IBM FileNet Business Process Framework
Version 4.1

Explorer Handbook

GC31-5515-06

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Note
Before using this information and the product it supports, read the information in "Notices" on page 61.

This edition applies to version 4.1.0 of IBM FileNet Business Process Framework (product number 5724-R75) and to all subsequent releases and modifications until otherwise indicated in new editions.

Contents

Revision log

Date	Revision
06/02/2010	Restored recommendations for handling LDAP accounts for new users in the Configuring Business Process Framework user accounts topic.
04/01/2010	Updated the topic Configuring the environment information > Configuring system-wide settings > Object store folder to file Case objects in response to APAR PJ37173.
09/14/2009	Revised document to incorporate technical changes and to improve readability.

Business Process Framework overview

IBM® FileNet® Business Process Framework (BPF) provides a highly configurable framework that you use to develop business process management applications. Business Process Framework Explorer is a Microsoft® Management Console (MMC) snap-in that you use to configure this framework.

TIP Before you begin configuring your Business Process Framework Web application, install the Business Process Framework software, including Business Process Framework Explorer. In addition, ensure that the supporting Content Engine and Process Engine objects are in place. For more information, see the *IBM FileNet Business Process Framework Installation Guide*.

Business Process Framework components

The following table identifies the components that make up the Business Process Framework environment. Except for the Business Process Framework Metastore, you use Business Process Framework Explorer to configure these components.

Component	Description
Application field	A single-value field that is available in your Business Process Framework Web application. Typically, an application field contains information relevant to a case such as the case ID, the date received, the priority, and the approver.
Business Process Framework Metastore	The database that stores the Business Process Framework configuration information that you specify for users, roles, inbaskets, application fields, case types, tools, and so on. The Metastore is created when you install Business Process Framework and cannot be configured by using Business Process Framework Explorer.
Business Process Framework role	A role that you configure in Business Process Framework Explorer to grant users access rights to one or more inbaskets. For example, you might configure roles such as the following: • Indexer: This role represents users who collect the information for cases and then create and index the cases. • Reviewer: This role represents users who review cases and then return the cases for additional information or forward the cases for approval. • Approver: This role represents users who approve or reject cases.
Business Process Framework Web application	A customizable and configurable portal provided by Business Process Framework for your Business Process Management applications. The Business Process Framework Web application, which you use Business Process Framework Explorer to configure, is hosted within a Java™ application server environment. The Business Process Framework Web application provides user interfaces for presenting inbaskets and cases to users. You can customize the layout of these user interfaces by using the Business Process Framework Layout Designer. For more information about this tool, see the *IBM FileNet Business Process Framework Web Application User Interface Guide*.

Component	Description
Case	An object that you configure to represent a business object or transaction. For example, in an insurance company a case might represent a claim. In a retail company, a case might represent a customer order. A case corresponds to one or more work objects in the workflow roster for which Process Engine handles the work object routing. Each case is represented by an instance of a custom object class in a Content Engine repository.
Case data dictionary	The set of case fields that are available for use with a specific case type.
Case field	An application field that you select to be used for a specific case type.
Case type	The superclass for a specific type of case object. The case type defines: • The process maps that determine the workflow processes into which the cases are opened • The fields that are used for the cases For example, an insurance company might need a different case type for automotive claims than the case type used for casualty claims.
Inbasket	A collection of cases at a particular step in the workflow that are assigned to a specific user role.

Configuration task order

Configuring a Business Process Framework Web application is an iterative process. You define the initial configuration, test your application, and then refine the configuration as needed. The following list identifies the primary configuration tasks and the general order in which you perform these tasks:

1. Configure access information for the users of your Business Process Framework Web application:
    a. Configure the companies and, optionally, departments to which users are assigned.
    b. Configure Business Process Framework roles such as Supervisor, Reviewer, and Indexer.
    c. Configure role-based user accounts that enable Business Process Framework to create user accounts automatically the first time that users log on to the Business Process Framework Web application under a given role.
2. Configure the behavior and general appearance of the Business Process Framework Web application:
    a. Configure the environment information for the Business Process Framework Web application.
    b. Import the initial workflow configuration from Process Engine and configure the queues, steps, and responses for use in Business Process Framework. Optionally, create actions, reasons, and queue filters.
    c. Configure the case types, which are the classes that serve as templates for the cases processed through your Business Process Framework Web application.
    d. Configure the case fields, which are the fields that are used to collect and display the information required to process a case.

e. Configure the tools that are to be available to users for creating cases, adding attachments, and so on.

f. Configure the inbaskets that are to be used to present cases to users.

3. Export and import the Business Process Framework configuration information as part of deploying your Business Process Framework Web application.

IMPORTANT Changes to the Business Process Framework configuration on a production system can have a substantial and possibly negative impact on system operation. Always test the changes before you make them available in your production environment.

Starting Business Process Framework Explorer

To start Business Process Framework Explorer:

1. Click **Start** > **All Programs** > **FileNet Business Process Framework** > **Business Process Framework Explorer**.

2. Log on by using your Business Process Framework Metastore user name and password.

   The Business Process Framework Explorer logon uses your DB2, Oracle, or SQL native user credentials for logon.

   TIP When you install Business Process Framework Explorer, the software provides a default user name and password, both set to Bp8. For security, ask your database administrator to reset this user name and password to site-specific values.

Configuring user access information

To access your Business Process Framework Web application, users must have Business Process Framework user accounts. These user accounts identify the Business Process Framework roles to which the users are assigned. Business Process Framework grants access rights to the various objects within your application based on the Business Process Framework user roles.

Configuring companies and departments

You can configure companies and departments to provide a hierarchical structure for categorizing users in your Business Process Framework Web application. However, Business Process Framework does not provide any predefined functionality for using companies and departments. You must write custom code to implement any use of company and department information.

Configuring companies

You must configure at least one company. If you use a hierarchical structure for categorizing users in the Business Process Framework Web application, you can configure additional companies to represent the primary divisions in the structure.

To configure a company:

1. In the console tree, expand the **User And Access Information** node.

2. Click **Companies.**

3. Click **Action** > **New** > **Company** to open the Company Properties window.

4. In the **Code** field, enter the code to be assigned to this company.

   You define this code to meet the needs of your enterprise. For example, you might assign a code that represents the cost center for the company or a code that represents the short name for the company.

5. In the **Description** field, enter the name that is to be displayed for this company in the Business Process Framework Web application.
6. Optional: Select the default case type for the company from the **Case type** list.

Configuring departments (optional)

If you use a hierarchical structure for categorizing users in the Business Process Framework Web application, you can configure departments to represent the secondary divisions in the structure.

To configure a department:

1. In the console tree, expand the **User And Access Information** node.
2. Click **Departments**.
3. Click **Action** > **New** > **Department** to open the Department Properties window.
4. In the Code field, enter the code to be assigned this department.

   You define this code to meet the needs of your enterprise. For example, you might assign a code that represents the cost center for the department or a code that represents the short name for the department.
5. In the **Name** field, enter the name that is to be displayed for this department in the Business Process Framework Web application.
6. From the Reports to list, select the department to which this department reports.

   You can use this setting to implement hierarchical departmental relationships.

Configuring Business Process Framework roles

You create Business Process Framework roles to authorize users within your Business Process Framework Web application.

Authentication and authorization

Users log on to the Business Process Framework Web application by using their LDAP user names and passwords. Business Process Framework then uses this LDAP information to authenticate the users' access to the Business Process Framework Web application.

Within the Business Process Framework Web application, Business Process Framework uses Business Process Framework roles to grant users access to specific inbaskets and cases. Business Process Framework roles determine the overall behavior of the Business Process Framework Web application within an inbasket. For example, roles can determine which actions and responses are presented, which fields are visible or editable, and so on. In addition, you assign specific roles to the custom layouts that you create with Business Process Framework Layout Designer.

You assign Business Process Framework roles by using one of the following methods:

- LDAP group integration: Associate an LDAP group with a Business Process Framework role when you create that role in Business Process Framework Explorer. Users who are members of that LDAP group are assigned to the Business Process Framework role.
- Workplace access roles: Associate a FileNet P8 Workplace access role with a Business Process Framework role when you create that role in Business Process Framework Explorer. Any LDAP user or group that is assigned to that FileNet P8 Workplace access role has access to the associated Business Process Framework role.

  Important: If you use Workplace access roles to perform authorization, users that have Full Control access to the bootstrap Content Engine object store have access to all Business Process Framework roles. The privileges that are associated with Full Control access override any limits

that are set by the Workplace access roles. This feature prevents you from excluding an object store super user from a given Business Process Framework role.

The method that you use to assign roles is determined by two systemwide settings: Enable LDAP group integration and Enable Access Roles. The following table identifies the values you specify for these settings to select the role assignment method that you want to use:

Role Assignment Method	LDAP group integration value	Enable Access Roles value
LDAP group integration	True	False
Workplace access roles	True	True

Tip: If your LDAP directory is large or if it contains many levels of nested groups and folders, use the Workplace access roles method to assign Business Process Framework roles. Using the Workplace access roles method can improve performance.

For information about system-wide settings, see System-wide Settings.

Configuring a Business Process Framework role

To create and configure a Business Process Framework role:

1. In the console tree, expand the **User And Access Information** node.
2. Click **Roles**.
3. Click **Action** > **New** > **Role** to open the Role Properties window
4. In the **Role name** field, enter the name assigned to this role.

   TIP For simplicity, use the same name for this Business Process Framework role as the LDAP group or the Workplace access role to which the role is mapped. (See step 5.)
5. In the **Access name** field, enter one of the following values based on how you enabled access in the system-wide settings:

   - If you are implementing access to Business Process Framework based on Workplace access roles, enter the name of the Workplace access role.
   - If you are implementing access to Business Process Framework based on LDAP group membership, enter the name of the LDAP group.

   For more information about defining access in Business Process Framework, see Authentication and authorization.

   TIP You must enter a value in this field. If you do not enter a value, the role is invalid and cannot be used to log on to Business Process Framework.
6. In the **Description** field, enter the name that is to be displayed for this role in the Business Process Framework Web application.
7. In the **Standard Layout** field, enter the name of the layout object to be used in the Business Process Framework Web application when this role is active.

   Leave this field blank to use the default layout object.

   For information about layout objects, see the *IBM FileNet Business Process Framework Web Application User Interface Guide*.

8. In the **Default tab** field, enter the name of the tab that will be displayed when users assigned to this role open cases. For information about the tabs that are available, see Configuring tabs for the case user interface.
9. Select the **Display case count** check box to display the number of cases to be processed next to the inbasket name in the Business Process Framework Web application.

Restriction: The CaseQuery Layout field is not used and is disabled.

Configuring inbaskets for a role

Business Process Framework roles determine which inbaskets users can access. You identify the inbaskets that are accessible for a Business Process Framework role by adding the role to the inbasket configuration. For more information, see Creating and configuring inbaskets.

When you add a role to an inbasket, Business Process Framework adds that inbasket to the Inbasket List field in the Role Properties window. The order in which the inbaskets are listed in this field is the order in which they are displayed to users in the Business Process Framework Web application.

To change the order in which inbaskets are displayed in the Business Process Framework Web application:

1. In the console tree, expand the **User And Access Information** node.
2. Expand the **Roles** node and click the role for which you want to reorder inbaskets.
3. Click **Action** > **Properties** to open the Role Properties window.
4. In the Inbasket list, click an inbasket.
5. Click **First**, **Up**, **Down**, or **Last** to move the inbasket in the list.

Restriction: You cannot remove inbaskets in the Role Properties window. Instead, you must remove the role from the inbasket configuration.

Configuring Business Process Framework user accounts

Instead of configuring a user account for each user, you must create a role-based user account for each Business Process Framework role required for your application. These accounts act as templates for new users. After authenticating a user, Business Process Framework searches the Business Process Framework Metastore for the user account that identifies the Business Process Framework roles to which the user is assigned. If an LDAP account exists, Business Process Framework logs the user on using the default Business Process Framework role. If no LDAP account exists for the user, Business Process Framework prompts the user for their role and creates a user account based on the corresponding role-based user account.

For efficiency, create LDAP groups and users first. Then define your Business Process Framework roles and create the role-based user account template for each role. For clarity, consider naming your LDAP groups and Business Process Framework roles the same name.

Business Process Framework stores the user account information in the USERS table in the Business Process Framework Metastore. Passwords are not maintained in the BPF Metastore.

Restriction: A user must not log on to Business Process Framework more than once at the same time. Various unexpected results can occur. A user also must not log on to multiple Business Process Framework applications on the same workstation at the same time. An incorrect browser window can result.

Configuring the fields for custom user attributes (optional)

You can define custom attributes for user accounts if required by your application. The values for these custom user attributes are entered on the General tab of the User Properties window and are stored in

the Business Process Framework Metastore. You can use Business Process Framework Explorer to configure the labels and the field width for the custom user attributes.

TIP For information about implementing custom attributes, see the *IBM FileNet Business Process Framework Developer Guide*.

To configure the labels and the field width for custom user attributes:

1. In the console tree, expand the **Application Settings** node and click Business Process Framework Explorer.
2. In the detail pane, right-click the user attribute that you want to configure and click **Properties**.
3. In the text box, enter the label for the attribute and the width of the field required for the attribute value. Use the following format to enter the label and width:

   ```
   label^n
   ```

   Where *label* is the new label and *n* is the field width. For example, to configure a field called "Employee number" that is six characters long, enter the following value:

   ```
   Employee number^6
   ```

Configuring a role-based user account

To create and configure a role-based user account:

1. In the console tree, expand the **User And Access Information** node.
2. Click **Users**.
3. Click **New** > **User** to open the User Properties window.
4. Click the **General** tab.
5. In the **Logon name** field, enter the name of the Business Process Framework role to which this role-based user account corresponds.

