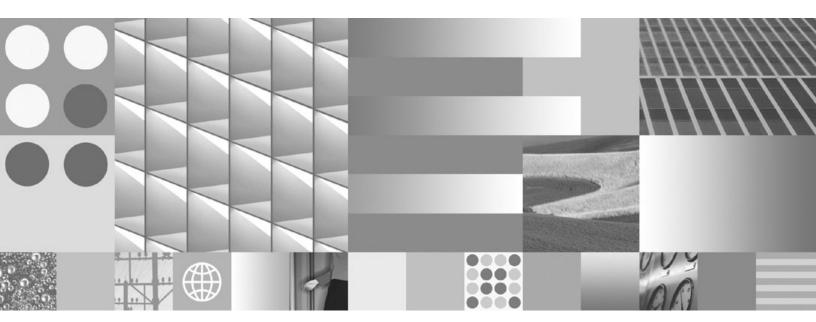


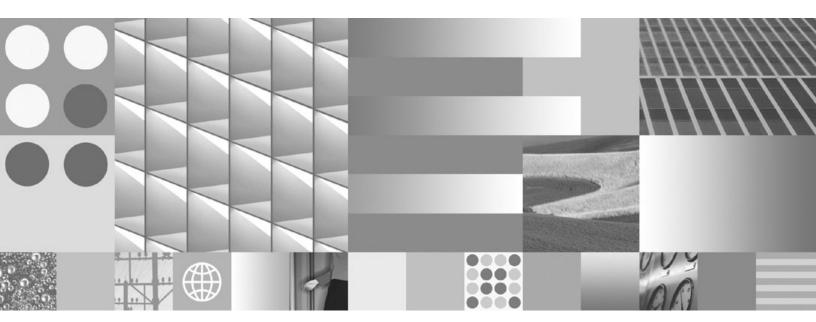
Version 3.6



**Explorer Handbook** 



Version 3.6



**Explorer Handbook** 

Note Before using this information and the product it supports, read the information in "Notices" on page 147.				

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# **Table of contents**

Revision Log	7
Introduction	10
Intended audience	10
Assumptions and recommended education	
FileNet components	
SQL Server	10
Web server	10
BPF overview	11
BPF user interfaces	
BPF Layout Designer	
Architecture	13
BPF Explorer	14
Concepts	
Case	
Case type	
Case fields	
Case Data Dictionary	15
Logical order of configuration	16
LDAP security definition and Workplace access roles	
Content Engine object definition	
Process Engine workflow and queue definition	
BPF configuration	
Launching BPF Explorer	
Add/Modify entries	
User and access information configuration	
Users	
Roles	
Company	
Departments	
Inbasket configuration  Creating and Maintaining Inbasket Configurations	
General tab	
Roles tab	
Responses tab	
Browse Fields tab	
Case Fields tab	
Inbasket Filters tab	
Toolbar tab	
Tabs tab	
Templates	
Inbasket Templates	
Defining Inbasket Templates	
General tab	60
Browse Fields tab	62
Case Fields tab	66
Applying Inbasket Templates	
Last Template Applied	
Other Template Operations	
Application settings	
System-wide settings	
BPF Explorer	80

Web Application	82
Case fields configuration	
Application fields	
Case Data Dictionary	
Miscellaneous	
Pick lists	
Reasons	
Actions	
Inbasket Filters	
Tools	
add document	
create_browse	
create_case	
create_eFormsCase	
queue_depth	
wp_add_attach	
Case Types	
Workflow configuration	
Queues	
Steps	
Filters	
Responses	132
Export and Import Management	134
Manifest Properties	
All Tasks	134
New/Add Remove Columns	139
View/Customize	139
New Window from Here	139
Utilities	140
WFImport	140
Running WFImport	140
Saving/Moving BPF Configurations	
BPF_Metadata	
Export	
Import	
Content Engine Object Store Definition	
Export/Import CE Object Classes	
Process Engine Definition	
Export/Import Process Maps	
Export/Import Queue Definition	
Security Definition (Users/Groups/Roles)	
LDAP Users and Groups	
Workplace Access Roles	
BPF Roles	145
Notice	4 47
Notices	14/

