This error occurred when there wasn't any data to display on chart axes.</p> |

Data Mapping Tools

| Closed in Release | JIRA # | Defect # | Summary (Sheet 1 of 6) |
|-------------------|--------|----------|--|
| 3.9.2 | GI-979 | | Bad mapping rule with unnamed CDF document can cause NPE on service request fault handling. |
| 3.9.1 | GI-853 | | jsx3.net.Service doesn't publish ON_ERROR event in JSON. |
| 3.9 | | 1-A6JKAE | If the WSDL contains <code>xsd:group</code> elements, then the web service invocation fails with the "Object required" exception. |
| 3.9 | GI-449 | | Clicking on WSDL method name in mapper throws an error in XHTML mode. |
| 3.8.0 | GI-404 | | WSDL <code>minOccurs</code> constraint is not taken into account for referenced elements. |
| 3.8.0 | GI-556 | 1-A0SXE9 | When using the XML/XHTML/Schema option in Mapper, the operation is not available in the Tester utility. "Data Unavailable" is displayed in the Operations list, so it is not possible to test the mapping rule. |
| 3.8.0 | GI-587 | | The mapper does not apply a <code>targetNamespace</code> when targeting a referenced schema element (for example, <code><element ref="someElement"/></code>). |
| 3.7.1 | GI-526 | | Compiling a mapping rule with recursion fails if the recurse node and its target node do not share the same node name. |
| 3.7.0 | | 1-85E4XS | GI Mapper now supports deeply nested WSDL and schema imports. |
| 3.7.0 | | 1-9EH74Z | When a WSDL is RPC Literal, the mapper incorrectly ignored the <code>part/@element</code> attribute. Instead, it only looked for the <code>part/@type</code> attribute. Both <code>element</code> and <code>type</code> attributes can now be used to define the message parameters. |
| 3.6.2 | GI-406 | 1-9AV3T9 | CDF binding of matrix controls does not work when the CDF is changed by the Data Mapper. |
| 3.6.0 | GI-303 | 1-93ACWZ | The mapping utility incorrectly parses the WSDL schema if a "ref" tag is used and if the referenced element in the target namespace is not namespace qualified. |

| Closed in Release | JIRA # | Defect # | Summary (Sheet 2 of 6) |
|-------------------|--------|----------|---|
| 3.6.0 | | 1-8RUEMP | Validation did not fail on_invalid, when restriction type was set to minLength. |
| 3.5.1 | GI-239 | 1-8EBIR7 | Double-clicking a rule in the data mapping utility would cause a null pointer exception if the given rule was not generated using a WSDL or a schema source document. |
| 3.5.0 | GI-154 | 1-8DBUEO | RULENODE variable not available in outbound rules. |
| 3.5.0 | | 1-8D2BON | <p>These namespace-related bugs were fixed in the XML Mapping Utility and Service class:</p> <ol style="list-style-type: none"> 1. The 'xml' namespace prefix was not handled correctly. If, for example, a document used this prefix to point to the implicitly-declared namespace, "http://www.w3.org/XML/1998/namespace", the Service class was unable to generate the appropriate markup, because it explicitly declared the namespace (which is wrong). 2. If a mapping rule did not use a stub document and the mapping rule had an attribute on the root node and if that attribute was assigned to a particular namespace, then the Service class would create a duplicate namespace declaration on the root node when generating the input message. 3. If the XML Mapping Utility parsed an XML document and that document used a qualified namespace on a given node and if that node also declared an unqualified namespace, the unqualified namespace was improperly assigned to the node, overwriting the namespace it actually should have used. |
| 3.5.0 | | 1-8CNHKB | The XML Mapping Utility and the Service class didn't support recursive rules, meaning deeply nested messages were difficult, if not impossible, to map. |
| 3.4.1 | GI-131 | 1-88F61H | Restrictions set on input parameters were also set incorrectly on the parent node when the WSDL was parsed in the XML Mapping Utility. |
| 3.4.1 | GI-130 | 1-88F1AJ | Reparsing a modified node in a WSDL failed if the original order of nodes was changed. |

| Closed in Release | JIRA # | Defect # | Summary (Sheet 3 of 6) |
|-------------------|--------|----------|--|
| 3.4.1 | GI-124 | 1-87V8N9 | The reparse feature for the XML Mapping Utility was broken. |
| 3.4.0 | GI-87 | 1-81TP0D | <p>The XML Mapping Utility was encoding soap messages that define a soap encoding style even if their 'use' was 'literal'. Instead, the XML Mapping Utility should only encode messages when both the encoding style is specified AND the 'use' is 'encoded'.</p> <p>Note: You can now edit the SOAP Use (encoded or literal) and the SOAP Encoding (http://schemas.xmlsoap.org/soap/encoding/) fields in the Rule Profile panel of the XML Mapping Utility.</p> <p>See XML Mapping Utility on page 12.</p> |
| 3.4.0 | GI-65 | 1-80VDDB | <p>The XML Mapping Utility method, <code>getTargetedSchemaQuery()</code>, was improperly including schemas in its search scope. This problem occurred when a WSDL was parsed that had these characteristics:</p> <ul style="list-style-type: none"> • it included multiple schemas • a following schema had an import child that referenced the namespace for a previous schema |
| 3.4.0 | | 1-7TRW5X | The Types drop-down list in the Mapping table didn't display when you clicked the drop-down arrow the first time. Also, the jsxnull ID displayed as the first item in the list instead of -Select-. |

| Closed in Release | JIRA # | Defect # | Summary (Sheet 4 of 6) |
|-------------------|--------|----------|--|
| 3.4.0 | | 1-7GUVAT | <p>Parsing a WSDL with SOAP version 1.2 using the XML Mapping Utility resulted in this misleading error message:</p> <pre>[ERROR] The WSDL located at 'JSX/addins/mapping/samples/ldap-bw.wsdl' does not contain any soap bindings (i.e., '/wsdl:definitions/wsdl:service/wsdl:port/soap: address'). Abstract WSDLs as well as protocols such as FTP and HTTP are not supported at this time.</pre> <p>Because the XML Mapping Utility doesn't support SOAP version 1.2, the error message was modified as follows:</p> <p>The WSDL located at '<code>{wsdl_url}</code>' does not contain a valid reference to a supported version of SOAP. At this time only this namespace is supported: '<code>http://schemas.xmlsoap.org/wsdl/soap/</code>'.</p> |
| 3.3.0 | | 1-7X3AN7 | <p>The <code>jsx3.net.Service</code> class was improperly sending the string value 'null' when a CDF attribute mapping was generating a value in the outgoing request.</p> <p>If the CDF attribute node was missing, no value should be set. If the CDF attribute node was an empty string, the value should be an empty string.</p> |
| 3.3.0 | | 1-7X3AFK | <p>The <code>doCall()</code> method for the <code>jsx3.net.Service</code> class failed to include the XML prolog when sending request documents. This wasn't standard and could cause the request to be mishandled by the receiving server.</p> <p>The prolog should include <code><?xml version="1.0" ?></code>, should be sent with <code>doCall()</code> requests, and should also appear when using the Test Interface in the XML Mapping Utility (panel 2 in the Test Interface).</p> |
| 3.3.0 | | 1-7VF6FY | <p>When the XML Mapping Utility parsed an XML document (not a WSDL), the <code>xmlns</code> nodes in the pattern master were persisted as CXF rules.</p> <p>The <code>xmlns</code> nodes should have been ignored and not persisted as rules. This was incorrect and broke the service class when the given ruleset was run.</p> |

| Closed in Release | JIRA # | Defect # | Summary (Sheet 5 of 6) |
|-------------------|--------|----------|--|
| 3.3.0 | | 1-7VF6EC | <p>When the XML Mapping Utility parsed a WSDL that contained a schema-defined node with the <code>nillable</code> attribute, the attribute wasn't honored.</p> <p>The <code>nillable</code> attribute, if explicitly declared, should have been added to the list of restrictions for the given node when it was first parsed by the XML Mapping Utility.</p> |
| 3.3.0 | | 1-7VF6D9 | <p>SOAP messages that didn't define a <code>soap:operation</code> node in the WSDL caused a null pointer exception in the XML Mapping Utility.</p> <p>The XML Mapping Utility needed to allow messages that didn't contain this node and continue parsing.</p> |
| 3.3.0 | | 1-7C0PJX | <p>Nodes were missing in the XML Mapping Utility. This occurred when a WSDL referenced a schema, which in turn referenced another schema. The XML Mapping Utility didn't support this feature and the behavior was as expected.</p> <p>The <code>xsd:extension</code> element won't properly parse if the element was based upon an <code>xsd:extension</code> element that was based upon yet another <code>xsd:extension</code> element.</p> |
| 3.2.0 | | 1-79SFGL | <p>No alert occurred when the XML Mapping Utility tried to parse a mapping file that didn't exist.</p> <p>The error message reported that the type was unrecognized when it should have reported the file wasn't found.</p> |
| 3.2.0 | | 1-76D12H | <p>Added support to the XML Mapping Utility to handle WSDLs created by BW 5.3.2.</p> |
| 3.2.0 | | 1-768GLZ | <p>Static service calls using <code>setInboundURL()</code> and <code>setOutboundURL()</code> don't work.</p> <p>For Inbound mappings to run, the HTTP status code must be 200, 202, or 0. This affected the <code>Service</code> class when running in test/static mode.</p> |
| 3.2.0 | | 1-72BKSN | <p>The XML Mapping Utility didn't account for different namespaces when the element name was the same.</p> |

| Closed in Release | JIRA # | Defect # | Summary (Sheet 6 of 6) |
|-------------------|--------|----------|---|
| 3.2.0 | | 1-71UVED | The XML Mapping Utility ignored locally declared namespaces (those namespaces declared on a node), so it failed to see the data type for the part. |
| 3.2.0 | | 1-6Q2SLD | Used an asynchronous call for the XML Mapping Utility to keep the browser from locking up if the WSDL was unavailable. Provided a Cancel button so the user could cancel if the call was taking too long. |
| 3.1.1 | | 1-6Y3BDR | Mapping Rule Migration - The CXF Rule conversion utility didn't automatically set <code>Restriction = Nillable</code> for empty nodes present in 3.0 CXF Rules. |
| 3.1.1 | | 1-6XY6RN | When selecting a SOAP Fault node in the mapper, an unnecessary error message was sent to the General Interface Builder log. |
| 3.1.1 | | 1-6XY6Q4 | 3.0 Rules with POST and empty message threw errors. |
| 3.1.1 | | 1-6XY6MN | XML documents remained in the IDE cache after rules creation and update, and then the XML Mapping Utility was closed. These XML documents accumulated each time the XML Mapping Utility was used and closed, taking up resources. |
| 3.1.0 | | 1-63NS8X | The SOAP Mapping Utility (now renamed XML Mapping Utility) could lose the association to the rule being edited. When this happened, the Test Rules tab stopped functioning. This behavior had no impact on runtime behaviors or performance. |

Deployment

| Closed in Release | JIRA # | Defect # | Summary (Sheet 1 of 2) |
|-------------------|--------|----------|---|
| 3.5.1 | GI-246 | 1-8H2F7Z | The page "jsx3.gui.window.html" will now open from the path "GI_HOME" instead of from the launch URL. |

| Closed in Release | JIRA # | Defect # | Summary (Sheet 2 of 2) |
|-------------------|--------|----------|---|
| 3.5.0 | GI-183 | 1-8CC7O3 | Deploying the same application multiple times to the same page was broken with a properties bundle. |
| 3.5.0 | GI-151 | 1-85IPVC | The Deployment Utility generated a script tag type attribute without an equals sign (=): <code><script type"text/javascript" ...></code> |
| 3.4.1 | GI-111 | 1-86NZG3 | Multiple General Interface applications deployed in a web page wouldn't run and reported this error to the console: <code>uncaught exception:class.nsm jsx3.util.Logger.Record#getLevel()</code> |
| 3.2.0 | | 1-772SE3 | Select and Datepicker Heavyweight window were not anchored to the correct position when placed inside a dialog and deployed inside a portal page. |

Documentation

| Closed in Release | JIRA # | Defect # | Summary (Sheet 1 of 3) |
|-------------------|--------|----------|--|
| 3.9.2 | GI-986 | | In the API documentation, <code>Box.addChildProfile()</code> does not return an HTML string. |
| 3.9.2 | GI-978 | | Properly document deprecated XML DOM methods. |
| 3.9.1 | GI-859 | | <code>jsxmininclusive</code> and <code>jsxmaxinclusive</code> XSL parameter for <code>jsx3.gui.Table</code> are not documented in XSL reference guide. |
| 3.9.1 | GI-940 | | API Doc for <code>jsx3.gui.Menu#enableItem</code> misstates modified attribute name as <code>"jsxselected"</code> . |
| 3.9.1 | GI-857 | | <code>jsx3.amp.PlugIn.loadRsrcComponent</code> document misstates return type. |
| 3.9.1 | GI-866 | | Developer Guide missing "\$" on \$Y examples. |
| 3.9 | GI-688 | | The Properties/Events/XSL API docs show the incorrect package in the left column. |

| Closed in Release | JIRA # | Defect # | Summary (Sheet 2 of 3) |
|-------------------|--------|----------|--|
| 3.9 | GI-836 | | In the <i>General Interface Developer Guide</i> , Chapter 20, "Asynchronous Modular Platform/Application Techniques and Utilities," the function definition name and the called function name must match. The example shows <code>objJSX.onBtnClick</code> but the called function is defined with an underscore after the period in <code><events jsxexecute="this._onBtnClick()" /></code> . |
| 3.9 | GI-810 | | The example in <i>General Interface Developer Guide</i> , Chapter 20, "Asynchronous Modular Platform/Application Techniques and Utilities," has a space in the JavaScript that should be removed for the sample to work correctly. |
| 3.9 | GI-809 | | The example in <i>General Interface Developer Guide</i> , Chapter 20, "Asynchronous Modular Platform/Applications and Built-in Extension Points," contains a closing tag that does not match the opening tag. |
| 3.9 | GI-768 | | Incorrect return type for <code>CDF.getRecordIds()</code> . |
| 3.9 | GI-721 | | The <code>inlinebox</code> tag is not defined in documentation. |
| 3.8.0 | GI-410 | | Update API documentation to indicate that <code>jsx3.gui.TextBox.doValidate</code> is implemented with <code>String.search(RegExp)</code> . |
| 3.7.0 | GI-405 | 1-9L8AIR | The tooltip of a block containing line feeds is displayed with its line feeds in Internet Explorer 7, but without them in Firefox 3. |
| 3.7.0 | GI-454 | 1-9KW3RE | Calling <code>getAttribute()</code> on objects of subclasses of <code>jsx3.gui.Painted</code> returns undefined if the attribute does not exist. |
| 3.7.0 | GI-401 | 1-9KZWFP | API documentation for <code>jsx3.gui.Dialog</code> indicates that <code>beep()</code> returns void, but it actually returns the dialog instance. |
| 3.6.0 | | 1-8F1XK0 | The Migration Guide indicated that migration to GI 3.4 is an intermediate step in migrating to GI 3.5. |
| 3.4.1 | GI-109 | 1-86Q47N | See Also links in HTML version of API documentation were broken. |

| Closed in Release | JIRA # | Defect # | Summary (Sheet 3 of 3) |
|-------------------|--------|----------|--|
| 3.4.0 | | 1-7SPC40 | When running in XHTML mode, API help threw an exception if the inline comments in the API documentation weren't XHTML-compliant. For example, API help for <code>jsx3.app.Server.getEnv()</code> triggered an exception. |
| 3.4.0 | | 1-7Z3209 | The <code>Matrix.Column</code> documentation was missing from API help (Help > API Documentation). |
| 3.3.0 | | 1-7TIWOV | The API documentation incorrectly stated that the <code>Matrix.getSortPath()</code> and <code>setSortPath()</code> methods required the name of the attribute to be preceded by an @ symbol. The @ symbol wasn't required and would break the sort if it was used. |