   Business Process Framework replaces this value with the user's logon name when it creates a user account.

   TIP The logon name is not case sensitive. To make it easier to differentiate between a role and the corresponding role-based user account, use an initial capital letter for the role name and all lowercase letters for the user account. For example, you might use Supervisor for the role and supervisor for the user account.
6. In the **Full name** field, enter a descriptive name for this role-based user account. For example, you might enter the following name for the Supervisor role: Supervisor profile user.

   Business Process Framework replaces this value with the user's common name when it creates a user account. However, because naming conventions vary for different LDAP directory services, you might need to modify this field for individual users. For more information, see Editing user accounts.
7. Clear the **Account is active** check box to make the role-based user account inactive in the Business Process Framework Web application.

   Business Process Framework selects this check box to make the new account active when it creates a user account.
8. From the **Default company** list, select the company to which members of this role are to be assigned by default.
9. From the **Default role** list, select the role to which this role-based user account corresponds.
10. Optional: In the Attr1 through Attr9 fields, enter values as required for any custom user attributes defined by your enterprise.

These attributes can be used for filters or pick lists. You can provide custom code that uses JDBC to retrieve the value of these attributes in Business Process Framework Explorer. For more information, see the *IBM FileNet Business Process Framework Developer Guide*.

11. Click **Apply** and **OK** to save the role-based user account.

You do not need to complete the **Roles**, **Departments**, or **Companies** tabs for a role-based user account.

Managing user accounts

Although Business Process Framework automatically creates user accounts, you might need to edit or disable a user account. For example, you might edit a user account to specify the full name of the use, which Business Process Framework cannot determine. You might disable a user account when a user leaves the company and you want to prevent anyone from using that account to access Business Process Framework.

Editing a user account

To edit a user account:

1. In the console tree, expand the **User And Access Information** node and then expand the **Users** node.
2. Click the user account you want to edit.
3. Click **Action** > **Properties** to open the User Properties window.
4. Edit the account properties as required.

   TIP Do not change the Logon Name value. This value corresponds to the user's name as it is defined in the LDAP.

Disabling a user account

To prevent a user from using Business Process Framework, you can disable that user's Business Process Framework user account. Disabling the account instead of deleting it enables Business Process Framework to retain the user information for traceability and archival purposes. Business Process Framework continues to reference disabled and deleted user accounts in the case audit log.

TIP Business Process Framework does not check to determine whether a user still has work assigned. Therefore, before you disable a user account, ensure that all work assigned to that user is completed or reassigned to another user.

To disable a user account:

1. In the console tree, expand the **User And Access Information** node and then expand the **Users** node.
2. Click the user account you want to disable.
3. Click **Action** > **Properties** to open the User Properties window.
4. On the **General** tab, clear the **Account is active** check box.

Configuring the Business Process Framework Web application

You use Business Process Framework Explorer to configure the general behavior and appearance of your Business Process Framework Web application. To configure the Business Process Framework Web application, do these tasks:

1. Configuring the environment information
2. Configuring the workflow

3. Configuring the case types
4. Configuring case fields
5. Configuring tools
6. Configuring inbaskets

Configuring the environment information

You set the options under the Application Settings node in Business Process Framework Explorer to control the global configuration settings of Business Process Framework. Business Process Framework caches these settings in your Business Process Framework Web application when you load the application.

The settings are divided into three categories:

- System-wide Settings
- XML Message Logging
- Web Application

Configuring system-wide settings

You use the System-wide Settings options to configure key systemwide settings for the Business Process Framework Web application and Task Manager.

To configure the System-wide Settings options:

1. In the console tree, expand the **Application Settings** node and click **System-wide Settings**.
2. Right-click the option that you want to configure and click **Properties** to open the Properties window.

Workplace preference name

If you are using Workplace access roles for authorization, set this option to the *preference name* portion of the Workplace site preferences file name.

Business Process Framework accesses the Workplace access roles from the Workplace site preferences file that is configured for your application. The file name is "Site Preferences for *preference name*," where *preference name* is an identifier for a set of preferences. Site preferences files are saved in the Preferences folder, which is not visible to your application users.

BPF Case ID Manager reservation size

Set this option to the number of case IDs that Business Process Framework is to reserve in cache. By default, this option is set to 100.

Business Process Framework assigns a unique ID to each case. By reserving a range of IDs in cache, you can reduce the load on Content Engine and improve response time. When the application is shut down, unused case IDs are removed from the cache. These numbers are not returned to the pool of case IDs.

TIP In a production environment, set this option to 100 or more. In a development environment, set this option to 10 or fewer.

Object store folder to file Case objects

Set this option to the name of the object store folder in which Business Process Framework is to file new case objects, attachments, and audit custom objects. Enter a forward slash (/) as the first character of the folder name.

TIP Setting this option is useful in a development environment because it ensures that Business Process Framework places all case-related objects in a single location. However, to avoid performance issues, do not set this option in a production environment.

TIP End users must have permission to modify the object store folder in which case objects are filed.

Default Content Engine Object Store Name

Set this option to the symbolic name of the object store that Business Process Framework is to use as the default object store.

Business Process Framework uses the default object store to store case objects, audit logs, and attachment objects when the case type does not specify an object store. Business Process Framework also searches the default object store first if the case type of the object to be located is unknown.

Enable LDAP group integration

Set this option to **True** if your Business Process Framework Web application is to authorize users' access to objects based on LDAP group membership. By default, this option is set to **True**.

Business Process Framework uses this option and the Enable Access Roles to determine how user authorization is performed. If you set this option to **True** and the Enable Access Roles option to **False**, Business Process Framework uses LDAP group membership to authorize users. If you set both this option and the Enable Access Roles option to **True**, Business Process Framework uses membership in Workplace access roles to authorize users.

If you set this option to **False**, Business Process Framework authorizes users based only on their Business Process Framework roles. This method does not provide a secure environment. You can use this method in a development environment, but do not use it in a production environment.

Enable BPF Metadata cache

Set this option to **True** if configuration information for your Business Process Framework Web application and the Business Process Framework Task Manager is to be retained in cache. Set this option to **False** to run every request for configuration information on the Business Process Framework Metastore database.

Business Process Framework configuration is data-driven and therefore can require a significant number of transactions on the Business Process Framework Metastore at run time. In a production environment, you can enable the Business Process Framework Metadata cache to minimize the number of transactions and improve response time.

TIP When you enable Metadata Cache, you can reset the cache either by restarting the Business Process Framework Web Application or from the http://$server:$port/bpf/Bp8Admin.jsp page.

Bootstrap Content Engine Object Store Name

Set this option to the display name of the object store that contains the Workplace access roles, the Case ID generation object (Bp8Settings), Business Process Framework stored searches, and the Business Process Framework site preferences.

Workflow Roster Name

Set this option to the name of the workflow roster that stores information about the workflows for your application. By default, this option is set to DefaultRoster.

When users open cases from a search window, Business Process Framework uses the workflow roster to determine where the active work objects for the cases are located in the workflow process.

Enable Access Roles

Set this option and the Enable LDAP group integration option to **True** if your Business Process Framework Web application is to authorize users' access to objects based on Workplace access roles.

Business Process Framework uses this option and the Enable LDAP group integration option to determine how user authorization is performed. If you set both this option and the Enable LDAP group integration option to **True**, Business Process Framework uses membership in Workplace access roles to authorize users. If you set this option to **False** and the Enable LDAP group integration option to **True**, Business Process Framework uses LDAP group membership to authorize users.

This option is ignored if the Enable LDAP group integration option is set to **False**.

IMPORTANT If you use Workplace access roles to perform authorization, users that have Full Control access to the Bootstrap Content Engine object store, in which Workplace access roles are stored, have access to all Business Process Framework roles. The privileges that are associated with Full Control access override any limits that are set by the Workplace access roles and prevent you from excluding an object store super user from a given Business Process Framework role.

Process Engine Connection Point

Set this option to the connection point name that identifies the isolated region in the workflow database that contains the transferred workflows and the data for all active workflows that are used by your Business Process Framework Web application.

Configuring XML message logging

You use the XML message logging options to control logging of client and server XML message traffic. When you enable XML message logging, the messages are stored in XML files in the `…/WEB-INF/logs/` folder on the Web server. The files are named by using the following format:

```
$userName_functionName_request.xml
```

```
$userName_functionName_response.xml
```

To configure the XML message logging:

1. In the console tree, expand the **Application Settings** node and click **XML Message Logging**.
2. Right-click each of the following options, click **Properties** to open the Properties window, and set the value as indicated:

Option	Settings		
Enable XML action messages logging	True	True	False
Create separate log file for each action	True	False	True/False
Append to the existing log file	True/False	True/False	True/False
Result	A separate XML file is created for each message	A separate XML file is created for each action. New messages overwrite the contents of the file.	No XML files are created

Configuring the Web application

You configure the Web Application options to control the behavior of your Business Process Framework Web application.

To configure the Web Application options:

1. In the console tree, expand the **Application Settings** node and click **Web Application**.
2. Right-click the option that you want to configure and click **Properties** to open the Properties window.

Create Case Tool – Prevent from creating Cases without attachments

Set this option to **True** to require users to attach documents to new cases that are created by using the Create Case tool. Set this option to **False** to enable users to create new cases without attaching documents.

Copy Audit Log Entries – Applicable for merge and split

Set this option to **True** if:

- The merge_case tool is to copy the audit log entries of the case that will be discarded case into the audit log of the case that will continue.

Set this option to **False** if the merge_case tool is not to copy the audit log entries into the audit log of the case that will continue.

Delete Discarded Custom Object – Applicable for merge

Set this option to **True** if the merge_case tool is to delete the custom object that represents the discarded case from the object store. Set this option to **False** if the merge_case tool is to retain the custom object representing the discarded case.

Whether Action Dialog Window can be resizable

Set this option to **True** to enable users to resize the window that displays the reasons associated with an action.

Whether Action Dialog Window can be scrollable

Set this option to **True** to enable users to scroll the window that displays the reasons associated with an action.

Action Dialog Window Dimensions in px

Set this option to the height and width of the Action window in pixels. Use the following format for the value:

```
<pixels>*<pixels>
```

By default, this option is set to 350*350.

Disable “Future date selected” message

Set this option to **True** to enable users to enter dates that are in the future without Business Process Framework displaying a confirmation prompt. Set this option to **False** to prompt users to confirm future dates. By default, this option is set to **True**.

Enable Case attachments list display

Set this option to **True** if the case attachments list can be displayed on the following tabs in the Business Process Framework Web application: Attachment, Audit, Case, eForms, Table, and custom implemented.

Set this option to **False** if the case attachments list is not to be displayed on these tabs. By default, this option is set to **True**.

The Enable Case attachments list display option controls the display of the case attachments list for the Business Process Framework Web application. Two other settings also control the display of the case attachments list:

- The Attachment Visibility option controls the display of the case attachments list for an inbasket.
- The _showatt parameter that is configured for custom tabs controls the display of the case attachments list for a tab.

Standard tabs: Audit and Case

If the Enable Case attachments list display is set to **False**, the case attachments list is not displayed on any tab regardless of the values of the Attachment Visibility option or the _showatt parameter.

If the Enable Case attachments list display is set to **True**, the case attachments list is displayed as follows.

Attachment Visibility option value	Case attachments list displayed on Audit and Case tabs?
Yes	Yes
No	No
Select	Yes

Custom tabs: Attachment, eForms, Table, and custom implemented

If the Enable Case attachments list display is set to **False**, the case attachments list is not displayed on any tab regardless of the values of the Attachment Visibility option or the _showatt parameter.

If the Enable Case attachments list display is set to **True**, the case attachments list is displayed as follows.

Attachment Visibility option value	_showatt parameter value	Case attachments list displayed on the custom tab?
Yes or Select	0	No
	1	Yes
	undefined	Yes
No	0	No
	1	No
	undefined	No

Case attachments list - Adhoc search definition

Set this option to the SQL statement that is to be used to retrieve the objects to be displayed in the case attachments list.

By default, this option contains an SQL statement that displays document, folder, and case objects in the case attachment list. (Case objects are not displayed in the Attachments page or the Document Viewer.)

You can enter the following SQL statement to display only document and folder attachments:

```
select a.Bp8ObjectRepositoryID as ObjectStoreId, a.Bp8ObjectGUID as ObjectGUID,
a.Bp8VersionSeries as DocVersionSeries, a.Bp8ObjectID as Id, a.Bp8ObjectType as ObjectType, a.Id
as AttachID, d.DocumentTitle, d.VersionSeries, d.VersionStatus, d.MajorVersionNumber,
d.MinorVersionNumber, d.MimeType, d.isReserved, d.IsVersioningEnabled, f.FolderName from
((Bp8Attachment a left outer join Document d ON d.VersionSeries = a.Bp8VersionSeries) left outer
join Folder f ON f.Id = a.Bp8ObjectGUID) where a.Bp8CaseID = ^1 and ^2 order by a.Bp8ObjectType
desc, f.FolderName asc, d.DocumentTitle asc
```

Business Process Framework uses this SQL statement to obtain a list of case attachments from the object store in which the case object is stored. After the search results are returned, the system retrieves the detailed information that is displayed for each attachment from the object store in which the attachment is stored. For example, if an attached document does not reside in the same object store as the case object, this query returns a null value for the d.DocumentTitle attribute. However, Business Process Framework retrieves the document title from the object store in which the attached document is stored and then displays this value in the attachment panel.

