TIBCO iProcess® Workspace (Browser)

Release Notes

Software Release 11.4.1
April 2014

Important Information

Contents

Release Notes

Check the TIBCO Product Support web site at http://support.tibco.com for product information that was not available at release time. Entry to this site requires a username and password. If you do not have a username, you can request one. You must have a valid maintenance or support contract to use this site.

Topics

New Features

This section lists new features in each release of the TIBCO iProcess Workspace (Browser).

As of version 10.6.0, the name of this product has changed from the TIBCO iProcess Client (Browser) to the TIBCO iProcess Workspace (Browser).

Version 11.4.1

Support for New Versions of Internet Explorer and TIBCO General Interface Added (IPWB-230)

This release of TIBCO iProcess Workspace (Browser) now supports:

- Microsoft Internet Explorer version 11
- TIBCO General Interface version 3.9.2

Can Now Specify a Priority When Closing or Purging Cases (IPWB-229)

A new **Priority** field has been added to the **Close Cases** and **Purge Cases** dialogs that allow you to either increase or decrease the priority at which cases are closed or purged.

Action Processor Requests Added to Obtain Message Interface Versions (IPWB-193)

The following Action Processor requests have been added, which can be used to get the TIBCO iProcess Objects Server and TIBCO iProcess Server Objects client message interface versions:

- GetServerMsgInterfaceVer
- GetClientMsgInterfaceVer

An Interface Has Been Added to Manage Monitor Event Request (MER) Messages (IPWB-190)

A new **Manage Monitor Event Request** selection has been added to the **Tools** menu on the application procedure list. This selection displays an interface that allows you to either create a new MER or to edit an existing MER on the server.

There is also a new **ManageMER** user access control added to the userAccessProfiles.xml file that controls access to the **Manage Monitor Event Request** selection on the **Tools** menu.

Two new Tools Interface methods have also been added to support this functionality:

- **manageMER** - This new WCC Tools Interface method can be used to open the Manage Event Monitor Request interface from custom WCC applications.

- **ipcManageMer** - This new the IPC Tools Interface method can be used to open the Manage Event Monitor Request interface from a customized iProcess Client application or forms used in the application.

Also, a new **IPEConfig** group has been added to the Action Processor requests, which includes the following two requests:

- **GetActivityPub** - Returns an XML string that represents a Message Event Request (MER) message.

- **SetActivityPub** - Sets the MER on the TIBCO iProcess Engine.

New User Options to Force User to Filter Work Items or Cases that Exceed Threshold (IPWB-188)

The following filter user options have been added to the config.xml file:

- forceWorkItemsThreshold
- forceCasesThreshold

These options can be used to force the user to filter work items or cases, so that the number of work items or cases are below the value specified in the **thresholdWorkItems** and **thresholdCases** user option attributes, respectively.

Check boxes have also be added to the **Options** dialog in the application to perform the same function.

New Configuration Parameter to Refresh List After Work Item Opened Externally (IPWB-185)

When external work item forms (ASP, JSP, SPD, etc.) are opened, the work item is locked by an external process. Therefore, the work item list does not reflect the locked state of the work item because it was performed externally.

A new **externalLock** configuration parameter has been added to config.xml that specifies a delay (in milliseconds) after which the work item list is automatically refreshed when an external form is opened. The time delay provides sufficient time for the external lock of the work item to take place before the list is updated to reflect the locked state:

New Option to Control Triggering Events on Case Purge and Close (IPWB-183)

A check box has been added to the **Close Case** and **Purge Case** dialogs that, when checked, causes a procedure-level event to be triggered when the case is closed or purged. The procedure can be defined to catch the event, then perform business logic either before or after the case is closed or purged.

This enhancement also results in the following changes:

- **closeCases** / **purgeCases** - These WCC Tools Interface methods have a new *doEvents* parameter that specifies whether or not a procedure-level event is triggered when cases are closed or purged with these methods.

- **ipcCloseCases** / **ipcPurgeCases** - These IPC Tools Interface methods have a new *doEvents* parameter that specifies whether or not a procedure-level event is triggered when cases are closed or purged with these methods.

- The Action Processor requests for **CloseCases**, **CloseCasesbyCriteria**, **PurgeCase**, **PurgeCasesByCriteria**, and **PurgeAndReset** now allow a *DoEvent* parameter to specify whether or not to trigger an event when cases are closed or purged.

Version 11.4.0

New Tools Methods Added to Return "Start Procs" and "Audit Procs" (IPWB-142)

The following tools methods have been added that return the list of procedures for which the logged-in user can start a case:

- **ipcGetStartProcs** - Can be used with the iProcess Client application.

- **getStartProcs** - Can be used with a custom WCC application.

The following tools methods have been added that return the list of procedures for which the logged-in user has permission to view or add entries to case history:

- **ipcGetAuditProcs** - Can be used with the iProcess Client application.

- **getAuditProcs** - Can be used with a custom WCC application.

For information about the **ipcGetStartProcs** and **ipcGetAuditProcs** methods, see the *IPC Tools Methods* chapter in the *TIBCO iProcess Workspace (Browser) Configuration and Customization* guide.

For information about the **getStartProcs** and **getAuditProcs** methods, see the *WCC Tools Methods* chapter in the *TIBCO iProcess Workspace (Browser) Components Reference* guide.

.NET Action Processor Assembly Now Strongly Named (IPWB-137)

The .NET Action Processor assembly (`ActionProcessor.dll`), which is installed in `\inetpub\wwwroot\TIBCOActProc\Bin` by default, is now strongly named.

Sample Custom GI Form Provided to Demonstrate New Tools Methods (IPWB-127)

A sample custom GI form is provided to demonstrate the use of the new "IPC" tools methods that were added in IPWB-112. The custom GI form includes, a button for each of the IPC tools methods to illustrate their use.

For information about the sample custom GI form, see the *IPC Tools Methods* chapter in the *TIBCO iProcess Workspace (Browser) Configuration and Customization* guide.

Tools Methods Added for iProcess Client Applications (IPWB-112)

Tools methods that can be used with a customized iProcess Client application have been added. (Similar methods already existed that could be used with a custom application created with WCC components.)

These methods allow you to perform functions such as starting a case, opening a work item, triggering an event, etc. For a complete list and descriptions, see the *IPC Tools Methods* chapter in the *TIBCO iProcess Workspace (Browser) Configuration and Customization* guide.

New Tools Methods Added for Custom WCC Applications (IPWB-111)

The **getUserAttributes** and **getGroupAttributes** methods have been added to the available tools methods for custom WCC applications. These methods return arrays of objects representing iProcess attributes. For details about these new methods, see the *WCC Tools Methods* chapter in the *TIBCO iProcess Workspace (Browser) Components Reference* guide.

Also, as part of this enhancement, a new GroupQueue property has also been added to the ContextObject for the **overrideInitialFilter**, **overrideFilter**, **overrideInitialSort** and **overrideSort** callout methods. The new property allows these callout methods to utilize the new **ipcGetUserAttributes** and **ipcGetGroupAttributes** tools methods to obtain user and group attributes (the **ipcGetUserAttributes** and **ipcGetGroupAttributes** tools methods were added as part of IPWB-112). For more information, see the *Customizations* chapter in the *TIBCO iProcess Workspace (Browser) Configuration and Customization* guide.

Ability to Restrict Access to Personal Work Queues Added (IPWB-109)

To allow system administrators the ability to restrict access to personal work queues, the following changes have been made:

- A new **PersonalWorkQueueOption** property has been added to the config.xml file that specifies whether the logged-in user's personal work queue is shown or hidden by default.

- A new **<WorkQueue><PersonalWorkQueueOption>** user access profile property has been added to the userAccessProfiles.xml file that controls whether or not the user can change from the default setting specified in the **PersonalWorkQueueOption** property in the config.xml file.

  If this user access property allows the user to change from the default setting, a selection will appear on the **View** menu on the work queue list that allows the user to either show or hide their personal work queue; if this property does not allow the user to change from the default, the menu selection does not appear.

- The Work Queue Loading chart no longer shows the user's personal work queue if the work queue is hidden by default and the user does not have the authority to change the default setting.

Version 11.3.0

New Background Colors and Icons (43330)

To provide a lighter and more consistent look across product lines. the background colors and icons in the TIBCO iProcess Workspace (Browser) have been updated.

User Preference Data Can Now be Persisted Server-Side (43302)

User preference data can now be persisted on the server, allowing users to move to a different machine and view changes they had made on another machine. User preference data includes things like changes to views, list filters, list sorts, column changes, and all settings on the **Options** dialog.

To accommodate server-side persistence, a new **UserPreferencePersistence** element has been added to the **ServerNodes** record in the client's config.xml file. This new element has two attributes:

- **persistOnServer** - If "true", user preferences are persisted on, and read from, the server. If "false", user preferences are stored locally, as well as read from the local machine upon login.

- **maxDataSize** - This is the maximun number of characters in a property value string. This must be set at or below the field size supported by the database used on the server.

Parameters of the same name have also been added to the direct login capability so that server-side persistence can be specified when bypassing the **Login** dialog.

Session Timeout Configuration Parameter Added (43295)

A configuration parameter has been added to the config.xml file that allows you to specify the amount of time before the user's session is closed and the user automatically logged out.

The new **SessionMonitor** parameter provides the following attributes to control the session timeout:

- **timeout** - The number of minutes of user inactivity before the session will time out.

- **warning** - The number of minutes *before* the time out will occur that a warning dialog is displayed informing the user that the session is about to time out.

- **disable** - Set to "true" to disable session monitoring — the application will not time out; set to "false" to enable session monitoring.

Procedure and Work Queue Loading Charts Can Now Display Subset (43285)

Previously, the **Procedure Loading Chart** and **Work Queue Loading Chart** dialogs displayed load information for *all* available procedures and work queues, respectively.

A new function has been added that allows the user to choose a subset of the procedures and work queues when displaying loading charts.

New **Select Procedures** and **Select Work Queues** icons and menu selections have been added to the **Procedure Loading Chart** and **Work Queue Loading Chart** dialogs. When selected, these icons/menu selections cause a new dialog to be displayed that contains a check box for each procedure/work queue that allows the user to choose a subset of the procedures/work queues to display in the loading chart.

A chosen subset is persisted between login sessions.

Work Items Can Now be Forwarded Using the "Drag and Drop" Method (43277)

Previously, work items could only be forwarded to a specific work queue by selecting the work queue from a list.

This new feature allows users to forward work items by selecting them in the work item list, then "dragging and dropping" them onto the desired work queue in the work queue list.

This method allows forwarding only to work queues to which the user has access (as those are the work queues listed in the work queue list).

Configuration Parameter Added to Control Application Log (43262)

A new **logging** record has been added to the application's `config.xml` file that allows you to control the Application Log. This new record has the following attributes:

- **appLogActive** - Controls whether or not the Application Log is active by default.

- **echoToJsxLog** - Controls whether or not Application Log data is echoed to the Application Monitor.

Work Item Lists are Automatically Refreshed When Re-displayed (43227)

Work item lists are now automatically refreshed whenever the list comes back into focus.

For example, if the user has a work item list displayed, then displays any other list (procedure list, options, etc.) that overlays the original work item list, when the user redisplays the original work item list, it is automatically refreshed to ensure the user is viewing an up-to-date list.

Work Items Can Now be Opened from the Outstanding Work Items Tab (43260)

An **Open Selected Work Item(s)** menu selection and icon have been added to the Case Details Outstanding Work Items tab to allow the user to open work items from the list of outstanding work items.

Configuration Parameter to Hide Find Tool on Data Tab Added (43200)

A new **CaseDataFind** configuration parameter has been added to the `config.xml` file that allows you to remove the **Find** tool from the case **Data** tab.

The reason you would want to remove the **Find** tool is because of an issue that can cause the field list on the case **Data** tab to be empty. This issue can occur under the following circumstances:

- You are using Microsoft Internet Explorer (the issue does not occur when using Mozilla Firefox),

- the case contains memo fields that contain a large amount of XML data, and

- the **Find** tool on the case **Data** tab is enabled.

Under these circumstances, an XML transformation performed by the **Find** tool can cause the MSXML parser to fail, resulting in the empty field list.

The **show** attribute on the **CaseDataFind** parameter can be set to "false" to hide the **Find** tool and prevent the MSXML parser error.

New Parameter Sets Maximum Number of Case History Entries (41557)

If the number of entries in the case history list is very large (e.g., greater than 5000), responsiveness of the list is degraded, and the chance of an out-of-memory condition is increased due to limitations of the TIBCO General Interface components used in the case history list.

For this reason, a configuration parameter has been added to the `config.xml` file that sets the maximum number of entries on the case history list. The new **MaxHistory** parameter contains a **maximum** attribute that allows you to specify the maximum case history entries.

A 64-Bit Variant of the Action Processor Now Available (32076)

A 64-bit variant of the Action Processor is available in this release, allowing the server-side components of TIBCO iProcess Workspace (Browser) to operate in a true 64-bit environment.

This allows the Java Action Processor to run in 64-bit JVMs, and the .NET Action Processor to run on 64-bit IIS.

Version 11.2.0

Requests for JMS Deltas Added to the Action Processor (41641)

The following requests have been added to both the Java and .NET Action Processors so that applications can make direct calls to the Action Processor to request that work queue deltas be obtained via a subscription to a topic in a JMS implementation (e.g., TIBCO Enterprise Message Service (EMS)):

- **MakeAWorkItemListJMS** - This request informs the WIS that the application will be receiving work queue deltas via a subscription to a JMS topic.

- **StartWorkQDeltaJMSPublish** - This request tells the WIS to establish the baseline list of work items, and to start publishing the work queue deltas to the JMS topic.

- **FetchAWorkItemListJMS** - Gets the baseline list of work items after the application has instructed the WIS to start publishing deltas to a JMS topic.

- **KeepAliveWorkQDeltaJMSPublications** - This request informs the WIS that the application is still active and wants the WIS to continue to publish deltas to JMS. Also note that a new request group (**Session**) was add to which the KeepAliveWorkQDeltaJMSPublications request was added.

For more general information about obtaining work queue deltas via a JMS topic, see the *TIBCO iProcess Server Objects Programmer's Guide* (either Java or .NET).

For more information about the data that needs to be passed with these new Action Processor requests, see the *TIBCO iProcess Workspace (Browser) Action Processor Reference guide*.

Added Ability to Configure the Number of Work Items in a Work Queue (41595)

The following changes have been made to allow configuration of the number of work items in work queues:

- A new **PageSize** parameter has been added to the config.xml file. The value of its **default** attribute specifies the default number of work items listed in work queues. This is the default number shown in the **Page Size** dialog available on the work item list.

- A new **<WorkQueue><WorkItem><PageSize>** access profile property has been added to the userAccessProfiles.xml file. This allows you to specify whether or not the user has access to the **Page Size** button and menu selection on the work item list.

Server-Side Atomic Locking of Work Items Added (41528)

To ensure that only available work items are locked when using the "Open First Available Work Item" or "Open Next Available Work Item" functions, the TIBCO iProcess Workspace (Browser) now supports *server-side atomic locking* of work items.

To support this feature, a new **AtomicServerLock** parameter has been added to the config.xml file. This parameter causes the selection of the work item to lock to occur on the server (instead of on the client) when using the "Open First Available Work Item" and "Open Next Available Work Item" functions.

Note that to use this "atomic server lock" feature, your TIBCO iProcess Objects Server must have MR 38404 implemented.

For more details about using this new parameter, including reasons why you would want to use it, see the *TIBCO iProcess Workspace (Browser) Configuration and Customization* guide.

Ability to Control Types and Statuses of Work Queues and Procedures Added (41490)

The following changes have been made to control the types and statuses of work queues and procedures to display in the application:

- New selections have been added to the **View** menu on the procedure list that allow the user to choose whether only main procedures, only sub-procedures, or both main and sub-procedures are displayed in the procedure list.

- A new **ListView** record has been added to the config.xml file that allows you to specify which work queue types and statuses are displayed by default on the work queue list, as well as which procedure types and statuses are displayed by default on the procedure list.

- New user access profile properties have been added to the userAccessProfiles.xml file to allow you to control access to the display of specific work queue and procedure types and statuses on the work queue and procedure lists.

Forms Can Now be Displayed Modally (41402)

The following changes have been made to specify whether or not forms opened in a dialog are *modal* (i.e., the user cannot perform any other functions until that dialog is closed):

- A new **Modal dialog** check box has been added to the "Layout" section of the **Options** dialog that allows the user to choose whether forms in a dialog are modal.

- A new **modalDialog** attribute has been added to the **Layout** element of the **Options** record in the config.xml file. This new attribute is used to specify the default value for the new **Modal dialog** check box on the **Options** dialog.

Can Now Control Access to Sorting Via Column Header (41388)

The following new user access profile properties have been added to the userAccessProfiles.xml file to allow you to control whether or not the user can click on the column header to sort the work item and case lists:

- **<Case><SortableColumns>** - Controls whether or not the user can click on a column header to sort the case list.

- **<WorkItem><SortableColumns>** - Controls whether or not the user can click on a column header to sort the work item list.

New User Access Profile Properties Added (41014)

New user access profile properties have been added to the userAccessProfiles.xml file to allow you to control access to the following items:

- The **View** menu **Preview** selections on the case list.

- The **View** menu **Preview** selections on the work item list.

- All selections available on the **Options** dialog.

- The **Clear** button on the **Session Activity** dialog.

For a complete list and descriptions of the new properties, see the *TIBCO iProcess Workspace (Browser) Configuration and Customization* guide.

WCC Components can now be Installed on UNIX Systems (40351)

The installer has been updated to allow installation of the WCC components on UNIX systems. This allows installation to an application server on a UNIX platform, for runtime download to a Windows system.

Can Now Control Whether or Not Case Counts are Obtained from the Server (39147)

A new **CaseCounts** configuration parameter has been added to the config.xml file to allow you to control whether or not case counts are obtained.

The procedure list may be configured to display counts of active cases, total cases, and closed cases for each procedure. Systems with very large numbers of procedures and cases may wish to avoid the overhead involved with obtaining these case counts. Setting the **CaseCounts** parameter's **show** attribute to "false" will prevent the counts from being calculated and retrieved from the server.

Ability to Redirect Client to a URL Upon Logout Added (38989)

A new **logoutUrl** attribute has been added to the **Logout** record in the config.xml file that allows you to redirect the client to a specified URL upon logout.

Note that the **logoutUrl** parameter applies to standard logins/logouts, as well as when single authentication is used to log into the application.

Ability to Redirect Client to a URL Upon Browser Session Timeout (38385)

A new **timeoutUrl** attribute has been added to the **Logout** record in the config.xml file that allows you to redirect the client to a specified URL upon a browser session timeout.

Note that the **timeoutUrl** parameter applies to standard logins/logouts, as well as when single authentication is used to log into the application.

Version 11.1.0

Support for Solaris on x86 and x64 Systems Added (39660)

TIBCO iProcess Server Objects (Java) can now be used on x86 and x64 systems running Solaris 10.

Configuration Parameters Added for TIBCO Forms Support (38143)

This release of the TIBCO iProcess Workspace (Browser) adds supports for TIBCO Forms version 2.0. As a result of this support, the following configuration parameter has been added to the config.xml file for both client applications and custom WCC applications:

• The **user:forms2** entry has been added to the **addins** record. This entry is needed if you are using version 2.0 TIBCO Forms in your client application or custom WCC application.

A second configuration parameter has also been added to the config.xml file for both the client applications and custom WCC applications that allows you to control forms caching. This parameter is applicable to all versions of TIBCO Forms:

• The new **formsConfig** parameter is used to specify that TIBCO Forms be reloaded on each request instead of retrieving them from the browser cache. Setting the parameter's **ignoreCache** attribute to True causes the form and its resources to be reloaded on each request instead of retrieving them from the browser cache.

Open Work Queue Via URL Application Included in Samples (38142)

A new sample application has been included in the iProcess Workspace (Browser) product. The **openWorkQViaURL** application is a WCC application that demonstrates how to login and automatically load a **WorkItemsPreview** component, containing a list of work items and a preview pane, using a URL parameter to specify the work queue that is to be opened.

Rather than selecting a work queue from a list, the user passes the necessary identifying information in the URL. Immediately upon logging in, the identified work queue is opened.