Dojo Integration

| Closed in Release | JIRA # | Defect # | Summary |
|-------------------|--------|----------|---------------------------------------|
| 3.9.1 | GI-846 | | Update bundled Dojo to version 1.4.1. |

Firefox

| Closed in Release | JIRA # | Defect # | Summary (Sheet 1 of 4) |
|-------------------|--------|----------|--|
| 3.9.2 | GI-972 | | Exception on call to <code>netscape.security.PrivilegeManager.enablePrivilege</code> . |
| 3.9.1 | GI-483 | | Service call result in uncaught exception when server or network is unavailable on Firefox. |
| 3.7.1 | GI-493 | | Firefox leaks memory when <code>jsx3.gui.Window</code> is repeatedly opened and closed. An event subscription is not released when the window is closed. |
| 3.7.1 | GI-480 | | In Firefox, JavaScript errors are not shown in the system log. |

| Closed in Release | JIRA # | Defect # | Summary (Sheet 2 of 4) |
|-------------------|--------|----------|--|
| 3.7.0 | | 1-8NH7C3 | In Firefox, the project link in the lower left of the window is truncated when clicked. This is a Firefox shrink effect and not a General Interface issue. |
| 3.6.1 | | 1-95476P | When General Interface Builder was opened for the first time in Firefox, it prompted you to choose a workspace directory. To select a directory other than the default workspace directory, you clicked the open dir/file icon. The file browser did not contain the directory name list to choose a workspace from. |
| 3.6.1 | | 1-8WAPIA | In Firefox 3 the matrix column resizing was not working properly. Only the first row was resized while the remaining rows did not move. |
| 3.6.1 | | 1-8UHY8B | A browser alert was thrown for Class Redefinition Exception on Firefox 3 beta 3 while asynchronous components were loaded. |
| 3.6.0 | | 1-8XPDTY | Vertical scrollbars in multiselect components appear disabled until some other component is selected or after clicking on appcanvas.xml. |
| 3.6.0 | | 1-8UQW9V | When the last tab has a long label and the width is not specified, the text exceeds the tab's right boundary, and the tab does not display correctly. |
| 3.6.0 | | 1-90RT3N | Displaying WSDL Source did not work with XML Mapping Utility using Firefox. |
| 3.5.1 | GI-233 | 1-8EW151 | The Matrix control now displays correctly when the URL points to "jsx:/xml/sample.xml" and the "XML Asynch" property is set to "Asynchronous". |

| Closed in Release | JIRA # | Defect # | Summary (Sheet 3 of 4) |
|-------------------|--------|-----------|---|
| 3.5.1 | GI-92 | 1-834QRK | <p>On Firefox, when a Matrix is scrolled to a position greater than zero and it (or one of its ancestor containers) has its display property set to none , the matrix scrollbar position will reset to the top (zero) position. This causes the Matrix scrollbar position to be out of synch with the top/left position of the Matrix data rows.</p> <p>This bug is exposed when a Matrix is contained by a Dialog or TabbedPane, as these both set the CSS display to 'none' when hiding their content.</p> |
| 3.5.0 | | 1-8EEEELZ | The Matrix DatePicker column didn't open the calendar when the calendar icon was clicked. |
| 3.5.0 | GI-140 | 1-85LLJ7 | In Firefox XHTML mode, entering an '&' or '<' character in a Matrix textbox edit mask could cause error on repaint. |
| 3.5.0 | | 1-7U5AWK | Firefox crashed after editing the Event property for the Matrix Select event. |
| 3.4.1 | GI-112 | 1-86NFYI | <p>When the <code>jsx_logger_config</code> attribute was added to the script element on the application launch page and the application was run in Firefox, the <code>jsx3.net.Request</code> class sent useless security messages to the logger:</p> <p>14:17:02.605 jsx3.net.Request (ERROR) - Error requesting Netscape privilege: A script from "http://localhost" was denied UniversalBrowserRead privileges.</p> |
| 3.4.1 | GI-89 | 1-82IIVT | <p>General Interface didn't support the use of <code>document.domain</code> for applications running under Firefox. This was due to Mozilla bug 326337 "XMLHttpRequest.responseXML permission denied if document.domain set."</p> <p>When <code>document.domain</code> was called in Firefox, <code>XMLDocument</code> object returned by <code>XMLHttpRequest</code> or <code>document.implementation.createDocument</code> threw permission denied exceptions when any of its attributes and methods were accessed.</p> |

| Closed in Release | JIRA # | Defect # | Summary (Sheet 4 of 4) |
|-------------------|--------|----------|--|
| 3.4.0 | GI-42 | 1-7ZPCAF | In Firefox 2 and 1.5, a long text string (wider than column width) in a select and select-combo mask column could run outside the drop-down box and onto the next column. If it was the last column of the matrix in a dialog, the long text could also run over the vertical scroll bar and out of the dialog. |
| 3.4.0 | | 1-7YR53C | In Firefox, the select-combo component was truncated to a width of 113 pixels regardless of the Width property setting. |
| 3.4.0 | | 1-7Y9ZKQ | <p>In Firefox, if you right-clicked the Size Array field of a layout component in the Properties Editor palette and selected a custom-created dynamic property, This error was displayed in the System Log:</p> <pre> 11:38:18.484 global (INFO) - (IDPR02) error evaluating expression 'objJSX.setDimensionArray(vntValue?vntValue.split(/\s*[,;]\s*/):[],true);': undefined at jsx3.ide#BJ() at jsx3.ide#p9() at jsx3#eval() at jsx3.lang.Object.eval() ... </pre> |
| 3.2.0 | | 1-77QPS3 | <p>When accessing data across multiple domains on Firefox 1.5.x in Windows and Mac, an exception was thrown. For example, this occurred when running the WSDL_Mapping_2 sample application.</p> <p>For Firefox, you must configure proxy communications. See Configuring Proxy Communications in the Tips & Techniques document, <i>Accessing Data Across Subdomains</i>, at http://www.generalinterface.org.</p> |
| 3.2.0 | | 1-7AP5XP | Moving the mouse over a context menu in Firefox may cause an error message in the System Log palette. This message can be ignored. |

Internet Explorer

| Closed in Release | JIRA # | Defect # | Summary (Sheet 1 of 2) |
|-------------------|--------|----------|---|
| 3.9.2 | GI-982 | | Access is denied when trying to open new <code>jsx3.gui</code> window. |
| 3.9.2 | GI-977 | | <code>jsx3.gui.NativeForm</code> can go into an infinite loop trying to check an <code>iframe.document</code> with "Permission denied" on IE. |
| 3.9.2 | GI-974 | | IE10 display quirks. |
| 3.9.2 | GI-973 | | In IE the checkbox <code><label></code> element covers the checkbox input element, causing it to be somewhat "unclickable." |
| 3.9.1 | GI-895 | | Text box email validation fails if the domain name has a '-' in the name. |
| 3.9.1 | GI-885 | | <code>NativeSelect</code> renders nested records twice. |
| 3.9.1 | GI-876 | | <code>NativeForm.setTarget()</code> throws error in IE. |
| 3.9.1 | GI-564 | | Dojo Rich Text Editor is broken in Internet Explorer. |
| 3.7.0 | | 1-9KWA9E | In Internet Explorer, the Text Area Column input box text is not selectable when the Matrix row selection is enabled. |
| 3.7.0 | GI-442 | 1-9GT97L | On Internet Explorer, there are large gaps in menu item text. |

| Closed in Release | JIRA # | Defect # | Summary (Sheet 2 of 2) |
|-------------------|--------|----------|---|
| 3.6.0 | | 1-8JOK9M | In Internet Explorer 7 in XHTML mode, the spyglass was too large for the properties editor, event properties, and for ctrl+alt+shift+j. |
| 3.6.0 | | 1-8CK41L | In Internet Explorer 6 and Internet Explorer 7, opening the System Log in a separate window and then changing the docking option to bottom or floating triggers multiple blank pages. This seems to be an incompatibility with Internet Explorer Developer Toolbar. |
| 3.5.0 | | 1-8EAMO3 | Internet Explorer 6 XHTML mode didn't display an image in the Matrix Image Button column. |

General Interface Builder

| Closed in Release | JIRA # | Defect # | Summary (Sheet 1 of 11) |
|-------------------|--------|----------|--|
| 3.9.2 | GI-999 | | Exception is generated in the system log on IE when a menu item triggers a new page to be loaded in a new window. |
| 3.9.2 | GI-997 | | System log shows 'Unable to get property "createRange" of undefined or null reference' when pressing the keyboard's left or right arrow button in any value of the Event Editor on IE11. |
| 3.9.2 | GI-992 | | ActiveX detection logic using (window.ActiveXObject) fails on IE11. |
| 3.9.2 | GI-991 | | IE11 cannot create or locate a workspace. |
| 3.9.2 | GI-983 | | IE10 code editor misaligned text. |
| 3.9.1 | GI-930 | | Builder IDE Dynamic properties editor throws NPE on the first property added using the [+] button on first column. |

| Closed in Release | JIRA # | Defect # | Summary (Sheet 2 of 11) |
|-------------------|--------|----------|---|
| 3.9.1 | GI-851 | | Attributes editor should allow dash (-) in attribute name. |
| 3.9.1 | GI-840 | | If a component is dropped on textarea, builder throws uncaught exception. |
| 3.9.1 | GI-835 | | Selecting a CDFSchema in the Builder DOM throws error when attributes palette is open. |
| 3.9.1 | GI-833 | | Select cdf Schema in dom and click toggle focus rectangle. Builder throws exception. |
| 3.9.1 | GI-808 | | jsx3.util.Logger#trace method does not supported in IE8 developer tools. |
| 3.9 | GI-815 | | Use of left and right cursor keys causes a loss of focus when trying the edit a property value in Builder. |
| 3.9 | GI-752 | | Remove the unused <code>jsxexecute</code> event code from <code>CheckBox.xml</code> prototype. |
| 3.9 | GI-749 | | Can not search API Documentation in dialog. |
| 3.9 | GI-746 | | <p>In IE, a component file is authored so that the text in <code>onAfterDeserialize</code> and other metadata elements is wrapped in a <code>CDATA</code> block. This is much easier to read when coding by hand then escaped text.</p> <p>Firefox, because of a limitation in its XSL processor has always serialized the component file without the <code>CDATA</code> block. The Firefox behavior should be changed to match IE.</p> |
| 3.9 | GI-725 | | Revert does not correctly revert the component profile form. |
| 3.9 | GI-724 | | In the JavaScript Test Utility, saved history is different with the last pop-up menu. |
| 3.9 | GI-715 | | Mixed case attributes on launch script element for <code>JSX30.js</code> are not preserved as GI environment parameters in IE. |

| Closed in Release | JIRA # | Defect # | Summary (Sheet 3 of 11) |
|-------------------|--------|----------|--|
| 3.9 | GI-694 | | Selecting an item deep in Component Hierarchy palette causes the scroll position to jump to the top position. |
| 3.9 | GI-692 | | Attributes editor should allow colon (:) in attribute name. |
| 3.9 | GI-677 | | IDE Hot Keys panel shows unresolved dynamic properties in Menu column. |
| 3.9 | GI-686 | | <code>jsxdisabledcolor</code> and <code>jsxdisabledbgcolor</code> are not editable from the Properties Editor palette in the Form GUI. |
| 3.9 | GI-630 | | If no project is loaded in General Interface Builder, a closed palette may not be revealed when it is reopened. |
| 3.8.1 | GI-696 | 1-9K0H1G | On Internet Explorer, the Find and Replace buttons do not work in General Interface Builder. |
| 3.8.0 | GI-706 | | <code>plugin_auto</code> does not work in obfuscated build. |
| 3.8.0 | GI-542 | 1-9SSS21 | The Project Settings menu item in the lower left context menu opens the deployment utility instead of the Project Settings dialog. |
| 3.8.0 | GI-548 | | The Builder settings file <code>builder.xml</code> saved on Internet Explorer contains UTF-8 BOM information. However, GI Builder could not read <code>builder.xml</code> if it has the UTF-8 BOM. |
| 3.8.0 | GI-617 | | The legacy autoload setting in <code>config.xml</code> is not honored in Builder. |
| 3.7.1 | GI-506 | 1-9N1F17 | General Interface syntax highlighting code editor fails in IE HTA mode. |
| 3.7.1 | GI-503 | | Toggling “Show Deprecated Members and Classes” hides all API document content. |
| 3.7.1 | GI-501 | 1-9MIRFP | When a cache is viewed in markup view using the palette Read Only view button, an alert window indicates an error. However, you can enter Markup view by switching from Edit view to Markup view using the canvas tab. |

| Closed in Release | JIRA # | Defect # | Summary (Sheet 4 of 11) |
|-------------------|--------|----------|--|
| 3.7.1 | GI-492 | | Some properties of <code>ChartLabel</code> and <code>Legend</code> generate errors when edited in Builder. |
| 3.7.1 | GI-489 | | When a file is selected, the URL format is incorrect in XSL Merge Tool. |
| 3.7.1 | GI-488 | 1-9MIRG8 | The context sensitive help ALT+F1 is broken. When clicked, it displays "Documentation not installed error window." |
| 3.7.1 | GI-484 | | When a matrix component has a URL configuration that creates an error, the Event Palette view is not updated. |
| 3.7.0 | GI-441 | 1-9GP6OV | An error is reported when the API Doc class is selected (compiled packages only). |
| 3.7.0 | GI-453 | 1-9KZWGH | Closing a component editor tab causes Builder to crash if XSL Parameters palette is loaded. |
| 3.7.0 | GI-176 | 1-7THZYB | The GUI Components node in the Project files palette should be hierarchical and reflect the structure defined on the file system. |
| 3.7.0 | GI-376 | 1-9KZWHK | Need to be able to open a project at an arbitrary path. |
| 3.6.2 | | 1-9DL60U | Update URL from <code>power.tibco.com</code> to <code>www.tibcommunity.com</code> . |
| 3.6.1 | | 1-95P54S | The XSL Merge tool did not display all available cached XML in the Cache Select. |
| 3.6.1 | | 1-8UHY7S | Could not run General Interface Builder with Firefox 3; unable to open or create a workspace. |
| 3.6.0 | | 1-8HLQR2 | Some loading and initialization messages were not properly localized in certain locales. |
| 3.6.0 | | 1-8YG841 | The tooltip for the <code>DatePicker</code> component incorrectly gave the dynamic property type as <code>jsxformat</code> . The tooltip now correctly describes the dynamic property type as <code>jsxdateformat</code> . |