A null value that is returned by the query can affect the order in which attachments are listed. For example, assume that the SQL statement includes the following **order by** clause:

```
order by a.Bp8ObjectType desc, f.FolderName asc, d.DocumentTitle asc
```

Business Process Framework sorts the returned objects and lists them in the attachment panel as follows:

1. a.Bp8ObjectType desc: This element causes all attachments to be sorted first by object type regardless of where they are stored. The system then lists the attachments in the following order:
    a. Custom objects
    b. Folders
    c. Documents
2. f.FolderName asc: This element causes the attachments that are folders to be sorted by name regardless of where they are stored.
3. d.DocumentTitle asc: This element causes the attachments that are documents to be sorted by title. However, if an attached document is in a different object store than the case, the title initially is a null value. Documents with a null title appear first in the attachment list. Documents in the same object store as the case appear next in the list and are listed next in ascending order by title. Even after the system returns the document titles, the sort order is unchanged.

Attachments tab - columns definition

Set this option to the list of case properties that are to be displayed on the Attachments page. Enter the list by using the following format:

```
<CE property symbolic name1>:<display label1>, <CE property symbolic name2>:<display label3>
```

Example:

```
ReceivedDate:Received Date, AccountNumber:Account Number, Priority1:Priority
```

TIP In certain circumstances, a property value might not be displayed for a given attachment. For example, no value is displayed if:

- The property does not apply to the class from which the attachment object is instantiated.
- The property has a binary or object-type value that cannot be displayed in a Web page.

Attachments tab - Adhoc search definition

Set this option to an SQL statement that defines the rules for retrieving the list of case attachments to be displayed on the Attachments page.

By default, this option is set to the following value:

```
select a.Bp8ObjectRepositoryID as ObjectStoreId, a.Bp8ObjectGUID as ObjectGUID, a.Bp8ObjectClass
as ObjectClassID, a.Bp8VersionSeries as DocVersionSeries, a.Bp8ObjectID as Id, a.Bp8ObjectType as
ObjectType, a.Id as AttachID, f.FolderName, d.DocumentTitle, d.ReceivedDate, d.CompanyName,
d.ContractAmount, d.DocumentType, d.CasePriority, d.VersionSeries, d.VersionStatus,
d.MajorVersionNumber, d.MinorVersionNumber, d.MimeType, d.isReserved, d.IsVersioningEnabled from
(Bp8Attachment a left outer join Document d ON d.VersionSeries = a.Bp8VersionSeries) left outer
join Folder f ON f.Id = a.Bp8ObjectGUID where a.Bp8CaseID = ^1 and ^2 order by a.Bp8ObjectType
desc, f.FolderName asc, d.DocumentTitle asc
```

The **order by** clause in the default statement does not determine the order in which the case attachments are displayed in the Attachments page. Instead, the attachments are displayed in ascending order by title. Users can change the order in the Attachments page by clicking the arrow icon in the Title column.

Viewer documents list - Adhoc search definition

Set this option to an SQL statement that defines the rules for retrieving the list of case attachments to be displayed in the left pane of the Business Process Framework Document Viewer.

By default, this option is set to the following value:

```
select a.Bp8ObjectRepositoryID as ObjectStoreId, a.Bp8ObjectGUID as ObjectGUID, a.Bp8ObjectClass
as ObjectClassID, a.Bp8VersionSeries as DocVersionSeries, a.Bp8ObjectType as ObjectType, a.Id as
AttachID, a.Bp8ObjectID as Id, d.DocumentTitle, d.isReserved, d.IsVersioningEnabled ,
d.VersionSeries, d.VersionStatus, d.MajorVersionNumber, d.MinorVersionNumber, d.MimeType from
Bp8Attachment as a left outer join Document as d on d.VersionSeries = a.Bp8VersionSeries where
a.Bp8CaseID = ^1 and ^2 order by d.DocumentTitle asc
```

The **order by** clause in the default statement does not determine the order in which the case attachments are displayed in the Business Process Framework Document Viewer. Instead, the attachments are displayed in ascending order by title. Users can change the order in the Document Viewer by clicking the arrow icon in the Title column.

Troubleshooting - enable profiling (obsolete)

Obsolete: This option is no longer used by Business Process Framework.

Enable Case object security validation

Set this option to **True** to enable Content Engine security checking when users open cases. Enter **False** to disable Content Engine security checking when users open cases.

TIP Enabling the object-level Content Engine security checking adds system overhead when users open cases. Because Business Process Framework limits access to objects based on user roles, you might not need the added security checking.

Enable dynamic pick list caching

Set this option to **True** to cache the options for dynamic pick lists. Set the option to **False** to have Business Process Framework retrieve the pick list choices from the database every time the pick list is displayed. By default, this option is set to **True**.

TIP Enabling caching of the options for dynamic pick lists provides significant performance benefits. Therefore, do not set this option to **False** unless there is a specific need to do so.

Enable Versioning Support in attachment

Set this option to **True** to display the latest version of a document regardless of the version that was attached to a case. Set this option to **False** to display the version of the document that was attached to a case.

If the option is set to **True**, Business Process Framework provides a versioning menu for attachments. This menu contains the actions that are specific to versioning: Check Out, Cancel Check Out, Check In, and Quick CheckIn.

Disable Reason Comments field (obsolete)

Obsolete: This option is no longer used by Business Process Framework.

Image files location

Set this option to the name of the root folder that contains the image files for your Business Process Framework Web application. By default, this option is set to **img**.

Application name

Set this option to the name that is to appear in the title bar for your Business Process Framework Web application.

The name cannot include the following characters:

- Braces ({ or })
- Quotation mark (")
- Apostrophe (')

Inbasket page size

Set this option to the number of records that are to be displayed on a single page of the inbasket browse list.

TIP Business Process Framework requires server resources to fetch the result set that contains the records to be displayed on a page. For better performance in a production environment, configure this option to display fewer than 100 records on a page.

Use web server time zone for date field calculation

Set this option to **True** to use the Web server time zone to display date and time fields in your Business Process Framework Web application. Set this option to **False** to use the client time zone. By default, this option is set to **False** to match the default setting that is used in Workplace.

IMPORTANT Ensure that your Business Process Framework Web application uses the same date and time zone formats as Workplace.

Workplace Integration Servlet URL

Set this option to the URL of the FileNet P8 Web Application that is the integration servlet provider for your Business Process Framework Web application.

TIP You can set this option to specify different URLs for different languages as shown in the following example:

```
en|http://p8demo30:7001/Workplace/, de|http://p8demo30:7001/Workplace/
```

Use an asterisk (*) to indicate all languages as shown in the following example:

```
*|http://p8demo30:7001/Workplace/
```

Business Process Framework uses the default language to determine which URL is to be used.

Configuring the workflow

The Business Process Framework Web application helps you to manage your workflows. You configure queues, steps, queue filters, and responses in Business Process Framework Explorer to correspond to the queues, steps, queue filters, and responses in the workflow map.

Importing the initial workflow configuration

To help you synchronize your Business Process Framework configuration with a workflow map, you can use the Workflow Map Import wizard to import the lists of workflow queues, steps, and responses. The wizard reads the data from the PEP file that is created when you save a workflow definition document in Process Designer. The wizard cannot read the workflow definition document from an XPDL 2.0 file.

The wizard extracts the required data and stores it in the Business Process Framework Metastore as follows:

- The list of workflow queues is stored in **Workflow Configuration** > **Queues**.
- The list of workflow steps is stored in **Workflow Configuration** > **Steps**.
- The list of workflow responses is stored in **Workflow Configuration** > **Responses**.

Optionally, you can create an action for each response by using the Workflow Map Import wizard.

You can run the Workflow Map Import wizard whenever you modify the workflow definition. The wizard imports only the new and modified queues, steps, and responses.

Before you run the Workflow Map Import wizard, perform the following steps:

1. Back up the PEP file that contains the configuration that you want to import.
2. Ensure that an Open Database Connectivity (ODBC) data source exists in the ODBC Administrative Tools.

   If the ODBC data source does not exist, you must create it.

   If you are using a SQL Server database, the system automatically creates a data source in the ODBC Administrative Tools when you install Business Process Framework Explorer. The system does not create a data source if you are using a different database.
3. In the registry, make the following changes:

   a. Navigate to **SOFTWARE** > **FileNet Business Process Framework** > **Common** and change the value of the **DATABASE_CONNECTION_STRING** registry key to the user name and password that are used to log on to Business Process Framework Explorer in your ODBC DSN.

      For example, if you log on to Business Process Framework Explorer with the user name bp8 and password bp8, set the **DATABASE_CONNECTION_STRING** key to the following value:

      ```
      DSN=Bp8Metastore;UID=bp8;PWD=bp8
      ```

      IMPORTANT Typically, you use the Workflow Map Import wizard only in your development environment. Therefore, setting the user name and password in the registry key is not a security risk.

      After you import the workflow map, reset the **DATABASE_CONNECTION_STRING** registry key to the following value:

      ```
      DSN=Bp8Metastore;UID=;PWD=
      ```

   b. If you are using an Oracle or DB2 database, change the value of the **BP8_EXPLORER_DATABASE_CONNECTION_STRING** registry key to include the user name and password used to log on to Business Process Framework Explorer.

For example, if you log on to Business Process Framework Explorer with the user name bp8 and password bp8, set the **BP8_EXPLORER_DATABASE_CONNECTION_STRING** key to the following value:

```
Provider=Oracle Provider for OLE DB;Data Source=VWDB_ORA10SERVER;User ID=bp8;
Password=bp8
```

4. Place a copy of the wfdef4.dtd file in the folder that contains the workflow map PEP file that you are importing.

   The wfdef4.dtd file is in the folder \Program Files\FileNet\BPF\BPFExplorer\Utils.

To import the workflow configuration:

1. Navigate to the folder Program Files\FileNet\BPF\BPFExplorer\Utils and double-click the WFImport.exe file to start the Workflow Map Import Wizard.
2. On the Step 1 page, click **Next**.
3. In the Select local file window, navigate to the PEP file that is to be imported and click **Open**.
4. On the Step 2 page, select the workflow queues, steps, and responses that you want to import. The wizard lists only those objects that were added or modified since the last import.
5. On the Step 3 page, specify the following options:
   a. In the **Select workflow isolated region** list, select the number of the isolated region that contains the workflow definition. Ensure that you select the region number that corresponds to the Process Engine connection point for the workflow.

      TIP You can view the region number on the property sheet for the isolated region. To access the property sheet in Enterprise Manager, select **PE Region Ids** from the domain, right-click the isolated region, and select **Properties**.

   b. If your workflow definition uses case-insensitive views, select the **Use Case-Insensitive views in PE** check box.

   c. If you want Business Process Framework to create a separate action for each response that is imported, select the **Select this checkbox if you want to generate different Actions for each Response** check box.

      If you do not select this check box, Business Process Framework creates a single system action that is applied to all responses.
6. Click **Finish**.

Viewing and editing queues

After you run the Workflow Map Import Wizard, review the queues in Business Process Framework Explorer to ensure that they were imported correctly.

You can edit the display name of the queue or delete queues that you do not need in your Business Process Framework configuration.

To view or edit a queue:

1. In the console tree, expand the **Workflow Configuration** node and then expand the **Queues** node.
2. Click the queue that you want to view or edit.
3. Click **Action** > **Properties** to open the Queue Properties window.
4. Optional: In the **Name** field, modify the display name for this queue. (This name is case sensitive.)

5. Ensure that the **Object name** field correctly identifies the name of the database view that points to the queue.

   The object name uses the following format:

   `<database_user>.VWVQ<isolated_region>_<queue_name>`

   Example: `f_sw.VWVQ15_PROCESSOR`

Viewing steps

After you run the Workflow Map Import Wizard, review the steps in Business Process Framework Explorer to ensure that they were imported correctly. You can delete any steps that you do not need in your Business Process Framework configuration, but do not modify the step information.

To view a step:

1. In the console tree, expand the **Workflow Configuration** node and then expand the **Steps** node.
2. Click the step that you want to view.
3. Click **Action** > **Properties** to open the Step Properties window.

   The name of the step in Business Process Framework must match the name of the step on the process map. Do not change the step name in the Step Properties window. If you need to change the name, change it in the process map and import the updated workflow.

Viewing and editing responses

After you run the Workflow Map Import Wizard, review the queues in Business Process Framework Explorer to ensure that they were imported correctly. You can also edit the name of the queue or delete queues that you do not need in your Business Process Framework configuration.

To view or edit a queue:

4. In the console tree, expand the **Workflow Configuration** node and then expand the **Responses** node.
5. Click the response that you want to view or edit.
6. Click **Action** > **Properties** to open the Response Properties window.
7. Ensure that the **Name** field correctly identifies the name of the response as it is defined in the workflow definition. Do not change this value.
8. Optional: Modify the text in the **Display label** field. Business Process Framework displays this text for the response in the Business Process Framework Web application.
9. Optional: In the **Hotkey** field, enter an alphabetic or numeric character to be used as in the hot key sequence to select this response in the Business Process Framework Web application.
10. Optional: Clear the **Enable** check box to prevent this response from being displayed in the Business Process Framework Web application.

    TIP The **System** check box does not perform any function.

11. In the **Actions** field, ensure that the correct action is listed for this response. If necessary, select a different option from the list.

    The action specifies the text that is recorded in the audit log when the user selects this response. For more information about actions, see Creating and editing actions.

Creating and editing actions

By default, Business Process Framework records the response name in the audit log when a user selects the response. An action can provide a more descriptive log entry for a response. For example, you might create an action such as “Invoice Approval Complete” to be recorded instead of the response name “Complete.”