The openWorkQViaURL application is a WCC application that is provided in the "samples", i.e., you must specify to install the samples when installing the iProcess Workspace (Browser). It is installed in the following directory:

InstallationHomeDir\iprocessclientbrowser\samples\openWorkQViaURL

For more information about this sample application, see the *Sample Applications* chapter in the *TIBCO iProcess Workspace (Browser) Components Concepts Guide*.

New Open Work Item Properties Added to User Access Profiles (37820)

Previously, there was a single user access profile property that controlled access to all of the following tools.

- Open Work Item
- Open First Work Item
- Open Next Work Item
- Auto-Repeat Open Work Item

The `userAccessProfile.xml` file has been updated to now allow you to control access to each of these tools individually. The following new properties have been added under the "WorkItem" property in all profiles to allow you to control access to their respective tool:

— <property name="OpenFirst" state="0"/>

— <property name="OpenNext" state="0"/>

— <property name="OpenAuto" state="0"/>

The existing "Open" property now controls access to only the Open Work Item tool.

This change also resulted in three new properties being added to the **wccWorkItems** component (only applicable if you have installed the TIBCO iProcess Workspace (Browser) components) to control access to their respective tools when adding a **wccWorkItems** component to a WCC application. The following properties have been added to the Properties Editor under the "WorkItem" property:

- Open First Item
- Open Next Item
- Open Auto-Repeat

Ability to Filter Case History Added (36912)

You can now filter the case history entries that are displayed on the case **History** tab. This allows you to more easily find the entries you are interested in if the case history is very lengthy. This new feature resulted in the following changes:

- A new **Filter** button and **Filter** selection on the **View** menu have been added to the case **History** tab, as well as on the graphical case history display. This button/menu selection displays the **Case History Filter** dialog, on which you

can specify filter criteria. It allows you to filter on things such as specific entry types (e.g., case started, work item released, etc.), user names, date ranges, etc.

- New user access profiles for controlling access to the new case history filter function have been added to the userAccessProfiles.xml file. There are two new profiles: one for access to the new filter case history function when the case is opened from the case list, and one for access to the new filter case history function when the case is opened from the work item list.

- A new **Filter Case History** property has been added to the **wccCaseHistory** component. This property is used to specify access permissions for the new case history filter function when adding the **wccCaseHistory** component to a WCC application.

- Two new callout methods have been added to allow filter overrides for case history filtering:

  — **overrideInitialHistoryFilter** - This allows specification of a filter that will be applied whenever the user opens the case history list. This filter is visible and can be changed by the user.

  — **overrideHistoryFilter** - This allows specification of a filter that will be applied whenever the user opens the case history list, refreshes the list, or applies a new filter to the list. The filter applied by this method is *not* visible to the user. It is forcibly applied without the user's knowledge.

The Maximum Number of Cases to Return from the Server is Now Configurable (36848)

A new **MaxCases** configuration parameter has been added to the client application's config.xml file. This parameter allows you to specify the maximum number of cases to download from the server. This allows for better performance when procedures are selected that contain a very large number of cases.

If the **MaxCases** parameter is set, and a user of the client application selects a procedure that contains a number of cases that exceeds the maximum specified, only the specified number are displayed in the case list. If this occurs, a message is shown on the bottom of the case list that tells the user how many were downloaded, as well as the number of cases that were not downloaded because they exceeded the maximum number.

TIBCO General Interface Version 3.6.2 Now Supported (36813)

This release of the iProcess Workspace (Browser) supports TIBCO General Interface 3.6.2. Note, however, that General Interface version 3.5.1 is still supported. If you have developed a WCC application using General Interface 3.5.1, you can continue to use that version; you are not required to upgrade to version 3.6.2. (Version 3.6.1 is not supported.)

Open Work Item Via URL Application Included in Samples (36812)

A new sample application has been included in the iProcess Workspace (Browser) product. The **openWorkItemViaURL** application is a WCC application that demonstrates how to automatically:

- open a work item form using URL parameters to specify the work item that is to be locked and opened, or

- start a case using URL parameters to specify the procedure to start.

Rather than selecting a work item or procedure from a list, the user passes the necessary identifying information in the URL. Immediately upon logging in, the identified work item form is displayed, or case is started.

The openWorkItemViaURL application is a WCC application that is provided in the "samples", i.e., you must specify to install the samples when installing the iProcess Workspace (Browser). It is installed in the following directory:

InstallationHomeDir\iprocessclientbrowser\samples\openWorkItemViaURL

For more information about this sample application, see the *Sample Applications* chapter in the *TIBCO iProcess Workspace (Browser) Components Concepts Guide*.

As part of this new feature, the following two new static methods have also been added:

— **openWorkItemEx** - This static method opens (and locks) the specified work item and displays the form associated with that work item. Unlike the **openWorkItem** method, however, you do not pass in a work item tag with this method — instead, the work item tag is obtained from a list of outstanding work items using the information passed in the parameters.

— **workItemTag2WorkQTag** - This static method returns a work queue tag extracted from the work item tag passed as an argument.

For more information about these methods, see the WCC Methods chapter in the *TIBCO iProcess Workspace (Browser) Components Reference Guide*.

New Callout Interface Method for Setting Initial Columns (36811)

Currently, there is a callout interface method (**overrideColumns** method) that lets a developer modify columns to be displayed in lists. It is run both when the list is initially loaded and after any changes are made to the columns by the user through the Columns Selector dialog.

A new **overrideInitialColumns** callout interface method has been added that is run only upon *initial* list display. This allows the developer to set the initial columns on the list, but then the user can modify the columns themselves using the Column Selector dialog.

Outstanding Steps Now Shown in Colored Text in Case History (36786)

Entries in the case history for currently outstanding steps are now displayed in a colored font to be able to distinguish them from the other entries. By default, they are displayed in a blue font.

You can also customize the color in which outstanding steps are displayed by modifying the "ipcOutstanding FC" record in the `JSXAPPS/ipc/jss/ipcCSS.xml` file. For more information about modifying color settings, see the *TIBCO iProcess Workspace (Browser) Configuration and Customization* guide.

Version 11.0.0

Simplified Callout Interface Implemented (34643)

A simplified callout interface that represents available fields, available columns, filters, sorts, and selected columns as JavaScript objects rather than XML has been implemented. This callout interface allows manipulation of the selected column list without having to manipulate a serialized XML version of Matrix.Columns. Where more complex changes are needed, it provides an extra callout for manipulating the TIBCO General Interface Matrix component directly.

For information about the callout interface methods, see the *TIBCO iProcess Workspace (Browser) Configuration and Customization* guide.

The previous callout interface has been deprecated, but is still functional and can continue to be used. The documentation for the original callout interface has been moved to an appendix in the *TIBCO iProcess Workspace (Browser) Configuration and Customization* guide.

Action Processor Implements New Fetch Requests (34444)

The Action Processor has implemented the following new requests:

- **FetchAWorkItemListIfChanged** - This new request fetches work items (**vAWorkItem**) from the server only if any items in the entire list have changed (not just the specified range) since the list was originally created with the **MakeAWorkItemList** request.

- **FetchWorkItemListIfChanged** - This new request fetches work items (**vWorkItem**) from the server only if any items in the entire list have changed (not just the specified range) since the list was originally created with the **MakeWorkItemList** request.

Action Processor Interfaces Are Now Published (34174)

The TIBCO iProcess Workspace (Browser) client application uses existing JavaScript interfaces to make requests to the Action Processor. These interfaces provide functionality such as starting cases, getting lists, setting case data, etc. These interfaces are now being published and documented so that custom WCC applications can more easily make direct requests to the Action Processor to perform the desired functionality.

For a complete list and description of the available JavaScript interfaces, see the *TIBCO iProcess Workspace (Browser) Components Reference*.

Work Item List Auto-Refresh Feature Added (33991)

A new feature has been added that allows you to specify whether or not work item lists should be automatically refreshed at a specified interval. The following changes have been made to accomplish this:

- The work item list has a new **Auto-Refresh** icon, as well as a new **Auto-Refresh** selection on the **View** menu. These new additions display an **Auto-Refresh** dialog that contains a check box that allows you to either enable or disable automatic refresh. It also contains a field that is used to specify the number of seconds between automatic refreshes.

- An indicator has been added to the work item list status bar that indicates the current auto-refresh status, on or off.

  The indicator shows "Refreshing..." during the time the list is being refreshed.

- The **Options** dialog has a new check box that allows you to specify whether or not auto-refresh is enabled or disabled by default when you login, as well as a new field that specifies the auto-refresh interval when it is enabled.

  There are also two new radio buttons on the **Options** dialog that specify whether changes to auto-refresh settings via the **Options** dialog should apply to currently open lists, as well as lists opened in the future, or whether changes should apply only to lists opened in the future.

- A new **AutoRefresh** property has been added to the user access profiles in the userAccessProfiles.xml file, which is used to allow or deny access to the auto-refresh feature for a specific user type.

- The following new attributes have been added to the **display** record in the **Options** section of the client application's `config.xml` file:

  — **autoRefreshWorkItems** - Either **"true"** or **"false"** to specify whether work item lists should automatically refresh.

  — **autoRefreshInterval** - The interval (in seconds) at which work item lists will automatically refresh if **autoRefreshWorkItems** is set to "true".

  — **autoRefreshApplyAll** - Either **"true"** or **"false"**. If true, changes to auto-refresh settings via the **Options** dialog should be applied to all work item lists currently open, as well as new lists opened in the future. If false, changes to auto-refresh settings via the **Options** dialog should be applied only to new lists that will be opened in the future.

- An **Auto-Refresh** property has been added to the Properties Editor in General Interface Builder when using the TIBCO iProcess Workspace (Browser) components. This allows you to control whether the user can enable/disable auto-refresh on work item lists that are built using the components.

Ability to Customize Appearance of Browser Window Added (33628)

You can now customize the appearance of the browser window when displaying work item forms. You can specify things such as whether the window is resizable, whether or not a status bar is displayed, etc.

Note that the extent to which you can customize your browser window appearance depends on the type of browser (i.e., Internet Explorer 6, Internet Explorer 7, or Firefox) you are using.

A new **BrowserFeatures** record has been added to the client application's `config.xml` file to provide this functionality. This new record has a number of attributes that allow you to specify specific customization features for browser windows displaying work item forms.

Note that this new feature can be used with ASP Forms, JSP Forms, BusinessWorks FormBuilder Forms, General Interface Forms, and TIBCO Forms, but they *cannot* be used with TIBCO iProcess Modeler-produced work item forms.

For a complete list of the **BrowserFeatures** attributes, and information about which browsers support each feature, see the *TIBCO iProcess Workspace (Browser) Configuration and Customization* guide.

Memo Fields Now Shown in Fields Grid (33272)

Previously, memo fields were shown in a separate **Memo Fields** list on the case **Data** tab. Memo fields are now shown in the fields grid on the case **Data** tab, like all other field types.

If the field is a memo field, "[Memo]" is displayed in the **Value** column for the field, followed by the first 60 characters of the text in the memo field.

If the user clicks on the **Value** column for a memo field, "[Memo]" changes to a **Memo** button. If the cursor is placed over the **Memo** button, tool-tip text displays the first 120 characters of the text in the memo field; if the text in the memo field exceeds 120 characters, the tool-tip text is followed by "...".

Clicking on the **Memo** button causes the **Memo** dialog to be displayed, which contains the contents of the memo field. The memo field text can be modified on the **Memo** dialog.

Other Information

Must Normalize Case Data to View Cases

When you install the iProcess Engine, there is a check box in the **Configuration** window that is used to enable a feature called **case data normalization**. If you are using an application developed with iProcess Server Objects (which are used to develop the TIBCO iProcess Client (Browser)), you **must** enable case data normalization. If it is not enabled, cases will not appear in the case list.

Case data normalization can be enabled either during the installation, or at a later time using the Case Data Normalization Utility, **swnormcd**.

For more information about case data normalization and using **swnormcd**, see the *TIBCO iProcess Engine Administrator's Guide*.

Character Encoding

ICU conversion libraries can be used to specify the desired character encoding. This may be necessary if you are using character sets such as Japanese.

To use the ICU conversion libraries, you must create the following Registry entry (Windows systems) or environment variable (UNIX systems) and set it to the name of the converter you wish to use.

— TISOUnicodeConverterName

On Windows systems, the Registry entry must be located in the following path:

HKEY_LOCAL_MACHINE\SOFTWARE\Staffware plc\Staffware SSO Client\

For a list of converter names, and information about each converter, see the following website:

http://demo.icu-project.org/icu-bin/convexp

Note that when using the ICU libraries, the converter you use must reserve positions 00 through 1F for the standard single-byte ASCII control characters. This ensures that the control characters do not otherwise occur in the byte stream. (The UTF-16 converter, for example, does not satisfy this requirement, and therefore, cannot be used.)

Memory Management

The following subsections describe memory management issues on Solaris and AIX systems. Therefore these subsections are applicable only if your Action Processor is installed on either Solaris or AIX.

Memory Management on Solaris

On Solaris systems, the Smartheap memory manager cannot be used by a shared library when running inside a process not built with Smartheap. The Java Action Processor uses the underlying iProcess Server Objects (Java) shared library. This shared library always runs in the Java executable, which is never built with Smartheap. Consequently, the benefits of Smartheap are not realized, and therefore it is not used on Solaris systems.

Sun offers a native equivalent to Smartheap, **libmtmalloc**. When running on a multiprocessor system, TIBCO recommends invoking the **libmtmalloc.so** library at runtime using the LD_PRELOAD environment variable. Consult your Solaris documentation for further information. The underlying iProcess Server Objects (Java) are not built with **libmtmalloc.so**, so it must be configured at runtime with LD_PRELOAD.

Memory Management on AIX

On AIX systems, the iProcess Server Objects (Java) that is part of the Java Action Processor component does not utilize Smartheap for optimizing memory management.

By default, AIX uses a single heap to service all memory allocation/de-allocation requests for all threads in a process. When limited to a single heap, simultaneous memory allocation/de-allocation operations are serialized. This can cause a significant negative impact on performance of the Action Processor, which is especially compounded on multi-processor systems.

AIX offers an ability for a process to use multiple heaps, thereby reducing the threading contention caused by having a single heap. This can be configured with the MALLOCMULTIHEAP or MALLOCOPTIONS environment variable, depending on the version of AIX you are using: MALLOCMULTIHEAP is used for versions prior to 5.3; MALLOCOPTIONS is used for 5.3 and newer.

When running the Action Processor on a multiprocessor system, TIBCO recommends setting the MALLOCMULTIHEAP/MALLOCOPTIONS environment variable prior to creating the Java process that hosts the Action Processor component of iProcess Workspace (Browser). The MALLOCMULTIHEAP/MALLOCOPTIONS environment variable allows you to specify the number of heaps a process may use. You may need to tune the number of heaps used by the process in order to achieve optimal performance. In general, configuring a process to use more heaps will result in less threading contention but at the cost of using some additional memory. Consult your AIX documentation for further information.

For information about MALLOCMULTIHEAP (for versions earlier than 5.3), see:

http://pic.dhe.ibm.com/infocenter/aix/v7r1/index.jsp?topic=%2Fcom.ibm.aix. prftungd%2Fdoc%2Fprftungd%2Fthread_env_vars.htm

For information about MALLOCOPTIONS (for version 5.3 and newer), see:

http://pic.dhe.ibm.com/infocenter/aix/v7r1/index.jsp?topic=%2Fcom.ibm.aix. genprogc%2Fdoc%2Fgenprogc%2Fmalloc_multiheap.htm

Known Issues

Installer Does Not Support Java 7

Errors occur if Java 7 is used when installing TIBCO iProcess Workspace (Browser). Therefore, if your system is set up to use Java 7, do the following to work around this issue:

- Remove JRE 1.7.x from the PATH variable.
- Clear the JAVA_HOME variable.

This causes the installer to use the JRE that is bundled with the installer.

Cannot Launch Application from General Interface Builder Using Internet Explorer 10

TIBCO General Interface Builder provides the ability to launch your application from a hyperlink. When you click the hyperlink, a parameterized launch page (shell.html) is called and the application is launched as a full console application.

When you are running General Interface Builder and select the menu option to "Run Project", it launches one of these hyperlinks. The problem is that the shell.html in General Interface Builder does not have the compatibility setting in the <head> element that is required when running a General Interface Builder application using Internet Explorer version 10.

To work around this problem, insert the following <meta> element into the <head> element of *GI_HOME*\shell.html:

```
<meta http-equiv="X-UA-Compatible" content="IE=EmulateIE7" />
```

Installer Doesn't Remember Action Processor Home During Upgrade

If you upgrade TIBCO iProcess Workspace (Browser), and are installing a new version of the Action Processor, the installer does not remember the home directory for the previous Action Processor.

Previous Release Notes and Readme Remain After Upgrade

If you upgrade TIBCO iProcess Workspace (Browser), the release notes and
Readme from the previous installation will remain in the
InstallDir\iprocessclientbrowser\doc directory after the upgrade. The file
names for these documents from the previous installation will contain the version
number of the previous installation.

The .NET Action Processor Must be Uninstalled Before Upgrading to 11.4.0

If you had a previous version of the .NET Action Processor installed, and you are
upgrading to the 11.4.0 version of the .NET Action Processor, you *must* uninstall
the .NET Action Processor before installing version 11.4.0.

Note, however, if you had made any changes to the previously installed .NET
Action Processor's apConfig.xml file, back up that configuration file before
uninstalling the .NET Action Processor. For more information, see the *Upgrading
From Previous Versions* section in the *TIBCO iProcess Workspace (Browser) Installation*
guide. (You do not need to uninstall a previous version of the Java Action
Processor before an upgrade.)

For information about uninstalling, see the *Removing the iProcess Workspace
(Browser)* chapter in the *TIBCO iProcess Workspace (Browser) Installation* guide.

Error Reported When Saving New GUI Component in WCC Project

The following error is displayed in TIBCO General Interface Builder when
creating a new GUI component in a WCC project.

```
"Uncaught Exception: 'r.getServer()' is null or not an object"
```

This error is generated when a new component is saved with the "Save and
Reload" option and an existing component file is selected to be overwritten.

This error requires a fix to TIBCO General Interface Builder. It does not prevent
you from successfully completing the WCC project.

Using Assistive Technologies

The TIBCO iProcess Workspace (Browser) launch script (iProcessClient.html)
contains a !DOCTYPE declaration that allows the application to work properly
with assistive technologies, such as screen readers (this !DOCTYPE declaration
was added in MR 41596).

The launch script also contains a <**meta**> statement that causes Internet Explorer 8
to emulate Internet Explorer 7.

However, there is a known issue in TIBCO General Interface that causes the <**meta**> statement to be ignored because of the !DOCTYPE declaration. Because of this, the !DOCTYPE declaration is commented out by default.

Therefore, if you are using an assistive technology, you must uncomment the !DOCTYPE declaration for the technology to work properly.

And if you are using an assistive technology *and* Internet Explorer 8, you must uncomment the !DOCTYPE declaration *and* set Internet Explorer 8 to Internet Explorer 7 compatibility view via the browser **Tools** menu.

Forms Opened in Firefox May Not Open Full Screen

If you set the user option to open work item forms in a separate browser window, and you check the option to open the forms in "Full Screen", the forms may not always open full screen when using Mozilla Firefox. Certain add-on menus and toolbars affect the size of the form and prevent it from opening full screen.

Also, when a form is opened under the circumstances described above, the buttons on the form may not be visible. To make them visible, click on the maximize icon in the upper right portion of the window.

Users Disabled on LDAP Server Can Still Log In

There is a known issue that allows users that have been disabled on Active Directory on an LDAP server to still be able to log in to the TIBCO iProcess Workspace (Browser). The LDAP API allows certain access (query, comparing password, etc.) to users that have been disabled.

Cannot Select Installation Home Directory Using HP Itanium

If you are installing the TIBCO iProcess Workspace (Browser) on an HP Itanium system, there is an issue with selecting the installation home directory.

During the installation process, the **Specify Installation Home** dialog will ask you to specify the installation home directory; the field is prefilled with "/opt/tibco". If you click the **Browse** button to browse for a different installation home directory, the selected directory is not entered into the **Specify Installation Home** field; if you are using an installation home directory different than the default, you must enter it manually.

IE 7 Add-on Can Cause Endless Loop of Browser Windows

When using Internet Explorer 7, if the "IE Developer Toolbar BHO" add-on is installed, it must be disabled for custom GI Forms to function properly. Having this add-on enabled results in multiple browser windows opening in an endless loop after a custom GI Form is closed.