| Closed in Release | JIRA # | Defect # | Summary (Sheet 5 of 11) |
|-------------------|--------|-----------|---|
| 3.6.0 | | 1-8KVVW8R | The maximize/restore down button on the Dialog caption bar did not display the correct graphic for the restore-down button. |
| 3.6.0 | | 1-8HBSSG | Some loading and initialization messages were not properly localized in certain locales. |
| 3.6.0 | | 1-8JHQCJ | Resizing the splitter that contained the Properties Editor palette did not collapse the drop down list of options associated with the active edit mask |
| 3.6.0 | | 1-8ORYFN | The view of elements such as DatePicker, TimePicker, Select, and Select-Combo did not get updated immediately. The behavior has been fixed for select, combo, timepicker, and datepicker. Setting color and background-color is now applied to the correct portions of the control. |
| 3.6.0 | | 1-90M2YJ | The text align property did not work on Button and WindowBar until Save and Reload or similar event that would reset the Box profile for the object. |
| 3.5.1 | GI-231 | 1-8FHHIL | In Internet Explorer 7 and TIBCO General Interface 3.5 some key actions would show an error "Uncaught Exception: Access is denied." in the System Log. These errors are no longer shown. |
| 3.5.1 | GI-232 | 1-8F4WHZ | Scrolling logic.js no longer causes the state to be set to modified. |
| 3.5.1 | GI-253 | 1-8F1YRL | Characters are now properly not escaped in the log files. |
| 3.5.1 | GI-235 | 1-8EXSXR | It is now possible to test context sensitive help in your application while working in TIBCO General Interface Builder, without the TIBCO General Interface Builder help function getting in the way. |
| 3.5.1 | GI-259 | 1-8EVMV0 | The Welcome Screen will not be re-displayed when a project is opened from within TIBCO General Interface Builder. |

| Closed in Release | JIRA # | Defect # | Summary (Sheet 6 of 11) |
|-------------------|--------|----------|--|
| 3.5.1 | | 1-8DSUP1 | <p>Installing a new version of TIBCO General Interface now causes the Welcome Screen to appear, even if the SHOW AT STARTUP checkbox has been previously cleared.</p> <p>To prevent the Welcome Screen from being subsequently displayed, clear the checkbox again.</p> |
| 3.5.1 | GI-240 | 1-8DRZIU | TIBCO General Interface will now provide a warning when the command Check For Updates fails due to a connection fault. The progress indicator will not be available. |
| 3.5.1 | | 1-8D9X37 | Deleting a DOM node with the TIBCO General Interface Builder Property Palette open will now delete the edit mask. |
| 3.5.0 | GI-173 | 1-89QBR5 | In General Interface Builder, changing the Type property of the Select control does not cause an exception. |
| 3.5.0 | GI-185 | 1-8BWWXP | In General Interface Builder, entering an invalid attribute name (for example, @jsxtext) in the Properties Editor palette for a Matrix Column, threw a Null Pointer Exception. The Properties Editor palette now stops incorrect names from being entered. |
| 3.5.0 | | 1-8C0B2D | When using the Find and Replace dialog, only the first search string was found. Clicking the Find button again didn't locate the next occurrence of the search string. |
| 3.5.0 | | 1-8AVRSL | In Internet Explorer, an IFrame that showed a Windows Explorer browser (file:/// URI + directory path) showed in front of all other General Interface controls. If a modal dialog was completely blocked by the IFrame, then General Interface Builder could be irrevocably locked up. |

| Closed in Release | JIRA # | Defect # | Summary (Sheet 7 of 11) |
|-------------------|--------|----------|---|
| 3.5.0 | GI-179 | 1-7HWJMF | <p>When running General Interface Builder in Internet Explorer, these steps caused an exception:</p> <ol style="list-style-type: none"> 1. The browser does not occupy the entire screen. 2. The Properties Editor palette is docked on the right side. 3. A property in the Properties Editor palette is being edited that uses a textbox mask. 4. The developer selects the text and continues the selection off the right edge of the browser. 5. The developer releases the mouse off the right edge of the browser. |
| 3.5.0 | GI-172 | 1-89MTML | Couldn't change the API search function to "class" in the API Documentation. |
| 3.5.0 | GI-171 | 1-8BSRTN | Matrix metadata in the Events Editor palette was missing Drag and Before Drop events. |
| 3.5.0 | GI-164 | 1-88XY67 | Clicking the Cancel button when switching projects threw an error. |
| 3.5.0 | GI-163 | 1-88Q9V4 | The Properties Editor palette for <code>jsx3.gui.Select</code> was missing a field to set the default text (<code>setDefaultText:jsxdefaulttext</code>). |
| 3.5.0 | GI-162 | 1-86TY0J | File was corrupted by General Interface Builder when saved with non-ASCII characters entered in text area. |
| 3.5.0 | GI-28 | 1-808KFD | <p>The JavaScript editor and GUI Component Source XML (Expert) view line position didn't get restored to the previous line scrolled down to after going to other views (pane) and back. The line number bar showed your last position in this view, but the body of the view was at the top of the document.</p> <p>This defect is fixed for Internet Explorer, but not for Firefox because of this defect - https://bugzilla.mozilla.org/show_bug.cgi?id=241033.</p> |

| Closed in Release | JIRA # | Defect # | Summary (Sheet 8 of 11) |
|-------------------|--------|----------|--|
| 3.5.0 | | 1-8CNHMC | When a document in the Local Data Cache palette was edited and then saved (Save to Cache), if that document was used as the source XML for a given control in the user interface (such as a <code>jsx3.gui.Tree</code> instance), the saved document wouldn't be saved to the correct cache and if the tree was repainted, the edits wouldn't be seen. |
| 3.4.1 | GI-114 | 1-852ZE9 | Loading a component programmatically in General Interface Builder cleared the state of the Component Hierarchy palette. |
| 3.4.1 | GI-113 | 1-86GCR7 | When changing the name of a DOM node in the Properties Editor palette, the Component Hierarchy palette lost its value and the Properties Editor palette cleared. |
| 3.4.0 | | 1-7YL8GT | In the Properties Editor palette, when you selected a property value from a drop-down menu, the same selection displayed for other properties with drop-down menus. |
| 3.4.0 | GI-34 | 1-7ZeqH0 | The <code>objEVENT</code> context parameter in spyglass model events didn't have event information (<code><empty></code>). |
| 3.4.0 | GI-30 | 1-7ZW345 | Although the Focus Rectangle was enabled in the Component Hierarchy palette, absolutely-positioned WindowBar instances couldn't be moved in the work area of the IDE. |
| 3.4.0 | GI-14 | 1-7WM1VJ | External files, such as xml, xsl, and jss documents, that were set to <code>auto-load=true</code> weren't loaded into the application cache. |
| 3.3.0 | | 1-7WP11F | <p>"Reset/Clear" in the <code>Matrix.Column Format Handler</code> property caused this exception:</p> <pre> 15:36:35.564 global (INFO) - (IDPR02)errorevaluating expression 'objJSX.setFormatHandler(vntValue);objJSX.repaint();': 'null' is null or not an object at jsx3.ide#BJ() at jsx3.ide#p9() </pre> |

| Closed in Release | JIRA # | Defect # | Summary (Sheet 9 of 11) |
|-------------------|--------|----------|--|
| 3.3.0 | | 1-7WOXL9 | When the children for a LayoutGrid were rearranged in General Interface Builder, the child blocks were not resized accordingly. |
| 3.3.0 | | 1-7UM83F | Add-in component icons weren't displayed correctly in the Component Libraries palette, because <code>GI_Builder/</code> was prepended to the icon URI. |
| 3.2.0 | | 1-6BYOQP | <code>jsx3.ide.debug()</code> statements at runtime (or Project > Run) throw a JavaScript error in the browser. This is expected behavior. To prevent these errors, wrap debug statements in an <code>if</code> statement, which refers to a global <code>isDebug</code> variable. Then set the variable to <code>True</code> for development and <code>False</code> for deployment. |
| 3.2.0 | | 1-7A5UB3 | The cursor was missing in the General Interface Builder editor when running in Firefox. |
| 3.2.0 | | 1-7CHI0R | When adding a new class path on the Classpath panel of the Project Settings dialog (Project Settings > Classpath), an error was thrown and the new record didn't immediately display. |
| 3.2.0 | | 1-78QAO1 | Unable to delete text area/textbox once it was dropped in the General Interface Builder work area toolbar (bottom of work area). |
| 3.2.0 | | 1-76FWL5 | When switching projects in General Interface Builder after an exception, General Interface Builder appeared to be unresponsive. High CPU usage was observed (99%). |
| 3.2.0 | | 1-72UPUR | The method, <code>jsx3.net.Service.getEndpointURL()</code> , appeared in API help but not when using the type-ahead feature (Ctrl+spacebar). |
| 3.2.0 | | 1-7AOYPQ | Restoring a Matrix Column from the Recycle Bin caused an exception. |

| Closed in Release | JIRA # | Defect # | Summary (Sheet 10 of 11) |
|-------------------|--------|----------|---|
| 3.2.0 | | 1-6FEKS8 | Certain sequences of author-time events, including toggling an object's properties between Absolute and Relative, could cause strange results later when trying to move the object by dragging the object's center point. The object appeared in a different location than where it was dropped. |
| 3.2.0 | | 1-6U3XMU | <code>jsx3.GO()</code> and other methods in getting a handle to an object which do not include the namespace found objects which have been placed in the trash can. This made updates to the view at author time unpredictable. |
| 3.2.0 | | 1-6X6AG4 | When the Source XML (Expert) view of a GUI Component (2nd button on the bottom of the work area) was active, only the Project Files palette and the Local Data Cache palette should be enabled. Because other areas of the user interface were enabled, it was possible to make changes to the component using the Component Hierarchy palette or Properties Editor palette, and so on, which were not persisted. |
| 3.2.0 | | 1-6X6AIS | There was no warning given when a developer tries to import a Referenced or Referenced-async GUI component as a child of JSXBODY (the topmost node in the Component Hierarchy). All referenced components needed to be a child of an object in the component hierarchy of the referencing component. Otherwise, when the referencing component was saved, the reference was lost. |
| 3.1.1 | | 1-70Q8JU | The Properties Editor palette got out of alignment when the Enter key was used for navigation. |
| 3.1.1 | | 1-6Z6WKR | XML markup text didn't render in the logger. |
| 3.1.1 | | 1-6Z6C5E | <code>jsx3.app.Monitor</code> didn't escape HTML/XML markup text. |
| 3.1.1 | | 1-6ZS55H | Changing the Show Deprecated Classes option collapsed the tree, unselected the current class, and prevented the selection of methods. |

| Closed in Release | JIRA # | Defect # | Summary (Sheet 11 of 11) |
|-------------------|--------|----------|---|
| 3.1.1 | | 1-6X6LLE | Pressing the Enter key while in the Type column of the Dynamic Properties Editor (or combo box column in any Grid) moved the focus two rows down. |

General Interface Framework

| Closed in Release | JIRA # | Defect # | Summary (Sheet 1 of 10) |
|-------------------|--------|----------|--|
| 3.9.2 | GI-987 | | <code>jsx3.util.Logger</code> implementation of console log handler does not work properly on Chrome. |
| 3.9.2 | GI-981 | | <code>jsx3.lang.Method - getParameterNames()</code> returns abstract method's last argument with <code>/**/</code> empty comment on Chrome |
| 3.9.2 | GI-980 | | <code>NativeError</code> - cannot get line number and filename on Chrome and IE 10. |
| 3.9.2 | GI-976 | | <code>jsx3.net.Form</code> can go into infinite loop trying to check <code>iframe.document</code> with "Permission denied" on IE. |
| 3.9.2 | GI-956 | | <code>jsx3.net.URI</code> does not support IPv6 hosts. |
| 3.9.1 | GI-951 | | <code>jsx3.net.Service</code> <code>getInboundDocument</code> fails to return the fault XML document on SOAP fault 500. |
| 3.9.1 | GI-922 | | NPE in <code>Object.getRelativePosition()</code> in Chrome/Safari. |
| 3.9.1 | GI-921 | | IE phantom resize event cause GITAK commands to collapse Heavyweight window when it's not supposed to. |
| 3.9.1 | GI-920 | | Matrix Number Column shows 0.0 for an integer with "0" for value. |
| 3.9.1 | GI-909 | | Redundant code in <code>Entity.replaceNode</code> . |
| 3.9.1 | GI-903 | | Compatibility with OpenSocial gadget hosted by Shindig. |
| 3.9.1 | GI-882 | | <code>NumberFormat</code> should treat all whitespace equally when parsing numbers. |

| Closed in Release | JIRA # | Defect # | Summary (Sheet 2 of 10) |
|-------------------|--------|----------|---|
| 3.9.1 | GI-879 | | NumberInput with bad format set causes NPE when parsing or formatting value. |
| 3.9.1 | GI-877 | | Event.getWheelDelta() does not return exactly 0 when there's no scrolling movement, it is also undocumented. |
| 3.9.1 | GI-862 | | Disable image preloading for system image files. |
| 3.9.1 | GI-841 | | Update URL to system requirements so that the GI version number is automatically part of the URL. |
| 3.9.1 | GI-906 | | Memory not reclaimed when removing portions of component files from the DOM. |
| 3.9 | GI-682 | | <code>jsx3.\$S()</code> works only when deprecated methods in <code>javascript.js</code> are loaded. |
| 3.9 | GI-625 | | Provide the ability to abort asynchronous loads in Document, Cache, and Cacheable. |
| 3.9 | GI-800 | | Calling <code>jsx3.eval(strScript, objContext)</code> with some special parameter names such as <code>var</code> or <code>function</code> in <code>objContext</code> will cause a syntax error because in <code>jsx3.eval</code> , all parameters in <code>objContext</code> will be copied to a local variable while parameter names such as <code>var</code> cannot be used for name of local variable. |
| 3.9 | GI-735 | | General Interface does not load in IE8 when running in XHTML mode. The issue is caused by the native browser method <code>HTMLElement.setAttribute</code> . In IE8+XHTML, the second argument to this method must be a string, otherwise the value is stringified as <code>"[object]"</code> . This causes no project JavaScript resources to load. |
| 3.9 | Gi-644 | | <code>jsx3.gui.Select</code> does not indicate when the data is loading or when there is an error with the XML data. |
| 3.9 | GI-428 | | <code>jsx3.gui.Matrix</code> : Events are not executed on active spyglass display. |