# **Revision Log**

Date	Revision
01/07/2009	Updated information about accessing FileNet documentation and contacting customer support to "About This Document."
10/31/2008	BPF-3.6.0-006 - Added the following note to the Inbasket Configuration >> General Tab section:
	NOTE Make sure to leave the Step Name dropdown blank on CASEQUERY inbaskets or you will see abnormal behavior when opening cases from Search using _commandId=9000.
10/27/2008	BPF-3.6.0-006 - Added revised screenshot of Application Settings > Web Application with three new Settings plus the verbiage for these new settings – all pertaining to the size, resizability, and scrollability of the Action Dialog window. These new settings are available beginning with BPF-3.6.0-006.
8/20/2008	Removed the following inaccurate section –
	<b>NOTE</b> You may access data from an external data source by specifying the full server name, database name, and table name qualifiers. Use the following format to specify an external data source:
	<pre><server_name>.<database_name>. <table_name></table_name></database_name></server_name></pre>
	The SQL statement is entered in a free-form manner. However, the result set must contain the following columns: ID, code, and description. The pick list may also contain parameters. Each parameter must be an application field. The following illustrates the format of the pick list parameter set for an application field with an ID of 55 (The Application Field ID can be obtained from the Case Fields Configuration / Application Fields detailed list view):
	%CASE_FIELD(55)%
	The SQL language depends on the installation type. It is T-SQL for a Microsoft SQL installation and PL/SQL for an Oracle installation. The SQL statement is entered in the dialog box by clicking the Advanced button. The SQL statement is executed once entered and the result of the execution is displayed. If the parameterized SQL statements cannot be executed when entered, an empty grid will be displayed.
	- and replaced it with this:
	NOTE BPF does not support parameterized picklists. Please use the lookup interface functionality (documented in the BPF Developer Guide and its accompanying CODE_SAMPLES.zip) instead, since it provides the same functionality that parameterized picklists would have done.
5/28/2008	Revised the following note for the "Bulk Process" row in the Responses Tab table:
	NOTE If Bulk Process is checked for an action/response, no other operations (such as reason selection, required fields, custom validation, etc.) should be configured for it. Configuring these other operations on an action/response that will be used in Bulk Process mode really defeats the purpose of Bulk Processing itself, since Bulk Process is designed by its very nature to allow a selected subset of actions/responses to be applied immediately to a number of cases "all at once" without any additional processing or user interface. It is therefore strongly

	recommended that you <i>do not</i> configure any other operations (operations (such as reason selection, required fields, custom validation, etc.) on actions/responses that will be used in Bulk Processing mode.
5/23/2008	Added the following note to the "Value" cell in the inbasket operations description table:
	NOTE When configuring the Operations on the Response Tab for an Inbasket, if the type of the Case Field is date/datetime and you select "Constant" as the Builtin Property, the value should be the milliseconds since January 1, 1970, 00:00:00 GMT. This value can, for example, be obtained by calling the getTime() methond on a Date object in either Java™ or JavaScript™.
8/25/2006	Initial document.

# Introduction

The purpose of the *BPF Explorer Handbook* is to provide you with functional information about the BPF Explorer configuration toolset, referred to throughout this document as BPF Explorer, which is used to configure the IBM® FileNet® P8 Platform Business Process Framework (BPF).

## Intended audience

This document is intended for BPF Administrators, that is, developers and administrators of BPF-based applications who are responsible for initially configuring or changing the configuration of the BPF Web Application functionality.

# **Assumptions and recommended education**

This document assumes the BPF administrator is familiar with the concepts of BPF, has attended IBM training on FileNet Content Manager and FileNet Business Process Manager, and has a general understanding of Java™ integration and database administration concepts.

#### FileNet components

BPF administrators should understand general FileNet P8 Platform Content Manager and Business Process Manager configuration and administration, even if they are not the primary FileNet system administrator. It is recommended that BPF administrators take courses on FileNet P8 platform administration and BPM process design as well as taking an overview course that provides a high-level overview of FileNet P8.

IBM training provides education to support many IBM offerings. Contact your training representative for more information.

#### **SQL Server**

It is important that the BPF administrator is knowledgeable in the use of Microsoft SQL Server (or Oracle) and the administrative tasks associated with SQL Server (or Oracle). Course #2072 Administering a Microsoft SQL Server 2000 Database is recommended.

### #2072 Administering a Microsoft SQL Server 2000 Database

This course provides students with the knowledge and skills required to install, configure, administer, and troubleshoot the Microsoft® SQL Server™ client/server database management system version 2000. For additional information, visit the associated Microsoft web site at: http://www.microsoft.com/TRAINCERT/SYLLABI/2072AFINAL.ASP.

#### Web server

It is important that the BPF administrator is knowledgeable in the use of and administrative tasks associated with the Web server that the BPF-based application will be deployed on. Please refer to the vendor's web site for recommendations on appropriate training classes.