This add-on can be disabled by opening **Tools > Manage Add-ons > Enable or Disable Add-ons...** from Internet Explorer 7.

Windows Script Update Addresses Performance Issues With Internet Explorer

AJAX applications running in Microsoft Internet Explorer can experience performance issues.

Microsoft has released Windows Script 5.7, which addresses these performance issues, partially by including an updated Garbage Collector. The version 5.7 update includes VBScript, Windows Script Host, JScript, Windows Script Components, and Windows Script Runtime.

If your system is currently using Windows Script 5.6, you should update to the 5.7 release, or newer. You can determine your current version by entering "cscript" at a command prompt. The first line displayed indicates the current version. For example:

```
Microsoft (R) Windows Script Host Version 5.6
```

For more information about the Windows Script update, as well as links to downloads for each operating system, see the following:

http://www.microsoft.com/technet/scriptcenter/newswire/wsh57.mspx

Case Data Unavailable Through Methods

The **Data** button, which is used to update case data, is not available on the **Events** nor the **Process Jump** dialog when those dialogs are displayed via the **triggerEvent** and **processJump** WCC methods, respectively.

If access to case data is needed, it can be accessed via the **CaseData** component.

For information about the WCC methods and components, see the *TIBCO iProcess Workspace (Browser) Component Reference*.

General Interface Builder XHTML Mode Not Currently Supported

When using TIBCO iProcess Workspace (Browser) components (WCC components) to create custom applications, running General Interface Builder in XHTML mode (GI_Builder.xhtml) is not currently supported.

General Interface Builder must be run in HTML mode (GI_Builder.html) at this time.

Cannot Operate Across Domains

The default security settings in TIBCO iProcess Client (Browser), Firefox and Internet Explorer do not allow JavaScript to access a different domain than the one from which the page was served — also called cross-domain scripting. This means they will not allow an XMLHttpRequest call to a domain that is different from the domain of the hosted JavaScript.

For Internet Explorer this issue affects calls to different hosts, but not to different ports on the same host.

For Firefox, this setting prevents calls to different ports on the same host. Therefore, if you are using the default security settings in Firefox, your client application, the Action Processor, and the WebDAV Server (applicable only if you are using TIBCO Forms) must not only be running in the same domain but must also be using the same port number.

Note that both browsers consider "localhost" and 127.0.0.1 to be in different domains. For instance, if you set the Action Processor URL to "localhost", then try to run the client application using the actual host name or 127.0.0.1, it will not work.

Work Item Form Title Bar May Display a URL

When using Microsoft Internet Explorer version 7.0, a browser security setting may prevent work item form titles from displaying properly. If the "Allow script-initiated windows without size or position constraints" browser security setting is disabled, it blocks the work item form title, and instead displays a URL in the title bar.

Rounding of Large Values May Occur

Because of the data types used in the iProcess Server Objects (which are used by the iProcess Workspace (Browser)), rounding may occur in data fields that contain very large numbers. The floating point precision provided in the data types used is 15-17 digits of accuracy.

For more information about this issue, see the following websites:

— http://msdn2.microsoft.com/en-us/library/Aa691146(VS.71).aspx

— http://mindprod.com/jgloss/floatingpoint.html

Java Heap Space Error

If you are running a Java Action Processor in Tomcat, and receive a "Java heap space" error message when attempting to display a list that contains a large number of items (10000+), you will need to do one of the following, depending on your version of Tomcat:

Tomcat Pre-Version 5.5

Modify the **EXECJAVA** statement in the **catalina.bat** file (Windows) or **catalina.sh** file (UNIX) to include the **-Xms** and **-Xmx** parameters. For example:

```
%_EXECJAVA% %JAVA_OPTS% %CATALINA_OPTS% %DEBUG_OPTS% -Xms1024m
-Xmx1024m -Djava.library.path="C:\Java\Tomcat55\shared\lib"
-Djava.endorsed.dirs="%JAVA_ENDORSED_DIRS%" -classpath
"%CLASSPATH%" -Dcatalina.base="%CATALINA_BASE%"
-Dcatalina.home="%CATALINA_HOME%"
-Djava.io.tmpdir="%CATALINA_TMPDIR%" %MAINCLASS% %CMD_LINE_ARGS%
%ACTION%
```

This sets the minimum Java heap and the maximum Java heap to 1 GB.

Tomcat Version 5.5 and 6.0

[For Tomcat 5.5 and 6.0 on UNIX, use the Tomcat Pre-Version 5.5 procedure above.] Start the Tomcat monitoring/configuration program by executing the following:

— `TomcatDir\bin\tomcat5w.exe` [Tomcat 5.5]

or

— `TomcatDir\bin\tomcat6w.exe`   [Tomcat 6.0]

The **Apache Tomcat Properties** dialog is displayed.

Click on the **Java** tab and add "-Xms1024m" and "-Xmx1024m" to the **Java Options** section. For example:
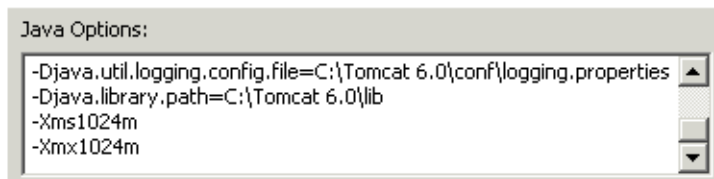
This sets the minimum Java heap and the maximum Java heap to 1 GB.

Separate Instance Of Tomcat May Be Required

If you are running a FormFlow project that is being hosted in Tomcat, and the FormFlow project is using a version 10.6.0, or earlier, of the TIBCO BusinessWorks iProcess Plug-in (which includes the FormFlow plug-in), the plug-in will be using a version of the iProcess Server Objects that are incompatible with this release of the iProcess Workspace (Browser).

This release of the iProcess Workspace (Browser) requires version 11.4.0 of the iProcess Server Objects.

Therefore, if you are running the Java Action Processor, and it is being hosted in Tomcat, it must be in a separate instance of Tomcat from the instance hosting the FormFlow project.

Newer releases of the plug-in will include version 11.4.0 of the iProcess Server Objects, at which time the FormFlow project and this release of the Java Action Processor could be hosted in the same instance of Tomcat.

Delay May Occur When Opening New Browser Window

If you have updated to JRE 5.0 update 6 (also known as JRE version 1.5.0_06) or newer, you may experience delays opening any new browser window. This could affect the time it takes to open a work item form in the TIBCO iProcess Client (Browser).

This delay appears to be related to the introduction of Secure Static Versioning (SSV) in JRE 10.5 update 6. SSV forces the browser to use one specific JRE version (the latest version) for all Java applets.

This information is based on postings in Sun/Java forums — no information from Sun about this issue could be found.

For more information, see the following links:

— http://forum.java.sun.com/thread.jspa?threadID=767612

— http://forum.java.sun.com/thread.jspa?threadID=778958&tstart=15

— http://www.fperkins.com/HowTofixIEloadingslow.html

Closing Window May Close Session

If you are running the iProcess Workspace (Browser) Client application from the local file system (rather than from an application server), and you are using Internet Explorer version 7.0, closing a browser window opened by the client application causes the original window to lose its session. Subsequent requests to the Action Processor result in the following error message:
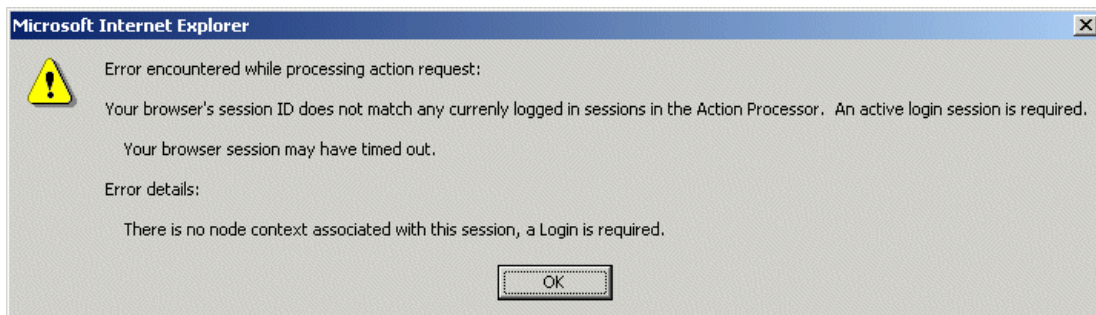
This is caused by a known issue in Internet Explorer 7.0, which can be fixed in a hotfix described in the following Knowledge Base article:

— http://support.microsoft.com/kb/935778

Uninstaller May Not Be Installed On UNIX Systems

Situations have arisen where the uninstaller has not been installed on UNIX systems. The problem appears to be an environmental issue, but it is still under investigation.

The workaround for this known issue is to use the following method to uninstall the TIBCO iProcess Workspace (Browser) when it has been installed on a UNIX system and the uninstaller was not installed:

```
java -cp uninstaller.jar run
```

Popup Blockers May Cause Problems

If the system on which you are running the TIBCO iProcess Workspace (Browser) has a popup blocker installed and running, it may interfere with the proper operation of forms that open in a separate browser window. You may see problems such as the form not displaying in the browser window, form buttons not performing their intended functions, the work item list not updating properly, etc.

Graphical Case History May Be Incorrect for Grafted Sub-Cases

When viewing the graphical case history for a case that contains grafted sub-cases, the start and end times for the grafted sub-cases may not be correct if the sub-cases are not uniquely named.

The workaround for this known issue is to use unique names for grafted sub-cases, or to use the non-graphical history display.

Drill-Down Limitation for Sub-Cases in Case History

There is an issue with drilling down further than approximately 17 nested sub-cases in the case history. If the hierarchy extends further than 17 nested sub-cases, you will not be able to drill down any further. You may also experience a gap in the case history display.

Note that this known issue does not effect the graphical case history. Therefore, the workaround for this known issue is to use the graphical case history if the case history contains a large number of nested sub-cases.

WebLogic Log4J Configuration

This is applicable only if you are using a WebLogic Web Application Server.

WebLogic may have problems finding classes associated with **Log4J**. This is documented at:

http://e-docs.bea.com/wls/docs90/logging/config_logs.html#1015132

This issue may require that you add several jars to the classpath in the server startup script:

/bea/user_projects/domains/base_domain/bin/startWebLogic.sh

Add the following lines:

```
# Add commons logging jars to class path
CLASSPATH="${CLASSPATH}/misc/bea/user_projects/domains/base_domain/lib/commons-logg
ing.jar:/bea/user_projects/domains/base_domain/lib/commons-logging-api.jar:/bea/web
logic90/server/lib/wlcommons-logging.jar"
```

The following two jar files can be downloaded from Apache-Jakarta:

- commons-logging.jar
- commons-logging-api.jar

They can be downloaded from the following location:
http://archive.apache.org/dist/jakarta/commons/logging/binaries/

The version 1.0.2 jar files were tested successfully. The version 1.0.4 jar files generated the following error in the WebLogic console on startup: "java.lang.NoSuchMethodError: org.apache.log4j.Category.log".

These jar files can be copied to any valid path, such as the server domain lib directory (as long as the CLASSPATH entry matches the path):

```
/bea/user_projects/domains/base_domain/lib
```

Unsupported Form Functionality

If you are using forms created with the TIBCO iProcess Modeler, the following iProcess Form elements are not supported by the iProcess Form Translator. (In some cases, the HTML generated for the iProcess Form can be customized to gain the functionality — for information, see the *Customizing iProcess Modeler Forms* chapter in the *TIBCO iProcess Workspace (Browser) Configuration and Customization* manual.)

- Items that require client-side evaluation of iProcess expressions (formerly called Staffware expressions). These include:
  - Conditional display of rows - Simple evaluator expressions are supported for conditionals, but not expressions that contain evaluator functions.
  - Expressions used as validation items - Simple expressions are supported, but not those containing evaluator functions.
  - Hidden fields where the calculated value might change when data on the form is changed. Note, however, that the initial value for hidden fields is calculated server side. So as long as the value won't change interactively, hidden fields will work as expected.
  - Calculated fields - The iProcess Objects Server will calculate an initial value for a calculated field, but the field data will not dynamically update as other values on the form are changed.
- Scripts - The initial, keep, and release code including scripts will be executed by the iProcess Objects Server. Individual script functions and calls to other scripts elsewhere on the form are not supported.
- Application field - Application fields will appear as a button that displays a message indicating application fields are not supported in the TIBCO iProcess Workspace (Browser).

- Interactively changing an array index - An array index and an array field can be displayed on the form but changing the index will not switch the array field value.

- Composite Tables

- Ampersand commands

- "Use" files

Also, the following are limitations that apply to items used as validation list names or validation items:

- SW_GROUPS - When used as a validation list, this may not return all groups if some groups do not currently contain members.

- SW_GRP_<groupname> - When used as a validation list, this may not return all group members if the user rights do not allow it.

- SW_STARTER:*, SW_GROUP:*, and SW_USER:* attributes (NAME, DESCRIPTION, LANGUAGE, MENUNAME, etc.) are not available on iProcess Modeler forms if you are using an iProcess Engine older than version 10.6. These attributes are available when using a version 10.6 iProcess Engine.

Security Warning in Microsoft Internet Explorer

If you are running the TIBCO iProcess Workspace (Browser) in Microsoft Internet Explorer you may see the following message (at the top of the browser window) when starting the application: *"To help protect your security, Internet Explorer has restricted this file from showing active content that could access your computer. Click here for options…"*

You can avoid this warning by navigating to the following in the browser:

```
Tools > Internet Options > Advanced
```

…and scrolling down to the Security section, then checking the following:

"Allow active content to run in files on My Computer"

MultipleLogins Must be Enabled

The **MultipleLogins** flag in the TIBCO iProcess Objects Server must be enabled. If multiple logins is disabled, lists in the TIBCO iProcess Workspace (Browser) fail to display, and an error similar to "**Error encountered reading ProcId values**" is displayed.

For information about setting the **MultipleLogins** flag, see the *TIBCO iProcess Objects Server Administrator's Guide*.

Error Returned If Administering Empty Group Queue

Attempting to administer redirection or participation schedules for a group work queue that does not have any members causes a "No member in group queue" error message to be displayed. Ensure that all group queues you administer have a least one member.

Migration

This section describes changes that have taken place in each release that may require an action on your part if you have upgraded from an earlier version. If you are upgrading from a version older than the most recent release, view all of the sections listed below, back to the version you are upgrading from (for example, if you are upgrading from version 11.2.0, look at the sections for 11.3.0, 11.3.1, and 11.4.0):

- Version 11.4.1

- Version 11.4.0

- Version 11.3.1

- Version 11.3.0

- Version 11.2.0

- Version 11.1.0

- Version 11.0.0

- Version 10.7.0

- Version 10.6.0

Most migration issues have to do with new configuration parameters in the config.xml file, and new user access profile entries in the userAccessProfiles.xml file. Note, however, the migration issues described here for new configuration parameters and user access profile entries only apply to custom WCC applications. They do not apply if you are using the iProcess Client.

If you are using the iProcess Client, new parameters and new user access profile entries are included in the config.xml and userAccessProfiles.xml files that are written to the file system by the installer during the upgrade (your original config.xml and userAccessProfiles.xml files are renamed config_old.xml and userAccessProfiles_old.xml, retaining any custom settings). For information about migrating when using the iProcess Client, see *Upgrading from Previous Versions* in the *TIBCO iProcess Workspace (Browser) Installation Guide*.

If you are using a custom WCC application, you will need to manually copy new configuration parameters and user access profile entries to the custom application's config.xml and userAccessProfiles.xml files if you want to take advantage of the functionality those parameters and entries provide.

The following subsections provide the steps necessary to add new configuration parameters and user access profile entries to your custom application.

Adding New Configuration Parameters

To add parameters that are new in the release to your custom application's `config.xml` file, perform the following steps:

1. Open the `config.xml` file that was installed with the new release. This is a "template" file that is used for all new WCC projects you create using General Interface Builder. This file is located as follows:

   WorkspaceDir\JSX\addins\wcc\projectTemplate\wccApp\config.xml

   where *WorkspaceDir* is the workspace directory you specified when installing the components.

2. Open your custom WCC application's `config.xml` file. This file is located as follows:

   WorkspaceDir\JSXAPPS*WCCProjectName*\config.xml

   where *WorkspaceDir* is the workspace directory used when the custom application was created, and *WCCProjectName* is the name you gave your WCC application when you created it in TIBCO General Interface Builder.

3. From the template file, locate and copy each of the desired new parameters and attributes and paste them into your custom application's configuration file.

4. Modify, if desired, the value of the newly added parameter or attribute.

   For information about setting parameter and attribute values, see the *TIBCO iProcess Workspace (Browser) Configuration and Customization* guide.

5. Save and close the configuration file.

6. Your custom application will need to be re-deployed before new parameters will take affect. For information, see the *Deploying Your Custom Application* section in the *TIBCO iProcess Client (Browser) Components Concepts* guide.

Adding New User Access Profile Entries

To add user access profile entries that are new in the release to your custom application's `userAccessProfiles.xml` file, perform the following steps:

1. Open the `userAccessProfiles.xml` file that was installed with the new release of the iProcess Workspace (Browser) components. This is a "template" file that is used for all new WCC projects you create using General Interface Builder. This file is located as follows:

   WorkspaceDir\JSX\addins\wcc\projectTemplate\wccApp\userAccessProfiles.xml

   where *WorkspaceDir* is the workspace directory you specified when installing the iProcess Workspace (Browser) components.

2. Open the `userAccessProfiles.xml` file used by your custom application. This file is located as follows:

   WorkspaceDir\JSXAPPS*WCCProjectName*\userAccessProfiles.xml

   where *WorkspaceDir* is the workspace directory you specified when creating your custom application, and *WCCProjectName* is the name you gave the WCC project/application.

3. Copy the new user access profile entries that were added in the new release of the iProcess Workspace (Browser) components, and paste them into your custom application's `userAccessProfiles.xml` file.

4. Modify, if desired, the **state** attribute for the new entries, then save the file. For information about modifying user access profile entries, see the *TIBCO iProcess Workspace (Browser) Configuration and Customization* guide.

5. Your custom application will need to be re-deployed before new entries will take affect. For information, see the *Deploying Your Custom Application* section in the *TIBCO iProcess Client (Browser) Components Concepts* guide.

Version 11.4.1

The following subsections describe changes that have been made in the 11.4.1 release that may require action if you are upgrading from a previous release.

New User Options

The following user options have been added to the **Options** configuration parameter in the 11.4.1 release:

- **forceWorkItemsThreshold**

- **forceCasesThreshold**

For information about adding these new user options to the **Options** parameter for your custom application, see Adding New Configuration Parameters on page 37.

New Configuration Parameter

The following configuration parameter has been added in the 11.4.1 release:

- **externalLock** - This new parameter allows you to specify a delay (in milliseconds) after which the work item list is automatically refreshed when an external form is opened..

For information about adding this new parameter to your custom application, see Adding New Configuration Parameters on page 37.

New User Access Element

The following user access element has been added in the 11.4.1 release.

- **<Proedure><ManageMER>** - This new user access element controls access to the **Manage Monitor Event Request** selection on the procedure list **Tools** menu.

For information about adding this new user access element to your custom application, see Adding New User Access Profile Entries on page 37.

Version 11.4.0

The following subsections describe changes that have been made in the 11.4.0 release that may require action if you are upgrading from a previous release.

New Configuration Parameter

The following configuration parameter has been added in the 11.4.0 release.

- **PersonalWorkQueueOption** - This new parameter allows you to specify whether the logged-in user's personal work queue is shown or hidden by default. For more information, see Ability to Restrict Access to Personal Work Queues Added (IPWB-109) on page 5.

For information about adding this new parameter to your custom application, see Adding New Configuration Parameters on page 37.

New User Access Profile Entry

The following user access profile entry has been added in the 11.4.0 release.

- **<WorkQueue><PersonalWorkQueueOption>** - This new user access profile entry controls whether or not the user can change from the default setting specified in the **PersonalWorkQueueOption** configuration parameter. For more information, see Ability to Restrict Access to Personal Work Queues Added (IPWB-109) on page 5.

For information about adding this new user access profile entry to your custom application, see Adding New User Access Profile Entries on page 37.