You can associate an action with a response in the following ways:

- Create an action in Business Process Framework Explorer and associate it with a response.
- Create a default action for each response when you import the workflow configuration. The default action is identical to the response name. Optionally, you can edit the default action to provide more descriptive text.

To create an action and associate it with a response:

1. In the console tree, expand the **Miscellaneous** node.
2. Click the **Actions** node.
3. Click **Action** > **New** > **Action** to open the Action Properties window.
4. In the **Name** field, enter the text that is to be recorded in the audit log for this action.
5. Optional: In the **Description** field, enter a description for the action. Business Process Framework displays this description in the **Action** list on the Response Properties window.
6. In the console tree, expand the **Workflow Configuration** node and then expand the **Responses** node.
7. Click the response that you want to view or edit.
8. Click **Action** > **Properties** to open the Response Properties window.
9. From the Action list, select the action to be associated with the response.

TIP You can associate a single action with multiple responses. However, associating an action with only one response provides more precise information for reporting purposes.

Creating reasons

Reasons provide additional details about why a user selected a particular response. You associate reasons with a response as part of the inbasket configuration. For example, you might associate reasons such as “Supporting documentation not submitted” and “Invalid policy information” with the “Claim Denied” response.

When a user selects a response, Business Process Framework prompts the user to select the appropriate reason. Business Process Framework then records the selected reason and the response or action text in the audit log.

To create a reason and associate it with a response:

1. In the console tree, expand the **Miscellaneous** node.
2. Click the **Reasons** node.
3. Click **Action** > **New** > **Reason** to open the Reason Properties window.
4. In the **Reason** field, enter the text that Business Process Framework is to display for this reason in the Business Process Framework Web application.
5. Select the **Active** check box to make this reason visible in the Business Process Framework Web application.

   If you clear this check box, the action becomes inactive and is no longer visible in the Business Process Framework Web application.

You associate the reason with one or more responses for an inbasket. For more information, see Configuring responses for an inbasket.

Creating queue filters

By default, Business Process Framework displays all work items that are at the step with which an inbasket is associated. You can define a queue filter to limit the work items that are displayed. For example, you can define a queue filter that displays only work items that are unlocked or only work items that have a field set to a specified value.

You can also define queue filters that provide sort criteria for the work items in an inbasket. These queue filters provide sorting in addition to the primary sorting determined by the inbasket default sort column.

Business Process Framework provides the following predefined queue filters:

- Public inbasket filter: This filter displays all the work items that are at the step with which the inbasket is associated.
- Private inbasket filter: This filter displays only those work items that are assigned to specific workflow participants.

You can use these predefined filters as templates for defining custom filters.

You can configure queue filters to produce a wide range of behaviors. For example, you can configure a queue filter that excludes cases that are locked by other users from the display. This behavior is useful in inbaskets in which a user is automatically assigned the next case in the queue. To achieve this behavior, add the following statement to the WHERE clause:

```
(F_LockedUser = %USERID% or F_LockedUser = 0)
```

In inbaskets in which a user is automatically assigned the next case in the queue, users sometimes simply save and close cases on which they do not want to work. This action typically resets the fields that determine the order of the cases in the browse list. You can configure a queue filter to prevent users from bypassing cases. To prevent these fields from being reset, replace the F_EnqueueTime and F_Unique_Id columns in the ORDER BY clause with fields such as F_CreateTime and Bp8CaseID that do not change when a case is saved.

To create a queue filter:

1. In the console tree, expand the **Workflow Configuration** node.
2. Click the **Queue Filters** node.
3. Click **Action** > **New** > **Filter**.
4. In the Select Template for the New Filter window, select the template you want to use for this queue filter or select **No template** if you do not want to use a template.

   TIP To configure a template to use for queue filters, add the filter to the APPLICATION_SETTINGS table in the Business Process Framework Metastore. You must name the template `FilterTemplateXX`, where XX is a unique number for the template. For example, you might name the template FilterTemplate03.
5. In the **Name** field, enter text a description for this filter.
6. In the **Display label** field, enter the label that Business Process Framework is to display for this filter in the Business Process Framework Web application.
7. Click **Edit Query** and click **Yes** when prompted to modify the queue filter query definition.
8. In the Modify Queue Filter Query window, enter the query to be used to retrieve work items from the queue.

   TIP If you are using a Microsoft SQL Server database for the Process Engine, specify the `WITH (NOLOCK)` option in the query before the `WHERE` clause to avoid deadlocks.

You can use the following macros in the SQL statement for this query.

Macro	Description
%FIELDLIST%	Retrieves the names of the workflow fields that are associated with the case fields in the inbasket browse list. **TIP** If the inbasket browse list includes workflow fields, you must include this macro in the queue filter.
%FILTERBY%	Retrieves the criteria that a user has selected for an inbasket filter that is defined for the current inbasket.
%ORDERBY%	Retrieves the default or user-selected sort order for the inbasket.
%PAGESIZE%	Retrieves the page size that is specified for the inbasket in Business Process Framework Explorer. To see the page size, click **Application settings** > **Web Application** > **Inbasket Page Size**.
%STEPNAME%	Retrieves the name of the workflow step that is associated with the inbasket.
%USERID%	Retrieves the workflow user ID for the active user.
%USERNAME%	Retrieves the name of the active user.
%VIEWNAME%	Retrieves the name of the workflow queue that is associated with the inbasket.

Example: Public inbasket filter

```
select %PAGESIZE% F_Wobnum, F_UniqueId, F_Locked, F_LockUser, F_BoundUser, intCaseStatusID,
9999 as queue_depth from %VIEWNAME% WHERE %FILTERBY% A_StepName='%STEPNAME%' order by
%ORDERBY%, F_EnqueueTime, F_UniqueId asc
```

Example: Personal inbasket filter that returns the number of records in the queue

```
select %PAGESIZE% F_Wobnum, F_UniqueId, F_Locked, F_Lockuser, F_BoundUser, intCaseStatusID,
(select count(*) from %VIEWNAME% where %FILTERBY% F_BoundUser = %USERID% and
A_StepName='%STEPNAME%' ) queue_depth  from %VIEWNAME%  WHERE %FILTERBY% F_BoundUser =
%USERID% and A_StepName='%STEPNAME%' order by %ORDERBY%, F_EnqueueTime, F_UniqueId asc
```

Configuring the case types

You define a case type to group cases that have the same process map and the same set of case fields. The case type identifies the workflow process into which a case entering the system is to be launched.

You can define multiple case types to support process maps that handle different transactional requirements or different workflows. For example, you might define one case type to handle accounts payable and another case type to handle payroll.

Configuring a case type

To create and configure a case type:

1. In the console tree, click the **Case Types** node.
2. Click **Action** > **New** > **Case Type** to open the New Case Type Properties window.
3. In the **Case Type name** field, enter a unique name for the new case type.

   IMPORTANT Do not modify the name of an existing case type. Several Business Process Framework components reference the case type name. Renaming a case type can have a negative effect on run-time performance.

4. In the **Workflow name** field, enter the name of the workflow process for which this case type is to be used. You must enter the name as it was defined for the workflow in Process Designer.
5. In the Content Engine Case Object area, identify the custom object class that contains the class definition for new case objects for this case type:
   a. Click the browse button for the **Object Store** field, enter your Content Engine credentials, and click **Log On**.

      TIP For the browse button to be enabled, you must install the COM compatibility layer (CCL). CCL provides Business Process Framework Explorer with access to the lists of object stores, classes, and properties. If you do not install CCL, you must type in the object store name. For information about installing CCL, see the *IBM FileNet P8 Platform Installation and Upgrade Guide*.

   b. From the **Object store** list, select the object store that contains the custom object class, and click **OK**.
   c. In the **Class Name** field, enter the symbolic name of the custom object class.
   d. Click the browse button for the **Favorite Field Name** field, click the field that is to be displayed in the status bar when an instance of this case type is opened, and click **OK**.

      Business Process Framework displays this field in the status bar on every tab in the case interface.
6. In the Content Engine Document area, identify the document class that represents documents that are attached to instances of this case type:
   a. Click the browse button for the **Object Store** field, enter your Content Engine credentials, and click **Log On**.
   b. From the **Object store** list, select the object store that contains the custom object class, and click **OK**.
   c. In the **Class Name** field, enter the symbolic name of the custom object class.
7. In the Content Engine Audit Log area, select the object store that is to contain the audit log for instances of this case type, and click **OK**.
   a. Click the browse button for the **Object Store** field, enter your Content Engine credentials, and click **Log On**.
   b. From the **Object store** list, select the object store that contains the custom object class, and click **OK**.
8. Select the **Display this Case Type in Create Case tool** check box to enable users to create cases of this type by using the Create Case tool. If you select this check box, Business Process Framework includes this case type in the Case Type list on the Create new Case window in the Business Process Framework Web application.
9. Select the **Enable feature "browse for local file" in Create Case tool** check box to provide a browse button for selecting attachments in the Create Case tool.

   If you do not select the **Enable feature "browse for local file" in Create Case tool** check box, you cannot attach documents when using the Create Case tool. Instead, users must use the Add Document tool to attach documents to existing cases.

Deleting a case type

You must remove all case fields that are associated with a case type before you can delete the case type.

To delete a case type:

1. In the console tree, click **Case Fields Configuration** > **Case Data Dictionary**.
2. Click **Action** > **Properties** to open the Case Data Dictionary Properties window.
3. From the **Case Type** list, select the case type that you want to delete.
4. Click **<–** to remove the case fields that are associated with the case type.
5. In the console tree, expand the **Case Types** node and click the case type that you want to delete.
6. Click **Actions** > **Delete**.

Configuring case fields

In Business Process Framework Explorer, application fields represent all the fields that are available to an application. To use these fields with your application, you must first associate the fields with a case type. The fields that are associated with a case type are called “case fields.”

A case field is a single-value field that can be displayed on the Case page in the case user interface. For example, you might define case fields such as Case ID, ReceivedDate, and Priority.

You can store a case field value in both Content Engine and Process Engine. You can also store a case field value as the property value of a document that is attached to a case.

Business Process Framework automatically provides a set of default case fields that are displayed on the Case page in the case user interface. These case fields, which are unique to a specific configuration, are created during the initial configuration.

Creating pick lists (optional)

You can create static and dynamic pick lists to define choices for application fields and inbasket filters. For a static pick list, you specify the value of each choice as you define the pick list. For a dynamic pick list, you create an SQL query that generates the set of choices at run time.

TIP Business Process Framework does not support parameterized pick lists. However, you can provide the same functionality by using the lookup interface. For more information about the lookup interface, see the *IBM FileNet Business Process Framework Developer Guide*.

Creating a static pick list

To create a static pick list:

1. In the console tree, expand the **Miscellaneous** node.
2. Click the **Pick Lists** node.
3. Click **Action** > **New** > **Pick list** to open the Pick List Properties window.
4. In the **Name** field, enter a name to be used to identify this pick list in Business Process Framework Explorer.
5. Optional: In the **Description** field, enter a description for the pick list.
6. Define each choice in the pick list:
    a. In the **Code** field, enter a unique abbreviation for the choice. For example, you might enter CA as the code if the choice is California.
    b. In the Description field, enter a description for this choice.

c. Optional: In the icon field, enter the name of the image file that contains the icon to be displayed for this choice. If you specify an image file, the icon is displayed in the pick list instead of the code or description.

   The Web Application setting Image File location identifies the location of the image files.

   When you use images, follow these guidelines:

   - Use an image that is 16 pixels x 16 pixels for the icon.
   - Deploy the image files as part of the Web Application. The image files must be available in the specified URL. For example, if you have an image file icon_1.gif that is located in the img folder and the URL of your BPF Web application is http://server_name:port/bpf, the image file must be available in the URL http://server_name:port/bpf/img/icon_1.gif.

d. Select the **Active** check box if this choice is to be included in the pick list at run time.

   Clear the **Active** check box if this choice is to be hidden at run time.

   If you clear the **Active** check box for an existing pick list, the choice remains visible if a user selected that choice before it was disabled.

TIP You associate a pick list with an application field when you configure the application field. For more information, see Creating application fields. You specify whether the description, code, or icon is displayed in the pick list when you add the case field to the browse list for an inbasket. For more information, see Configuring the browse list for an inbasket.

Creating a dynamic pick list

To create a dynamic pick list:

1. In the console tree, expand the **Miscellaneous** node.
2. Click the **Pick Lists** node.
3. Click **Action** > **New** > **Pick list** to open the Pick List Properties window.
4. In the **Name** field, enter a name for the pick list and in the **Description** field, enter a description for the pick list.
5. Click **Edit** to display the Picklist Advanced Configuration window.
6. Enter the SQL statement that generates the choices for the pick list.

   By default, Business Process Framework runs this SQL statement on tables in the Business Process Framework Metastore.

   Example:

```
SELECT   user_id as ID, name as code, full_name as DESCRIPTION, active as ACTIVE, name as
"Logon ID" FROM users   where Active = 1 and system <> 1 ORDER BY full_name
```

7. Click **OK**. The Pick List Properties window displays the choices generated by the SQL statement.

Creating application fields

Application fields represent all the fields that can be used with your application. As part of creating an application field, you configure properties such as name, data type, and format.

To use an application field, you must first associate the field with a case type. For more information, see Associating application fields with a case type.

To create and configure an application field:

1. In the console tree, expand the **Case Fields Configuration** node.
2. Click the **Application Fields** node.

3. Click **Action** > **New** > **Application Field** to open the New Field Properties window.
4. In the **Field name** field, enter a unique name for the new application field.