| Closed in Release | JIRA # | Defect # | Summary (Sheet 3 of 10) |
|-------------------|--------|----------|---|
| 3.8.0 | GI-707 | | The resource URL path starting with <code>JSXAPPS/</code> is considered absolute by the General Interface path resolver for legacy compatibility. An application using the legacy resource <code>jsx3.resolveURI("JSXAPPS/...")</code> was broken. |
| 3.8.0 | GI-531 | | It is not possible to create a pointcut on an inherited method. |
| 3.8.0 | GI-540 | | The dynamic property <code>@Transparent BG</code> resolves to <code>-1</code> . |
| 3.8.0 | GI-547 | | Localization support is required for the <code>jsx3.gui.Table</code> header CDF. |
| 3.8.0 | GI-550 | | <code>jsx3.net.Form</code> , <code>getResponseXML</code> , and <code>getResponseText</code> fail on Internet Explorer and Safari. |
| 3.8.0 | GI-572 | | Logging messages are not escaped in the application monitor in Internet Explorer. |
| 3.8.0 | | 1-9ZLRJK | Add CLDR localization data for Indonesian and Vietnamese. |
| 3.7.1 | GI-517 | | Setting <code>jsxname</code> for a serialized object to a JavaScript reserved word generates an error. |
| 3.7.1 | GI-507 | | Add Firebug console log handler. |
| 3.7.1 | GI-500 | 1-9OWHCI | <p>Template resolvers that return an invalid CSS property (such as <code>\$bg</code>) cause an error in IE.</p> <p>Note: The template resolver, <code>\$bg</code>, included a trailing semicolon in its final CSS output. This caused a warning in most browsers and an error in IE. GI Builder currently implements two dynamic properties that return invalid CSS: <code>'@Transparent BG'</code> and <code>'@No BG Image'</code>. Using these properties will also cause an error in the template engine. If you are implementing a template-based class that needs these, create your own custom dynamic property.</p> |
| 3.7.1 | GI-494 | | System-wide workaround is needed for Mozilla bug 340345 in Firefox 3.0 framework. |

| Closed in Release | JIRA # | Defect # | Summary (Sheet 4 of 10) |
|-------------------|------------------|----------------------|---|
| 3.7.1 | GI-491 | | Add memory statistics to benchmarking code . |
| 3.7.1 | GI-472 GI-487 | 1-9NK5BO 1-9R5ZEB | URI path resolver fails to resolve components/test.xml to JSXAPPS/test/components/test.xml. |
| 3.7.0 | | 1-9ELF25 | jsx3.net.Service.XML2JSON generates the wrong JSON string for nested nodes/objects. |
| 3.7.0 | | 1-9JWAND | When a menu is used as an edit mask in a matrix, the BeforeShow event for the menu is executed before the edit session can be created for the matrix. This causes the method emGetSession to return a null or stale edit session. |
| 3.7.0 | GI-464 | 1-9J1VG5 | jsx3.util.NumberFormat does not implement a internationalized version (or any version) of a parse method. |
| 3.7.0 | | 1-9J1DSP | The class jsx3.gui.Window needs to provide the method doClose to make its APIs consistent with the functionality provided by jsx3.gui.Dialog. The existing method close only destroys the view. |
| 3.7.0 | | 1-9ECYBL | When autorow is set to true in a matrix with a Delete button column, a new row is appended. When the Delete button is clicked to delete the autorow, it is not deleted. |
| 3.7.0 | GI-382 | 1-9AUSPJ | The event Destroy is not executed when the dialog doClose function is called to remove the dialog from the screen. |
| 3.7.0 | GI-403 | 1-9ACWIZ | A tree that allows for multiple selection will have its view corrupted when a node is deleted. |
| 3.7.0 | GI-423 | 1-9KZWLD | System.reloadLocalizedResources() does not reload add-in resources. |
| 3.6.2 | GI-416 | 1-9AUSR1 | Select/Combo control's getValue() method returns jsxtext instead of jsxid when an item is selected using a sequence of keyboard keys. The same method returns jsxid when the item is selected using the mouse. |

| Closed in Release | JIRA # | Defect # | Summary (Sheet 5 of 10) |
|-------------------|--------|----------|---|
| 3.6.2 | | 1-9BGM7L | The <code>getResponseXML()</code> method of <code>jsx3.net.Request</code> class does not return the SOAP Fault XML document. This issue also affects <code>jsx3.net.Service</code> request. |
| 3.6.2 | GI-429 | 1-9CY8MB | A race condition is possible in the resource loader. This can happen when loading multiple addins with the same name. |
| 3.6.1 | | 1-9ARWH1 | Added support for Windows XP Professional, SP3. |
| 3.6.0 | GI-305 | 1-8JZUUD | The <code>jsx3.util.NumberFormat.format</code> method returned incorrect results when the input value started with "9" and contained more than four "9" digits. |
| 3.6.0 | | 1-8JOC21 | Projects created in previous versions had the wrong type set on the record with <code>jsxid="eventsvers"</code> in <code>config.xml</code> . The type was set to number instead of string. This caused migration issues when the project is opened in newer versions. |
| 3.6.0 | | 1-8KE9JN | The time format for the French locale has been updated to enforce exclusive use of the 24-hour time format. The 12-hour format is not valid for that locale. |
| 3.6.0 | | 1-90HBLX | Matrix Date and Time Column do not display localized data after using the <code>setLocale()</code> and <code>reloadLocalizedResources()</code> methods. |
| 3.6.0 | | 1-91CYCD | An error occurs when displaying a Line LinearX chart using XMLURL data and XML Bind property set. |
| 3.6.0 | | 1-8VM95B | Some formatting, such as line feeds, is lost when using the <code>jsx3.net.Form.setField</code> method. |
| 3.6.0 | | 1-8UZVTU | Users were unable to programmatically set focus on a tab that was not visible in the active area of a tabbed pane. The <code>doShow</code> method has been updated to reveal the tab if it is scrolled out of view. |
| 3.6.0 | | 1-910SXP | Localization files (JSS files) were not properly loaded when loaded as an addin. |

| Closed in Release | JIRA # | Defect # | Summary (Sheet 6 of 10) |
|-------------------|--------|----------|---|
| 3.6.0 | | 1-91CYCD | An error was returned when setting setXMLBind to Bound on a linearXLineChart chart. |
| 3.5.1 | | 1-8JGUV7 | <p>The selection language of the MSXML 3 parser should be set to XPath by default to better match Firefox and MSXML 4+ behavior. <code>get/setSelectionLanguage</code> should be deprecated as it only applies to Internet Explorer.</p> <p>The previous behavior can be restored by calling <code>setSelectionLanguage ("XSLPattern")</code> on an instance of <code>jsx3.xml</code>. Document before calling <code>selectNodes()</code> or <code>selectSingleNode()</code>.</p> |
| 3.5.1 | | 1-8IUDYD | The <code>jsx3.xml.CDF</code> method (<code>insertRecordNode</code>) did not follow the same contract as the method <code>insertRecord</code> . It would fail to perform an update when a CDF record was added with a <code>jsxid</code> that already exists in the CDF document. This would result in a CDF document containing multiple records with the same <code>jsxid</code> . |
| 3.5.1 | GI-192 | 1-8HVQVX | <p>Entering an invalid value for a component Key Binding would cause two problems:</p> <ul style="list-style-type: none"> • Corrupt the component so that it will no longer load. • The IDE did not load any more components and would only display the loading message. |
| 3.5.1 | GI-257 | 1-8G1CQV | <code>TimePicker.getDate()</code> now returns correct value after switching AM/PM with <code>h=12</code> on a 12-hour clock. |
| 3.5.1 | GI-256 | 1-8G0TWX | <code>TimePicker</code> now implements <code>getValue()</code> correctly. |
| 3.5.1 | GI-260 | 1-8EMMJV | <p>TIBCO General Interface version 3.2 to 3.5 was not compatible with the Windows Script 5.7 for Windows XP update.</p> <p>TIBCO General Interface version 3.5.1 is compatible.</p> |
| 3.5.1 | GI-251 | 1-8EKGFW | Unescaped characters in several controls no longer cause errors in Firefox XHTML mode. |

| Closed in Release | JIRA # | Defect # | Summary (Sheet 7 of 10) |
|-------------------|--------|----------|--|
| 3.5.0 | | 1-8DWFV9 | <p>From an HTTPS URL, Internet Explorer threw this security alert:</p> <p>"This page contains both secure and nonsecure items. Do you want to display the nonsecure items?"</p> <p>when the user FIRST executed any of these actions:</p> <ul style="list-style-type: none"> Clicked the [x] Delete icon of the matrix row Dynamically loaded (<code>Model.load</code>) a matrix component Clicked a select or select/combo item in the drop-down list (XML URL data) Opened or closed a dialog box containing an asynchronous-referenced matrix |
| 3.5.0 | | 1-8D25WB | <code>jsx3.util.strEscapeHTML</code> wasn't XHTML-compliant. |
| 3.5.0 | GI-184 | 1-8CDBQA | Logger handlers could be added more than once to a handler, causing duplicate logging messages. |
| 3.5.0 | GI-170 | 1-8BEFIZ | The <code>Server.loadAppWindow()</code> method threw the wrong kind of error when the root component wasn't a <code>jsx3.gui.Window</code> . |
| 3.4.1 | GI-132 | 1-88QWW3 | Attempting to load a non-existent XML document in Static mode caused a corrupted cache. |
| 3.4.1 | GI-125 | 1-88C9J0 | The <code>jsx3.net.URIResolver.USER.getUriPrefix()</code> method returned JavaScript code instead of a path. |
| 3.4.0 | | 1-7Z3211 | <p>When a General Interface application was deployed to an HTTP server and the launch page for the application wasn't a sibling to the JSX directory, these default system images were not resolved correctly:</p> <ul style="list-style-type: none"> The plus/minus toggling icon for tree and matrix-tree The transparent image used for all CDF controls The green check mark icon used for the select options list to denote which option is selected |

| Closed in Release | JIRA # | Defect # | Summary (Sheet 8 of 10) |
|-------------------|--------|------------------------|--|
| 3.3.0 | | 1-7ZP9SH / 1-7YTIK0 | <p>In some versions of Internet Explorer 6 and 7, XML, XSL, and JSS files were never cached by the browser. TIBCO General Interface has been modified to work around this issue.</p> <p>For more information on Internet Explorer caching and best practices, see “Understanding Internet Explorer Caching” at http://www.generalinterface.org in the Tips and Techniques section.</p> |
| 3.3.0 | | 1-7XUQPP | The <code>jsx3.xml.Processor</code> constructor didn’t accept <code>jsx3.xml.Entity</code> (and subclass <code>jsx3.xml.Document</code>) for the source document parameter. |
| 3.3.0 | | 1-7Y9EB1 | The <code>jsx3.net.Form()</code> method caused an error due to obfuscation. |
| 3.3.0 | | 1-7U7YT1 | The <code>activateOnHotKey</code> attribute of the application monitor (<code>logger.xml</code>) doesn’t work. It should disable the application monitor until the hot key, <code>Ctrl+Alt+m</code> , is pressed in the application. |
| 3.3.0 | | 1-7WUUZU | The <code>jsx3.resolveURI()</code> method erroneously removed query parameters and fragment parts of the URI. |
| 3.3.0 | | 1-7VUMGR | In Internet Explorer and over HTTP, if a component file contained a dynamically loaded class and an include that referenced another component file that also contained the same dynamically loaded class, General Interface under certain conditions showed FATAL alerts about trying to reload the class. |
| 3.3.0 | | 1-7V4G99 | <p>The <code>jsx3.xml.Entity.setValue()</code> method caused inconsistent behavior in the XML Mapping Utility. In Firefox, this method was concatenating the string by appending each new bit of text, while in Internet Explorer it was replacing any existing text.</p> <p>The correct behavior was to replace all content of the entity with the text value of the input parameter, so that the only value of the entity is the newly added text value. Firefox and Internet Explorer now consistently handle these methods: <code>setValue()</code>, <code>createNode()</code>, <code>insertBefore()</code>, and <code>appendChild()</code>.</p> |

| Closed in Release | JIRA # | Defect # | Summary (Sheet 9 of 10) |
|-------------------|--------|----------|---|
| 3.3.0 | | 1-7V4G9S | A Tabbed Pane container with two asynchronously loaded Matrix components (asynch referenced the same matrix) that were set with the Not Selectable property caused an exception: 18:02:38.747 global (ERROR) - Uncaught Exception: Reference to undeclared namespace prefix: 'xsl'. |
| 3.2.0 | | 1-7CIEMN | <p>In General Interface Framework, there was a problem if you used an edit mask within a Matrix and that given Matrix instance didn't use any pagination (<code>jsx3.gui.Matrix.PAGING_OFF</code>).</p> <p>Calling the <code>redrawRecord()</code> method or any method that calls <code>redrawRecord()</code>, such as <code>insertRecord()</code> or <code>insertRecordNode()</code>, resulted in an error.</p> |
| 3.2.0 | | 1-79I48Z | The Dynamic Properties editor (Matrix control) threw an exception when updating the <code>jsxid</code> column and required refresh to be in synch with underlying data. |
| 3.2.0 | | 1-73QTJ7 | <p>Removing a child of a layout grid (and its subclasses such as <code>StackGroup</code>) didn't properly remove the child HTML.</p> <p>This was true if the layout grid had been repainted but not true if the children had been added with <code>insertHTML()</code>.</p> |
| 3.2.0 | | 1-72KUMP | Hot keys registered as properties of the button classes or registered as the <code>jsxkeycode</code> CDF attribute of menu should register themselves with the first ancestor DOM node that was a <code>jsx3.gui.Window</code> , <code>jsx3.gui.Dialog</code> , or root block of a server. |
| 3.2.0 | | 1-72G8V7 | CDF records with only numeric IDs cause ID collisions. |
| 3.2.0 | | 1-70Q86W | Added missing <code>getServer()</code> method to the <code>jsx3.net.Service</code> class, allowing for more consistent experience in both General Interface Builder and runtime. |
| 3.2.0 | | 1-712JG1 | <p>It wasn't possible to combine nodes or documents that were created using differing threading models.</p> <p>The threading model used by the <code>xmlhttp</code> control and the threading model used by static XML documents were different.</p> |

| Closed in Release | JIRA # | Defect # | Summary (Sheet 10 of 10) |
|-------------------|--------|----------|---|
| 3.2.0 | | 1-6X3V2V | Adding more than two children to a splitter parent caused unpredictable runtime behavior. |
| 3.1.1 | | 1-72252X | <code>jsx3.net.Service.setTimeout</code> caused JavaScript error, "onTimeout is undefined". |
| 3.1.1 | | 1-6XP1CC | XSL document was reloaded when destroying List/Grid. |
| 3.1.1 | | 1-6YKVJL | Date Picker failed in GMT-nn time zones. |
| 3.1.0 | | 1-692LVH | The JavaScript function <code>setTimeout</code> was not supported in the version of the HTTP object referenced in Project Deployment Options. |