Renamed Events

In the previous release, the event that was labeled "Open Case Outstanding Work Item(s)" in the General Interface Builder Event Editor for the following components was inadvertently causing the custom application to subscribe to the 'openItems' event, rather than the 'openOutstandingItems' event:

- **wccCases**
- **wccCaseDetail**
- **wccCaseOutstanding**

Therefore, if your custom WCC application subscribed to the event labeled "Open Case Outstanding Work Item(s)" in the Event Editor on one of these components, after upgrading the iProcess Workspace (Browser) components, you will need to open your application in General Interface Builder, then re-subscribe to the "Open Case Outstanding Work Item(s)" event.

If your application subscribed to the 'openItems' event in code (via the `PageBus.subscribe` method) on any of the three components listed above, you will need to modify the code to subscribe to the 'openOutstandingItems' event instead.

Also, if your custom application subscribed to the 'openItems' event in code (via the `PageBus.subscribe` method) on the **wccWorkItems** component, and the intent was to subscribe to the event published when an outstanding work item was opened via the work item list, you will need to modify the code to subscribe to the 'openOutstandingItems' event instead.

After making any of these changes to your custom WCC application, you will need to re-deploy the application.

For additional information about events published by each component, see the *TIBCO iProcess Client (Browser) Components Concepts* guide.

Version 11.3.1

The following subsection describes changes that have been made in the 11.3.1 release that may require action if you are upgrading from a previous release.

New Configuration Parameter

The following parameter has been added in the 11.3.1 release.

- **OutstandingTypes** parameter - This new parameter allows you to specify the types of steps to display in the list of outstanding steps for a case.

For information about adding this new parameter to your custom application, see .

Version 11.3.0

The following subsection describes changes that have been made in the 11.3.0 release that may require action if you are upgrading from a previous release.

New Configuration Parameters

The following parameters have been added in the 11.3.0 release.

- **SessionMonitor** - This new parameter allows you to specify the amount of time before the user's session is closed and the user automatically logged out.

  For more information, see Session Timeout Configuration Parameter Added (43295) on page 7.

- **CaseDataFind** - This new parameter allows you to hide the **Find** tool on the case **Data** tab to prevent an issue that causes an empty field list on the case **Data** tab when using Microsoft Internet Explorer and the case contains memo fields with large amounts of XML data.

  For more information, see Configuration Parameter to Hide Find Tool on Data Tab Added (43200) on page 8.

- **UserPreferencePersistence** - This new parameter allows you to specify that user preference data be persisted on the server, rather than locally. It allows users to move to different machines and pickup user preference data that was entered from another machine.

  For more information, see User Preference Data Can Now be Persisted Server-Side (43302) on page 6.

- **MaxHistory** - This new parameter allows you to sets the maximum number of entries on the case history list. If the number of case history entries is very large (e.g., greater than 5000), responsiveness of the list is degraded, and the chance of an out-of-memory condition is increased

  For more information, see New Parameter Sets Maximum Number of Case History Entries (41557) on page 9.

For information about adding these new parameters to your custom application, see Adding New Configuration Parameters on page 37.

Version 11.2.0

Migrating WCC Applications Created With Earlier Versions of TIBCO General Interface

Version 11.2.0 of TIBCO iProcess Workspace (Browser) was built with TIBCO General Interface Builder version 3.8.

If you have created a custom WCC application using either version 3.5.1 or 3.6.2 of TIBCO General Interface, you can upgrade to version 11.2.0 of TIBCO iProcess Workspace (Browser) without upgrading your version of TIBCO General Interface.

However, you must perform the following migration task before running your custom WCC application after upgrading TIBCO iProcess Workspace (Browser) to version 11.2.0:

1. Upgrade to version 11.2 of TIBCO iProcess Workspace (Browser).

2. Open the `config.xml` file for your custom WCC application.

3. Search for the reference to the `JSXAPPS/ipc/jss/ipcCSS.jss` file.

4. Change this reference to `JSXAPPS/ipc/jss/ipcCSS.`**xml**.

5. Save and close `config.xml`.

Note that this is required because of a change that was made in MR 42655.

New Parameter on workItemTag2WorkQueueTag Static Method

A new *nameSpaceRef* parameter has been added to the **workItemTag2WorkQueueTag** static method (see 41934). This new parameter is required in order to obtain a reference to the application object that provides access to the server node name, which is a component of the work queue tag.

If your application uses the workItemTag2WorkQueueTag static method, you must now pass the namespace reference.

New Configuration Parameters and Attributes

The following parameters and attributes have been added in the 11.2.0 release.

- **logoutUrl** attribute - This new attribute in the **Logout** record allows you to redirect the client to a specified URL upon logout.

  For more information, see Ability to Redirect Client to a URL Upon Logout Added (38989) on page 12.

- **timeoutUrl** attribute - This new attribute in the **Logout** record allows you to redirect the client to a specified URL upon a browser session timeout.

  For more information, see Ability to Redirect Client to a URL Upon Browser Session Timeout (38385) on page 12.

- **caseCounts -** This new parameter allows you to control whether or not case counts (active cases, closed cases, and total cases) are obtained from the server.

  For more information, see Can Now Control Whether or Not Case Counts are Obtained from the Server (39147) on page 12.

- **modalDialog** attribute - This new attribute in the **Options** record allows you to specify whether or not forms opened in a dialog are *modal* (i.e., the user cannot perform any other functions until that dialog is closed).

For more information, see Forms Can Now be Displayed Modally (41402) on page 11.

• **AtomicServerLock** parameter - This new parameter is used to ensure that only available work items are locked when using the "Open First Available Work Item" or "Open Next Available Work Item" functions.

For more information, see Server-Side Atomic Locking of Work Items Added (41528) on page 10.

• **ListView** parameter - This new parameter allows you to specify which work queue and procedure types and statuses are displayed by default on the work queue and procedure lists.

For more information, see Ability to Control Types and Statuses of Work Queues and Procedures Added (41490) on page 10.

For information about adding these new parameters and attributes to your custom application, see Adding New Configuration Parameters on page 37.

New User Access Profile Entries

A number of new user access profile entries have been added to the userAccessProfiles.xml file in this release.

Note that, with one exception, you need to add these new entries *only* if you want to control access to the functions to which they apply. The only exception is adding the new entries that control access to the functions on the **Options** dialog. If you do not add the new Options entries, the user of your custom application will not have access to the **Options** dialog (see the list of entries below that begin with "<Options>"). For all other new user access profile entries, access will be what it was before this release, that is, access is allowed.

The following user access profile entries have been added in version 11.2.0:

— <WorkQueue><WorkItem><PageSize>

— <Procedure><Status>

— <Procedure><Type>

— <WorkQueue><Status>

— <WorkQueue><Type>

— <Procedure><Case><SortableColumns>

— <WorkQueue><WorkItem><SortableColumns>

— <Procedure><Case><Preview>

— <Procedure><Case><CasePreviewOn>

— <Procedure><Case><CasePreviewFloat>

— <Procedure><Case><CasePreviewOff>

— <WorkQueue><WorkItem><PageSize>

— <WorkQueue><WorkItem><Preview>

— <WorkQueue><WorkItem><Preview><WIPreviewOn>

— <WorkQueue><WorkItem><Preview><WIPreviewFloat>

— <WorkQueue><WorkItem><Preview><WIPreviewOff>

— <SessionActivity><ClearActivity>

— <Options>

— <Options><Language>

— <Options><InitialList>

— <Options><WorkQueueReference>

— <Options><ProcedureReference>

— <Options><AutoRefresh>

— <Options><WorkItemFilters>

— <Options><CaseFilters>

— <Options><CasePreview>

— <Options><WorkItemPreview>

— <Options><BrowserOrDialog>

— <Options><SizeAndPosition>

— <Options><OutstandingItems>

— <Options><SessionActivity>

— <Options><ChangePassword>

— <Options><SubCaseVersion>

For information about what these new user access profile entries control, see the *TIBCO iProcess Workspace (Browser) Configuration and Customization Guide*.

For information about adding these new user access profile entries to your custom application, see Adding New User Access Profile Entries on page 37.

Using Single Authentication in Custom WCC Applications Created Before 11.2.0

The project template for custom applications created with WCC components has been updated in this release (in MR 40331) to allow the use of single authentication. This release also includes an update to the open-via-URL sample applications provided with the TIBCO iProcess Workspace (Browser).

If you have an existing WCC project that was created pre-version 11.2.0 for which you would like to use single authentication, you must add some code to the project's `Application.js` file after installing this release. (Existing WCC projects include custom applications created with WCC components, or either of the open-via-URL sample applications: openWorkItemViaURL or openWorkQViaURL.)

To migrate your existing WCC project to use single authentication:

1. Open the `Application.js` file for the custom/sample application for which you will be using single authentication. It is located as follows:

   `INSTALL_DIR\application\js\`

   where INSTALL_DIR is the directory in which you have installed your custom or sample application.

2. Locate the **postLoadInit()** method.

   Note that depending on the age of your pre-existing project, your `Application.js` file may or may not have a **postLoadInit()** method.

3. Add the appropriate code to the `Application.js` file:

   a. If your `Application.js` file contains a **postLoadInit()** method, add the following line of code as the first line in the **postLoadInit()** method:

   `this.jsxsuper(path);`

   b. If your `Application.js` file does not contain a **postLoadInit()** method, add the following to the `Application.js` file:

   ```
   wccClass.prototype.postLoadInit = function(path) {
      this.jsxsuper(path);
   };
   ```

4. Save and close the `Application.js` file.

Version 11.1.0

WCC Cases and CaseHistory Components Modified

Two iProcess Workspace (Browser) components were changed in version 11.1.0:

• **Cases** component - New functionality was added to this component to show the user if the number of cases downloaded was limited by the **MaxCases** parameter in the WCC applications's `config.xml` file.

   Note that this also applies to the **CasesPreview** and **ProcsCases** composite components because they include the **Cases** component.

- **CaseHistory** component - New case history filtering functionality was added to this component.

If you are upgrading the TIBCO iProcess Workspace (Browser) components from version 11.0.0 to version 11.1.0, and had created a custom WCC application that includes any of the components listed above, you will need to follow the steps provided here to update your components to gain the new functionality.

Add the New Components to your Project

Follow the steps below to replace the old components with the new ones:

1. Open your 11.0.0 WCC project in General Interface Builder.

   Note - General Interface Builder version 3.6.2 is now supported in version 11.1.0 of the iProcess Workspace (Browser). However, General Interface Builder version 3.5.1 is still supported and will work with 11.1.0 components.

2. Delete any existing **CaseHistory**, **Cases**, **CasesPreview**, and **ProcsCases** components in the project, and replace them with the same components from the 11.1.0 components.

3. Re-configure the properties and events you had previously configured for the components that you've replaced.

   Notice that there is a new property on the **CaseHistory** component that pertains to the new filtering functionality.

   The new **Cases**, **CasesPreview**, and **ProcsCases** components do not have any new properties nor events.

4. Save the project.

Update the User Access Profiles

Two new entries have been added to the user access profiles for the new filtering functionality on the **CaseHistory** component. To make use of these new user access profile entries in your custom WCC application (that is, if you are using the **CaseHistory** component in your application), you must add these new entries to the userAccessProfiles.xml file used by your custom application.

The first new entry is used to control access to the case history filtering when the case was opened from the case list:

```
<property name="Open" state="1">
   <property name="Summary" state="1"/>
   <property name="History" state="1">
      <property name="AddHistoryEntry" state="0"/>
      <property name="Predict" state="0"/>
      <property name="GraphicalHistory" state="1"/>
      <property name="FilterHistory" state="1"/>
```

Add for case history filtering

The second new entry is used to control access to the case history filtering when the case was opened from the work item list:

```
<property name="WiHistory" state="1">
   <property name="AddHistoryEntry" state="0"/>
   <property name="Predict" state="0"/>
   <property name="GraphicalHistory" state="1"/>
   <property name="FilterHistory" state="1"/>
```

Add for case history filtering

To add the new entries, perform the following steps:

1. Open the `userAccessProfiles.xml` file that was installed with the new 11.1.0 components. This is a "template" file that is used for all new WCC projects you create using General Interface Builder. This file is located as follows:

   WorkspaceDir\JSX\addins\wcc\projectTemplate\wccApp\userAccessProfiles.xml

   where *WorkspaceDir* is the workspace directory you specified when installing the 11.1.0 components.

2. Open the `userAccessProfiles.xml` file used by your custom application. This file is located as follows:

   WorkspaceDir\JSXAPPS*WCCProjectName*\userAccessProfiles.xml

   where *WorkspaceDir* is the workspace directory you specified when creating your 11.0.0 application, and *WCCProjectName* is the name you gave the WCC project/application.

3. Copy the new user access profile entries that were added for the case history filtering functionality and paste them into your custom application's `userAccessProfiles.xml` file. See the examples above.

4. Modify, if desired, the **state** attribute for the new entries, then save the file. For information about modifying user access profile elements, see the *TIBCO iProcess Workspace (Browser) Configuration and Customization* guide.

New Parameters Added to the config.xml File

The following parameters have been added in the 11.1.0 release.

- **MaxCases** - This parameter is used to specify the maximum number of cases to download from the server.

  This parameter is needed only if your WCC application is using the **Cases** component (or a composite component that uses the **Cases** component), and you want to use the functionality provided by this parameter (i.e., to be able to limit the number of cases downloaded). If it is not present, the number of cases downloaded is unlimited.

  For more information, see The Maximum Number of Cases to Return from the Server is Now Configurable (36848) on page 15.

- **formsConfig** - This parameter is used to specify that TIBCO Forms be reloaded on each request instead of retrieving them from the browser cache.

  This parameter is needed only if you want to gain the functionality it provides (i.e., setting TIBCO Forms caching).

  For more information, see Configuration Parameters Added for TIBCO Forms Support (38143) on page 13.

- **user:forms2** entry has been added to the **addins** record. This entry is needed if you are using version 2.0 TIBCO Forms in your custom WCC application.

  For more information, see Configuration Parameters Added for TIBCO Forms Support (38143) on page 13.

For information about adding these new parameters and attributes to your custom application, see Adding New Configuration Parameters on page 37.

New Open Work Item User Access Profile Properties Added

Three new user access profile properties have been added to the userAccessProfiles.xml file in version 11.1.0. (See New Open Work Item Properties Added to User Access Profiles (37820) on page 14.)

If you are upgrading the TIBCO iProcess Workspace (Browser) components from version 11.0.0 to version 11.1.0, and had created a custom WCC application that includes the **WorkItems** component (or the **WorkItemsPreview** or **WorkQsItems** composite components, which include the **WorkItems** component), you may want to update the userAccessProfiles.xml file used by your custom WCC application to include the new properties. If your WCC application uses the **WorkItems** component, and its userAccessProfiles.xml file does not include the new properties, those tools will not be available from the work item list.

The new properties to control access to the Open First Work Item, Open Next Work Item, and Auto-Repeat Open Work Item tools are shown below:

```
<property name="WorkItem" state="1">
   <property name="AutoRefresh" state="1"/>
      <property name="Forward" state="1">
         <property name="ForwardAnyQueue" state="0"/>
      </property>
   <property name="Open" state="1"/>
   <property name="OpenFirst" state="1">          New Open
   <property name="OpenNext" state="1"/>          Work Item
   <property name="OpenAuto" state="1">           Properties
   <property name="Release" state="1"/>
   <property name="Unlock" state="1"/>
```

For information about adding these new user access profile entries to your custom application, see Adding New User Access Profile Entries on page 37.

Version 11.0.0

Upgrading Custom WCC Applications

If you are upgrading the TIBCO iProcess Workspace (Browser) components from version 10.7.0 to version 11.0.0, and had created a custom WCC application with the 10.7.0 components, you will need to perform manual tasks to upgrade your application to 11.0.0 functionality. These tasks are described in the following subsections:

New Auto-Refresh Functionality on the Work Item List

The work item list was modified in version 11.0.0 to include an Auto-Refresh function.

If you had included a work item list in your custom application, to gain this new functionality, you must replace the old work item list with the new one. To do this, perform the following steps after installing the 11.0.0 components:

1. Open your 10.7.0 WCC project in General Interface Builder.

2. Delete any existing work item lists in the project, and replace them with work item lists from the 11.0.0 components.

    This includes the **WorkItems** component, as well as the **WorkItemsPreview** and **WorkQsItems** composite components, which include the **WorkItems** component.

3. Re-configure the properties and events you had previously configured for the work item lists in your application.

    Notice that there is a new property on the **WorkItems** component that pertains to the new Auto-Refresh functionality.

4. Save the project.

User Access Profiles

A new user access profile element has been added to the `userAccessProfiles.xml` file for the new Auto-Refresh function on the work item list.

```
<property name="WorkQueue" state="0">
   <property name="LoadingChart" state="0"/>
   <property name="Participation" state="0"/>
   <property name="Redirection" state="0"/>
   <property name="Supervisors" state="0"/>
   <property name="WorkItem" state="0">
      <property name="AutoRefresh" state="1"/>          New element for
      <property name="Forward" state="0">               Auto-Refresh
         <property name="ForwardAnyQueue" state="0"/>
      </property>
      <property name="Open" state="0"/>
```

To make use of this new user access profile element in your custom WCC application (that is, if you are using work item lists in your application), you must add this new element to the user access profile file used by your custom application.

For information about adding these new user access profile entries to your custom application, see Adding New User Access Profile Entries on page 37.

Application Configuration File — config.xml

There are two new additions to the `config.xml` file in version 11.0.0 that need to be manually copied to your custom WCC application's `config.xml` file:

*   New "Options" that specify the default settings for the new Auto-Refresh function.

*   A new **BrowserFeatures** record has been added. This new record has a number of attributes that allow you to specify specific customization features for browser windows displaying work item forms.

For information about adding these new parameters and attributes to your custom application, see Adding New Configuration Parameters on page 37.

Version 10.7.0

General Interface Forms

This version of TIBCO iProcess Client (Browser) uses a new version of General Interface Builder, as follows:

iProcess Workspace (Browser)	General Interface Builder
10.6.0	3.5.0
10.7.0	3.5.1

If you are using custom GI Forms, and are upgrading to version 10.7.0 of TIBCO iProcess Client (Browser), note the following migration issue:

- Array fields are now supported in GI Forms. This new support includes the following changes:

  — The **postLoadInit** method has been changed to request all array fields when the work item is loaded.

  — The **buildCDFArrays** function has been added, and is called by the **initializeFormData** function. This new function adds the data for the array fields into the CDF document for the form.

Because of this change, you may need to make some modifications to use custom GI Forms created for an earlier version of iProcess Workspace (Browser), depending on which features were used when they were created.

There are comments available in the FormTemplate.js file that provide information about changes that have been made. Also refer to the TIBCO General Interface documentation for migration information.

General Interface Forms Verification if Upgrading From Version 10.5.x

If you are upgrading the TIBCO iProcess Client (Browser) from version 10.5.x to version 10.7.0, you will also need to migrate your General Interface software:

  — TIBCO iProcess Client (Browser) 10.5.x required General Interface 3.1.1

  — TIBCO iProcess Client (Browser) 10.7.0 requires General Interface 3.5.1

As there were several versions of General Interface between versions 3.1.1 and 3.5.1, the General Interface migration is a multi-step process. After each step of the General Interface migration, you should verify that your GI Forms still display and operate properly.

GI Forms verification is accomplished using the **GIFormsTest** program. This program, as well as the *TIBCO GI Forms Verification* guide, are available from TIBCO Support.

New Callout Interface Method Parameter

An additional parameter, **componentName**, has been added to all callout interface methods. This new parameter identifies the instance of the component that will be affected by the code.

No changes are required for this when porting custom callout code from earlier versions. However, if you wish to change your code so that it examines the new parameter, you will need to replace the older function signature with the new one that includes the **componentName** parameter.

XML Parser Version

The following provides information about the version of the Microsoft XML Parser (MSXML) used in each version of General Interface and the iProcess Workspace (Browser):

- Version 3.5 of General Interface (which was used in version 10.6 of the iProcess Workspace (Browser)) tried to load MSXML version 4 first; if version 4 wasn't present, it tried to load version 3.

- Version 3.5.1 of General Interface (which is used in version 10.7.0 of the iProcess Workspace (Browser)) tries to load MSXML version 6 first; if version 6 isn't present, it tries to load version 4.; if version 4 isn't present, it tries to load version 3.