   IMPORTANT Do not modify the name of an existing application field. Several Business Process Framework components reference this name. Renaming an application field can have a negative effect on run-time performance.
5. In the **Display label** field, enter the name that Business Process Framework is to display for this application field in the Business Process Framework Web application.
6. From the **Data type** list, select the data type of this application field. Typically, you set the data type for the application to the same data type as the Content Engine or Process Engine property with which the field is associated.

   Select one of the following data types:

   - DATE: This data type corresponds to the DateTime data type in Content Engine and the Time data type in Process Engine. Business Process Framework displays a DATE field as a text box with a calendar control and provides date data validation.
   - BOOLEAN: This data type corresponds to the Boolean data type in Content Engine and Process Engine. Business Process Framework displays a BOOLEAN field as a check box.
   - MONEY: This data type corresponds to the Float data type in Content Engine and Process Engine. A MONEY value can be negative. Business Process Framework displays a MONEY field as a text box and validates the money data.

     Business Process Framework does not support a decimal (floating point) data type without performing money validation.
   - NUMERIC: This data type corresponds to the Integer data type in Content Engine and Process Engine. Business Process Framework displays a NUMERIC field as a text box and validates the integer data.
   - STRING: This data type corresponds to the String data type in Content Engine and Process Engine. Business Process Framework displays a STRING field as a text box. Business Process Framework does not validate STRING fields.
   - WORKFLOWGROUP: This data type defines a field that provides an interface to a workflow group. This data type does not correspond to any data type in Content Engine or Process Engine.

     You can configure a WORKFLOWGROUP field as a choice in a pick list. To do so, you first associate the WORKFLOWGROUP field with a Business Process Framework operation. This association configures the WORKFLOWGROUP field for use as a response in an inbasket.

     You cannot modify or save a WORKFLOWGROUP field.
7. Optional: Configure this field to be displayed as a combination box in the Business Process Framework Web application:

   a. From the **Pick list** field, select a pick list to be associated with this field. You cannot associate a pick list with a BOOLEAN or DATE application field.

      For information about defining pick lists, see Creating pick lists.

   b. Select the **Display pick list code** check box if Business Process Framework is to display the Code value that is assigned to each choice in the pick list.

   c. Select the **Display pick list description** check box if Business Process Framework is to display the description that is assigned to each choice in the pick list.
8. Optional: Select the **Lookup** check box to enable the lookup feature for this application field.

   If you assigned a pick list to this field, selecting the Lookup check box provides additional lookup features for the field in the Business Process Framework Web application. This feature enables users

to type text, including masking characters, into the combination box and then use this text to find the appropriate choice.

If you did not assign a pick list to this field, you can select the Lookup check box to provide support for external lookup capabilities. Configure the external lookup capabilities:

a. Optional: Select the **Disable lookup validation** check box to provide a button to perform validation on this field. If you do not select this check box, Business Process Framework validates the value when the use leaves the field.

   This field is enabled only if you select the **Lookup** check box and enter a value in the **Lookup service URL** field.

b. In the **Lookup service URL** field, enter the URL of the Web service or Java™ Server Page (JSP) that you configured for the lookup. For more information, see “Lookup extensions interface” in the *IBM FileNet Business Process Framework Developer Guide*.

9. Select the presentation attributes for the application field as applicable for the data type:

   a. In the **Maximum number of characters** field, enter the maximum characters that a user can enter into this field.

      The maximum character restriction applies to the following data types: DATE, MONEY, NUMERIC, STRING, WORKFLOWGROUP

   b. In the **Column width** field, enter the width of the field in characters. The width can be less than the maximum number of characters.

   c. In the **Number of rows** field, enter the height of the field in lines. Typically, the number of rows is set to 0.

      The number of rows applies to the following data types: MONEY, NUMERIC, STRING, WORKFLOWGROUP

      If you set the **Number of rows** field to a value greater than 0 for a STRING field, Business Process Framework displays a scrollable text box containing the specified number of lines in the Business Process Framework Web application.

10. Optional: If you are defining a DATE field, select one of the following options from the **Display format of DATE type field** list:

    - Display Both Date and Time: This option displays the field value using the format MM/DD/YYYY hh:mm:ss.
    - Display Date only: This option displays the field value using the format MM/DD/YYYY.

    If you do not select one of these options, the DATE value is displayed using the format MM/DD/YYYY hh:mm:ss unless the value of this field is set to midnight (MM/DD/YYYY 00:00:00). If the field is set to midnight, the value is displayed using the format MM/DD/YYYY.

11. In the **CE Property name** field, select the Content Engine property with which this application field is to be associated:

    a. Click the browse button to display the Content Engine Logon window.

    b. In the **User name** and **Password** fields, enter your FileNet P8 domain credentials.

    c. From the **Object store** list, select the object store in which the Content Engine document property is located.

    d. Click **OK** to display the Select CE Property window.

    e. Select the Content Engine property and click **OK**.

12. In the **Attachment field name** field, select the Content Engine document property that Business Process Framework is to update for attached documents when a user changes the value of this application field:
    a. Click the browse button to display the Content Engine Logon window.
    b. In the **User name** and **Password** fields, enter your FileNet P8 domain credentials.
    c. From the **Object store** list, select the object store in which the Content Engine document property is located.
    d. Click **OK** to display the Select CE Property window.
    e. Select the document property that is to be updated and click **OK**.
13. Optional: In the **Process field name** field, enter the name of the workflow field that Business Process Framework is to update when a user changes the value of this application field. Workflow field names are case sensitive, so enter the name exactly as it appears in the process map.

    For Business Process Framework to update the workflow field, you must include the field in the list of parameters that are to be used in the activity step for the process map.

    TIP Create workflow fields on the process map only when the fields are required to define conditions for workflow routing, to facilitate filtering, or to enable sorting of the inbasket. Not all application fields are process fields.

Associating application fields with a case type

You associate application fields with a case type by adding the fields to the case data dictionary for that case type. Application fields in a case data dictionary are called “case fields” and are available to be displayed in an inbasket or used with the Business Process Framework tools.

TIP You can associate an application field with multiple case types.

To associate an application field with a case type:

1. In the console tree, expand the **Case Fields Configuration** node.
2. Click the **Case Data Dictionary** node.
3. Click **Action** > **Properties** to open the Case Data Dictionary Properties window.
4. From the **Case Type** list, select the case type with which you want to associate application fields.
5. In the list on the left, click an application field and then click the **–>** button to add the field to the case data dictionary list on the right.

Configuring tools

You configure the tools that are to be available in the toolbar of the case user interface. Business Process Framework always includes the Search, Action, and Log Out tools in the toolbar, so you do not need to configure these tools. However, you can add custom tools.

Configuring a custom tool

To add a custom tool:

1. In the console tree, click **Tools**.
2. Click **Action** > **New** > **Tool**.
3. From the **Case type** list, select the case type for which you are configuring this tool.
4. In the **Tool name** field, enter a unique name to identify this tool in Business Process Framework Explorer.

5. In the **Display label** field, enter the name that is to be displayed for this tool in the Business Process Framework Web application.
6. In the **Handler URL** field, enter the name of the Java Applet that will be started when a user selects this tool.
7. In the **Appearance** area, specify the following properties of the window for this tool:
   a. In the **Window width** field, enter the width of the window in pixels.
   b. In the **Window height** field, enter the height of the window in pixels.
   c. Select the **Resizable** check box to enable users to resize the window. Clear this check box if the window is to be a fixed size.
   d. Select the **Modal** check box to prevent users from taking action outside this window until this window is closed.
8. Select the **Case mode** check box to make this tool available on the toolbar in the case user interface.
9. Select the **Browse mode** check box to make this tool available on the toolbar in the Web application inbasket selection interface.
10. Configure the case fields for this tool:
    a. Select the field from the list on the left and click **->** to add it to the fields for this tool.
    b. Optional: In the **Display Label** field, enter the label that is to be displayed for this field.
    c. Optional: In the **Value** field, enter a default field value. This value is displayed in the field when the user runs this tool.
    d. Optional: Select the **Required** cell if the user must enter a value in this field.
    e. Optional: Clear the **Visible** cell if this field is to be hidden in the tool window.
    f. Optional: Select the **R/O** cell if this field is to be read-only. If this cell is not selected, the field can be written to.

Configuring the sample tools

Business Process Framework provides tools as part of the Case Manager sample application. If you installed the sample application, these tools are available in Business Process Framework Explorer. By default, these tools are configured to use with the Case Manager application. However, you can modify or copy these tools to use in your own application.

add_document tool

This tool enables users to attach documents to cases from local or network drives. The documents are then checked in to the Content Manager Repository.

The **Case Type** and **Local File** fields are automatically included in the add_document window. You can select additional case fields to be used to populate the properties of documents that are added to cases.

create_browse tool

This tool enables users to create cases and then to use Workplace to attach documents or folders to the cases from Content Manager repositories.

The **Case Type** field is automatically included in the create_browse window. You can select additional case fields to be used to populate the case fields in the new cases.

create_case tool

This tool enables users to create cases in the Business Process Framework Web application and, optionally, to attach electronic documents to the new cases from local or network drives.

The **Case Type** and **Local File** fields are automatically included in the create_case window. You can select additional case fields to be used to populate the case fields in the new cases.

create_eFormsCase tool

This tool enables users to use predefined eForms templates to create cases in the Business Process Framework Web application. After the new case is created, the users can display the forms that are associated with the cases in pages that are configured for specific inbaskets. For more information about eForms templates, see *IBM FileNet Business Process Framework eForms Integration to Business Process Framework*.

You do not configure the case fields for new cases in Business Process Framework Explorer. Instead, the case fields are determined by the form templates.

merge_case tool

This tool enables users to merge cases. The users determine the case information that is to be carried forward in the surviving cases.

queue_depth tool

This tool enables users to count the cases in inbaskets.

reclassify_case tool

This tool enables users to change the case types of cases and restart the workflow processes based on the new case types.

split_case tool

This tool enables users to split an existing case into two separate cases. For the new cases, the users specify the case types and identify the information that is to be included in the cases.

wp_add_attach tool

This tool enables users to access Workplace to select documents or folders that are to be attached to cases.

Configuring inbasket filters

You can provide filters that enable users to view a subset of the cases in an inbasket based on the criteria you define. For example, you might provide a filter that enables users to view only those cases submitted by a particular client or only those cases that are priority 1.

To create and configure an inbasket filter:

1. In the console tree, expand the **Miscellaneous** node.
2. Click **Inbasket Filters**.
3. Click **Action** > **New** > **Inbasket Filter** to open the New Custom Filter Properties window.
4. In the **Name** field, enter a name for this inbasket filter. This name identifies the filter on the Custom Filters tab of the Inbasket Properties window.
5. From the **Data type** list, select the data type of the case field that is to be used for this inbasket filter. (See step 11.)

For certain data types, Business Process Framework validates user entries in the filter field based on the data type.

Data type	Description
BOOLEAN	This data type corresponds to the Boolean data type in Content Engine and Process Engine. Business Process Framework displays a BOOLEAN field as a check box.
DATE	This data type corresponds to the Date/Time data type in Content Engine and the Time data type in Process Engine. Business Process Framework displays a DATE field as a text box with a calendar control and provides date data validation.
MONEY	This data type corresponds to the Float data type in Content Engine and Process Engine. Business Process Framework displays a MONEY field as a text box and provides money data validation. Business Process Framework does not support a decimal (floating point) data type without money validation.
NUMERIC	This data type corresponds to the Integer data type in Content Engine and Process Engine. Business Process Framework displays a NUMERIC field as a text box and provides integer data validation.
STRING	This data type corresponds to the String data type in Content Engine and Process Engine. Business Process Framework displays a STRING field as a text box. Business Process Framework does not provide validation for STRING fields. Business Process Framework supports wildcard searches for a STRING field.
WORKFLOWGROUP	This data type defines a field that provides an interface to workflow group. This data type does not correspond to any data type in Content Engine or Process Engine.

6. In the **Description** field, enter text that describes this inbasket filter.
7. In the **Title** field, enter the text that is to be used as the label for this inbasket field in the Business Process Framework Web application.
8. In the **Width** field, enter the width of this field in characters.
9. In the **Max chars** field, enter the maximum characters that a user can enter into the field. You must enter a number greater than 0. You can enter a number that is greater than the width of the inbasket filter.

   The **Max chars** field is disabled if the inbasket filter is of type BOOLEAN or DATE, or if the filter is configured as a pick list.
10. Optional: Configure a pick list for this inbasket filter:
    a. From the **Pick list** list, select the pick list that is to be used for this inbasket filter.
    b. Optional: Select the **Add "All" record** check list to add "All" as a choice in the pick list.
    c. Optional: From the **Pick list Display Behavior** list, select the value indicating which format is to be used to display the choices in this pick list

Option	Description
Code	Business Process Framework displays the abbreviation that is associated with each choice. This option is the default setting for the pick list display behavior.
Description	Business Process Framework displays the descriptive name that is associated with each choice.

11. In the Regular area, configure the case field that is to be used for this inbasket filter:
    a. From the **Case field** list, select the case field that is to be used for filtering. The **Case field** list contains only those case fields that are configured with process fields.
    b. Click **Expression** to define the filter criteria expression.
    c. In the Template field, enter the SQL query to be used to retrieve cases. You can use the following macros in this query.

Macro	Description
%PARAM1%	This macro represents the data that a user enters in the inbasket filter field. `%PARAM1%` is the default macro when specifying the filter condition. Examples: Bp8CaseID = %PARAM1% CompanyName LIKE %PARAM1%
%CEILDATE% %FLOORDATE%	These macros test the high and low boundaries of the data that a user enters in a date inbasket filter field. Example: ReceivedDate < (%CEILDATE%) and ReceivedDate >= (%FLOORDATE%)

12. Optional: If you selected the **Add "All" record** check box, configure the case field that is to be used for the All choice:
    a. From the **Case field** list, select the case field that is to be used for filtering. The **Case field** list contains only those case fields that are configured with process fields.
    b. Click **Expression** to define the filter criteria expression. For more information, see Defining the inbasket filter criteria expression.
    c. In the Template field, enter the SQL query to be used to retrieve cases. You can use the following macros in this query.