GIPP/GITAK

| Closed in Release | JIRA # | Defect # | Summary |
|-------------------|--------|----------|--|
| 3.9 | GI-825 | | GITAK runtime is missing from the 3.8 distribution. |
| 3.9 | GI-708 | | Test recorder NPE when a model event triggers the removal of the event publisher from the DOM. |

GUI Components

| Closed in Release | JIRA # | Defect # | Summary (Sheet 1 of 21) |
|-------------------|--------|----------|--|
| 3.9.2 | GI-975 | | <code>jsx3.gui.Template</code> based UI display issue on Safari 6 and chrome. |
| 3.9.2 | GI-971 | | <code>jsx3.html.getCSSOpacity()</code> should return "opacity:<value>;" instead of "filter:alpha(opacity=<value>;)". |

| Closed in Release | JIRA # | Defect # | Summary (Sheet 2 of 21) |
|-------------------|--------|----------|---|
| 3.9.2 | GI-967 | | Under Chrome, matrix header not matching column. |
| 3.9.2 | GI-864 | | Matrix - Hierarchical: nodes in the same level don't aligned vertically when some of them are wider than the container. |
| 3.9.1 | GI-952 | | Disabled toolbar button does not show the button icon as grayed out. |
| 3.9.1 | GI-937 | | Matrix DatePicker formatter is broken when there is a conflict between data store format and display format. |
| 3.9.1 | GI-913 | | NPE occurs when paged matrix control is repainted or accessed while off screen. |
| 3.9.1 | GI-910 | | Read-only NumberInput should not increment/decrement with mouse wheel. |
| 3.9.1 | GI-900 | | Drag-and-drop reordering of Matrix column fails on right most columns of a large column set. |
| 3.9.1 | GI-891 | | Matrix Reorder event not fired when moving a column into the last position. |
| 3.9.1 | GI-890 | | Long cell text mangles with the + / -icon. on Matrix-Tree. |
| 3.9.1 | GI-884 | | Combo CHANGE event may not fire when blurring the combo input field. |
| 3.9.1 | GI-881 | | Ability to disable dates and months in the DatePicker calendar popup. |
| 3.9.1 | GI-880 | | Allow the null value label of a DatePicker to be overridden. |
| 3.9.1 | GI-871 | | Change event not firing when date control is cleared. |
| 3.9.1 | GI-867 | | Matrix autorow cleanup results in an exception. |
| 3.9.1 | GI-935 | | Focus/unfocus in matrix cell with edit mask makes increasing number of invocations of edit mask. |
| 3.9.1 | GI-865 | | jsx3.gui.NativeForm Multipart property is broken. |

| Closed in Release | JIRA # | Defect # | Summary (Sheet 3 of 21) |
|-------------------|--------|----------|---|
| 3.9.1 | GI-854 | | Provide new methods: <code>TextBox.getSelection</code> and <code>setSelection</code> . |
| 3.9.1 | GI-848 | | <code>NativeSelect</code> and <code>NativeFileUpload</code> don't implement <code>getValue()</code> correctly. |
| 3.9.1 | GI-844 | | <code>LayoutGrid.getRows()</code> , documented return type is <code>String</code> , can return <code>Array</code> . |
| 3.9.1 | GI-823 | | <code>Visibility.visible</code> is not properly applied for Chrome browser. |
| 3.9.1 | GI-711 | | Combo select case insensitive comparison is not i18n ready or overridable. |
| 3.9 | GI-744 | | Implement correct border and margin properties on <code>Tab</code> and <code>TabbedPane</code> . |
| 3.9 | GI-709 | | <p>When an object of <code>class javax3.gui.Select</code> is set to <code>Combo/Type</code> ahead, it publishes a <code>SELECT</code> event when the user selects a value from the option list.</p> <p>It should also publish an event if the value of the input is changed by entering a new value manually that does not match one of the options..</p> |
| 3.9 | GI-695 | | Position of matrix edit masks is incorrect if HTML body with overflow property other than <code>hidden</code> (default is <code>auto</code>) is scrolled. |
| 3.9 | GI-661 | | To improve accessibility by user agents and users who have turned images off, alternate text is supported for all user-supplied images, including user configured image element, <code>Image</code> button, and <code>Toolbar</code> button(<code>alt=</code>). |
| 3.9 | GI-656 | | To improve accessibility by users who have turned images off, alternate text is supported for the <code>System Image</code> , which includes all GI provided UI controls with image sub-component, such as <code>DatePicker's</code> previous/next year and month, <code>Spinner's</code> up and down buttons and <code>Slider's</code> slide handle. |
| 3.9 | GI-767 | | Removing a button activated by a hot key should deregister the hot key. |

| Closed in Release | JIRA # | Defect # | Summary (Sheet 4 of 21) |
|-------------------|--------|----------|---|
| 3.9 | GI-766 | | When a number is entered in <code>NumberInput</code> and the <code>doValidate</code> method is invoked, Builder throws an exception. |
| 3.9 | GI-745 | | Controls such as <code>TabbedPane</code> should honor the padding of their parent block. |
| 3.9 | GI-720 | | Some Matrix operations throw an error in IE when the matrix is rendered in another window. |
| 3.9 | GI-717 | | <code>jsx3.gui.Matrix</code> throws an exception when a column with a button mask has properties (such as <code>onmousedown</code>) defined with quotes. |
| 3.9 | GI-703 | | For <code>jsx3.gui.Select</code> , the <code>Text</code> and <code>Options</code> list is not updated correctly if set to asynchronous. |
| 3.9 | GI-676 | | There is a hierarchical matrix rendering glitch on Safari. |
| 3.9 | GI-687 | | Disabled color and background color are not applied for Radio buttons and check boxes on Internet Explorer. |
| 3.9 | GI-657 | | Cannot use Multiselect control from the keyboard (accessibility issue). |
| 3.8.1 | GI-407 | 1-9BLPU5 | Stack group vertical stack container () displays text horizontally. |
| 3.8.0 | GI-284 | | Splitter Container 1 Min is not enforced during window resizing. |
| 3.8.0 | GI-426 | | Resized splitter sits above dialog box in Firefox 3. |
| 3.8.0 | GI-532 | | The <code>xsl:attribute</code> in the matrix column value template that is applied to a parent element is not reapplied during cell repainting. |
| 3.8.0 | GI-534 | | Dragging a horizontal splitter inside a tab to another tab breaks the splitter and content. |
| 3.8.0 | GI-543 | | Incorrect order sometimes results from dragging multiple rows of a matrix. |

| Closed in Release | JIRA # | Defect # | Summary (Sheet 5 of 21) |
|-------------------|--------|----------|--|
| 3.8.0 | GI-622 | | <code>jsx3.gui.Sound</code> does not work with Firefox and Quicktime. |
| 3.7.1 | | 1-AD8AI7 | Text box change is not vetoable. |
| 3.7.1 | GI-519 | | The <code>TextBox CHANGE</code> event cannot be vetoed. |
| 3.7.1 | GI-516 | | When a matrix is scrolled horizontally, it does not adjust its left position if the ancestor container was resized to a larger size. There is a gap at the right edge of the matrix, which scrolls the rows off the screen. |
| 3.7.1 | GI-486 | | If <code>objCOL.setDisplay(jsx3.gui.Block.DISPLAYNONE)</code> is used to hide a column in a matrix and then a column to the right of the hidden column is resized, an incorrect <code>intCOLUMNINDEX</code> is returned in the event handler for the resizing operation. |
| 3.7.1 | GI-509 | 1-9OVGWJ | If there is a change in the underlying CDF that is preceded by an initial scroll in a paged matrix, <code>repaintData()</code> does not update the view. |
| 3.7.1 | GI-68 | | Double-clicking on the matrix column divider auto-sizes column width. |
| 3.7.0 | GI-292 | 1-9K4K1S | Setting the BG color property to <code>@Transparent BG</code> for the splitter component breaks the component. |
| 3.7.0 | GI-419 | 1-9L39WP | Stacks displaying menus in the bar (such as the palettes in Builder) could cause the active stack to shift unexpectedly when removing a stack from the stack group. |
| 3.7.0 | | 1-9L39TP | <code>jsx3.gui.Dialog</code> does not show the dynamic property <code>jsxtext</code> in the Task bar tab. |
| 3.7.0 | | 1-9GYNBZ | When a stack is dropped on any container other than <code>stackgroup</code> in Internet Explorer 7, an exception is created. |
| 3.7.0 | GI-440 | 1-9GYNAT | Component Hierarchy palette toolbar buttons is disabled after new components are added. |
| 3.7.0 | GI-272 | 1-9KZWMG | <code>DatePicker</code> loses the default format when the value is deleted twice. |

| Closed in Release | JIRA # | Defect # | Summary (Sheet 6 of 21) |
|-------------------|--------|----------|---|
| 3.7.0 | GI-295 | 1-9KZWNR | When <code>jsx3.gui.Matrix</code> is set to hierarchical rendering mode, the custom open/close icons on the hierarchical matrix do not change as they should. |
| 3.7.0 | GI-296 | 1-9L39TP | <code>jsx3.gui.Dialog</code> does not show the dynamic property <code>jsxtext</code> in the taskbar tab. |
| 3.7.0 | GI-400 | 1-9L39UH | <code>TimePicker</code> does not conform to the contract of <code>jsx3.gui.Form</code> ; it does not implement <code>doValidate</code> . |
| 3.7.0 | GI-408 | 1-9L39VQ | The browser context menu is not blocked for <code>jsx3.gui.Window</code> . In a new window created using <code>server.createAppWindow</code> , the browser context menu always appears. For the main window it is not shown. |
| 3.7.0 | GI-420 | 1-9CAOI3 | An exception occurs when the <code>setDisplay</code> method of the new component inherited from <code>jsx3.gui.Template.Block</code> is called. |
| 3.7.0 | GI-425 | 1-9L39ZK | A template with a <code><for-each></code> loop did not function properly when a resize event occurred. |
| 3.7.0 | GI-427 | 1-9L3A0L | Add support for <code>getValue</code> and <code>setValue</code> methods to <code>CheckBox</code> and <code>RadioButton</code> control for CDF mapping. |
| 3.7.0 | GI-431 | 1-9L3A1G | Add support for multi-level property (object property) in <code>jsx3.gui.Template.Block.setProperty</code> . |
| 3.6.2 | | 1-9C4AR9 | Dialog control created using with constructor does not contain the maximize button in the window bar. |
| 3.6.1 | GI-372 | 1-959QLY | Combo control regression: <code>getValue()</code> returned the text instead of the <code>jsxid</code> . |
| 3.6.1 | GI-302 | 1-917199 | Under certain conditions, dropping entries onto a <code>Matrix</code> component did not properly account for the rendering context. Note that this defect was marked closed in release 3.6.0, but actually is closed in release 3.6.1. |
| 3.6.1 | | 1-95LYL9 | The time selected in <code>timepicker</code> differed by one hour from the <code>timepicker.getDate()</code> value called within <code>Change</code> event. |

| Closed in Release | JIRA # | Defect # | Summary (Sheet 7 of 21) |
|-------------------|--------|----------|---|
| 3.6.1 | | 1-96AM6R | Table headers did not display when no data was available for the headers. |
| 3.6.1 | | 1-96YYLR | Typing in a combo box with valid option text and then clicking the tab key did not select the valid option. |
| 3.6.1 | | 1-96ZW5T | DatePicker did not implement the <code>getValue()</code> method required for <code>jsx3.gui</code> . |
| 3.6.0 | | 1-8VM944 | Disabled form fields were able to receive focus, either by mouse-click or tab-key selection. You can no longer tab into a disabled form field, including combo and select boxes. |
| 3.6.0 | | 1-90ODVT | The text editing cursor remained in the textbox after the focus was moved away to a button by a user click or by the using the tab key. |
| 3.6.0 | | 1-9171BN | In previous releases, the method <code>getSortedIds</code> for Matrix components did not account for the rendering context, and therefore, the row count returned was potentially inaccurate. |
| 3.6.0 | | 1-8VGMYM | Menu hotkey does not work if the menu's CDF data is loaded asynchronously from a file pointed to by XMLURL. |
| 3.6.0 | | 1-8EBIXD | Calling <code>repaintData</code> while the Matrix display property is set to "none" results in no vertical scroll bar when display is restored. |
| 3.6.0 | | 1-8NGCDO | After dynamically loading a Matrix into the content pane belonging to a hidden Tab, the Matrix rendering overlapped the TabbedPane control when the Tab was displayed. This only occurred when the content pane's load type was set to "Deserialize on show". |
| 3.6.0 | | 1-93LEGR | A Matrix with dialog mask caused an exception if there was a taskbar present. |
| 3.6.0 | | 1-8K05W1 | The combo select control triggered a Select event after the user typed a partial string then moused to the selection window. |

| Closed in Release | JIRA # | Defect # | Summary (Sheet 8 of 21) |
|-------------------|--------|----------|---|
| 3.6.0 | | 1-936B9Q | In Internet Explorer, the Matrix select/combo mask drop-down did not collapse while adjusting the column width. |
| 3.6.0 | | 1-8IGQBM | When using the paginated paging model, the Matrix did not listen to the mousewheel event. |
| 3.6.0 | | 1-93ITQ0 | Updating dialog caption text did not update the tool tip on the associated task bar button. |
| 3.6.0 | | 1-8EBIXD | Calling <code>repaintData()</code> while matrix is <code>display=none</code> resulted in no vertical scroll bar when display is restored. |
| 3.5.1 | GI-266 | 1-8IUN7F | In Internet Explorer with MSXML3, when a user would click any column header to sort by that column (n), the sort indicator would appear on the column to the right of the one that was clicked (n+1). |
| 3.5.1 | | 1-8IUE0E | <p>A SelectBox that referenced its data in an external file (<code>setXMLURL</code>) which also:</p> <ul style="list-style-type: none"> • was set to asynchronously load its data (<code>setXMLAsync</code>) and • had a default/initial value (<code>setValue</code>) <p>would not update the UI with the resolved lookup value when the asynchronous data did finally arrive.</p> |
| 3.5.1 | GI-221 | 1-8HYTSM | An error would occur when tabbing between tabs in TabbedPane. |
| 3.5.1 | GI-222 | 1-8HYTRB | The <code>jsx3.gui.Tree</code> component did sometimes paint incorrectly. |
| 3.5.1 | GI-220 | 1-8HVQX6 | Adding a Splitter as one of the children of a <code>LayoutGrid</code> made the Splitter incorrectly display its two children. |
| 3.5.1 | GI-237 | 1-8HPYKA | DatePicker would leave Jan 1 1970 in the matrix when no value was entered. |