Both General Interface 3.5.1 and iProcess Workspace (Browser) 10.7.0 will work with versions 3, 4, and 6 of MSXML. Note, however, if the application logic in the General Interface form uses MSXML itself, it may get mapped to a different version when General Interface is loaded (there are differences in behavior between different versions of MSXML).

If desired, you can force General Interface to load a particular version. For instance, you can force the loading of MSXML version 3 by adding the following deployment parameter to the application's launch file (i.e., `iProcessClient.html` for the iProcess client application):

```
jsxmlversion="3"
```

This forces MSXML version 3 to be loaded, even if version 4 or 6 are present. For more information, see the TIBCO General Interface documentation.

> You can determine the version of MSXML is on a particular machine by opening the following page in Microsoft Internet Explorer:
>
> http://www.bayes.co.uk/xml/utils/msxml_sniffer.htm

Upgrading Custom WCC Applications

If you are upgrading the TIBCO iProcess Workspace (Browser) components from version 10.6.0 to version 10.7.0, and had created a custom WCC application with the 10.6.0 components, you will need to perform manual tasks to upgrade your application to 10.7.0 functionality. These tasks are described in the following subsections:

New Open Case Functionality on the Work Item List

The work item list was modified in version 10.7.0 to include an Open Case function.

If you had included a work item list in your custom application, to gain this new functionality, you must replace the old work item list with the new one. To do this, perform the following steps after installing the 10.7.0 components:

1. Open your 10.6.0 WCC project in General Interface Builder.

2. Delete any existing work item lists in the project, and replace them with work item lists from the 10.7.0 components.

   This includes the **WorkItems** component, as well as the **WorkItemsPreview** and **WorkQsItems** composite components, which include the **WorkItems** component.

3. Re-configure the properties and events you had previously configured for the work item lists in your application.

   Notice that there are new properties and events on the **WorkItems** component that pertain to the new Open Case functionality.

4. Save the project.

User Access Profiles

New user access profile elements have been added to the
`userAccessProfiles.xml` file for the new Open Case functionality on the work
item list.

```xml
<property name="WorkItem" state="1">
      <property name="Forward" state="1">
          <property name="ForwardAnyQueue" state="1"/>
      </property>
      <property name="Open" state="1"/>
      <property name="Release" state="1"/>
      <property name="Unlock" state="1"/>
      <property name="SelectColumns" state="1"/>
      <property name="OpenCase" state="1">
          <property name="Summary" state="1">
              <property name="Activate" state="1"/>
              <property name="Close" state="1"/>
              <property name="WiJump" state="1">
                  <property name="DataRead" state="1"/>
                  <property name="DataUpdate" state="1"/>
                  <property name="SelectColumns" state="1"/>
              </property>
              <property name="Suspend" state="1"/>
              <property name="WiTrigger" state="1">
                  <property name="DataRead" state="1"/>
                  <property name="DataUpdate" state="1"/>
               <property name="RecalculateDeadlines" state="1"/>
              </property>
              <property name="Purge" state="1"/>
          </property>
          <property name="WiHistory" state="1">
              <property name="AddHistoryEntry" state="1"/>
              <property name="Predict" state="1"/>
              <property name="GraphicalHistory" state="1"/>
          </property>
          <property name="WiOutstanding" state="1">
              <property name="SelectColumns" state="1"/>
          </property>
          <property name="DataRead" state="1"/>
          <property name="DataUpdate" state="1"/>
      </property>
      <property name="Filter" state="1"/>
      <property name="Sort" state="1"/>
  </property>
  <property name="SelectColumns" state="1"/>
</property>
```

New elements for Open Case.

To make use of these new user access profile elements in your custom WCC
application (that is, if you are using work item lists in your application), you must
add these new elements to the user access profile file used by your custom
application. To do this, perform the following steps:

1. Open the `userAccessProfiles.xml` file that was installed with the new 10.7.0 components. This is a "template" file that is used for all new WCC projects you create using General Interface Builder. This file is located as follows:

   WorkspaceDir\JSX\addins\wcc\projectTemplate\wccApp\userAccessProfiles.xml

   where *WorkspaceDir* is the workspace directory you specified when installing the 10.7.0 components.

2. Copy the new user access profile elements that were added for the Open Case function. See the example above.

3. Open the `userAccessProfiles.xml` file used by your custom application. This file is located as follows:

   WorkspaceDir\JSXAPPS*WCCProjectName*\userAccessProfiles.xml

   where *WorkspaceDir* is the workspace directory you specified when creating your 10.6.0 application, and *WCCProjectName* is the name you gave the WCC project/application.

4. Paste the new user access profile elements you copied in step 2 to the `userAccessProfiles.xml` file you opened in step 3.

5. Modify, if desired, any of the new user access profile elements, then save the file. For information about modifying user access profile elements, see the *TIBCO iProcess Workspace (Browser) Configuration and Customization* guide.

Application Configuration File — config.xml

There are two new additions to the `config.xml` file in version 10.7.0 that need to be manually copied to your custom WCC application's `config.xml` file:

- A new **webDAVRoot** configuration parameter that is used if your custom application uses TIBCO Forms. It specifies the base URL of the form's location on the server.

  Also note that if your custom application is using TIBCO Forms, after you upgrade to version 10.7.0 and open the project in GI Builder, you must check the **TIBCO Forms** check box on the **Project Settings** / **Add-ins** dialog.

- New "Options" that specify the default settings for the new Preview Pane resizing functions.

To add these new parameters to your custom application's `config.xml` file, perform the following steps:

1. Open the `config.xml` file that was installed with the new 10.7.0 components. This is a "template" file that is used for all new WCC projects you create using General Interface Builder. This file is located as follows:

WorkspaceDir\JSX\addins\wcc\projectTemplate\wccApp\config.xml

where *WorkspaceDir* is the workspace directory you specified when installing the 10.7.0 components.

2. Open your custom WCC application's config.xml file. This file is located as follows:

WorkspaceDir\JSXAPPS\WCCProjectName\config.xml

where *WorkspaceDir* is the workspace directory used when the custom application was created.

3. Copy the new items from the "projectTemplate" config.xml file to your custom application's config.xml file, as follows:

a. Locate the **webDAVRoot** record and copy the entire record to your custom application's configuration file:

    <record jsxid="webDAVRoot" URL="%TIBCO_CLIENT_WEBDAVROOT%"/>

(There may already be a URL specified if one was entered during the installation of the components.)

b. Locate the **Options** record and either copy the entire record, or only the new Preview Pane resizing-related attributes (marked as bold below), to your custom application's configuration file:

```
<record jsxid="Options" type="ipc">
   <options>
      <display localeKey="en_US" initialDisplay="workQs" captionCases="name"
               captionWorkItems="name"/>
      <filter filterCases="specify" thresholdCases="500" filterWorkItems="never"
               thresholdWorkItems="500"/>
      <layout previewCase="on" previewWorkItems="on" previewCaseResize="false"
               previewWorkItemResize="false" previewCaseSize="50"
               previewWorkItemSize="50" floatWorkItems="dialog" floatLeft="220"
               floatTop="220" floatWidth="540" floatHeight="400"
               floatFullscreen="false" floatCenter="true"
               floatRememberPosition="true"/>
      <outstanding recurse="true"/>
      <subcase precedence="swPrecedenceR"/>
   </options>
</record>
```

4. Modify, if desired, the values of the newly added parameters. For information about setting these parameters, see the *TIBCO iProcess Workspace (Browser) Configuration and Customization* guide.

5. Save and close the configuration file.

Version 10.6.0

General Interface Forms

This version of TIBCO iProcess Client (Browser) uses a new version of General Interface Builder, as follows:

iProcess Workspace (Browser)	General Interface Builder
10.5.0	3.1.1
10.6.0	3.5.0

Because of this change, you may need to make some modifications to use custom GI Forms created for an earlier version of iProcess Workspace (Browser), depending on which features were used when they were created.

The following summarizes the GI Form changes in version 10.6.0:

- The TIBCO General Interface Forms Class Package has changed in this release.

  The Class Package used in version 10.5.0:

  — jsx3.ipc

  Has changed to the following in version 10.6.0:

  — com.tibco.bpm.ipc

  If you are using General Interface Forms in your iProcess Workspace (Browser) application, you must make a global change of this Class Package.

- If in your custom GI form you uncommented the **setModal(...)** statement to make the form modal, you must comment out or remove that statement. The forms are no longer based on the GI Dialog object. In some cases the form may be displayed in a separate browser window or in a preview pane, so the modal setting is no longer valid and the statement could cause an exception.

- Add the statement "**jsx3.require('ipc');**" to the top of your form before all other code. This ensures the **ipc** class, which is required, is loaded. This statement is included in the latest `FormTemplate.js` file.

  Also, some GI controls could be unavailable unless a similar **require** statement is added. If you encounter exceptions for a particular control, try adding a **require** statement. For instance, for exceptions regarding the GI Grid control, add "jsx3.require('jsx3.gui.Grid');"

There are comments available in the FormTemplate.js file that provide information about changes that have been made. Also refer to the TIBCO General Interface documentation for migration information.

General Interface Forms Verification if Upgrading From Version 10.5.x

If you are upgrading the TIBCO iProcess Client (Browser) from version 10.5.x to version 10.6.0, you will also need to migrate your General Interface software:

— TIBCO iProcess Client (Browser) 10.5.x required General Interface 3.1.1

— TIBCO iProcess Client (Browser) 10.6.0 requires General Interface 3.5.0

As there were several versions of General Interface between versions 3.1.1 and 3.5.0, the General Interface migration is a multi-step process. After each step of the General Interface migration, you should verify that your GI Forms still display and operate properly.

GI Forms verification is accomplished using the **GIFormsTest** program. This program, as well as the *TIBCO GI Forms Verification* guide, are available from TIBCO Support.

Callout Interface Method Changes

This migration issue is applicable if you are using the callout interface method, **calloutColumns**, in a callout handler; this method provides a way to alter the columns displayed for a list.

The iProcess Workspace (Browser) is using a new version of TIBCO General Interface Builder in this release. Because of this, the format of the XML used to represent the columns list has changed in this release of the iProcess Workspace (Browser). This also affects what versions of native XML Parsers are used to query the XML — a query of the column list XML may use various versions of XML parsers.

Also, in version 10.5 of iProcess Workspace (Browser), columns were in the format used by the **jsx3.gui.List** object; in version 10.6 of iProcess Workspace (Browser), columns were changed to be in the format used by the **jsx3.gui.Matrix** object.

The SampleCalloutHandler.js file shows how to query the new XML format for the columns. It also performs the queries in a way that addresses issues with some XML parser versions that might be used. When porting custom callout code from version 10.5 to 10.6 or later you should apply these changes. Comments for the **calloutColumns** method in the SampleCalloutHandler.js file provide full details (the SampleCalloutHandler.js file is located in the *InstallationHomeDir*\iprocessclientbrowser\samples\Callouts directory, where *InstallationHomeDir* is the directory in which the installer places administrative files).

Closed Issues

The table in this section lists issues that were closed in the named releases.

Closed in Release	Key	Summary
11.4.1	IPWB-232	The `userAccessProfiles.xml` settings for **ShowErrorDetail** and **ShowStackTrace** are reversed. When access to **ShowErrorDetail** is turned off, the detail is available, but the stack trace is disabled. When the **ShowStackTrace** access is turned off, the stack trace is available but the detail is removed.
11.4.1	IPWB-230	Support for the latest versions of Microsoft Internet Explorer and TIBCO General Interface need to be added. Implemented. See Support for New Versions of Internet Explorer and TIBCO General Interface Added (IPWB-230) on page 2.
11.4.1	IPWB-229	Need the ability to specify a priority when closing or purging cases. Implemented. See Can Now Specify a Priority When Closing or Purging Cases (IPWB-229) on page 2.
11.4.1	IPWB-193	Action Processor requests need to be added to be able to get the TIBCO iProcess Objects Server and TIBCO iProcess Server Objects client message interface versions. Implemented. See Action Processor Requests Added to Obtain Message Interface Versions (IPWB-193) on page 2.
11.4.1	IPWB-191	When the **AddHistoryEntry** and **Predict** user access elements are denied (state="0"), the **History** tab on the Case Detail dialog does not display any data, and only a small scroll bar appears. This only occurs when both user access elements are denied. Corrected.
11.4.1	IPWB-190	An interface is needed for managing Monitor Event Request (MER) messages on the server. Implemented. See An Interface Has Been Added to Manage Monitor Event Request (MER) Messages (IPWB-190) on page 2.

Closed in Release	Key	Summary
11.4.1	IPWB-189	When viewing the WCC Events Editor in TIBCO General Interface Builder using Microsoft Internet Explorer version 9, no events are listed. Corrected.
11.4.1	IPWB-188	When the **filterCases** or **filterWorkItems** user option is set to "specify", the filter dialog is displayed if the number of items exceeds the specified threshold. A new user option is needed that forces the user to enter a filter that will result in fewer items than the threshold. Currently, the user can enter a filter that results in more items than the threshold being retrieved. Implemented. New User Options to Force User to Filter Work Items or Cases that Exceed Threshold (IPWB-188) on page 3.
11.4.1	IPWB-187	When the user option, **filterCases**, in the config.xml file, is set to "always", the filter dialog is displayed, but a server request is sent to retrieve all cases. The request should not be sent until a filter is specified because the purpose of the "always" setting is to prevent a large number of cases from being retrieved until a refinement filter can be applied. Corrected.
11.4.1	IPWB-186	If the **AutoRefresh** user access control is turned off in userAccessProfiles.xml, the tool is removed from the user interface and the functionality is also disabled — this is not the correct behavior. The appropriate behavior should be that when the **AutoRefresh** tool is disabled in userAccessProfiles.xml, the tool should be removed from the user interface, but the functionality of auto-refresh should be controlled by the default setting in config.xml. Corrected.
11.4.1	IPWB-185	A configuration parameter needs to be added that specifies the time delay after which the work item list is automatically refreshed when an external form is opened. The refresh causes the list to reflect the locked state of the work item. Implemented. See New Configuration Parameter to Refresh List After Work Item Opened Externally (IPWB-185) on page 3.

Closed in Release	Key	Summary
11.4.1	IPWB-183	An option to control whether or not an event is triggered when cases are purged or closed has been added.
		Implemented. See New Option to Control Triggering Events on Case Purge and Close (IPWB-183) on page 4.
11.4.1	IPWB-182	When opening a work item that is handled using an external form, if the user's password contains a hash (#) character, the form is not displayed.
		Corrected.
11.4.1	IPWB-181	The Action Processor log fails to archive or rollover.
		Corrected.
11.4.0	IPWB-157	An error can occur when saving swMemo or swText data in a GI Form if the data includes XML with CDATA elements.
		Corrected.
11.4.0	IPWB-151	The iProcess Client could not be accessed using the shortcut icon placed on the desktop by the installer when using Mozilla Firefox.
		The desktop icon attempts to access the iProcess Client via the local file system, which is not allowed by later versions of Firefox (because of tighter cross-domain scripting controls). Because it is expected that the iProcess Client will be deployed to a Web application server, and launched from there, rather than from the file system, the shortcut icon will no longer be added to the desktop by the installer.
11.4.0	IPWB-144	When a custom WCC application is created in General Interface Builder, subscribing to the 'openOutstandingItems' event caused the application to actually subscribe to the 'openItems' event.
		Corrected. The event names have been corrected in the applicable "pub.xml" files. Also see Renamed Events on page 39 for migration information if you are upgrading the iProcess Workspace (Browser) components.
11.4.0	IPWB-142	Tools methods should be available to determine the procedures for which the logged-in user can start cases or view case history.
		Implemented. See New Tools Methods Added to Return "Start Procs" and "Audit Procs" (IPWB-142) on page 4.

Closed in Release	Key	Summary
11.4.0	IPWB-137	The .NET Action Processor assembly should be strongly named. Implemented. See .NET Action Processor Assembly Now Strongly Named (IPWB-137) on page 5.
11.4.0	IPWB-132	An error is displayed when attempting to access the .NET Action Processor when running on Windows Server 2008, Windows Server 2008 R2, and Windows 7, indicating that the Action Processor's log file is not accessible. Post-installation instructions have been added to the *TIBCO iProcess Workspace (Browser) Installation* guide, which describe how to change the location of the log file when using the operating systems listed above.
11.4.0	IPWB-129	The .NET Action Processor will not run on IIS 7.0 or 7.5 in a .NET Framework 4.0 application pool. This was resolved by adding an `httpRuntime` setting to the Action Processor's `web.config` file that must be commented out when running in a .NET Framework 2.0 application pool. .
11.4.0	IPWB-127	A sample custom GI form is needed to demonstrate the use of the new "IPC" tools methods that were added in IPWB-112. Implemented. See Sample Custom GI Form Provided to Demonstrate New Tools Methods (IPWB-127) on page 5.
11.4.0	IPWB-125	When a procedure is selected and a filter is specified on the list of cases, if another procedure is then selected to display a different list of cases, when you return to the originally selected procedure and attempt to change or clear the previous cases filter, the following error is displayed: "`Error occurred while applying the filter`". Also, the list contains an unfiltered set of cases. Corrected.
11.4.0	IPWB-120	TIBCO iProcess Workspace (Browser) applications should be able to be run in Microsoft Internet Explorer 9 and Mozilla Firefox 9. Corrected.

Closed in Release	Key	Summary
11.4.0	IPWB-117	The Browser Features settings, used to configure browser windows containing work item forms, does not include a "scrollbars" setting allowing for specification of whether or not the browser window will display scrollbars when the content overflows the browser dimensions.
		A "scrollbars" attribute has been added to the <**BrowserFeatures**> record in `config.xml`, which allows the display of scrollbars to be controlled. (Note that the new scrollbars attribute applies only to GI Forms. When using external forms (ASP, JSP, BusinessWorks FormBuilder, iProcess Modeler), scrollbars will always appear if the form content exceeds the browser dimensions.)
11.4.0	IPWB-112	Tools methods have been added that can be used with a customized iProcess Client application.
		Implemented. See Tools Methods Added for iProcess Client Applications (IPWB-112) on page 5.
11.4.0	IPWB-111	Two new tools methods have been added that can be used by custom WCC applications.
		Implemented. See New Tools Methods Added for Custom WCC Applications (IPWB-111) on page 5.
11.4.0	IPWB-109	The ability to restrict access to personal work queues has been added.
		Implemented. See Ability to Restrict Access to Personal Work Queues Added (IPWB-109) on page 5.
11.4.0	IPWB-108	If you have a work item with a memo field, and the data for the field contains line-feed characters, when you open the work item in the application using Firefox, all of the line feeds are replaced with spaces.
		Corrected.
11.4.0	IPWB-104	An error is generated when starting a case of a procedure that uses forms created with the "iProcess Modeler", and the locale is set to French.
		Corrected.

Closed in Release	Key	Summary
11.3.1	IPWB-94	When performing a silent installation on a 64-bit system, the installer asks whether you want 32-bit or 64-bit libraries, but regardless the response, it always installs the 64-bit libraries. The response to the question about 32-bit 64-bit libraries is not being recorded in the response file. Corrected.
11.3.1	IPWB-90	The iProcess Client, as well as custom WCC applications, by default will not run in an HTML frame (for example, an iframe in a portal). Corrected. The launch script can now be configured so that the application can be launched in a frame. This is described in the *Introduction* chapter of the *TIBCO iProcess Client (Browser) Configuration and Customization* guide (for the iProcess Client), and the *Building Custom Applications* chapter in the *TIBCO iProcess Client (Browser) Component Concepts* guide (for custom WCC applications).
11.3.1	IPWB-87	The types of steps that are displayed in a list of outstanding work items for a case should be controllable. Corrected. A new **OutstandingTypes** parameter has been added to the `config.xml` file that allows you to specify the types of steps to display in the list of outstanding steps for a case.
11.3.1	IPWB-86	A scroll bar is not appearing on the right side of the work queue list when the list of work queues is too large to fit in the window. Corrected.
11.3.1	IPWB-84	When the "Forward" user access control is disabled, the user can still forward a work item by dragging it to another queue, even though there is no toolbar button for forwarding work items. Corrected.
11.3.0	IPWB-72	The Event Editor and Application Publish Definer do not work properly if you use a workspace different than the General Interface Builder installation directory, and you are using Mozilla Firefox to develop your custom WCC application with General Interface Builder. Under these conditions, a configuration needs to be set in Firefox. This information has been added to the documentation.