Macro	Description
%PARAM1%	This macro represents the data that a user enters in the inbasket filter field. `%PARAM1%` is the default macro when specifying the filter condition. Examples: Bp8CaseID = %PARAM1% CompanyName LIKE %PARAM1%

Macro	Description
%CEILDATE% %FLOORDATE%	These macros test the high and low boundaries of the data that a user enters in a date inbasket filter field. Example: ReceivedDate < (%CEILDATE%) and ReceivedDate >= (%FLOORDATE%)

Configuring inbaskets

An inbasket contains a set of cases that are assigned to a particular user role. All the cases in an inbasket are at the same step in the workflow.

You provide access to inbaskets based on a user's Business Process Framework role. When a user logs on to the Business Process Framework Web application, Business Process Framework displays the set of inbaskets to which that user has access. The user then selects an inbasket to access the cases in that inbasket. Depending on how you configure the inbasket, the user is presented with the next case in the queue or with a list of cases from which to select.

An inbasket can be public or private depending on the associated workflow step. If the step is assigned to a queue in the workflow map, the inbasket is public. If the step is assigned to specific workflow participants, the inbasket is private.

Creating an inbasket

You can create an inbasket in the following ways:

- Use the New action to create an inbasket for one or more roles.
- Use an inbasket template to create an inbasket. This method enables you to apply changes to all inbaskets based on a template at one time. For more information, see Creating and configuring inbasket templates.
- Copy and paste an existing inbasket in Business Process Framework Explorer to create an inbasket. The new inbasket is independent of the source inbasket.

To create an inbasket:

1. In the console tree, click **Inbasket Configurations**.
2. Click **Action** > **New** > **Inbasket** to open the New inbasket Properties window.
3. Configure the inbasket properties as required for your Business Process Framework Web application. You must configure the following properties:
   - On the General tab, enter values for the following properties:
     - Inbasket name
     - Master Role
     - Inbasket type
     - Queue name
     - Filter name
   - On the Browse list columns tab, configure at least one browse list column and identify the case fields that are associated with that column.

Configuring the general properties

To configure the general properties for an inbasket:

1. Click the **General** tab of the Inbasket Properties window.
2. In the **Inbasket name** field, enter a unique name for this inbasket as it is to be displayed in the Business Process Framework Web application. The name can be up to 50 characters.
3. From the **Master Role** field, select the role that can access this inbasket.

   You can configure the inbasket to grant access to multiple roles. To do so, add the roles on the Roles tab. For more information, see Configuring roles for an inbasket.

   TIP Assigning a role as the master role does not provide users with any additional privileges in this inbasket.
4. From the **Inbasket type** list, select one of the following values:

Inbasket type	Description
STANDARD	This type of inbasket enables a user to access an active case from a work queues, edit the case, and dispatch the case to the next step. Business Process Framework displays a STANDARD inbasket when: • The user selects the inbasket from the inbasket list in the Business Process Framework Web application. • You are using the 9010 (Process Case) command in the Business Process Framework integration servlet and the user selects the inbasket from search results.
CASEQUERY	This type of inbasket enables users to access cases from either search results or a URL. A CASEQUERY inbasket can contain both active and inactive cases. You can configure the inbasket to enable a user to edit an active case, but not to dispatch the case. For example, you might use a CASEQUERY inbasket to enable administrators to access and fix problems in cases without dispatching the cases. Inactive cases are opened in read-only mode. You can define only one CASEQUERY inbasket for a role. **TIP** You cannot predict the types of cases that will be returned by a search or the workflow steps in which these cases will be. Therefore, when you configure a CASEQUERY inbasket, populate the inbasket with all case fields for all case types to ensure that the inbasket can accommodate any case that is returned by a search.

5. Optional: Identify the Java adapter class that contains the methods to be run when a user opens a case in this inbasket.

   You can extend the `com.filenet.bp8.api.ext.openCaseEventHandler` class to implement a Java adapter class to perform tasks such as data validation or connecting to an external system. You then associate that class with an inbasket. Business Process Framework then runs the methods that are defined for the class whenever a case is opened from the inbasket. For more information about extending the `openCaseEventHandler` class, see the *IBM FileNet Business Process Framework Developer Guide*.

   a. In the **Class name** field, enter the name of the Java adapter class, including the package name.

b. In the **Parameters** field, enter any parameters to be passed to the Java adapter class. Separate multiple parameters with commas.

6. Specify the workflow configuration to determine the cases that are to be available in this inbasket.

   a. Optional: From the **Step name** list, select the name of the workflow step with which this inbasket is to be associated.

   b. From the **Queue name** list, select the name of the workflow queue to which the specified workflow step is assigned on the process map.

   c. From the **Filter name** list, select the queue filter that Business Process Framework is to use to retrieve the cases for this inbasket.

7. Select the mode in which this inbasket is to present cases to users:

Inbasket mode	Description
Browse	In Browse mode, Business Process Framework presents the user with a list of the cases in the inbasket. The user can select a case to work on. **TIP** Select the **Browse** check box when you are defining a personal inbasket.
Sequential	In Sequential mode, Business Process Framework presents the user with the case in that inbox that is to be processed next.

   If you select both the **Browse** and **Sequential** check boxes, Business Process Framework displays the Modes tool on the toolbar in the Business Process Framework Web application to enable users to switch modes. If you clear both check boxes, Business Process Framework uses the Sequential mode by default.

8. Clear the **Enable inbasket** check box to hide this inbasket in the Business Process Framework Web application.

9. Select the **Enable open case event** check box to record an event in the audit log whenever a user opens a case from this inbasket.

   TIP Use this feature sparingly because it can result in unnecessary entries in the audit log.

10. Select the **Enable Save button** check box to display the **Save** button in the toolbar of the case user interface when a user opens a case from this inbasket.

    When a user clicks **Save**, Business Process Framework saves the case data without closing the case user interface. Business Process Framework does not display any confirmation message that indicates that the case data is saved. To return the case to the inbasket, the user must click the inbasket in the inbasket list or click **Close** if a **Close** button is provided.

    If your application uses a custom plug-in tab that supports the save functionality, selecting the **Enable Save button** check box enables the Save button for the plug-in tab and for the case user interface.

    If you do not select this check box, the user must dispatch the case to save any data. If the user attempts to close the case, Business Process Framework displays a message that indicates that the data will be lost and that the user must confirm that the case is to be closed.

11. Select the **Enable Close button** check box to display a **Close** button in the toolbar of the case user interface when a user opens a case from this inbasket. If the user clicks the **Close** button, Business Process Framework returns the case to this inbasket and any unsaved changes are lost.

12. Select the **Allow removing attachments** check box to enable users to remove attachments from a case that is opened from this inbasket. When this check box is selected, an **x** icon is displayed next to the document icon for each attachment in the case user interface. The user clicks the **x** icon to delete the attachment.

13. Select the **Disable updating attachment properties** check box to keep Business Process Framework from updating properties for the documents that are attached to a case in this inbox.

    If a case contains many attachments and there are a number of properties to be updated, performance can decrease Business Process Framework updates the properties in attachments. Performance can further decrease if the updates are part of a batch operation that processes multiple cases. Selecting **Disable updating attachment properties** check box can prevent this problem.

14. Select the **Enable bulk processing** check box to enable users to select multiple cases in this inbasket for processing. In addition to selecting this check box, you must configure the actions that are to be available for bulk processing. For more information, see Creating and editing actions.

    Content Engine limits the number of objects that can be processed at one time to 150. In addition to this limit, processing large numbers of cases can decrease performance. For best performance, users should select no more than 50 cases for processing at one time.

15. From the **Attachment visibility** list, select the option that indicates whether the case attachments list can be displayed on the Attachment, Audit, Case, eForms, Table, and custom tabs in this inbasket if the Enable Case attachments list display option is set to True. For more information, see Enable Case attachments list display.

16. Optional: In the **Attachment panel document list SQL** field, enter an SQL query to limit the attachments that are displayed on the Case tab content bar when users open cases in this inbasket. For example, the following query displays only those attachments that are of DocType 1.

    ```
    select a.Bp8ObjectID as Id, a.Bp8ObjectType as ObjectType, a.Id as AttachID, f.FolderName,
    d.DocumentTitle, d.VersionSeries, d.VersionStatus, d.MajorVersionNumber,
    d.MinorVersionNumber, d.MimeType, d.isReserved, d.IsVersioningEnabled from (Bp8Attachment a
    left join Document d ON d.VersionSeries = a.Bp8VersionSeries) left join Folder f ON f.Id =
    a.Bp8ObjectGUID where a.Bp8CaseID = ^1 and ^2 and DocType = 1 order by a.Bp8ObjectType desc,
    f.FolderName asc, d.DocumentTitle asc
    ```

    If you leave this field blank, Business Process Framework uses the SQL query that is defined in the **Case attachments list - Adhoc search** definition parameter to determine which attachments to display. By default, this parameter displays all documents and folders that are attached to the case.

Identifying the roles that have access to an inbasket

You must identify the master role that is to have access to an inbasket on the General tab of the Inbasket Properties window. You can provide other access to other roles by adding the roles on the **Roles** tab.

To give access to an additional role

1. Click the **Roles** tab in the Inbasket Properties window.
2. Select the role to be added from the Available list.
3. Click **->** to add the role to the **Selected** table.

Selecting the case fields for cases in an inbasket

You must select the case fields that will be used on the Case tab for cases that a user opens from an inbasket. The fields included on the Case tab represent the set of fields that can be modified by a user or by your application. For an application field to be available in an inbasket, you must add that field to the case data dictionary of a case type that is used for the inbasket.

Prerequisite tasks:

- Configure the case types to be used for this inbasket.
- Configure the case fields for each case type.

To select and configure the fields that will be on the Case tab:

1. Click the **Case Fields** tab.

2. From the **Case Type** list, select a case type from which you want to select case fields. You can select fields from multiple case types to use on the Case tab.
3. From the list of case fields, select a field and click **->** to add the field to the table of selected fields.

   If you do not define a layout for the Case tab, Business Process Framework lists the fields in the order in which they are listed in the table. For information about creating a Case tab layout, see Designing the Case tab layout for an inbasket.
4. Optional: If you do not want Business Process Framework to display this field on the Case tab, click in the **Visible** cell and then click the arrow to set the value to **No**.
5. Optional: To make this field read-only, click in the **R/O** cell and then click the arrow to set the value to **Yes**.
6. Repeat steps 3 through 5 for each field in the case type that you want to use for this inbasket.
7. Click **Apply**.
8. Repeat steps 2 through 7 for each case type from which you want to use case fields.

Designing the Case tab layout for an inbasket

You can customize the layout of the Case tab for an inbasket. By default, Business Process Framework displays the fields on the Case tab in a single column and in the order in which the fields are listed in the inbasket configuration.

You use the Case Tab Designer to create a custom layout that can contain multiple columns and multiple sections. The Case Tab Designer is a drag-and-drop visual editor that lets you design your own Case Tab layout.

To design a Case tab by using the Case Tab Designer:

1. On the Case Fields tab of the Inbasket Properties window, click Case Tab Designer.
2. Optional: Insert rows and columns by clicking the appropriate button:

Button	Action
Ins. row	Inserts a row above the selected row.
App. row	Appends a row after the last row.
Del. row	Deletes the selected row. Any fields in the row are returned to the Case fields list.
Ins. col.	Inserts a column to the left of the selected column.
App. col.	Appends a column to the right of the last column.
Del. col.	Deletes the selected column. Any fields in the column are returned to the Case fields list.

3. Optional: Add expandos to enable users to expand and collapse portions of the Case tab. For information about creating new expando labels, see Creating an expando label.
   a. Click the cell in which the expando label is to appear.
   b. In the **Expandos** list, click the expando and then click the arrow above the list to move the expando to the cell.

   All the rows between this label and any following expando label are controlled by this expando.

4. Position case fields on the tab:
   a. Click the cell in which you want the field placed. You can place only one field in a cell.
   b. In the **Inbasket Fields** list, click the field and then click the arrow above the list to move the field to the cell.

   TIP You can reposition a field by dragging the field to a different cell.
5. Format cells in the Case tab layout as needed.
   - Type text in any cell that does not contain a field. You can make this text bold, italic, or underlined by clicking the **B**, **I**, or **U** buttons respectively.
   - Move the field label to the right of the field. To move the label, right-click the field and click **Display label on the right**.

     TIP You cannot change the label text in Case Tab Designer. Instead, you must change the display label for the field. For more information, see Creating application fields.
   - Merge cells in two or more columns to accommodate a long field. To merge cells, right-click one of the cells and click **Column** > **Expand column left** or **Expand column right**.
   - Expand or collapse the expando by default. Click the arrow next to the expando title to expand or collapse the expando. When the user opens the case, the expando appears either expanded or collapsed as it is in Case Tab Designer.

Creating an expando label

To create an expando label, you must edit the Business Process Framework Metastore and add the label as a new row in the INBASKET_EXPANDOS table:

1. In your database, expand the Bp8Metastore node.
2. In the console tree, click **Tables**.
3. In the details pane, right-click **INBASKET_EXPANDOS** and click **Open Table** > **Return all rows** to open the **INBASKET_EXPANDOS** table.
4. In the **DISPLAY_LABEL** field, enter the label for this expando.
5. In the **DEFAULT_OPEN** field, enter 0 if the expando is to be collapsed by default. Enter 1 if the expando is to be expanded by default.