| Closed in Release | JIRA # | Defect # | Summary (Sheet 9 of 21) |
|-------------------|--------|----------|---|
| 3.5.1 | GI-258 | 1-8HPYJ5 | <p>The column reordering logic used by the matrix did not work in these scenarios:</p> <ul style="list-style-type: none"> • No column could be moved after the last column • The first column couldn't be moved • If the matrix used a horizontal scrollbar, it did not scroll horizontally to reveal columns that were not already visible at the time when the reordering event began. |
| 3.5.1 | | 1-8HPYI5 | Resizing paged matrix to a bigger size did not move the visible page to the right vertical position in Internet Explorer; it did, however, move the page in Firefox. |
| 3.5.1 | GI-254 | 1-8HLQMH | TextBox would always paint the default width or height, which prevented sizing of the text area with rows or columns. |
| 3.5.1 | GI-238 | 1-8H53YJ | Dialogs will resize properly even when their height or width are set using a dynamic property. |
| 3.5.1 | GI-247 | 1-8H2F7H | Incorrect behavior when clicking on <code>jsx3.gui.Table</code> data rows would not dismiss an open context menu in Internet Explorer has been fixed. |
| 3.5.1 | GI-252 | 1-8GW05L | <p>The property "Container 1 Min" now behaves correctly on the second attempt to move it pass the specified minimum size (100).</p> <p>The drag image will no longer become disembodied from the splitter bar.</p> |
| 3.5.1 | GI-244 | 1-8GW053 | Headers will now display properly in the table controls when placed in the 2nd, 3rd, and other tab panes. |
| 3.5.1 | GI-245 | 1-8GIS9I | The null pointer exception caused by a <code>jsx3.gui.Table</code> configured with an external XML URL and with enabled XML asynchronous loading properties has been fixed. |
| 3.5.1 | GI-234 | 1-8EYS1Y | Cascading submenus are now positioned correctly in those cases where the parent menu is closer to the bottom of the page than the top, and where the child menu is shorter than the distance between the top of the page and the top of the parent menu. |

| Closed in Release | JIRA # | Defect # | Summary (Sheet 10 of 21) |
|-------------------|--------|----------|---|
| 3.5.1 | GI-158 | 1-8EYHHB | Any paginated matrix that used Format Handlers to reformat the display of cell data will now only reformat a subset of all possible cells. |
| 3.5.1 | GI-236 | 1-8EL2ID | Cursor property is now correctly honored by the form element TextBox/TextArea/Select/Combo. |
| 3.5.1 | GI-255 | 1-8EKGFD | Text box-password Max Length property will now work properly in XHTML mode. |
| 3.5.1 | GI-248 | 1-8E7PFE | Menu with no data now has an improved “No Data” message. |
| 3.5.0 | | 1-8EERV7 | An exception was thrown when setting the XSL URL and the XSL wasn’t loaded. |
| 3.5.0 | | 1-8EE4CC | From HTTPS URL, Internet Explorer threw the security alert "This page contains both secure and nonsecure items. Do you want to display the nonsecure items?" when the user deleted a Matrix row (Matrix List prototype) using the delete column (Matrix Delete column). |
| 3.5.0 | | 1-8DL6UD | The scroll-into-view logic used by the Matrix class was throwing a null pointer exceptions when a matrix was used as a mask by another matrix. |
| 3.5.0 | | 1-8DKJ4M | Scrolling a matrix with the scroll wheel didn’t collapse the active edit session, leading to unaligned heavyweight edit masks. |
| 3.5.0 | GI-128 | 1-8DBUDF | Heavyweight components were not positioned and sized correctly when the deployment page (the document body) was scrolled. |
| 3.5.0 | | 1-8D9OPE | Some form controls didn’t honor the contract for cursor. |

| Closed in Release | JIRA # | Defect # | Summary (Sheet 11 of 21) |
|-------------------|--------|----------|---|
| 3.5.0 | | 1-8D5O4H | <p><code>jsx3.gui.Block</code> instances that implement drag (<code>setCanDrag</code>) created a drag icon that wasn't cross-browser compatible, resulting in the text, 'undefined', following the cursor.</p> <p>This is fixed to be consistent with the other GUI controls that support drag-and-drop (matrix and tree). These provide a default method (<code>getDragIcon</code>) that returns generic markup appropriate to the control type while also allowing the developer to override this method on an instance-by-instance basis to customize the drag icon.</p> |
| 3.5.0 | | 1-8CYQC9 | <code>jsx3.util.DateFormat("MMM d, yyyy").parse("Feb 29, 2008")</code> yielded March 1. |
| 3.5.0 | | 1-8CYCOP | Select/Combo and Menu key navigation was broken. Menu scrolling displayed poorly. |
| 3.5.0 | | 1-8CRHVR | <p>The autorow for the Matrix had three specific bugs that are now fixed:</p> <ol style="list-style-type: none"> 1. It wrongly identified deltas in the autorow, which lead to empty rows being added to the matrix. 2. The autorow didn't take the rendering context into account and appended everything to <code>jsxroot</code>. 3. The autorow allowed for an empty <code>jsxid</code> property to be committed. |
| 3.5.0 | | 1-8CG6R6 | A CSS-related bug in the Matrix class (width) caused the Events Editor palette in General Interface Builder to truncate text in the 'Value' column after saving and reloading a component. |
| 3.5.0 | | 1-8C5VGN | If a Properties Editor palette and Events Editor palette wasn't expanded and was then undocked, the editor content didn't display. |
| 3.5.0 | GI-159 | 1-8C3E4Q | Character limit prevented the Change event from firing on a text area in some cases. |
| 3.5.0 | GI-106 | 1-8C3E2R | Using Ctrl+click on a RadioButton or CheckBox could commit events and property edits to the wrong object. |

| Closed in Release | JIRA # | Defect # | Summary (Sheet 12 of 21) |
|-------------------|--------|----------|---|
| 3.5.0 | GI-182 | 1-8C2ZTZ | Load/Reload in General Interface Builder didn't work with a properties bundle file. |
| 3.5.0 | GI-181 | 1-8BWOG5 | <code>jsx3.app.Properties</code> caching caused the <code>get()</code> method to return a bad value after a grandparent was removed or added. |
| 3.5.0 | | 1-8BELJD | In Internet Explorer, when a column in the matrix had right- or center-aligned content, resizing the column caused only the first cell to resize, leaving all other cells at the wrong dimension. |
| 3.5.0 | GI-169 | 1-8BCION | A dialog lost its border after it was moved, minimized, and maximized when a task bar wasn't present. |
| 3.5.0 | GI-174 | 1-8AVRLY | Matrix edit masks didn't resize when their column was widened. |
| 3.5.0 | GI-168 | 1-8ASG52 | A layout issue occurred with menu bar and toolbar. For example, when a Toolbar was the direct child of a Layout, the toolbar buttons didn't display. |
| 3.5.0 | GI-180 | 1-895KXB | The first column of an hierarchical matrix didn't honor cell styles. This caused various property settings not to be honored. For example, if word wrapping was set to false, the text would still wrap. |
| 3.5.0 | GI-161 | 1-86ACHX | The height of the active stack content pane wasn't updated when adding or removing other stacks from the same stack group. |
| 3.5.0 | GI-146 | 1-862VHR | Overflow property of TextBox in General Interface Builder had incorrect enumerated values. OVERFLOWNORMAL, AUTO, and SCROLL fields in TextBox were incorrectly deprecated. |
| 3.5.0 | GI-141 | 1-859IQ7 | In XHTML mode, an error was thrown when a value was entered in the IFrame Source URL field in the Properties Editor palette. The error was also thrown when selecting Reset/Clear from the context menu. |

| Closed in Release | JIRA # | Defect # | Summary (Sheet 13 of 21) |
|-------------------|--------|----------|---|
| 3.5.0 | GI-139 | 1-855SNK | When the IFrame prototype had a default value about : blank, you couldn't reset the source in XHTML mode and an error was triggered. |
| 3.5.0 | GI-160 | 1-853I07 | When the dialog mask column was last in a matrix grid, the dialog popped up off the matrix area and caused the matrix display to be out of alignment. |
| 3.5.0 | GI-99 | 1-84QDH6 | In Internet Explorer 7 XHTML mode, menus weren't rendered correctly. For example, submenus were detached and couldn't be selected. |
| 3.5.0 | GI-93 | 1-834QYZ | When the select/option drop-down list was long, the vertical scroll bar took up space within the drop-down window instead of getting extra width and the longer select text was truncated. |
| 3.5.0 | GI-58 | 1-7BPVY0 | In a multiple-level menu, moving the mouse quickly in and out of a nested submenu caused the submenu to detach and move to the top left of the browser window. The problem was most apparent when the submenu was long or when the browser was repeatedly refreshed. |
| 3.4.1 | GI-126 | 1-88QU4Z | The <code>setText()</code> method on the Tab component didn't update the parent TabbedPane scroll indicators. |
| 3.4.1 | GI-118 | 1-88C9HT | Cacheable GUI controls with an invalid XML URL or XML String property threw an exception on paint. |
| 3.4.1 | GI-129 | 1-888L5E | The Slider component listened to keyboard/wheel events even when the Enabled property was set to Disabled. |
| 3.4.1 | GI-119 | 1-87CTVM | Hot key failed for Image Button. |
| 3.4.1 | GI-110 | 1-86Q45H | The <code>Matrix.revealRecord()</code> method was broken for certain versions of Internet Explorer and MSXML. |

| Closed in Release | JIRA # | Defect # | Summary (Sheet 14 of 21) |
|-------------------|--------|----------|---|
| 3.4.1 | GI-115 | 1-80Y4RN | <p>An exception was thrown when minutes were entered in a TimePicker column:</p> <pre>11:30:59.931 global (ERROR) - Uncaught Exception: Object doesn't support this property or method (line: 13, file: file:///C:/tibco/gi/3.3/GI_Builder.html) at jsx3.gui.TimePicker.Fi() at anonymous(j) { return j.Fi(j.jsxshowsecs?"second":"ampm"); } at anonymous() { if(k.getParent()===null)return;var xb=g.value;if(nc==xb)g.value=xb=S... at jsx3#vC()</pre> |
| 3.4.0 | GI-103 | 1-84ZLB9 | <p>The @lookup format handler didn't resolve lookups unless the edit mask was a direct child of the matrix column. Therefore, matrix column @lookup format handler didn't work with BlockMask or a DialogMask.</p> |
| 3.4.0 | GI-102 | 1-84ZL9Z | <p>Applying focus to a cell that was non-existent because it belonged to a paginated matrix didn't work. If the cell didn't exist, the Matrix should be scrolled to the correct location, so that the given page that contained the cell was rendered and the cell was made available for focus.</p> <p>In addition, there wasn't a method, <code>revealRecord()</code>, as is provided by tree, meaning it wasn't possible to display a given cell without first applying focus.</p> |
| 3.4.0 | GI-101 | 1-84ZL8Z | <p>The <code>setValue()</code> method wasn't properly implemented by the matrix. When passing an ID or an array of IDs if selection model is multi-row, the given record(s) weren't selected and the first record wasn't scrolled into view.</p> |
| 3.4.0 | GI-100 | 1-84TGPY | <p>Drag-and-drop from Tree to Matrix didn't work. Also, poor support for adoption of records that contained nested records.</p> |
| 3.4.0 | GI-98 | 1-84JSFJ | <p>In General Interface Builder, the Properties Bundle editor and the Dynamic Properties editor should prevent entering duplicate jsxids.</p> |
| 3.4.0 | GI-97 | 1-843RIP | <p>Heavyweight windows, such as menu and select drop-down list, didn't move with the menu anchor or select box when the browser window was resized.</p> <p>This was especially apparent when a block container was right-aligned.</p> |

| Closed in Release | JIRA # | Defect # | Summary (Sheet 15 of 21) |
|-------------------|--------|----------|---|
| 3.4.0 | GI-96 | 1-8434XJ | Matrix with paging off should apply format handlers synchronously at <code>repaint()</code> and <code>repaintData()</code> . This will eliminate flickering in this case. |
| 3.4.0 | GI-95 | 1-842SW4 | KEYUP event didn't fire for combo select. |
| 3.4.0 | GI-84 | 1-83WMBP | Form elements didn't inherit font color from the ancestor block. |
| 3.4.0 | | 1-834YTH | Dialog when dragged didn't have top-most Z-index, so that it appeared to drag behind other dialogs. |
| 3.4.0 | GI-91 | 1-834QR3 | Setting the Tag Name property of block in General Interface Builder didn't regenerate the HTML. |
| 3.4.0 | GI-90 | 1-830NQL | In the Properties Editor palette in General Interface Builder, switching the Type property from textbox to textarea or textarea to textbox didn't work. |
| 3.4.0 | GI-88 | 1-82I3L9 | Saving an XML file in General Interface Builder with an XML declaration created "unsupported" comment. |
| 3.4.0 | GI-86 | 1-81HOEW | If a dialog with a select-combo component was moved on the screen, it lost its value and new values couldn't be assigned even though they could be selected from the drop-down list. |
| 3.4.0 | GI-85 | 1-81HAI7 | The <code>jsx3.gui.Button.focus()</code> method didn't apply focus to the correct HTML DOM node and didn't work at all in Firefox. |
| 3.4.0 | GI-37 | 1-81B3K3 | The Time Picker didn't respond to the number pad of the keyboard. |
| 3.4.0 | GI-38 | 1-818IT6 | The <code>objEVENT</code> was null in the CHANGE model event context of <code>jsx3.gui.Slider</code> when using the up and down arrow keys to edit values. |
| 3.4.0 | GI-43 | 1-80OOH3 | When deserialized a dialog box top-left position could be at a negative position if the min-width and min-height were larger than the client window and no top-left positions were defined. Call <code>constrainPosition(true)</code> if there is a chance that the dialog is larger than its parent. |

| Closed in Release | JIRA # | Defect # | Summary (Sheet 16 of 21) |
|-------------------|--------|----------|---|
| 3.4.0 | | 1-80I857 | When the No Wrap property was set for a text area, text was still wrapped. |
| 3.4.0 | GI-33 | 1-7ZOVRR | Matrix didn't conform to the contract of <code>jsx3.gui.Form</code> , because it didn't implement <code>doValidate</code> . Note that <code>doValidate()</code> returns 1 if the form element is optional or if it's required and at least one row is selected. |
| 3.4.0 | GI-21 | 1-7YTKVZ | The tab EXECUTE event didn't fire when the tab was clicked. |
| 3.4.0 | | 1-7YTJ72 | If a dialog that contained a Matrix Grid was moved while a text edit box in the grid had focus, the text box couldn't receive focus or be edited after it was moved. |
| 3.4.0 | GI-22 | 1-7YR59D | Entering text in the Text/HTML property of a block in the Properties Editor palette and adding a select component to the same block, prevented the General Interface Builder tabs from working and you couldn't switch between tabs. |
| 3.4.0 | GI-12 | 1-7Y9ZJR | The Font Weight property for the toolbar button wasn't working properly. |
| 3.4.0 | GI-16 | 1-7VUTFJ | <code>Select.doValidate()</code> should be verifying against the selectable value (valid <code>jsxid</code> in the CDF) instead of considering all non-null value to be valid. |
| 3.4.0 | | 1-7KV0SU | Tabs don't cascade to the next row if they exceed the viewable space. <code>TabbedPane</code> now provides an automatic right and left scrolling mechanism for navigating through tabs that are hidden when they exceed the viewable space. Hover over the right or left arrow icons to scroll through the hidden tabs. You can also navigate tabs using the right and left arrow keys. |
| 3.4.0 | | 1-7GFNGT | If a drop-down menu had a vertical scroll bar, it might have been impossible to move the mouse to a submenu without hiding the submenu. In Internet Explorer, mousing over the scroll bar caused a mouse out event on the active menu item. |
| 3.4.0 | | 1-7DS71V | The main body of the Matrix didn't respond to the scroll wheel on the mouse. |