Closed in Release	Key	Summary
11.3.0	IPWB-68	The Action Processor's log file never closes, which prevents the Action Processor installation directory from being deleted during an undeployment or removal of the Action Processor. Corrected.
11.3.0	IPWB-63	The property and event on the WCC **Generic** component are not working properly. Corrected. The single **Generic** property has been split into two properties — **Show Clear Button** and **Show Close Button** — that control the visibility of the buttons on the **Generic** component dialog. The single event has also been split into two events — **Generic Clear** and **Generic Closed** — that fire when the **Clear** and **Close** buttons are clicked.
11.3.0	IPWB-61	Comments in the `apConfig.xml` file are not being disregarded. If the comments contain XML tags, they are processed as though they are not in a comment. Corrected.
11.3.0	IPWB-60	Running TIBCO iProcess Workspace (Browser) through RMI doesn't work properly. Corrected. As a result of this fix, the installer was modified to now ask for a Java naming provider URL when the RMI interface is selected for installation. It writes this value to the server factory configuration in the `apConfig.xml` file.
11.3.0	IPWB-53	If in a custom WCC application, the case list is rendered by subscribing to either the Start Case or Procedure Versions event on one of the procedure list components, the case list can exhibit unexpected behavior, including the filter function not working properly. Corrected.
11.3.0	IPWB-52	If a work item is opened that uses an "external form" (ASP form, JSP form, BusinessWorks FormBuilder form, or iProcess Modeler form), the URL from a previous form request may be cached, resulting in the work item not being locked and the form containing stale data. An error message is displayed that states: One of the items in the array returned an error — Work item is not locked by user. Corrected.

Closed in Release	Key	Summary
11.3.0	IPWB-45	When using Mozilla Firefox 3.x, neither local persistence nor localization work properly unless the host name in the URL used to launch the client application is fully qualified. Corrected.
11.3.0	IPWB-11	An exception is raised when creating a new project in TIBCO General Interface Builder when the GI Builder workspace path is set to a path different than the GI Builder installation directory. Corrected.
11.3.0	IPWB-10	An "Invalid character" error is displayed in TIBCO General Interface Builder after a WCC project is created, and General Interface Builder is reloaded. The Properties and Event Editors also do not work properly. Corrected.
11.3.0	43353	TIBCO iProcess Workspace (Browser) needs to be upgraded to TIBCO PageBus version 2.0 from version 1.2.0. Implemented.
11.3.0	43330	Background colors and images need to be updated. Implemented. See New Background Colors and Icons (43330) on page 6.
11.3.0	43302	User preference data should be able to be stored server-side. Implemented. See User Preference Data Can Now be Persisted Server-Side (43302) on page 6.
11.3.0	43297	The text on the **View** menu of the **Case Details** tab is truncated when it is localized to certain languages (e.g., German, Spanish, and French). Corrected. Toolbar buttons and menus now have dynamic widths that expand to the size of the associated text.
11.3.0	43295	A means of specifying a session timeout value is needed. Implemented. See Session Timeout Configuration Parameter Added (43295) on page 7.

Closed in Release	Key	Summary
11.3.0	43285	The Procedure Loading Chart and Work Queue Loading Chart display information for *all* procedures and work queues, respectively. The user should be able to display a subset of the available procedures and work queues. Implemented. See Procedure and Work Queue Loading Charts Can Now Display Subset (43285) on page 7.
11.3.0	43278	Occasionally, scroll bars do not appear on lists until the page or splitter bar is resized. Corrected.
11.3.0	43277	The user should be able to forward work items using the "drag and drop" method. Implemented. See Work Items Can Now be Forwarded Using the "Drag and Drop" Method (43277) on page 7.
11.3.0	43270	If the "Remember Floating Window Position" check box in the **Layout Options** section on the **Options** dialog is checked, the position and size of floating work item forms is persisted only for the current login session. Corrected. With the "Remember Floating Window Position" option selected, the position/size of work item forms is now persisted between login sessions.
11.3.0	43262	The Application Log is active by default, which can have an adverse effect on performance. There should be a means to turn off the Application Log by default. Implemented. See Configuration Parameter Added to Control Application Log (43262) on page 8.
11.3.0	43261	If the TIBCO General Interface Builder workspace path is not set at the GI Builder root directory an exception is raised when a new WCC GUI component is created.
11.3.0	43260	The user should be able to open work items from the **Outstanding Work Items** tab. Implemented. See Work Items Can Now be Opened from the Outstanding Work Items Tab (43260) on page 8.

Closed in Release	Key	Summary
11.3.0	43227	Work item lists should be refreshed whenever the list comes back into focus. Implemented. See Work Item Lists are Automatically Refreshed When Re-displayed (43227) on page 8.
11.3.0	43226	TIBCO iProcess Workspace (Browser) needs to be updated to support TIBCO General Interface version 3.9. Implemented. Note that there are no migration issues other than those concerning the use of TIBCO General Interface Builder forms.
11.3.0	43202	When a work item or case is saved, and there is a memo field that contains a large amount of data, there is a very long delay, giving the impression that the application is hung. This can occur either when saving case data by clicking the **Apply** button on the case **Data** tab, or when saving and closing a work item form by clicking the **Keep** button. Corrected.
11.3.0	43201	Memo fields containing large amounts of XML data are displayed empty on work item forms. Note - This issue occurs only when using Microsoft Internet Explorer; it does not occur when using Mozilla Firefox. Corrected.
11.3.0	43200	An empty list of fields is displayed on the case **Data** tab if the case has memo fields with values containing large amounts of XML data. Note - This issue occurs only when using Microsoft Internet Explorer; it does not occur when using Mozilla Firefox. Corrected. The empty list occurs because of the XML transformation performed by the **Find** tool on the case **Data** tab. For this reason a configuration option has been added to the application's config.xml file that allows you to remove the **Find** tool from the case **Data** tab if it is known that cases will contain memo fields with large amounts of XML data. See Configuration Parameter to Hide Find Tool on Data Tab Added (43200) on page 8.
11.3.0	43025	There is no log output if the Action Processor logging (in `apConfig.xml`) is set to DEBUG. Corrected.

Closed in Release	Key	Summary
11.3.0	43018	The Action Processor `apAction.xsd` file incorrectly places the request group elements inside of a <**sequence**> element, indicating that the requests must be submitted in the specified sequence. Corrected. The <**sequence**> element has been changed to a <**choice**> element.
11.3.0	43010	If a request is sent to the Action Processor that contains both **xSession** and **xNodeManager** requests, and either the **xSession** or the **xNodeManager** request (or both) generates no output, the response will contain the error "String index out of range: -1". This applies to both the Java and .NET Action Processor. Corrected.
11.3.0	42979	If you set the TIBCO General Interface Builder workspace to a directory other than the installation root, then attempt to save an event definition file created with the Application Publish Definer utility from within TIBCO General Interface Builder, a "Path not found" error is displayed. Corrected.
11.3.0	41680	If the "CasePreviewOff" or "WIPreviewOff" user access controls in the `userAccessProfiles.xml` file are turned off (State="0"), the text for those options are still being displayed, although overlaid by other text, in the **Layout Options** section on the **Options** dialog. Corrected.
11.3.0	41557	If the number of entries in the case history list is very large (e.g., greater than 5000), responsiveness of the list is degraded, and the chance of an out-of-memory condition is increased. A means of limiting the number of case history entries is needed. Implemented. See New Parameter Sets Maximum Number of Case History Entries (41557) on page 9.

Closed in Release	Key	Summary
11.3.0	40694	When the overrideInitialFilter method in the callout interface is applied to a list of work items, and an invalid filter string is passed in the method call, the client hangs and the user must restart the application. Two errors are received when the callout is applied: the first is a server error indicating an invalid filter; the second error message is "Invalid Parameter. HeldId is empty or too short.". The application hangs after the second error message.
		Corrected.
11.3.0	40219	Each time a work item is opened in a new browser window, the window increases in size by 4 pixels.
		Corrected.
11.3.0	38679	When the Find tool is initially opened in type-ahead mode, the pagination tool is hidden. However, when the Find tool is closed and re-opened, the pagination tool is visible. It should not be visible at that point.
		Corrected.
11.3.0	38464	When using the sample FormTemplate class to open custom GI Forms, clicking on the **Form Details** button does not result in the detail dialog being displayed. The detail dialog is intended to provide developers with action processor data and information to provide insight into how to create custom GI Forms.
		Corrected.
11.3.0	32076	A 64-bit variant of the Action Processor needs to be produced.
		Implemented. See A 64-Bit Variant of the Action Processor Now Available (32076) on page 9.

Closed in Release	Key	Summary
11.3.0	19319	Custom GI forms that have been minimized do not display an icon on the task bar. In addition, there is no border or alternate background color on minimized items, making the taskbar look more like a status bar. Also, when clicking on a task bar item for an open window that is not the active/top window, it should bring the window to the top rather than minimizing it. Corrected. Task bar behavior now matches the Windows task bar behavior, as follows: — When a new dialog is opened, it receives focus as well as its task bar button. — When the dialog does not have focus, clicking on the associated task bar button places focus on the dialog. — If the dialog already has focus, clicking on the associated task bar button minimizes the dialog. — If a dialog is minimized or closed, focus is placed on another dialog and associated task bar button, if one is open. — Clicking on the title bar of a dialog, places focus on the dialog and selects the associated task bar button. Noted restriction: Clicking on the body or contents of a dialog will place focus on the dialog, however, the title bars of dialogs and associated task bar buttons will not reflect the change in focus.
11.2.0	42959	When custom callout routines are implemented to control the columns on a work item list, the Server Find tool returns an "Invalid Syntax" error when attempting to filter the list contents. The Server Find error is generated when the **overrideSelectColumns**, **overrideInitialColumns**, **overrideColumns** or **modifyMatrixColumns** callout methods are invoked for a work item list. Corrected.
11.2.0	42655	The `ipcCSS.jss` file is not loading on a Windows 2008 platform with IIS7 because IIS7 does not recognize the `jss` MIME type. Corrected. The `ipcCSS.jss` file has been changed to an `ipcCSS.xml` file. This also resulted in the removal of a prerequisite from the *TIBCO iProcess Workspace (Browser) Installation Guide* about adding the `jss` MIME type. Since there are no longer any `jss` files in the application, this prerequisite is no longer needed.

Closed in Release	Key	Summary
11.2.0	42616	Custom callout handlers need access to the Tag property of work item and case lists so that they have access to persisted filter, sort, and column-related user data for lists of work items and cases. Corrected. The following callout methods now have a **ListTag** property on the **oContext** parameter that is passed into the method: — overrideFilterFields — overrideInitialFilter — overrideFilter — overrideSortFields — overrideInitialSort — overrideSort — overrideSelectColumns — overrideInitialColumns — overrideColumns — modifyMatrixColumns
11.2.0	42563	When a WCC project is opened, and a new GUI Component is created, a series of error messages are displayed in GI Builder when the new component is saved with the "Save and Reload" option and an existing component file is selected to be overwritten. The errors only occur if performing "Save and Reload" and then choosing to overwrite an existing file. Corrected. Note that this issue caused four errors to be displayed. The first three errors have been resolved by this fix. However, the fourth error, "Uncaught Exception: 'r.getServer()' is null or not an object" is generated by GI Builder 3.8. It is not related to TIBCO iProcess Workspace (Browser) nor WCC. It requires a fix to GI Builder. The GI Builder error does not appear to prevent you from successfully completing the WCC project.
11.2.0	42546	The **Close** button on the case detail tabs in the Preview Pane does not work when using Mozilla Firefox. Corrected.
11.2.0	42503	If the application is localized to a language other than English, the **Work Queue Participation** dialog hangs if more than one participation record is created. Corrected.

Closed in Release	Key	Summary
11.2.0	42110	When running two instances of TIBCO iProcess Workspace (Browser) or a custom WCC application, if a work item form is opened in a separate browser from one instance, and a second form is opened from the other instance, one form automatically closes and the other fails to open with a "window.opener is null" error. Corrected.
11.2.0	41934	The **workItemTag2WorkQueueTag** static method fails with the following exception: "this.workItemTag is null or not an object" Corrected. A new *namespaceRef* parameter has been added to the workItemTag2WorkQueueTag static method to implement this fix. Also see, New Parameter on workItemTag2WorkQueueTag Static Method on page 42.
11.2.0	41918	Paging of the work item list does not work correctly when a server-side sort is applied on the second page. Corrected.
11.2.0	41641	Requests for JMS deltas need to be added to the Action Processor. Implemented. See Requests for JMS Deltas Added to the Action Processor (41641) on page 9.
11.2.0	41596	TIBCO iProcess Workspace (Browser) needs to be updated to work with assistive technologies, such as screen readers. Corrected. The following !DOCTYPE declaration has been added to the launch script (`iProcessClient.html`) to provide compatibility with assistive technologies: `<!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.0 Strict//EN" "http://www.w3.org/TR/xhtml1/DTD/xhtml1-strict.dtd">` Note that this !DOCTYPE declaration is commented out by default. For more information, see Using Assistive Technologies on page 25.
11.2.0	41595	The ability to specify the number of work items to display in a work queue should be provided. Implemented. See Added Ability to Configure the Number of Work Items in a Work Queue (41595) on page 10.

Closed in Release	Key	Summary
11.2.0	41528	When a user selects the "Open First Available Work Item" or "Open Next Available Work Item" function in the TIBCO iProcess Workspace (Browser), a "Work item already locked" error can appear. This error can appear because the work item to open is being selected from the work item list on the client, which is a "snapshot" and doesn't reflect locks that have occurred by other users on work items in that snapshot.
		To ensure that only available work items are locked when using the aforementioned functions, the TIBCO iProcess Workspace (Browser) needs to support server-side atomic locking of work items.
		Implemented. See Server-Side Atomic Locking of Work Items Added (41528) on page 10.
11.2.0	41490	The ability to control the types and status of work queues and procedures to display by default needs to be added.
		Implemented. See Ability to Control Types and Statuses of Work Queues and Procedures Added (41490) on page 10.
11.2.0	41466	If a user double-clicks on a work item that is either suspended or already open by another user, an error is returned informing the user that the work item is suspended or already open. Double-clicking on a work item that is suspended or already open should have no effect, i.e., all methods of opening the work item should be disabled.
		Corrected.
11.2.0	41412	The user cannot select a date on a form date picker when using a TIBCO iProcess Modeler-produced form, and the locale is set to Korean.
		Corrected.
11.2.0	41402	The user should have the ability to specify whether or not forms opened in a dialog are modal.
		Implemented. See Forms Can Now be Displayed Modally (41402) on page 11.
11.2.0	41401	When the "Open First Work Item" function is executed, it may attempt to open a work item that is locked by another user or that is no longer in the list, because the list is not refreshed prior to the function being executed.
		Corrected. The list is now automatically refreshed before the "Open First Work Item" function is executed.

Closed in Release	Key	Summary
11.2.0	41388	There should be a means of controlling whether or not the user can sort a work item or case list by clicking on a column header.
		Implemented. See Can Now Control Access to Sorting Via Column Header (41388) on page 11.
11.2.0	41192	If a work item that uses a custom GI form that includes a TabbedPane element is locked by one user, then another user attempts to open it, an unhandled exception is generated. This unhandled exception leaves the client in an unstable state, requiring a re-start.
		Corrected
11.2.0	41014	New user access profile properties need to be added to allow control of the **Preview** selections on the case and work item lists, all selections on the **Options** dialog, and the **Clear** button on the **Session Activity** dialog.
		Implemented. See New User Access Profile Properties Added (41014) on page 11.
11.2.0	40879	When using Mozilla Firefox 3, the list of work items is duplicated when the Find tool is opened. For example, if there are three items in the list, there will be six items after clicking on the Find tool, each item appearing twice in the list.
		Corrected.
11.2.0	40801	When the user releases a work item with a TIBCO iProcess Modeler-produced form (the problem does not occur with custom TIBCO General Interface Forms), the list of queues/work items becomes blank and the "Loading data" message can be seen at the top of the window. The following message is written to the log: "The callee (server [not server application]) is not available and disappeared; all connections are invalid".
		This issue occurs sporadically but relatively frequently and seems to be related to heavy work load on the system. It occurs when using Microsoft Internet Explorer, but not with Mozilla Firefox.
		Corrected.
11.2.0	40632	The **overrideInitialHistoryFilter** custom callout method is not executing when the case history list is initially displayed.
		Corrected.

Closed in Release	Key	Summary
11.2.0	40351	The WCC components can only be installed on Windows systems. They should be installable on UNIX systems also.
		Implemented. See WCC Components can now be Installed on UNIX Systems (40351) on page 12.
11.2.0	40331	Single authentication does not work in applications using WCC components.
		Corrected. The project template for custom applications created with WCC components has been updated to allow the use of single authentication. This release also includes an update to the open-via-URL sample applications provided with the TIBCO iProcess Workspace (Browser).
		For information about migrating an existing WCC application (created pre-version 11.2.0) to use single authentication, see Using Single Authentication in Custom WCC Applications Created Before 11.2.0 on page 44.
11.2.0	40186	When storing very large blocks of data in memo fields, the iProcess Workspace (Browser) client application is unable to display the work item in an iProcess Modeler-produced Form.
		Corrected.
11.2.0	39743	The "type ahead" text on the Find tool is truncated when using a German locale.
		Corrected.
11.2.0	39505	When the work item list in the main application window is refreshed, either by an "auto-refresh" action or a refresh that occurs when a work item is opened or closed, focus is taken from any opened work item forms and placed on the main application window. This causes forms to momentarily lose focus and be hidden by the main window when initially opened, and causes focus to be placed on the main window when an "auto-refresh" occurs.
		There is a related issue where a floating work item form closes immediately after opening, then re-appears once the floating window is repainted. (The form does not actually close, it merely loses focus and is hidden by the main window.) This problem occurs on Microsoft Internet Explorer only.
		Corrected.

Closed in Release	Key	Summary
11.2.0	39284	If a group name contains the "/" character, work items are not being displayed in that group's work queue. (The application log shows the following exception: "Uncaught Exception: Permission denied".)
		Corrected. Note that after installing this release, users of Microsoft Internet Explorer 7 will lose persisted layout settings for the work queue that contained the "/" character. This includes settings such as the columns displayed, column widths, etc. The persisted work item list layout settings will revert to the default settings.
11.2.0	39148	If the "Full Screen" check box is checked when setting the User Option to open forms in a separate browser window, the forms are not opened in full screen in Mozilla Firefox.
		Corrected.
11.2.0	39147	The procedure list can be configured to display columns that show the number of active, closed, and total cases. On systems that have a very large number of cases, the overhead involved in obtaining those case counts can have an adverse affect on performance. A means of controlling whether or not the system obtains the case count is needed.
		Implemented. See Can Now Control Whether or Not Case Counts are Obtained from the Server (39147) on page 12.
11.2.0	39066	If the Work Item Preview Default option on the **Options** dialog is set to "Preview Off - float work item forms", the next time the application is loaded, the option is set to "Preview On - float work item forms".
		Corrected.

Closed in Release	Key	Summary
11.2.0	39065	The TIBCO iProcess Workspace (Browser) software automatically loads a JavaScript file called webDAVRoot/META-INF/form_ext.js. This file allows loading and using custom JavaScript libraries inside TIBCO Form validations and events. The form_ext.js file is customized and deployed from TIBCO Business Studio. The form_ext.js JavaScript is failing with an "object not found" error. Corrected. The failure is due to the custom JavaScript form not being loaded automatically at application start-up. Before the script is loaded, a check is made to see if the file exists. Because of a change in TIBCO General Interface version 3.5, TIBCO iProcess Workspace (Browser) always thought the file did not exist. TIBCO iProcess Workspace (Browser) has been modified to attempt to load the JavaScript file without first checking for its existence. The impact of this change is that, if the file does not exist, there will be no error messages written to the log indicating the file is missing and the first indication will be an "object not found" error when the form attempts to run the missing script.
11.2.0	39017	If the "Remember Floating Window Position" option on the **Options** dialog is selected, forms in floating windows are opening at the top of the screen, even though the previous form was moved to a new position (the previous form's left position is remembered, but not the top). Corrected.
11.2.0	39016	The **wccCaseHistory** component is not displaying the correct case number and description. Corrected.
11.2.0	39004	When the last page of a work item list is being displayed, refreshing the list can cause the first page of the list to be displayed, but the pagination bar still indicates the last page is displayed. (The last page should continue to be displayed after the refresh.) Corrected.
11.2.0	38989	The TIBCO iProcess Workspace (Browser) should provide the ability to redirect the client when the user logs out. Implemented. See Ability to Redirect Client to a URL Upon Logout Added (38989) on page 12.