Resetting the Case tab layout

To return the Case tab to the default layout, click **Reset Layout** on the Case Fields tab. You cannot retrieve the custom layout after you reset the Case tab layout.

Configuring responses for an inbasket

You configure responses to provide a set of predetermined choices for processing the cases in an inbasket. A user completes work on a case and selects the appropriate response to move the case to the next step in the workflow.

Adding responses for an inbasket

You select responses for the inbasket from the list of responses that are imported from the workflow map.

To add a response for this inbasket:

1. Click the **Responses** tab in the Inbasket Properties window.
2. In the Available list box, select a response and click **->** to add the response to the **Selected** table.

Configuring a response

To configure a response for this inbasket:

1. Click the response in the **Selected** table on the Responses tab.
2. Optional: In the **Java class** cell, enter the Java class plug-in that Business Process Framework will invoke when a user selects this response from the Action menu.

   You can define a Java class plug-in to perform tasks such as complex data validations and field checking based on the business rules. For more information, see the *IBM FileNet Business Process Framework Developer Guide*.
3. Optional: Click in the **Bulk Process** cell if this response is to be available for bulk processing.

   TIP Bulk processing is designed to apply a selected subset of responses immediately to a number of cases without additional processing or user interaction. Therefore, if you make a response available for bulk processing, do not configure other operations such as reason selection, required fields, or custom validation for this response.
4. Select the fields for which users must enter values for Business Process Framework to process this response:
   a. In the **Required fields** area, click **Edit** to open the Required Fields window.
   b. From the Case Type list, select the case type from which you want to select a field.
   c. From the list box on the left, select a field and click **->** to add it to the Field table on the right.
   d. When you finish selecting the fields, click **OK** to return to the Inbasket Properties window.
5. Optional: Associate a pick list to be displayed when a user selects this response. The user must select a value from the pick list to process the response.

   Typically, this pick list is used to select the person to whom the case will be routed. For example, a response called Route might require that a user select the person to whom the case will be routed. You can associate a pick list with the Route response to provide users with a list of people to whom the case can be routed.
   a. From the **User Pick list** list, select the pick list that contains the choices for this response.
   b. From the **User Case field** list, select the case field in which Business Process Framework is to record the selected choice. You must select a case field of the WORKFLOWGROUP type.

      This field also determines how Business Process Framework displays the selected pick list. If you select a Case field that is defined as a standard pick list, Business Process Framework displays the selected pick list in a drop-down list. If the Case field is defined as a lookup, Business Process Framework displays the selected pick list as a text box.
   c. Optional: Select the **Multi-select** check box to enable the user to select more than one choice from the pick list.
   d. Optional: In the **Instructions** field, enter the text that will be displayed for this pick list. If you do not enter any text, Business Process Framework displays the following instructions by default: To complete the function request, the following selection must be made. Click **OK** to continue.
   e. Optional: Select the **Lookup** check box to enable the user to access a choice in the pick list by typing a full or partial value in the case field.

      The user can use wildcard characters when typing the value. The user can enter a percent sign (%) to match multiple characters or an underscore (_) to match a single character.
6. Optional: Provide external lookup capabilities for the response:
   a. Select the **Lookup** check box to enable the user to type a full or partial value in the case field.

The user can use wildcard characters when typing the value. The user can enter a percent sign (%) to match multiple characters or an underscore (_) to match a single character.

b. In the **URL** field, enter the URL of the Web service or Java Server Page (JSP) that you configured for the lookup. For more information, see "Lookup extensions interface" in the *IBM FileNet Business Process Framework Developer Guide*.

7. Optional: Select the reasons to be associated with this response.

   When you associate reasons with a response, the user must select a reason to complete the response. Business Process Framework records the selected reason in the audit log. For example, if the response denies a claim, you might require the user to select the reason for the denial.

   a. Click **Add**.

   b. Click in the **Reason** field and then click the arrow to display the list of available reasons.

      For information about defining reasons, see Creating reasons.

   c. Click a reason.

   d. To add another reason, repeat steps a through c.

8. Optional: Define operations to automatically assign values to case fields for a specific response. The values entered by these operations override any values that the user enters in the specified case fields.

   TIP Business Process Framework runs the operations in the order in which they are listed in the Operations area.

   a. Click in the **Case Field** field and then click the arrow to display the list of case fields.

   b. Select the case field to which this operation applies.

   c. Click in the **Builtin Property** field and then click the arrow to display the list of built-in properties that indicate the type of value to be assigned to the case field and how the value is to be assigned.

   d. Select the built-in property and, if required, enter the appropriate text in the **Value** field:

Built-in property	Value field entry	Value assigned to case field at runtime
Constant	String If the case field is of type date or date/time, you must enter a value that is the number of milliseconds since January 1, 1970, 00:00:00 GMT. One way to obtain this value is to call the getTime() method on a Date object in a Java or JavaScript™ program.	Business Process Framework assigns the specified literal string as the value of this case field.
Active User ID	None	Business Process Framework assigns the user's Business Process Framework ID to this case field. Business Process Framework obtains the user ID from the USER_ID column of the USERS table in the Business Process Framework Metastore.

Built-in property	Value field entry	Value assigned to case field at runtime
Active User name	None	Business Process Framework assigns the user's logon name to this case field. **TIP** If you select this property, ensure that the case field is defined as a workflow group.
Case field	Name of the case field	Business Process Framework assigns the current value of the specified case field to this case field.
Active User Full Name	None	Business Process Framework assigns the user's full name to this case field.
Current Profile ID	None	Business Process Framework assigns the ID associated with the user's role to this case field.
Current Profile	None	Business Process Framework assigns the name of the user's role to this case field.
Current WF User ID	None	Business Process Framework assigns the user's Process Engine ID to this case field. Business Process Framework obtains the user's ID from the USERS table in the Business Process Framework Metastore.

Configuring the browse list for an inbasket

The browse list contains the cases that are available in an inbasket. A user can browse through the list and select a case to view or process.

You configure the various columns that make up the browse list. Each column contains one or more case fields. You also specify the default sort order for the fields and optionally alternative sort orders that users can select at run time.

To configure the columns for the browse list window for an inbasket:

1. Click the **Browse Fields** tab in the Inbasket Properties window.
2. In the Display Label cell, replace the default text Column0 with the text that is to be used as the column header.

   Business Process Framework displays the columns from left to right in the browse list window in the order in which they are listed on this tab.
3. With the column selected, identify the case field or fields to be displayed in this column.

   a. Click in the **Case Field** cell.

b. Click the arrow and select the first field to be displayed in this column. This field must be supported for all case types used by the inbasket.

c. If this field is a pick list, click in the **Pick list Display Behavior** field, click the arrow and select the mode in which the choices are to be displayed:

Pick list mode	Description
Default	Business Process Framework displays the description that is associated with each choice in the pick list.
Description	Business Process Framework displays the description that is associated with each choice in the pick list.
Icon	Business Process Framework displays the icon that is associated with each choice in the pick list

d. Optional: Click **Add** to identify another case field to be displayed in this column.

4. Clear the **Visible** cell if this column is to be hidden in the browse list window.
5. Optional: Indicate whether users can sort the browse list based on the entries in this column.

   a. Select the **Sortable** cell to enable users to sort the browse list based on the entries in this column.

      TIP Runtime errors can occur if the field is not exposed in the Process Engine workflow queue. If you select the **Sortable** cell, ensure that the field associated with this column is exposed in the workflow queue.

   b. Select the **Sort Direction** cell if Business Process Framework is to sort the column in descending order. Clear the **Sort Direction** cell if Business Process Framework is to sort the column in ascending order.

   c. Select the Default cell if the browse list is to be sorted based on this column by default.

      Users can sort the list by other columns, but Business Process Framework sorts the list based on the default column any time users refresh the inbasket.

      You can define more complex sorting for the default column. For more information, see Changing the sort order for the default column.

6. Optional: Click **Add** in the Browse list columns area to add another column to the browse list window.

   TIP For better performance, limit the number of columns in the browse list window.

Customizing the sort order

Business Process Framework initially sorts the inbasket contents according to the browse column that you designate as the default browse column. To enable users to re-sort the contents, you can specify other browse columns as sortable.

By default, Business Process Framework sorts the content by locating the case field that you associated with the browse column and retrieving the workflow field that is associated with that case field. Business Process Framework then uses the workflow field value to sort from the workflow queue. You can define more complex sort expressions to override the default sort behavior.

To define a customized sort order for a browse column:

1. Create a custom workflow field:

   a. Start the Process Configuration Console:

      - In Workplace, select **Admin** and then select **Process Configuration Console**.

- In Workplace XT, select **Administration** on the **Tools** menu, and then select **Process Configuration Console**.

b. In the scope pane, expand **PEConnection[1]** and **Rosters**.

c. Right-click the workflow in which you want to create the workflow field and select **Properties**.

d. On the Data Fields page, complete the Field Name, Field Type, and Length fields to define the new workflow field.

2. On the **Browse Fields** tab, click the browse column for which you want to provide a custom sort order.

   TIP You must select a browse column that is identified as Default or Sortable.

3. Click **Edit**.

4. In the **Workflow field name** field, replace the default workflow field with the name of the workflow field that you created in step 1.

   The contents of the workflow field name dialog box substitutes the %ORDERBY% macro in the workflow filter query when the inbasket is filtered for content. See the Filters section for details on the workflow queue query.

Example: Advanced inbasket sorting

This example illustrates how you can configure the browse list to sort the cases as follows:

- Sort the cases first by priority so that priority 1 cases are listed first, priority 2 cases are listed next, and priority 0 cases are listed last.
- Within each priority group, sort the cases by the voucher numbers so that all voucher numbers beginning with the letter U are listed first.
- Within each group of voucher numbers, sort the cases so that the cases are listed in ascending order by date.

To implement this sorting requirement for an inbasket:

1. Create the inbasket sort criteria and associate the criteria with a default sorting column:

```
ap.PRIORITY_ORDER(intPriority), ap.INDEXER_QUEUE_SORT(strVoucherNumber), intCaseStatusID
```

2. Create the user-defined functions in the VWdb workflow database:

```
CREATE FUNCTION INDEXER_QUEUE_SORT (@iqsort as varchar(40))
RETURNS varchar(40) AS
BEGIN
RETURN Case LEFT(@iqsort, 1) WHEN 'U' THEN (@iqsort) ELSE
'ZZZZZZZZZZZ' END;
END

CREATE FUNCTION PRIORITY_ORDER (@fldval as int)
RETURNS int AS
BEGIN
RETURN Case @fldval WHEN 0 THEN 3 WHEN 1 THEN 1 WHEN 2 THEN 2
END;
END
```

Adding inbasket filters to an inbasket

You can add custom inbasket filters to enable users to limit the content that is displayed in an inbasket. For information about creating inbasket filters, see Configuring inbasket filters.

To add an inbasket filter to an inbasket:

1. Click the **Inbasket Filters** tab in the Inbasket Properties window.

2. From the list of available inbasket filters, select a filter and click **->** to add the filter to the table of selected inbasket filters.

The inbasket filters are listed in the inbasket in the order that they are listed in the table.

Configuring the toolbar and tools for an inbasket

You configure the toolbar for an inbasket by selecting the tools that are to be included on the toolbar. For more information about these tools, see Configuring tools.

To configure the toolbar for an inbasket:

1. Click the **Toolbar** tab on the Inbasket Properties Window.
2. From the list of available tools, select a tool and click **->** to add the tool to the **Tool** table.

   By default, the tool is visible to users and enabled in the case interface.

   TIP The tools are listed in the toolbar in the order that they are listed in the **Tool** table.
3. Optional: Clear the **Visible** cell to prevent the tool from being displayed.
4. Optional: Clear the **Enabled** cell to disable the tool. The tool remains visible on the toolbar; however, if a user selects the tool, Business Process Framework displays a message stating that the tool is not available.

   You might use this feature if you are creating a prototype of your application. If the functionality for a tool is not fully implemented, you can disable the tool to prevent users from using the tool while still showing the tool in the toolbar.
5. Optional: In the **Tool tip** field, enter hover help that Business Process Framework is to display when a user moves the cursor over this tool.

Configuring tabs for the case user interface

You specify the tabs that are to be active in the case user interface for cases that are opened from an inbasket. You can choose from the following predefined tabs that Business Process Framework provides:

- Case tab: This tab contains the case fields that are used to display and gather information about the case.
- Audit tab: This tab contains information from the Business Process Framework audit log.
- eForms tab: This tab contains a form that is created by using FileNet P8 eForms.
- Attachments tab: This tab contains the documents that are attached to the case.
- Table tab: This tab contains multiple values and multiple column case data.

You can also create custom tabs that you can use in the Case User interface. For information about creating tabs, see the *IBM FileNet Business Process Framework Developer Guide*.

To add a tab to the Case User interface:

1. Click the **Tabs** tab in the Inbasket Properties window.
2. From the **Available** list, select a tab and click **->** to add the tab to the **Selected** table.

   The tabs are listed in the Case User interface in the order that they are listed in the **Selected** table.
3. Optional: Click the **Hide** cell in the **Selected** table if the tab is not to be visible to users.

   Typically, you hide a tab that you do not want displayed but that contains information required for the open case. For example, you use an eForm tab to collect information from a user. That information is then used to update fields on the Case tab. In this situation, you might choose to hide the Case tab.

   If the **Hide** field is selected, then the tab will be hidden from the user. If unselected, then it will be displayed.