| Closed in Release | JIRA # | Defect # | Summary (Sheet 17 of 21) |
|-------------------|--------|----------|---|
| 3.4.0 | GI-8 | 1-7C7LIW | The Text field in the combo component wasn't disabled when the component was flagged as "disabled." |
| 3.4.0 | GI-63 | 1-6THXVP | Submenus and menus weren't aware enough to always cascade in the most optimal direction. Long menus at the bottom of the screen, particularly those with long submenus, were rendered with scroll bars. Long menus now render with auto-scroll arrows instead of scroll bars. |
| 3.3.0 | | 1-7Y9EC9 | Some formats of the <code>jsx3.gui.Matrix.ColumnFormat.getInstance()</code> method didn't work. |
| 3.3.0 | | 1-7XUQQU | Calling the <code>dialog.focus()</code> method on a modal dialog caused the loss of modal. |
| 3.3.0 | | 1-7XJ0NF | <p>Several XSLT features (particular as implemented by the Matrix) caused a noticeable slowdown. First, due to browsers not caching XSL imports, any repaint command on a Matrix (or the other CDF controls) forced a roundtrip to the server, which caused a substantial impact on even the smallest update. In addition, the Matrix should expose a public API that allows developers direct access to the native HTML element for a Matrix cell. This was critical when integrating with technologies, such as Comet, DWR, or Lightstreamer, where using XSLT for a simple update to a cell was CPU intensive.</p> <p>Added a new public method to Matrix, <code>getContentElement()</code>, that allows access to the HTML element by providing the CDF record id and the named attribute on the CDF.</p> |
| 3.3.0 | | 1-7X9FEW | Importing failed with an exception when canvas was "dirty" (after adding a new container and trying to import into its pane). |
| 3.3.0 | | 1-7X3RV2 | The cursor for Matrix cells in Internet Explorer appeared as the text cursor (<code>cursor:text</code>) except in portions of header cells where text wasn't present. |

| Closed in Release | JIRA # | Defect # | Summary (Sheet 18 of 21) |
|-------------------|--------|-----------------------------|--|
| 3.3.0 | | 1-7X3RSF | In Internet Explorer, unless a row in the Matrix explicitly implemented a bgcolor (specified in the XSL Parameters Palette or the Properties Editor palette), the text bled through onto the next cell in the row. |
| 3.3.0 | | 1-7X3APA | The <code>jsx3.gui.Button</code> class couldn't be toggled from relative to absolute and have the left/top be honored. |
| 3.3.0 | | 1-7WS633 | With a Matrix row selected, switching the application focus to another application, such as Notepad, and then switching back to the browser caused multiple (2) select events to be triggered. |
| 3.3.0 | | 1-7WS62L | After resizing the Properties Editor palette and the Events Editor palette by resizing the splitter pane or resizing the browser window, "Reset/Clear" a property caused the name cell to expand in size. |
| 3.3.0 | | 1-7VK76Z | In Internet Explorer 6, a modal dialog invoked from a menu in a layout pane wasn't rendered correctly. This occurred on initial loading of dialog and every other loading of dialog, such as third and fifth. On the second, fourth, and sixth loading of dialog, the modal dialog was rendered correctly. |
| 3.3.0 | | 1-7U5AVZ | The Space key didn't trigger select (or execute) event for a Matrix List or a Matrix Grid. |
| 3.3.0 | | 1-7TLD4E and 1-7UM7XG | When a Tree was already displayed on the screen and the <code>insertRecord()</code> method was used to add the first new child record to a node, the new Tree node displayed was detached from the parent node. |
| 3.3.0 | | 1-7T8Y2X | A Dialog could be resized to a "floating" drag corner image by dragging the left bottom edge of the dialog to the right top edge. |
| 3.2.0 | | 1-7RUQNG | While dragging a record from a can drag Matrix control to another drop-enabled Matrix control, the mouse cursor is changed into a forbidden cursor (/). |

| Closed in Release | JIRA # | Defect # | Summary (Sheet 19 of 21) |
|-------------------|--------|------------------------------|---|
| 3.2.0 | | 1-7D33L9 | Calling the <code>setDisplay()</code> method on a Matrix Column child should result in the XSLT for the owning Matrix to be reset. |
| 3.2.0 | | 1-7CM78U | When using a paginated instance of the Matrix (<code>jsx3.gui.Matrix.PAGING_PAGED</code>), if records were added and removed and the Matrix was then repainted (by calling <code>repaintData()</code> or <code>repaint()</code>), the scroll bars didn't update to reflect the changed record count. |
| 3.2.0 | | 1-7AMECV | Selecting a different node in the Component Hierarchy palette while editing a property in the Properties Editor palette might have caused the change to affect the newly selected object, not the intended object. |
| 3.2.0 | | 1-79KHWA | Using the Tab key in the Properties Editor palette after editing a value triggered an exception. The Tab key didn't work in the Matrix component. |
| 3.2.0 | | 1-78Q4ZV | Selecting a Matrix cell on the right-hand side of the grid caused the grid to jump to the left. |
| 3.2.0 | | 1-785LPA | Stack gradient color disappeared after mouse over, then mouse out. |
| 3.2.0 | | 1-785LOQ | Stack () layout had text displayed horizontally instead of vertically. |
| 3.2.0 | | 1-77QQDH | Splitter handle custom image could fail in distributed deployments. |
| 3.2.0 | | 1-75ZTPK | Menus bound to lists didn't always work properly, because the Object ID argument was missing from <code>jsx3.gui.Menu setMenu()</code> . |
| 3.2.0 | | 1-74N KU7 and 1-75ZTO1 | In CDF data, images in tree/menu/list/grid that refer to <code>JSX/images</code> or <code>JSXAPPS/application_dir/images</code> didn't resolve correctly when the <code>JSX</code> directory and <code>JSXAPPS/application_dir</code> directory didn't reside in the same directory as the launching HTML page. |
| 3.2.0 | | 1-748XL9 | Dialog failed to paint content after being maximized if it was window-shaded. |

| Closed in Release | JIRA # | Defect # | Summary (Sheet 20 of 21) |
|-------------------|--------|----------|---|
| 3.2.0 | | 1-70ZZYW | Missing a method to unselect a selected item in Grid. There wasn't a functional equivalent to List behavior. |
| 3.2.0 | | 1-6XUR3U | Pressing Tab or Shift+Tab while in an open select or combo box should select the current item, close the select/combo, and move focus to the next (previous) item. |
| 3.2.0 | | 1-6VWJ99 | <code>jsx3.gui.Grid</code> — Grid won't accept a drop unless the <code>auto-expand</code> property was set to <code>TRUE</code> . This resulted in an on-screen control that added extra rows to the view each time the user clicked in the last row of the Grid. |
| 3.2.0 | | 1-6RBJ3S | Keyboard navigation couldn't be used with the Date Picker component, which obstructed the process of using the Tab key to select components. |
| 3.2.0 | | 1-6OUN7V | <code>jsx3.gui.List/Grid</code> - Unselectable nodes in List/Grid could trap focus, blocking keyboard navigation past those items. |
| 3.2.0 | | 1-6OJO49 | <code>jsx3.gui.Tree</code> - Trees with hidden root nodes took a long time to paint when they were enclosed several levels deep within other components, and the ancestor components were repainted. Setting the Show Root Node property to <code>Hide</code> caused 15 second repaint. Setting to <code>Show</code> , resulted in instant repaint. |
| 3.2.0 | | 1-6A9E3T | <code>jsx3.gui.Tree</code> — Key navigation in a tree followed the order of the records in the underlying CDF document. If the View was resorted using the XSL parameter <code>jsxsortpath</code> , arrow key navigation in the tree wouldn't follow the order of onscreen tree nodes, resulting in unexpected behavior. |
| 3.2.0 | | 1-3HVT9B | The Properties Editor palette was missing a no border property. |
| 3.1.1 | | 1-70Q8IS | Combo control for grid failed to check for 'null' on the 'select' event, causing quirky behavior. |

| Closed in Release | JIRA # | Defect # | Summary (Sheet 21 of 21) |
|-------------------|--------|----------|---|
| 3.1.1 | | 1-6XJTCH | Dialogs — Clicking a Dialog icon in the taskbar should bring the dialog forward if it wasn't forward. Instead, it minimized the dialog. The requested behavior follows that of Windows taskbar and Windows icons. |
| 3.1.1 | | 1-6X98XH | Alerts with large text blocks didn't scroll and the OK button disappeared. |
| 3.1.1 | | 1-6WT94Q | The Radio button prototype column didn't have a default groupname, so the radio button column didn't work as expected. |

Installation and Build

| Closed in Release | JIRA # | Defect # | Summary |
|-------------------|--------|----------|--|
| 3.9 | GI-698 | | Add full support for the Finnish locale (FI). |
| 3.9 | GI-588 | | Build tool fails on Ubuntu/Solaris systems due to limitation in Java method <code>File.renameTo</code> . |
| 3.8.0 | GI-571 | | General Interface localized strings are broken for several locales. |
| 3.7.1 | GI-505 | | Build process generates severe warnings on Windows. |
| 3.7.1 | GI-498 | | Build process should be able to use the obfuscation name mapping from the previous run. |
| 3.1.1 | | 1-6ZL8JH | When overwriting an existing installation, the Installer permanently deleted user-created files (files which were not installed as part of the package). |

L10N

| Closed in Release | JIRA # | Defect # | Summary (Sheet 1 of 2) |
|-------------------|--------|----------|--|
| 3.9.2 | GI-960 | | Portuguese translation for - Select - should be - Selecione -. |

| Closed in Release | JIRA # | Defect # | Summary (Sheet 2 of 2) |
|-------------------|--------|----------|--|
| 3.9.1 | GI-850 | | Localized boot text does not display if the navigator language property is set with language-Country (i.e. fr-FR). |
| 3.9.1 | GI-843 | | Translation for "Powered By" is incorrect for Japanese and possibly other languages. |
| 3.9.1 | GI-847 | | Clean up and update localization texts. |

Samples

| Closed in Release | JIRA # | Defect # | Summary |
|-------------------|--------|----------|---|
| 3.4.0 | | 1-8494E7 | Because Xignite now requires registration for access to the service, the WSDL_Mapping_2 sample has been modified to run in Static mode. To receive live data, you must register with Xignite and modify the sample to run in Live mode. |

Known Issues

This section discusses known issues in the named releases.

Browser Limitations and the Margin Property

The behavior of the margin property varies by browser as follows:

- Internet Explorer applies all margins properly when the object is rendered, but if an ancestor container is ever hidden (display:none), the left margin is no longer honored when redisplayed.
- Firefox applies all margins if the object does not specify an overflow property (overflow:hidden, overflow:auto, overflow:scroll). If the object uses overflow, the top and bottom margin settings aren't honored.

In summary, margin properties are honored as follows:

- The only margin setting that is honored by all browsers in all situations is margin-right.
- The margin properties, margin-top, margin-bottom, and margin-right, are honored in all browsers if the object does not specify an overflow property of hidden, scroll, or auto.
- The margin properties, margin-top, margin-bottom, margin-left and margin-right, are honored in all browsers if the object does not specify an overflow property (hidden, scroll, or auto) and no ancestor of the object ever has its display property toggled between none and block.

Browsers - General

| JIRA # | Defect # | Summary/Workaround |
|--------|----------|---|
| | GI-988 | <p>Summary In IE and Firefox, <code>timePicker.setValue('12:00:30.999 AM')</code> returns the value <code>12:NaN:NaN.NaN</code>.</p> <p>Workaround Do not specify milliseconds in <code>Timepicker.setValue()</code>.</p> <p>Identified in Version 3.9.1</p> |

Data Mapping Tools

| JIRA # | Defect # | Summary/Workaround |
|--------|----------|--|
| | 1-8S15KL | <p>Summary When closing the Mapping Utility while focus is active on the autorow's Path/Value cell, an exception is thrown in Internet Explorer. In Firefox, this same scenario causes the "Unsaved File" dialog with no exceptions.</p> <p>Workaround None</p> <p>Identified in Version 3.5.1</p> |
| | 1-7YL8IO | <p>Summary In Internet Explorer 7 with MSXML 3.0, when you select a complex parent type in the Rules tree of the XML Mapping Utility and choose Map > DOM (Map and Create), the menu command fails.</p> <p>Workaround Select a child or children of the complex parent type and choose Map > DOM (Map and Create).</p> <p>Identified in Version 3.3.0</p> |
| | 1-70DGBK | <p>Summary While retrieving and parsing a remote WSDL document in the XML Mapping Utility, if the developer makes a typo in the URL, General Interface Builder locks up until the server returns a "document not found" error.</p> <p>Workaround Do not make typos in the URL field or work from a local copy of the WSDL.</p> <p>Identified in Version 3.1.0</p> |

Documentation

| JIRA # | Defect # | Summary/Workaround |
|--------|----------|---|
| | 1-7T8VF1 | <p>Summary Not all classes that extend Block implement all of the methods or input types available to Block. In these cases, the API documentation lists those methods. The Properties Editor palette accepts and displays only the correct members.</p> <p>Workaround none</p> <p>Identified in Version 3.2.0</p> |

Dojo Integration

| JIRA # | Defect # | Summary/Workaround |
|---------|----------|---|
| GI-1003 | | Summary GI Dojo integration using Dojo-1.4.1 does not work on IE10/11. Workaround None Identified in Version 3.9.1 |
| GI-928 | | Summary DOJO Rating widget is broken. Workaround None Identified in Version 3.9.1 |
| GI-605 | | Summary Dojo widgets do not support XHTML. Workaround None Identified in Version 3.8.0 |