Closed in Release	Key	Summary
11.2.0	38972	Embedding WCC components by reference in TIBCO General Interface forms causes an exception at runtime, stating that it is unable to find the referenced component file. Also, if you have upgraded TIBCO iProcess Workspace (Browser) from a version prior to 11.1.0, custom menus that have been added to the application no longer work properly. Corrected.
11.2.0	38971	When using single authentication in Mozilla Firefox, and the authentication fails, the user is not being redirected to the path specified in the **failureUrl** attribute. Corrected.
11.2.0	38934	If the auto-repeat feature is turned on, and the work item list is refreshed at the same time that a work item is being opened, it can result in the following problems: work items are not displayed in the work item list, tools on the work item list are disabled and the "Loading Data..." message continues to display, the newly opened form may contain components, such as drop-down lists, that do not function properly. Because the problem occurs when a refresh happens at exactly the same time as a work item being opened, it tends to occur more frequently if the auto-refresh feature is also turned on. Implemented fix. Note that this fix results in an improvement, but the problem can still occur, especially if the auto-repeat and auto-refresh features are both turned on.
11.2.0	38831	Using a password longer than 137 characters causes an error from the Action Processor. Corrected.
11.2.0	38830	When using the Mozilla Firefox 3 browser, the following error is occasionally generated when work item forms are opened: "Uncaught Exception: uncaught exception: Illegal value for argument st rNa me:" Also, after several work items have been successfully opened and closed, the application suddenly hangs with "Loading Data..." displayed. The browser cannot be closed, after the hang, and the process must be terminated. Corrected.

Closed in Release	Key	Summary
11.2.0	38758	A work item using an iProcess Modeler-produced form can be released without all of the required data fields filled in.
		Corrected. Note - An iProcess Modeler Form can be customized so that the standard code calls user-defined functions, which can determine whether the **Keep** and **Release** buttons should be disabled/enabled (using spdSetValidationNotificationFunction). If this has been done, the code in the function will need to be changed to set the **value** property of the object rather than setting the parameter itself to true or false. For example, if the custom code previously contained...

		canKeep = true;
		or
		canRelease = true;

		... it must be changed to:

		canKeep.value = true;
		or
		canRelease.value = true;

11.2.0	38468	Processing large requests to the Action Processor are taking a long time.
		Corrected. The Action Processor has been modified so it will no longer drill down fully into the Action XML, creating objects for every XML element. It will now only drill down three elements, which is enough to get the request type.
11.2.0	38385	TIBCO iProcess Workspace (Browser) should provide the ability to redirect the client if the browser's session times out.
		Implemented. See Ability to Redirect Client to a URL Upon Browser Session Timeout (38385) on page 12.
11.1.0	39660	Support for Solaris 10 running on x86 and x64 systems needs to be added.
		Implemented. See Support for Solaris on x86 and x64 Systems Added (39660) on page 13.

Closed in Release	Key	Summary
11.1.0	38505	When the Find tool is opened on work item and case lists, the potential for conflicts exist if the Filter, Sort, or Refresh tools are activated while the Find is still open.
		Corrected. To avoid conflicts and unexpected results, the Filter, Sort and Refresh tools are disabled on work item and case lists when the Find tool is open. The Auto-Refresh tool is also disabled on the work item list when the Find tool is open. All of these tools are re-enabled when the Find tool is closed.
11.1.0	38461	When a TIBCO Form is opened in a separate browser window, if the window size is smaller than the form contents, scroll bars are not available to view the entire form. The only way to see the entire form contents is to enlarge the window size.
		Corrected.
11.1.0	38381	Messages containing a large amount of XML field data sent to the Action Processor can result in long processing times.
		Corrected.
11.1.0	38338	Browser memory usage continues to increase as work item forms are opened and closed, particularly when custom GI Forms are opened in a separate browser window. The leak also occurs when forms are opened in a dialog or the preview pane, but it is more significant when the form is opened in a separate browser. The amount of leak appears to be related to the complexity of the form contents.
		Corrected. The implemented fix provides an improvement in the amount of memory being leaked, however, there is still an increase in the memory usage each time a form is opened and closed.
		This fix has no impact on the leak that occurs when forms are opened in a dialog or the preview pane — this fix only applies to forms opened in a new browser window. The reasons for the additional memory leaks are continuing to be investigated.
11.1.0	38143	New configuration parameters are needed to support TIBCO Forms.
		Implemented. See Configuration Parameters Added for TIBCO Forms Support (38143) on page 13.

Closed in Release	Key	Summary
11.1.0	38142	A sample WCC application is needed that loads a **WorkItemsPreview** component via a URL.
		Implemented. See Open Work Queue Via URL Application Included in Samples (38142) on page 13.
11.1.0	37939	Work items in the Undelivered work queue cannot be opened. Attempting to open them causes the error: "Error : -1 (Exception Thrown.) Length cannot be less than zero. Parameter name: length"
		Corrected.
11.1.0	37919	If a work item list is refreshed when a page other than the first page of the list is displayed, the refreshed list always displays the first page rather than the page that was displayed when the list was refreshed.
		Corrected.
11.1.0	37820	There is currently a single user access profile permission that controls access to the following tools: Open Work Item, Open First Work Item, Open Next Work Item, and Auto-Repeat Open Work Item. There should be a separate permission for each of these tools.
		Implemented. See New Open Work Item Properties Added to User Access Profiles (37820) on page 14.
11.1.0	37791	Case data can be deleted, even though the user's user access profile specifies that they have read-only access.
		This occurs if the user's profile in `userAccessProfiles.xml` is set as follows: `Procedure > Case > Open > DataRead = 1` and `Procedure > Case > Open > DataUpdate = 0`.
		The causes the "pencil eraser" icon to remain enabled on a field with existing data in it. So a user can clear a field's value, even with DataUpdate disabled, if the case is opened in a floating dialog rather than the preview pane as this provides an X in the top right corner. This allows the user to then close the dialog and choose "Save" when prompted that "Case data has been modified".
		Corrected.

Closed in Release	Key	Summary
11.1.0	37789	When a work item list is displaying a page (other than on the first page), and a refresh is performed, when returning to the first page, the contents are not correct. This only occurs when the refresh does not result in the list being updated (i.e., the list did not change on the server, so the list is not reloaded).
		This situation can occur when a work item is opened, but the work item does not get locked because of an error — a refresh is performed, but the status of the list does not change on the server due to the error.
		Corrected.
11.1.0	37486	If all tools for a work item list (open, release, forward, etc.) are disabled in the userAccessProfiles.xml file, the application hangs when switching between work queues.
		Corrected.
11.1.0	37468	When selecting **Programs** > **TIBCO** > **TIBCO iProcess Workspace (Browser)** from the **Start** button, only the uninstaller and documentation are available. This should provide access to the uninstaller, documentation, readme, release notes, and the client application launcher.
		Corrected.
11.1.0	37244	When changing from one work item list to another, if the **Refresh** button is clicked immediately after selecting the second list, the list displays the contents of the previously selected list.
		Corrected.
11.1.0	37118	On the **Edit Redirection Schedule** dialog, if you set the start and/or end times, click on the date picker, then tab to another field, the start and end times are reset to 12:00 am and 11:59 pm, respectively.
		Corrected.
11.1.0	36912	The user should be able to filter case history entries.
		Implemented. See Ability to Filter Case History Added (36912) on page 14.

Closed in Release	Key	Summary
11.1.0	36904	When using the Find function "Type Ahead" feature, if already typed text is selected with the mouse or cursor, then replaced with new text, the results may not be correct for the newly entered text. Corrected.
11.1.0	36876	In both the Column Selector and Sort dialogs, if a selected item is moved up or down in the list, the list does not scroll to follow the position of the item in the list. This can result in the item moving out of visibility of the user, requiring the user to manually scroll the list to see the selected item. Corrected.
11.1.0	36852	The Date & Time column on the Session Activity screen is not sorting properly. Corrected. The column was being sorted as string values — it is now being correctly sorted as numeric dates and times.
11.1.0	36848	The maximum number of cases to return from the server should be configurable. Implemented. See The Maximum Number of Cases to Return from the Server is Now Configurable (36848) on page 15.
11.1.0	36813	The iProcess Workspace (Browser) needs to support TIBCO General Interface version 3.6.2. Implemented. See TIBCO General Interface Version 3.6.2 Now Supported (36813) on page 15.
11.1.0	36812	There should be a way of accessing a work item via URL parameters, rather than requiring the user to navigate work queue and work item lists. Implemented. See Open Work Item Via URL Application Included in Samples (36812) on page 16.

Closed in Release	Key	Summary
11.1.0	36811	Currently, there is a callout interface method that lets a developer modify columns to be displayed in lists. It is run both when the list is initially loaded and after any changes are made to the columns by the user through the Columns Selector dialog.
		There should be a way to make changes only upon initial display. That allows the initial columns to be set up, but the user would then be able to make changes to the columns after it is displayed.
		Implemented. See New Callout Interface Method for Setting Initial Columns (36811).
11.1.0	36786	Outstanding steps should be shown in a colored font on the case history to be able to distinguish them from the other entries.
		Implemented. See Outstanding Steps Now Shown in Colored Text in Case History (36786) on page 17.
11.1.0	36484	If a filter threshold is specified, and the user selects a procedure that contains a very large number of cases (e.g., 400,000), the Filter dialog is displayed, as it should. However, internally the client is still requesting the large list, resulting in a timeout before the user can enter a filter expression. This can also occur when selecting a work queue that contains a very large number of work items that exceeds the threshold.
		Corrected.
11.1.0	36089	If a filter had been applied to a work item list, then the Find function is used on the list, when the user switches to another work item list, the filter and find parameters are incorrectly being carried forward to the new list.
		Corrected.
11.1.0	19322	If the custom GI Forms sample implementation class (**FormTemplate**) is used to display a work item form, the form is based on a specialized class that allows the form to be minimized to the browser's task bar. However, if the **showFormDetails** function is used to display the **Form Details** button on the form, pressing this button causes the **Form Details** dialog to display in a standard GI dialog, which cannot be minimized to the task bar. The **Forms Details** dialog should be minimizable too.
		Corrected. The **Form Details** dialog can now be minimized to the browser's task bar.

Closed in Release	Key	Summary
11.0.1	36447	When displaying information in a drop-down list on an iProcess Modeler-produced form, decimal points are displaying as curly brackets, and date and time fields are displaying "null". Corrected.
11.0.1	36154	The silent and console installation modes are not working properly. Corrected. For information about using the silent and console installation modes, see the *TIBCO iProcess Workspace (Browser) Installation Guide*.
11.0.1	35900	Various labels on the client application screens are truncated when the application is localized to German or Spanish. Corrected. Some screen layout changes have been made to accommodate German and Spanish localization.
11.0.1	35738	Various labels on the client application screens are truncated when the application is localized to Portuguese. Corrected. Some screen layout changes have been made to accommodate Portuguese localization.
11.0.1	35651	When external forms are opened in a new browser window from within a WCC application or an iProcess Workspace (Browser) client application running as a homepage in an Outlook folder, an error is generated when the form attempts to retrieve data from the server. The error is: `Error: -7 ("There is no node context associated with this session, a Login is required.")` Note - "External forms" are defined as ASP Forms, JSP Forms, iProcess Modeler Forms, or BusinessWorks FormBuilder Forms. "GI Forms" are defined as General Interface Forms or TIBCO Forms. Corrected. Note that the resolution for this MR results in new behavior for the "dialog" attribute in the <**BrowserFeatures**> record in the WCC/client application's configuration file, `config.xml`. Ensure that you review the information about the "dialog" attribute in the *TIBCO iProcess Workspace (Browser) Configuration and Customization Guide*.

Closed in Release	Key	Summary
11.0.0	34867	When using the Server Find function to find items in the work item list, an implied '*' wild card character is always included. For example, if specifying "Case Description = c", the Server Find will find all work items whose case description begins with "c". Since wild card characters can be used with Server Find, entries without wild cards should match only those work items that match the criteria exactly.
		Corrected.
11.0.0	34687	An "Object Error" exception occurs when the **activateCases**, **suspendCases**, or **processJump** WCC methods are called, although the methods successfully perform the action. This only occurs if the case list has not been populated.
		Corrected.
11.0.0	34686	Procedures with an optional case description show a "Required" label on the case description field.
		Corrected.
11.0.0	34643	A simplified callout interface needs to be implemented.
		Implemented. See Simplified Callout Interface Implemented (34643) on page 17.
11.0.0	34611	The Server Find function on the work item list is not correctly finding work items when wild card characters ('?' and '*') are included in the search criteria.
		Corrected.
11.0.0	34588	Under the following circumstances, all items in the work item list are not visible. The page size of the work item list is set to a number larger than the number of items that display, causing a scroll bar to appear (e.g., the page size is set to 30 and the list is sized to only display items 1-20). The scroll bar is then moved to the bottom, displaying the last items on the page (e.g., items 10-30 are displayed). When the user clicks "Next" to go to the next page (a page that has fewer items which all display in the list with no scroll bar, e.g., 10 items), only the last 5 items are visible — the first 5 items are above and out of view and cannot be scrolled to because the scroll bar is disabled.
		Corrected.

Closed in Release	Key	Summary
11.0.0	34562	TIBCO iProcess Modeler-produced forms don't use locale settings in the client application for numeric fields.
		Corrected.
11.0.0	34545	A Data Execution Prevention (DEP) error is occurring on the server at the point where Windows is closing the IIS Worker Process (**W3WP.exe**) that is running the TIBCO iProcess Workspace (Browser).
		Corrected. A call to **ssoDOTNET.Shutdown()** was added to the **ActionProcessor.dll**.
11.0.0	34444	The Action Processor needs to implement the new **FetchAWorkItemListIfChanged** and **FetchWorkItemListIfChanged** requests that correspond to new interfaces in the iProcess Server Objects.
		Implemented. See Action Processor Implements New Fetch Requests (34444).
11.0.0	34260	On iProcess Modeler-produced forms, it is possible to click the **Undo**, **Keep**, or **Release** button more than once. When displaying a start case form, this can result in multiple cases starting. When displaying an existing work item, the first click is properly processed, but subsequent clicks may cause an error message to be displayed.
		Corrected. After the first click, all buttons on iProcess Modeler-produced forms are now disabled.
11.0.0	34204	When a custom form (e.g., General Interface or TIBCO form) is opened, but fails to load properly due to an invalid path or some other error, the form does not display in the Preview Pane. But when the user tries to open another work item form, they receive the "A work item form is open in the Preview Pane" warning and are not allowed to open any additional work items.
		Corrected.
11.0.0	34174	The Action Processor JavaScript interfaces need to be published and documented.
		Implemented. See Action Processor Interfaces Are Now Published (34174) on page 18.

Closed in Release	Key	Summary
11.0.0	33991	A feature needs to be added that allows automatic refresh of work item list.
		Implemented. See Work Item List Auto-Refresh Feature Added (33991) on page 18.
11.0.0	33628	The ability to customize the appearance of the browser window when displaying work item forms needs to be added.
		Implemented. See Ability to Customize Appearance of Browser Window Added (33628) on page 19.
11.0.0	33272	Memo fields should be included in the fields grid on the **Case Data** tab like all other field types.
		Implemented. See Memo Fields Now Shown in Fields Grid (33272) on page 19.

TIBCO Business Studio Forms

This section lists closed issues and known issues that are specific to TIBCO Business Studio Forms.[1]

This information is included in these release notes because the TIBCO iProcess Workspace (Browser) application is where you will see TIBCO Business Studio Forms.

TIBCO Business Studio Forms Closed Issues

The table in this section lists closed issues related to TIBCO Business Studio Forms.

Closed in Release	Key	Summary
2.2.5	IPF-195 (SR 378292)	The message displayed in a form did not reflect the translated value in the common resource bundle or the message in the form-specific property bundle.
2.2.5	IPF-193 (SR 354705)	If a form was submitted with empty values in the mandatory fields, validation markers were displayed. If you closed the form after providing valid values, no data was displayed for those fields after opening the form again.
2.2.5	IPF-192 (SR 333634)	Closing a form was not possible if a mandatory field was left empty. You could close the form only after clearing the validation markers.
2.2.5	IPF-190 (SR 350991)	For German locale, values provided in the Integer type fields with number separators and decimal separators were not getting submitted in the TIBCO iProcess Workspace (Browser) client.
2.2.5	FORM_5326 (SR 302147)	Issues were observed with the layout of forms in Mozilla FireFox browser after upgrading to TIBCO iProcess Workspace (Browser) 11.4.0.
2.2.5	FORM-5318 (SR 302147)	Issues were observed with the performance of TIBCO Forms and also with the layout of forms in Mozilla FireFox browser after upgrading to TIBCO iProcess Workspace (Browser) 11.4.0.

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1. "Business Studio Forms" and "TIBCO Forms" are synonymous.

Closed in Release	Key	Summary
2.2.4	FORM-4810	In TIBCO GI forms, some of the pane-specific CSS classes were not rendered as specified in the Forms User's Guide. The following CSS classes were not being used by TIBCO GI Forms: • pane-horizontal • pane-tabbed • pane-messages • pane-record Also for text controls, the CSS class control-text was used instead of the documented control-textinput.
2.2.4	FORM-4475	In TIBCO GI forms in Workspace, the enter key did not work for submitting the form if the focus was within a grid pane.
2.2.4	FORM-4160	In TIBCO GI forms, the tabs configured within a Tabbed pane could not be made visible or invisible using the setVisible() API.
2.2.4	FORM-3940	The code specified in the external Java-Script files, referenced by the form, was not executed consistently.
2.2.4	FORM-3814	In TIBCO GI forms, the scrollbar for a multi-select optionlist was obscured when that control was placed in the last column of a grid pane.
2.2.4	FORM-3714	In TIBCO GI forms, calling the setEnabled() method on a pane from within the form open script could result in an error dialog.
2.2.4	FORM-3436	The list control within the grid pane was not seen after clicking the **Add** button on the list control. This is seen only with Firefox browser version 3.6.x.
2.2.4	FORM-3366	The memory used by the browser kept increasing when forms were loaded and unloaded multiple times. This is applicable to iProcess Workspace Browser Client application.
2.2.4	FORM-3335	The multi-select option list used within the grid pane displayed the option list values instead of the option list labels.
2.2.4	FORM-3305	When the form was opened and if there were validation markers present on the form, then the form was scrolled down to the message pane which would display the validation markers.

Closed in Release	Key	Summary
2.2.4	FORM-3093	Specific to Workspace while using TIBCO GI forms and iProcess Workspace (Browser). Optionlists did not support multiple choices that had the same underlying value. For example, if you had two choices with different labels, but the same value, then only one of those would be shown as a choice.
2.2.4	FORM-2638	In TIBCO GI forms, the API supported the ability to set primitive values via the `data.set[paramName]()` API. Although it was possible to define a computation action to update a complex parameter, this would not work. The only way to change the value via the API was to use `data.get<paramName>()` and update the fields of the returned object. You could not change the root object itself.
2.2.4	FORM-2477	Specific to TIBCO GI forms. It was not possible to use the API to set any of the font properties of a control within an action that was triggered by the **Enter** event of that same control. This affected the following methods: • `Control.setFontColor()` • `Control.setFontName()` • `Control.setFontSize()` • `Control.setFontWeight()`
2.2.4	FORM-2115	In TIBCO GI forms, if a checkbox was in a grid pane and had its enabled flag set to **false**, it was still being shown as operational. It was correctly disabled if the grid pane itself did not support editing.
2.2.4	FORM-1109 (1-94X8TY)	Forms and associated resources that were direct children of the Forms special folder could not be deployed. This issue did not affect deployment to ActiveMatrix BPM.
2.2.4	FORM-1064 (1-8ZLZWZ)	Specific to Workspace and iProcess Workspace (Browser). iProcess did not support text data types with embedded newlines: it discarded text after the newline, making them unusable for text area controls that supported newlines.
2.1.1	FORM-2634	GI/Workspace: A GI form would not load if it contained a disabled duration control, or if a duration control was located within a pane that was disabled. Also, the API for dynamically setting the enabled state of a duration control did not work.