Configuring inbasket templates (optional)

You can create an inbasket template to configure a set of configuration parameters that you can then use to configure many inbaskets. Using an inbasket template enables you to save time when you configure inbaskets for the first time and when you need to modify the properties of multiple inbaskets.

Creating an inbasket template

To create an inbasket template:

1. In the console tree, expand the **Templates** node.
2. Click **Inbasket Templates**.
3. Click **Action** > **New** > **Inbasket Template** to open the New inbasket template Properties window.
4. Configure the inbasket template properties as required for your Business Process Framework Web application.

   TIP An inbasket template must contain at least one browse column and case field before you can apply the template to an inbasket.

Configuring the general properties

To configure the general properties for an inbasket template:

1. Click the **General** tab of the Inbasket Template Properties window.
2. In the **Inbasket Template name** field, enter a unique name for this inbasket template as it is to be displayed in Business Process Framework Explorer. The name can be up to 50 characters.
3. Select the mode in which an inbasket that is based on this template is to present cases to users:

Inbasket mode	Description
Browse	In Browse mode, Business Process Framework presents the user with a list of the cases in the inbasket. The user can select a case to work on. **TIP** Select the **Browse** check box when you are defining a personal inbasket.
Sequential	In Sequential mode, Business Process Framework presents the user with the case in that inbox that is to be processed next.

   If you select both the **Browse** and **Sequential** check boxes, Business Process Framework displays the Modes tool on the toolbar in the Business Process Framework Web application to enable users to switch modes. If you clear both check boxes, Business Process Framework uses the Sequential mode by default.
4. Clear the **Enable inbasket** check box to hide an inbasket based on this template in the Business Process Framework Web application.
5. Select the **Enable open case event** check box to record an event in the audit log whenever a user opens a case from an inbasket based on this template.

   TIP Use this feature sparingly because it can result in unnecessary entries in the audit log.
6. Select the **Enable Save button** check box to display the **Save** button in the toolbar of the case user interface when a user opens a case from an inbasket based on this template.

   When a user clicks **Save**, Business Process Framework saves the case data without closing the case user interface. Business Process Framework does not display any confirmation message that

indicates that the case data is saved. To return the case to the inbasket, the user must click the inbasket in the inbasket list or click **Close**, if a Close button is provided.

If your application uses a custom plug-in tab that supports the save functionality, selecting the **Enable Save button** check box enables the Save button for the plug-in tab as well as for the case user interface.

If you do not select this check box, the user must dispatch the case to save any data. If the user attempts to close the case, Business Process Framework displays a message warning that the data will be lost and asking the user confirm that the case should be closed.

7. Select the **Enable Close button** check box to display a **Close** button in the toolbar of the case user interface when a user opens a case from an inbasket based on this template. If the user clicks the **Close** button, Business Process Framework returns the case to this inbasket and any unsaved changes are lost.
8. Select the **Allow removing attachments** check box to enable users to remove attachments from a case that is opened from an inbasket based on this template. When this check box is selected, an **x** icon appears next to the document icon for each attachment in the case user interface. The user clicks the **x** icon to delete the attachment.
9. Select the **Disable updating attachment properties** check box to keep Business Process Framework from updating properties for the documents that are attached to a case in an inbasket based on this template.

   If a case contains many attachments and there are a number of properties to be updated, performance can decrease if Business Process Framework updates the properties in attachments. Performance can further decrease if the updates are part of a batch operation that processes multiple cases. Selecting **Disable updating attachment properties** check box can prevent this problem.
10. Select the **Enable bulk processing** check box to enable users to select multiple cases in an inbasket based on this template for processing. In addition to selecting this check box, you must configure the actions that are to be available for bulk processing. For more information, see Creating and editing actions.

    Content Engine limits the number of objects that can be processed at one time to 150. In addition to this limit, processing large numbers of cases can decrease performance. For best performance, users should select no more than 50 cases for processing at one time.
11. From the **Attachment visibility** list, select the option that indicates whether the case attachments list can be displayed on the Attachment, Audit, Case, eForms, Table, and custom tabs in this inbasket if the Enable Case attachments list display option is set to True. For more information, see Enable Case attachments list display.
12. Optional: In the **Attachment panel document list SQL** field, enter an SQL query to limit the attachments that are displayed on the Case tab content bar when users open cases in an inbasket based on this template. For example, the following query displays only those attachments that are of DocType 1.

    ```
    select a.Bp8ObjectID as Id, a.Bp8ObjectType as ObjectType, a.Id as AttachID, f.FolderName,
    d.DocumentTitle, d.VersionSeries, d.VersionStatus, d.MajorVersionNumber,
    d.MinorVersionNumber, d.MimeType, d.isReserved, d.IsVersioningEnabled from (Bp8Attachment a
    left join Document d ON d.VersionSeries = a.Bp8VersionSeries) left join Folder f ON f.Id =
    a.Bp8ObjectGUID where a.Bp8CaseID = ^1 and ^2 and DocType = 1 order by a.Bp8ObjectType desc,
    f.FolderName asc, d.DocumentTitle asc
    ```

    If you leave this field blank, Business Process Framework uses the SQL query that is defined in the **Case attachments list - Adhoc search** definition parameter to determine which attachments to display. By default, this parameter displays all documents and folders that are attached to the case.

Resetting the Case tab layout

To return the Case tab to the default layout, click **Reset Layout** on the Case Fields tab.

Important: You cannot retrieve the custom layout after you reset the Case tab layout.

Configuring the browse list for an inbasket

The browse list contains the cases that are available in an inbasket based on this template. A user can browse through the list and select a case to view or process.

You configure the various columns that make up the browse list. Each column contains one or more case fields. You also specify the default sort order for the fields and, optionally, alternative sort orders that users can select at run time.

To configure the columns for the browse list window for an inbasket based on this template:

1. Click the **Browse Fields** tab in the Inbasket Template Properties window.
2. In the Display Label cell, replace the default text Column0 with the text that is to be used as the column header.

   Business Process Framework displays the columns from left to right in the browse list window in the order in which they are listed on this tab.
3. With the column selected, identify the case field or fields to be displayed in this column.
   a. Click in the **Case Field** cell.
   b. Click the arrow and select the first field to be displayed in this column. This field must be supported for all case types used by the inbasket.
   c. If this field is a pick list, click in the **Pick list Display Behavior** field, click the arrow, and select the mode in which the choices are to be displayed:

Pick list mode	Description
Default	Business Process Framework displays the description that is associated with each choice in the pick list.
Description	Business Process Framework displays the description that is associated with each choice in the pick list.
Icon	Business Process Framework displays the icon that is associated with each choice in the pick list

   d. Optional: Click **Add** to identify another case field to be displayed in this column.
4. Clear the **Visible** cell if this column is to be hidden in the browse list window.
5. Optional: Indicate whether users can sort the browse list based on the entries in this column.
   a. Select the **Sortable** cell to enable users to sort the browse list based on the entries in this column.

      TIP Runtime errors can occur if the field is not exposed in the Process Engine workflow queue. If you select the **Sortable** cell, ensure that the field associated with this column is exposed in the workflow queue.
   b. Select the **Sort Direction** cell if Business Process Framework is to sort the column in descending order. Clear the **Sort Direction** cell if Business Process Framework is to sort the column in ascending order.
   c. Select the Default cell if the browse list is to be sorted based on this column by default.

      Users can sort the list by other columns, but Business Process Framework sorts the list based on the default column any time users refresh the inbasket.

      You can define more complex sorting for the default column. For more information, see Changing the sort order for the default column.

6. Optional: Click **Add** in the Browse list columns area to add another column to the browse list window.

   TIP For better performance, limit the number of columns in the browse list window.

Applying an inbasket template to one or more inbaskets

To apply an inbasket template to an inbasket:

1. In the console tree, click **Inbasket Configuration**.
2. In the details pane, click the inbasket to which you want to apply an inbasket template. To select additional inbaskets, press the Ctrl key and click the additional inbaskets.
3. Click **Action** > **Apply Template** to open the Choose Inbasket Template window.
4. From the **Inbasket Template** list, choose the template that you want to apply.
5. Select the **Apply Browse Fields** check box to apply the settings defined for the inbasket template on the Browse Fields tab to the selected inbaskets.
6. Select the **Apply Case Fields** check box to apply the settings defined for the inbasket template on the Case Fields tab to the selected inbaskets.
7. Select the **Update All Case Types** check box to remove all case types and case fields that are defined in the inbasket and replace them with the case types and case fields that are specified in the template.

   If you do not select this check box, to remove only those case types and case fields that are defined in the inbasket that are also defined in the template and replace them with the case types and case fields that are specified in the template. Any case types and case fields that are defined only in the inbasket are left unchanged
8. Select the **Apply Modes Section** check box to overwrite the Modes settings in the selected inbaskets with the Modes settings specified in the inbasket template.
9. Select the **Apply Options Section** check box to overwrite the Options settings in the selected inbaskets with the Options settings in the inbasket template.
10. Select the **Perform Backup** check box to perform an export of the Business Process Framework configuration before the template changes are applied.

    If you select this check box, Business Process Framework prompts you to enter the name of the XML file that contains the Business Process Framework manifest and the directory in which this file is to be saved.

Exporting and importing Business Process Framework configurations

You use the Export and Import Management tool in Business Process Framework Explorer to export the Business Process Framework configuration from the source environment and then import it to the destination environment. Typically, you perform these tasks when you deploy your application from a development environment to the production environment.

You can also use the export function to back up your Business Process Framework configuration. To do so, you create an export file that contains the configuration data and then store that file in Content Manager to provide a versioned, secure backup of your application settings.

Exporting the Business Process Framework configuration

Your Business Process Framework configuration consists of the metadata that is located in the Business Process Framework Metastore. You use the export function to extract this metadata into an export manifest file that can be used to save or deploy the configuration.

To export the configuration information:

1. In the console tree, click **Export and Import Management**.
2. If you previously created an export list, click **Action** > **All Tasks** > **Clear Export List** and then click **Yes** to remove the old configuration object types from the export list.
3. Click **Action** > **All Tasks** > **Add All Objects to Export List** to populate the export list with the current configuration object types.

   IMPORTANT Although you can perform partial exports of your Business Process Framework configuration, you cannot import a manifest file that is created from a partial import. Therefore, always export all objects to the export list.
4. Click **Action** > **All Tasks** > **Export XML Manifest** to display the Save As window.
5. Enter a name for the manifest file and then save to create the file. Business Process Framework might take several minutes to create the file depending on the number of configuration objects that must be exported.

Importing the Business Process Framework configuration

You use the import function in Business Process Framework Explorer to deploy your Business Process Framework configuration to a new environment.

Before you import the Business Process Framework configuration:

- If a Business Process Framework configuration already exists in the new environment, back up the configuration.
- If you created any custom tables in the Business Process Framework Metastore, define these tables in the Metastore in the new environment.

To import the Business Process Framework configuration:

1. In the console tree, click **Export and Import Management**.
2. Click **Action** > **All Tasks** > **Import XML Manifest** and then click **Yes** when prompted to confirm the import.
3. In the Open window, navigate to the folder that contains the XML manifest file, select the file, and click **Open**.
4. When you are prompted, indicate whether you want to preserve the user information in the current Business Process Framework configuration:
   - Click **Yes** to prevent import of the user records and preserve the current user records.
   - Click **No** to import the user records. This action overwrites any existing user records in the destination environment.
   - Click **Cancel** to exit the procedure without importing the Business Process Framework configuration.

Business Process Framework might take several minutes to import the XML manifest file depending on the number of configuration objects that must be imported.

Importing the Business Process Framework configuration without using Business Process Framework Explorer

You can generate an SQL script from an XML manifest. You can run this SQL script in your database environment to import your Business Process Framework configuration without running Business Process Framework Explorer. You might use this feature to automate the import of the configuration.

TIP Business Process Framework generates a server-specific SQL script. Ensure that you use the Oracle, MS SQL Server, and DB2 script as appropriate for your database.

To generate the SQL script for your Business Process Framework configuration:

1. In the console tree, click **Export and Import Management**.
2. Click **Action** > **All Tasks** > **Generate SQL Script from XML Manifest**.
3. In the Open window, navigate to the folder that contains the XML manifest file, select the file, and click **Open**.
4. In the Save As window, enter a file name for the SQL script.
5. When you are prompted, indicate whether you want to export the user information from the Business Process Framework configuration.

Deployment of the supporting FileNet P8 objects

When you deploy your Business Process Framework Web application, you must import the Content Engine and Process Engine objects that are required by the application in addition to importing the Business Process Framework. For information about deploying these objects, see “Application Deployment” in the FileNet P8 Help.

Import the following Content Engine objects that are required by your application:

- Document classes
- Custom case objects, that is all instances of the Bp8Objects class and its subclasses

  TIP The Bp8Settings object, which contains the most recent case ID that is used by your application, is typically in the root folder of the object store. When you import the Bp8Settings object, you might want to reset the case ID to a specific start sequence number.
- Object properties, including any user-defined property templates and all property templates that are prefixed with Bp8
- Stored searches and stored search templates

  TIP When you import a search to the destination Content Engine repository, you must open and save the search in Search Designer to update the Repository name.
- Object security (these should be exported and imported only if the target CE repository is in the same LDAP domain)
- Folders, folders including the Site Layouts folder, which contains any customized layouts, and the Workflows folder
- Event Subscriptions

  TIP You should manually create event subscriptions on the target Content Engine system.

Import the following Process Engine objects that are required by your application:

- Process maps

- The Process Engine isolated region that includes the definitions for the queues, rosters, event logs, and so on

You cannot import the Workplace access roles that are required by your Business Process Framework Web application. Instead, define these roles manually in the Workplace site preferences in the destination environment.

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