Firefox

| JIRA # | Defect # | Summary/Workaround (Sheet 1 of 4) |
|--------|----------|---|
| | 1-9AXKKQ | Summary Builder hot keys such as CTRL+S are not captured on Windows Firefox3. Workaround None Identified in Version 3.7.0 |
| | 1-8UQPI1 | Summary Firefox 3 default security configuration prevents loading of script files from <code>file://</code> URL from multiple directories (or sub directories). Workaround Disable the strict same origin. <ol style="list-style-type: none"> 1. Have the browser URL open <code>about:config</code>. 2. Type <code>security</code> in the textbox to filter down to security configuration properties only. 3. Look for the setting for <code>security.fileuri.strict_origin_policy</code> and change the value to <code>false</code> by double clicking on the value. Identified in Version 3.6.1 |

| JIRA # | Defect # | Summary/Workaround (Sheet 2 of 4) |
|--------|----------------------|--|
| | 1-96GSDO | <p>Summary When GI is opened in Firefox 3, the error console that is displayed when you click Control+Shift+J shows multiple errors warnings and messages.</p> <p>Workaround None</p> <p>Identified in Version 3.6.1</p> |
| | 1-8WAPHK | <p>Summary In Firefox 3, for a migrated 3.4 project that had a delete column proptotype with no width+height on the delete button mask, the delete image in a matrix delete column is not displaying.</p> <p>Workaround Either re-create the column in version 3.6 (using the prototype with height/width information for the image button mask), or manually set the height+width value.</p> <p>Identified in Version 3.6.1</p> |
| | 1-8W2GIP 1-953POT | <p>Summary General Interface Builder fails to load on a fresh install of Firefox 2.0.0.12 and 3.x because of security settings being locked in to it.</p> <p>Workaround Create a new developer-only Firefox profile so you can create a project workspace directory when running General Interface Builder. Do not use your default profile for this. Manually grant the permissions in Pref.js found under <user_home>/Application Data/Mozilla/Firefox/Profiles as shown below. You need not manually edit Pref.js because Firefox will prompt you to grant the UniversalXPConnect privilege when General Interface Builder starts.</p> <p>Add these settings if they do not exist; if these settings exist, edit them as follows:</p> <pre>user_pref("capability.principal.codebase.p0.granted", "UniversalXPConnect UniversalBrowserRead"); user_pref("capability.principal.codebase.p0.id", "file:///"); user_pref("capability.principal.codebase.p0.subjectName", "");</pre> <p>Identified in Version 3.5.1 and 3.6.1</p> |
| | 1-927BZ7 | <p>Summary A bug in Firefox 2 prevents General Interface from displaying localized boot messages.</p> <p>See https://bugzilla.mozilla.org/show_bug.cgi?id=285267.</p> <p>Workaround To change the default browser locale for Firefox, change the property <code>general.useragent.locale</code> in <code>about:config</code> to your preferred locale.</p> <p>Identified in Version 3.6.0</p> |

| JIRA # | Defect # | Summary/Workaround (Sheet 3 of 4) |
|--------|----------|--|
| | 1-91CQX5 | <p>Summary When Firebug is enabled for local file and network monitoring, XMLHTTP requests result in permission denied exceptions.</p> <p>Workaround Disable network monitoring when Firebug is enabled for local file and network monitoring.</p> <p>Identified in Version 3.6.0</p> |
| | 1-8HVR2F | <p>Summary Firefox doesn't allow cross-domain XMLHttpRequests for security reasons.</p> <p>Workaround For test environment and those willing to risk the security vulnerability, here is how to bypass the cross-domain restriction:</p> <ol style="list-style-type: none"> 1. Create a new Firefox profile called Test-only 2. Close Firefox 3. Edit the file prefs.js in your Firefox Test-only profile folder 4. Add this line anywhere in the file: <pre>user_pref("capability.policy.default.XMLHttpRequest.open", "allAccess");</pre> 5. Save the file and re-open Firefox. <p>Identified in Version 3.5.0</p> |
| | 1-83YTXT | <p>Summary On Firefox, if a textbox is a child of a relatively positioned Block with absolute size (W:200,H:200), the textbox takes on the height of the Block container even though it specifies a different height (W:100,H:30). This is due to a Firefox bug.</p> <p>Workaround Nest an additional 100%x100% relatively positioned block and THEN put the textbox inside of that one. This has the effect of insulating the textbox from the outermost box and the corruption it is causing.</p> <p>Identified in Version 3.4.0</p> |
| | 1-78I4SR | <p>Summary On a Mac, text in charts on Firefox 1.5.x doesn't display properly. The text is drawn correctly but after dragging the parent, it isn't redrawn. In some cases, text is drawn when the scroll bar is scrolled. This defect has been reported to https://bugzilla.mozilla.org/show_bug.cgi?id=316564.</p> <p>Workaround none</p> <p>Identified in Version 3.2.0</p> |

| JIRA # | Defect # | Summary/Workaround (Sheet 4 of 4) |
|--------|----------|---|
| | 1-7T87PZ | <p>Summary On Firefox, when you drop a charting component onto the work area and try to shift focus to that component using the Show/Hide Focus Rectangle button, the charting component doesn't receive the focus. Therefore, you can't drag and drop the component as desired. This defect has been reported to https://bugzilla.mozilla.org/show_bug.cgi?id=360141.</p> <p>Workaround none</p> <p>Identified in Version 3.2.0</p> |
| | 1-74L8YJ | <p>Summary General Interface Builder error sound does not play properly in Firefox 1.5.x.</p> <p>Workaround Download and install a plug-in for .wav files.</p> <p>Identified in Version 3.2.0</p> |
| | 1-7A9DSG | <p>Summary Firefox can't open non-XML files encoded as UTF-16.</p> <p>Workaround Use the General Interface Builder IDE, Internet Explorer, or a text editor to convert to 8-bit encoding before opening in Firefox.</p> <p>Identified in Version 3.2.0</p> |

Mac and Firefox Known Issues

Mac OS X and Firefox have these known issues:

- The JavaScript Step Through Debugger isn't supported in Firefox. To debug in Firefox, use the Firebug browser add-on.
- Inconsistent scroll bar support on Mac OS X. Also if layering is used, such as a dialog layered over an application, scroll bars bleed through. This occurs whenever z-index is used. See defect 1-7SGRHB in Known Issues on page 109.
- For charting on Firefox with Mac OS X, some SVG behavior is unexpected. For example, text isn't always rendered properly due to clipping. This is possibly related to scrolling. See defect 1-78I4SR in Known Issues on page 109.
- Mac OS X accelerator keys don't always work in Firefox.
- Firefox doesn't support `jsx3.net.Form` with file upload. As an alternative, set the Text/HTML property of a Block component to free form HTML containing a `form` element.
- Unexpected layout behavior in Firefox with the Block component, such as misaligned GUI components, when using relative positioning.

Workaround To avoid unexpected layout behavior in deployed applications, it's recommended to use Block as a container **only** if it meets **one** of these requirements:

- The Block is owned by a layout manager, such as LayoutGrid, Tab, Stack, and Splitter.
- The Block is relatively positioned and has a width of 100%.
- The Block is absolutely positioned.
- Overflow on a draggable object, such as a dialog, is hidden.

Workaround Make the dialog visible by adding width and height.

- XPath/XSLT in Firefox
 - The XSL must meet these requirements in Firefox or it fails:

The XSL must point to this namespace:
`xmlns:xsl="http://www.w3.org/1999/XSL/Transform"`

The XSL must output valid XML. Balanced tags are required. For example,
`<xMessage>Hello World!</xMessage>`
 - XSLT implementation does not support the namespace axis, limiting the ability to query and discover namespaces. The DOM-based interface also fails to implement this axis.
 - XSLT implementation does not support the `node-set()` method, which means that complex parameters and result tree fragments cannot be resolved.
 - XSLT implementation does not allow output escaping to be disabled, which means that escaped entities cannot be resolved during a transformation.

The only output formats supported for XSLT processing are HTML 4.0 and XML.

General Interface Builder

| JIRA # | Defect # | Summary/Workaround (Sheet 1 of 3) |
|--------|----------|--|
| GI-998 | | <p>Summary When pressing the Enter key and Tab key in IE 10, the input caret skips to the line above instead of the next line in the source editor (css, js, xml).</p> <p>Workaround None</p> <p>Identified in Version 3.9.2</p> |
| GI-944 | | <p>Summary Malformed XML makes the Alert dialog undraggable. Throws uncaught exception when user clicks in the dialog.</p> <p>Workaround Don't drag the error alert box, just dismiss it (click OK).</p> <p>Identified in Version 3.9.1</p> |
| | 1-9K7L6D | <p>Summary The type-ahead feature is no longer provided in the script , XML and XSL editors.</p> <p>Workaround None</p> <p>Identified in Version 3.7.0</p> |
| | 1-9GHSMW | <p>Summary When GI is first launched in HTA mode builder does not register the initial workspace directory setting.</p> <p>Workspace directory is registered only after second try.</p> <p>Note : this is not a problem If GI is first launched HTML mode then HTA is used after workspace is already configured.</p> <p>Workaround None</p> <p>Identified in Version 3.7.0</p> |
| | 1-992QYN | <p>Summary Currency symbol is currently not localized.</p> <p>Workaround Manually edit <code>locale.xml</code> and add the symbol value for <code>number.currency</code>.</p> <p>Identified in Version 3.6.1 and 3.7.0</p> |

| JIRA # | Defect # | Summary/Workaround (Sheet 2 of 3) |
|--------|----------|---|
| | 1-9239YG | <p>Summary When using the Properties Editor resource, you cannot browse to your workspace directory if the current assign path is a system path such as, <code>jsx:///images/list/select.gif</code>.</p> <p>Workaround Remove the path value before using browse or set the path value to <code>jsxapp://</code>, which will direct the browser to start from the workspace directory.</p> <p>Identified in Version 3.5.1</p> |
| | 1-8EB787 | <p>Summary General Interface Builder doesn't repaint correctly when a palette is resized after adding a Mask-Dialog column in Matrix.</p> <p>Workaround None</p> <p>Identified in Version 3.5.0</p> |
| | 1-852K7J | <p>Summary Internet Explorer external add-ons, such as Yahoo and Developer toolbars, might interfere with opening the API documentation in a separate window (Help > API Documentation > Open in separate window) and trigger multiple blank pages in Internet Explorer 6 and Internet Explorer 7.</p> <p>Workaround Open the API documentation in a dialog or in the HTML version or disable external add-ons before opening in a separate window.</p> <p>Identified in Version 3.4.0</p> |
| | 1-84SURZ | <p>Summary In Internet Explorer 7, you can't open General Interface Builder in XHTML mode (<code>GI_Builder.xhtml</code>) even though the <code>xhtml</code> extension is configured to be opened by Internet Explorer 7. If you attempt to open General Interface Builder in XHTML mode, the Open/Save/Cancel dialog displays.</p> <p>Workaround Rename the file to <code>GI_Builder.xhtml.html</code> to open with Internet Explorer 7.</p> <p>Identified in Version 3.4.0</p> |

| JIRA # | Defect # | Summary/Workaround (Sheet 3 of 3) |
|--------|----------|---|
| | 1-7T33C9 | <p>Summary On Mac, menu accelerator hot keys aren't working for some General Interface Builder menu items. For example, IDE Settings (Ctrl+,), Project Settings (Ctrl+Shift+,), and all palettes(Ctrl+1, Ctrl+2, and so on). This defect has been reported to https://bugzilla.mozilla.org/show_bug.cgi?id=106048.</p> <p>This applies to only to Firefox 1.5.x and 2.0.x.</p> <p>Workaround None</p> <p>Identified in Version 3.2.0</p> |
| | 1-7QJTEX | <p>Summary In Internet Explorer, you can't create a new folder under the C:\ root directory using the Create New Folder button while creating a workspace folder. Creating subfolders under an existing folder is not an issue.</p> <p>Workaround Create the folder under the C:\ root directory in the Windows file manager. In General Interface Builder, choose the Browse button in the Create or Locate a Workspace dialog or in the Workspace field of the IDE Settings dialog (Tools > IDE Settings > Paths) and select the newly created folder.</p> <p>Identified in Version 3.2.0</p> |
| | 1-79MFUX | <p>Summary Firefox determines the user home from the install directory and is case-sensitive, even though the file system is case-insensitive.</p> <p>Workaround If you change the browser URL from C: to c:, you need to specify the user home directory again.</p> <p>Identified in Version 3.2.0</p> |

General Interface Framework

| JIRA # | Defect # | Summary/Workaround |
|--------|----------|--|
| GI-932 | | <p>Summary Using a child GUI object that calls setName() can cause a memory leak when you unload only this child object and not the top parent object of a loaded serialization file.</p> <p>Workaround Do not call setName() on a child GUI object if you plan to unload it instead of the top parent object of a serialization file.</p> <p>Identified in Version 3.9.1</p> |
| | 1-8PGCCD | <p>Summary Provide the ability to specify a default date and display a different background color for this default date in the DatePicker's Calendar .</p> <p>Workaround None</p> <p>Identified in Version 3.9.0</p> |
| GI-104 | 1-85O3Z2 | <p>Summary Moving focus to an object which is outside the current browser display area causes the entire application to shift in the browser window.</p> <p>Workaround Move the offending object, such as a dialog, again to restore the view or Shift+Tab to tab back.</p> <p>Identified in Version 3.2.0</p> |

GUI Components

| JIRA # | Defect # | Summary/Workaround (Sheet 1 of 2) |
|--------|----------|---|
| GI-451 | 1-9A9XZZ | <p>Summary Table.getNoDataMessage() is not able to be used, and the default message is a blank space.</p> <p>Workaround None</p> <p>Identified in Version 3.6.0</p> |

| JIRA # | Defect # | Summary/Workaround (Sheet 2 of 2) |
|--------|----------|--|
| | 1-7SGRHB | <p>Summary On Mac OS X, if multiple dialogs are open, the vertical scroll bars of the bottom dialog bleed through to the dialog on top. This defect has been reported to https://bugzilla.mozilla.org/show_bug.cgi?id=187435.</p> <p>Applies to Firefox 1.5.x and 2.0.x only.</p> <p>Workaround None</p> <p>Identified in Version 3.6.0</p> |
| | 1-8UCEEO | <p>Summary Using the setDate(new Date("11/11/11")) method on Firefox and Internet Explorer, sets the year to 1911, but on Safari, the date is 2011.</p> <p>Workaround Always use 4-digit years.</p> <p>Identified in Version 3.5.1</p> |
| | 1-754023 | <p>Summary Cursor in text tabs bleeds through a dialog in front of it.</p> <p>Workaround None</p> <p>Identified in Version 3.1.0</p> |

Safari and Chrome

| JIRA # | Defect # | Summary/Workaround (Sheet 1 of 2) |
|--------|----------|---|
| | 1-95LYE7 | <p>Summary The column resize icon does not display where expected in Safari 3. The resize icon is not visible, but a blue line indicates where the icon is displayed.</p> <p>Workaround Move the mouse pointer slightly to the right to find the resize icon bar.</p> <p>Identified in Version 3.6.1</p> |
| | 1-964LI3 | <p>Summary The TAB key does not work for General Interface Form elements such as button, image button, slider, select, menu, tree, matrix tree, matrix grid. The Combo form elements works because it has a input box.</p> <p>Workaround None</p> <p>Identified in Version 3.6.1</p> |

| JIRA # | Defect # | Summary/Workaround (Sheet 2 of 2) |
|--------|----------|---|
| | 1-96AM5D | <p>Summary You cannot use the down arrow key for navigation in the Select and Combo Select elements. This is a Safari defect on implementation of the <code>tabIndex</code> property and will be addressed in a new Safari release.</p> <p>Workaround Use mouse navigation.</p> <p>Identified in Version 3.6.1</p> |