Closed in Release	Key	Summary
2.1.1	FORM-2585	When a grid pane and record pane were set up to act as a Master/Detail, if all of the records were removed from a grid pane, then the record pane would still show the values from the last record before it was deleted. It should be blank and disabled if there are no records in the Master pane.
2.1.1	FORM-2556	Forms showed incorrect behavior when attributes had the same name in two classes in a containment relationship.
2.1.1	FORM-2526	Custom layout and font settings were only being applied to the first row of a radiogroup control.
2.1.1	FORM-2523	Custom layout and font settings were not getting applied to the Duration control in GI Preview or Workspace.
2.1.1	FORM-2474	GI/Workspace: If a class in a BOM was modeled using numeric attributes, the JavaScript object instantiated for that class still expected the value set for those attributes to be a string. The value was maintained correctly internally and was posted to the server in the correct format.
2.1.1	FORM-2329	If an action script referenced a control or pane (e.g., `control.myControl`), then renaming the pane or control would result in the loss of formatting and comments in any action scripts that referenced that control or pane.
2.1.1	FORM-1975	Label position was sometimes specified incorrectly in default forms.
2.1.1	FORM-1793	The `set()`, `add()`, and `subList()` did not show up correctly in content assist and were marked with incorrect validation markers.
2.1.1	FORM-1698	It was not possible to add a Datetime control to a grid pane in the forms designer, but it was possible for one to be added automatically in a default form, or a form that was generated from a User Task interface. In such a case, the runtime would just show a read-only view of the Datetime value.
2.1.1	FORM-1542	Hyperlinks that appeared within a tabbed pane could not be changed dynamically when using Firefox 2.x. This issue is closed but will not be addressed, since Firefox 2.x is no longer supported.

Closed in Release	Key	Summary
2.1.1	FORM-1531	Content of Passthrough controls did not render correctly (did not wrap) when using Firefox 2.x. This issue is closed but will not be addressed, since Firefox 2.x is no longer supported.
2.1.1	FORM-1505	SW_NODENAME field is not working.
2.1.1	FORM-1068	Migrated projects with Numeric fields all give validation error which does not give enough information for user to understand. For example: Control 'caseid' has a maxLength property (10) that does not match its bound parameter length (10). This is also n
2.1.0	1-9HD9A3 (FORM-1549)	Controls that have validations and an empty label would display a label of undefined after the validation is evaluated. This has been fixed.
2.1.0	1-8QN95F (FORM-767)	The value of an Option List cannot be directly mapped to the value of a parameter of type Date. Previously, this mapping was possible at design time. The Option List would always return a value of type String. This was not a problem in the preview mode, but caused an error at runtime in the TIBCO iProcess Workspace (Browser). There is now a validation during forms modeling that prevents this mapping, so the problem no longer occurs at runtime.
2.0.3	1-9IVI6H (FORM-1582)	Entering a date in the GI Preview would reset the time component of the Date-Time control to 00:00. The problem occurred when `time` was initialized before `date`. This has been fixed.
2.0.3	1-9HW7I1 (FORM-1571)	If an option list had the flag **Allow Multiple Selection** checked, and has a binding specified for its value, then an exception `(ERROR) – Uncaught Exception: Unspecified error` would sometimes appear in the logs. Although this exception was harmless and could be ignored, the problem has now been fixed.
2.0.3	1-9DYD9I (FORM-1393)	The Reset action did not work for controls that did not have a default value specified in the Form, or have any default value provided by the corresponding process data fields. In this case, the Reset action would not reset the values to `empty`, and instead would leave any values provided by the user. Any values that were modified were reset to their original values. This has been fixed.
2.0.3	1-8S3U4N (FORM-867)	There were problems with the GI preview displaying horizontally aligned controls with labels flush with the fields (such as **City/Suburb Name** [ ] **Zip** [ ]). This has been fixed.

Closed in Release	Key	Summary
2.0.3	1-8R05BU (FORM-821)	The hyperlink, label, and passthrough controls did not make use of the font property. This has been fixed.
2.0.2	FORM-1980	The `com.tibco.forms.Form.validate()` method did not validate controls in nested panes, and the message pane did not get refreshed when the parameter **`true`** was passed. The issue was raised in response to Service Request 1-9ZI30V. This has been fixed.
2.0.1	1-A5T88V (FORM-1742)	`Form.invokeAction()` was not working at runtime. This has been fixed.
2.0.1	1-A68VA2 (FORM-1748)	Form data was not getting submitted under certain circumstances. This has been fixed.
2.0.1	1-A9NIIX (FORM-1790)	Users sometimes saw the following erroneous error message when opening a form in iProcess Browser: **Uncaught Exception: 'tagName' is null or not an object**. This has been fixed.
2.0.1	1-9X8U7J	The `setValue()` API for Date, Time, and DateTime controls needs to accept the Javascript `Date` object as input. It should accept a **`null`** value as well. This has been fixed.

2.0.1	1-93CWQT	A form will not render controls that appear after a Passthrough control containing a self-closing iframe tag. For example:
		
		`<iframe src=http://www.tibco.com  …  />`
		
		Since most browsers do not correctly render iframes coded as self-closing tags, an explicit closing tag should always be used for iframes:
		
		`<iframe src=http://www.tibco.com  …  > </iframe>`

2.0.1	1-9LT3L3	Form parameter synchronization was changing control labels from data field labels and control hints from interface descriptions without prompting. Also removed and added controls when parameters were being added or removed. Synchronization is now fixed so that only parameters are synched with the User Task. This applies only to the design time of forms, not to runtime behavior.
2.0.1	1-9TE0X1	Dynamic visibility was not working for panes nested within horizontal panes. This has been fixed.

Closed in Release	Key	Summary
2.0.1	1-9UANSB	Error in script on form open `this.getServer()` is null or not an object calling `setRequired()`. This has been fixed
2.0.1	1-9UF2JD	A performance issue was sometimes seen when setting the visibility of panes. This has been fixed.
2.0.1	1-9X8U7J	The `setValue()` methods for Date, Time, and DateTime controls need to accept JavaScript Date object as input. They must accept `null` value as well. This has been fixed.
2.0.0	1-90DXRT	Panes that were marked as invisible using properties were incorrectly visible when seen via the GI preview and at runtime. This affected vertical root panes, vertical panes under horizontal panes, and horizontal panes under horizontal panes. This has been fixed.
2.0.0	1-8ZUA6R	In the Form Designer, input fields on the property sheets did not support keyboard shortcuts for Copy, Cut, Paste, and Delete. This has been fixed.
2.0.0	1-8XM5NT	Any attempt to set the visibility flag of a control from within the script Form Open is ignored. This has been fixed.
2.0.0	1-8RUZGC	In the sample project, a user may see a script validation error when attempting to edit either of the actions `third_party_fields_required` or `witness_fields_required`. This has been fixed.

Closed in Release	Key	Summary
2.0.0	1-8R40XJ	Installation of TIBCO ActiveMatrix 2.0 products after installing TIBCO Business Studio 2.1 or 2.2 or other products in multiple installation environments resulted in a corrupted installation environment and was not supported. This would affect TIBCO ActiveMatrix Service Grid 2.0, TIBCO ActiveMatrix Service Bus 2.0 and TIBCO ActiveMatrix BusinessWorks Service Engine 5.6. This is no longer an issue for TIBCO ActiveMatrix 2.1 and later versions. You can now choose different values of TIBCO_HOME for multiple installations of TIBCO Business Studio.
2.0.0	1-8QO167	When multiple panes were present in the Root pane, they did not render in a correct order in the GI Preview and at runtime. This has been fixed
2.0.0	1-8QLC33	Activities in TIBCO XPDL process models contain named parameters. The previous version of the Process Editor allowed these names to contain spaces and other characters that the Form model did not support.
2.0.0	1-8KS8N5	Setting `visible="false"` on the child of a tabbed pane was not working. This has been fixed
1.1.0	1-92HKRL	When using a French locale in TIBCO Business Studio, the behavior of decimal points during forms modeling was not consistent with the behavior during business process modeling. This has been fixed to ensure consistency for the localized entry of data throughout Business Studio.
1.1.0	1-8S5ZLJ	Once a field marked as required had thrown an error it was always required even if the required flag was subsequently turned off programmatically.
1.1.0	1-8RV1ZQ	Problem markers for script validations sometimes persisted even after the script error had been corrected. This could show up in any of the form elements that made use of scripts. The problem markers sometimes persisted even if the offending object was completely removed.

Closed in Release	Key	Summary
1.1.0	1-8QWMK0	When a horizontal pane was nested within a vertical pane, and contained certain combinations of controls or panes, the contents of the pane were not always rendered properly, or were not be rendered at all.
1.1.0	1-8QTPQH	When an Option List had **Allow multiple selections** set to true, only the values of the Option List would be displayed at runtime. The labels were ignored.
1.1.0	1-8QJXLB	When the root folder in a WebDAV server configuration dialog was changed, the old root folder continued to be used.
1.1.0	1-8QE79R	The form would not display in the preview or at runtime if the workspace, project, or form folder name contained non-ASCII characters.
1.1.0	1-8QB7M5	Forms were not supported on the Firefox browser. Known Issues included: 1. Selection of values in Option Lists were not visible on the screen. The value was actually selected, but it was not displayed. 2. Selecting another tab in a tabbed pane caused the pane to disappear. Clicking in the background of the form would cause the tabbed pane to reappear. 3. Layout of panes and labels was problematic. This could be worked around by inheriting font, layout, and child layout properties at the form level. In many situations vertical pane labels alternated between wrapping and not wrapping as the focus changed in the form.
1.1.0	1-8Q99CG	When defining a custom action for the `oncontrolenter` event of a control, there was sometimes an error if the script for that custom action modified the visual properties for the control. For example, the following script would cause problems: this.setVisualProperty("bgColor","#ff80ff");
1.1.0	1-8OV93V	If no label was provided for a choice in an Option List, then the label would appear as a blank in the preview and at runtime.

Closed in Release	Key	Summary
1.1.0	1-8MRMQX	Projects had to be located within the workspace to function properly. If you imported a project from a different location, and did not copy the files into the workspace, then the forms feature would not function correctly.

TIBCO Business Studio Forms Known Issues

The table in this section lists known issues related to TIBCO Business Studio Forms.

Defect #	Summary/Workaround
FORM-5103	**Summary**: If the user invokes `List.remove()` method on the List object bound to the value of a record pane, the record is removed from the list. However, the index of the selected record and total number of records shown in the navigator are not updated. **Workaround**: If you click any of the navigator icons like first, last, next or previous, the index of the selected record and number of records are updated properly in the navigator.
FORM-5101	**Summary**: If a user invokes `List.clear()` method on the List object bound to the value of a record pane, all records are removed from the list. However, the index of the selected record and total number of records shown in the navigator is not updated to zero. **Workaround**: If you click any of the navigator icons like first, last, next or previous, the index of the selected record and number of records are updated properly in the navigator.
FORM-5028	**Summary**: The default values added to the List control of type `Time` are not submitted by the form to the iProcess server. **Workaround**: You need to change the default values added to the List control of type `Time` so that their values are submitted by the form.

Defect #	Summary/Workaround
FORM-4893	**Summary**: If a user modifies the Move, Rename or Delete command by deselecting the 'Clear/Update forms references to affected resource(s)' change, the consequential 'unresolved reference' problem markers may not appear. This will happen if these references had already been loaded into memory. For further information, refer *Forms User's Guide > Concepts > Cross-Resource References*. **Workaround**: Restart TIBCO Business Studio and clean+rebuild the project(s) containing the referencing form(s).
FORM-4386	**Summary**: An embedded form does not work within a record pane when a parameter on the embedded form is bound to a child object of the record pane selection. The embedded form will be displayed, but no data are shown for the record. This only affects TIBCO GI forms; GWT forms do not have this problem. **Workaround**: You can construct the record pane so that the type of object bound to the record pane value is the same as that of the parameter in the embedded form to which you are binding. That is, do not bind to a child of the record pane selection, but bind to the actual selection value itself.
FORM-4117	**Summary**: Fixed point decimal values are not handled at runtime. Even if a number is configured as a fixed point decimal, it is treated as a floating point number in the runtime. **Workaround**: None.
FORM-4106	**Summary**: The names of form files do not support multi-byte characters. **Workaround**: Use only ASCII characters when naming User Tasks and form files.

Defect #	Summary/Workaround
FORM-3983	**Summary**: Even though business object models support the full XSD regular expression, the TIBCO GI runtime only supports the subset that is supported in Java-Script regular expressions. That means the following syntax will not work in validations for TIBCO GI forms: `\d` - shorthand for digits (only ascii characters supported) `\w` - shorthand for word characters (only ASCII characters supported) `\p{L}` through `\p{C}` - (Unicode properties) `\p{Lu}` through `\p{Cn}` - (Unicode property) `\p{IsBasicLatin}` through `\p{IsSpecials}` (Unicode block) `\P` (negated variants of all `\p` as listed above) `\i, \I, \c,` and `\C` shorthand XML name character classes `[abc-[abc]]`- character class subtraction This will typically only be a problem for imported XSD schemas that use any of the above constructs **Workaround**: If the form is being targeted towards a TIBCO GI runtime, the pattern constraint can be removed or modified in the **Advanced Settings** tab for the attribute in the BOM modeler.

FORM-861
 	
1-8RV3OX
	Summary: A computation action script consisting of an array literal is incorrectly flagged with a problem marker: `The script for action 'xxx' contains a syntax error at line 1 column 1: unexpected token: [`
	
	Workaround: In the computation action script, first assign the array literal to a local variable, then return the value of the local variable, thus:
	`var labels = ['One', 'Two'];`
	`labels;`

FORM-3345	**Summary**: After a control is deleted in an auto-generated form, a warning problem marker appears on the form stating that the form "user interface is out of sync." **Workaround**: The warning will not have any affect on deployment or the runtime functionality of the form. However, to suppress the warning, under Window > Preferences > Form Designer > Errors/Warnings > Process Synchronization > (summary) Forms User Interface should match its source interface, change the reporting level to **Ignore**.

Defect #	Summary/Workaround
FORM-3309	**Summary**: Specific to TIBCO GI forms. For a RadioGroup control, if a custom font setting is used for the choice labels, the displayed text of the labels may be clipped. This only occurs in Firefox. **Workaround**: Use the default font for the choice labels of the RadioGroup control.
FORM-3203	**Summary**: Specific to Workspace while using TIBCO GI forms and iProcess Workspace (Browser). For a grid pane that does not have a binding, programmatic updates to the List for that grid pane will not be reflected in the UI. **Workaround**: After making changes to the List object, invoke `pane.<gridpaneName>.setValue(list)`, passing in the updated List object.
FORM-3200	**Summary**: Specific to Workspace while using TIBCO GI forms and iProcess Workspace (Browser). The layout property for radio groups will not be honored if that radio group appears in a horizontal pane. **Workaround**: None.

Defect #	Summary/Workaround
FORM-2558	**Summary**: Form Preview may not open on Linux.
	Workaround: TIBCO Business Studio is based on Eclipse-3.4, which has a known issue with XulRunner-1.9+ on Linux:
	`https://bugs.eclipse.org/bugs/show_bug.cgi?id=262929` `http://www.eclipse.org/swt/faq.php#howdetectmozilla`
	The issue does not always surface but when it does it can completely prevent Business Studio from launching. Known workarounds include:
	1. export `GRE_HOME=/dev/nul`
	2. export `MOZILLA_FIVE_HOME=/dev/nul`
	3. in TIBCOBusinessStudio.ini: `-Dorg.eclipse.swt.browser.XULRunnerPath=/dev/nul`
	It may also be necessary to increase the maximum open file handles to allow TIBCO Universal Installer and TIBCO Business Studio to run. For example, add these entries to `/etc/security/limits.conf` then restart the system:
	• `soft nofile 4096`
	• `hard nofile 4096`
	However, when the above XulRunner workaround was active an SWTError prevented Form Designer from opening.
	Business Studio now logs a single message per session to the Error Log and disables the preview tab. Forms design can proceed normally but preview functionality is disabled for the session.
FORM-1838	**Summary**: The Forms runtime does not handle validation for the multiplicity of child relationships in the BOM. If a parent defines a relationship with a multiplicity of other than *, the Forms runtime will not validate that the correct number of children are present in the relationship. This would most commonly be seen on a relationship that specifies a multiplicity of `1..*`. In that case, it is possible to submit a form where there are no children present in the relationship, resulting in validation error being returned from the Action Processor.
	Workaround: Avoid specifying multiplicity constraints of `1..*`, or if you do, ensure that at least one child is present by manually adding a validation constraint on one of the form controls that is set to be evaluated on submit.
1-9H3QR0 (FORM-1543)	**Summary**: The width and height are not respected for image controls when viewed in Firefox.
	Workaround: Do not specify width and height, and instead resize the image to the desired dimensions before including in the form.

Defect #	Summary/Workaround
1-9F64L1 (FORM-1448)	**Summary**: Option list controls that have the flag **Allow Multiple Selections** enabled will not initially render correctly in the TIBCO GI Preview mode on Linux. The option values will initially show empty until one of the items is selected. **Workaround**: None
1-9E52H7 (FORM-1398)	**Summary**: Updating the value of controls within actions triggered by the Enter or Update events of that control may result in an infinite loop. **Workaround**: Refrain from updating the value of the source control within these actions.
1-8ZK0QL (FORM-1062)	**Summary:** Specific to Workspace and iProcess Workspace (Browser). Loading of Forms properties files in Firefox will result in a denial of Universal-BrowserRead privileges. No localized resources will be loaded in this case. This will happen if the iProcess Workspace (Browser) and the WebDAV server are installed on different hosts or ports. **Workaround:** Make sure that the iProcess Workspace (Browser) and WebDAV are installed on the same server and port, and when specifying the WebDAV root in iProcess Workspace (Browser), do not use the host name. For example, the WebDAV root should be specified as "/webdav/Forms".

Defect #	Summary/Workaround

1-8ZDLZI (FORM-1056)	**Summary:** When viewing the form preview on Linux, the bottom of the form will be clipped by the portion of the preview application that shows the submitted parameters. This only happens with the Firefox browser, which is used to preview forms on the Linux platform.
	
	Workaround: Workaround: An alternate preview application is shipped as part of the TIBCO GI preview plug-in. You can enable this by following the following steps:
	
	1. Shut down TIBCO Business Studio if it is running.
	
	2. Find the install directory for the TIBCO GI Preview plugin. This can be found under
	
	`[TIBCO_HOME]/studio/3.1/studio-addins/eclipse/plugins/com.tibco.xpd.forms.gi.preview_2.0.0.xxx`
	
	   "xxx" will correspond to a 3 digit build number (e.g. 009)
	
	3. Find the preview application directory, at the path:
	
	`[TIBCO_HOME]/studio/3.1/studio-addins/eclipse/plugins/com.tibco.xpd.forms.gi.preview_2.0.0.xxx/gi-apps/harness/JSXAPPS/studioformviewer`
	
	4. Within this directory, rename appCanvas.xml to appCanvas_IE.xml
	
	5. Within this directory, rename appCanvas_Firefox.xml to appCanvas.xml
	
	6. Restart TIBCO Business Studio

1-8Y0IIN (FORM-1000)	**Summary:** In Firefox, horizontal panes that do not inherit Font properties may not display properly. In this case, the background color for the pane will not cover the entire height of the pane, and panes below the horizontal pane may cover up part of the horizontal pane. **Workaround:** Specify a fixed height for the horizontal pane.
1-8NZYJR (FORM-653)	**Summary:** When setting the background color of a control, the design time sets the color of the entire control, including the label. The runtime sets the background color only on the field itself. The runtime is applying the color incorrectly. **Workaround:** None.

Defect #	Summary/Workaround
1-8MWS6Q (FORM-578)	**Summary:** Panes that are direct children of the form object do not make use of the label position set in the Child Labels section of the Form. By default, root panes have their labels displayed in the top position. **Workaround:** Add a root vertical pane to the Form, uncheck the label visibility for that pane, and nest remaining panes within that single root pane. The label position for all child panes can then be set within the single root pane.