## **BPF** overview

BPF is designed and built on the FileNet P8 Platform and leverages the latest in Web technology. BPF allows you to rapidly develop process-driven applications that enable web browser access for process participants. The BPF Web Application and related processes are data driven and are configurable using BPF Explorer. This allows Administrators of a solution built on BPF to modify the Web Application user interface layout and business processes flow without performing any programmatic coding. BPF can support multiple business processes in a single installation utilizing different process maps (for instance, it can support a HR and AP business process in the same Web Application).

BPF is a deployment approach that employs consistent, reusable code and tools that create custom Case management applications.

The framework focuses on customers with the following requirements:

- Case management
- Integration with external systems
- Unique user interface needs are not met by FileNet "out-of-the-box" Workplace, Capture, or web user interface
- Role based work distribution and work management requirements
- Push and pull mode work distribution

Setting up BPF using BPF Explorer is a multi-part process; the process should be thoroughly understood before beginning the procedures.

#### **BPF** user interfaces

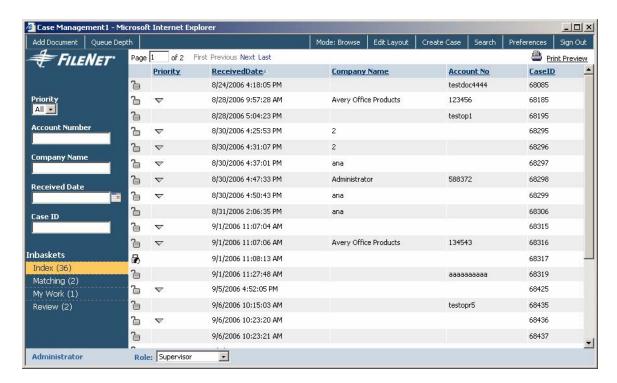
BPF Web Applications consists of dynamic HTML, HTML, JSP, XML, XSL, HTC, and JavaScript<sup>™</sup> files. The user interface and processes are configurable and data driven. BPM Web Applications leverage both Content Engine (CE) and Process Engine (PE) features and functionality and can use different process maps to support multiple business processes within a single application.

BPF Web Application consists of two primary user interface screens. BPF Explorer is used to configure both of these user interfaces.

- Web Application Inbasket Selection The Web Application Inbasket Selection is the screen you use to make all Inbasket and Case selections.
- Case User Interface The Case User Interface is the screen that displays whenever you open a Case.

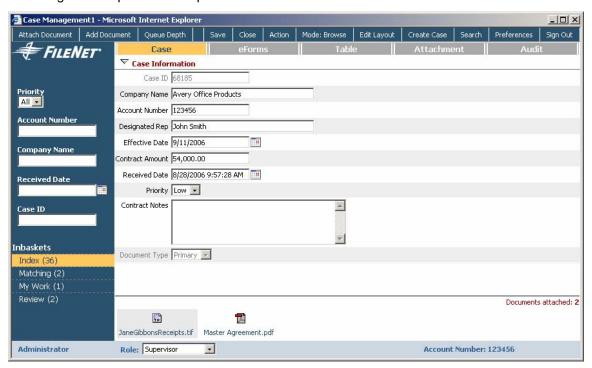
#### **BPF Web Application (Inbasket Selection)**

Following is a sample screen capture of the Web Application User Interface.



#### **BPF Web Application (Case User Interface)**

Following is a sample screen capture of the Case User Interface.



### **BPF Layout Designer**

The BPF Layout Designer tool allows you to configure to placement of information in the BPF Web Application. See the BPF Web Application User Inerface Guide for more information on BPF Layout Designer.

#### **Architecture**

BPF is operating system independent, is written in a J2EE compliant environment, and is based on the FileNet P8 Platform. Key architectural features include:

- Content BPF stores content in the both CE and Image Manager (IM) as well as other repositories via a CE proxy object.
- Process Process integrated with FileNet BPM.
- Business data BPF securely manages business data via CE and is implemented based on the object-oriented architecture.

A Microsoft SQL or Oracle database (BPF Metastore) manages BPF configuration settings (Metadata).

- Directory Services Directory Services are integrated with LDAP.
- Web Application Web Application is based on JSP and Java.
- Localization services Localization services provide multiple local language support via the
  web browser. By specifying the preferred language in the web browser, BPF determines the
  appropriate metadata to display in the BPF user interface. This includes both the text shown
  on the screen and data type formatting.

BPF currently does not support any right-to-left languages. Localization services are subject to any CE and PE software constraints.

- Legacy systems Legacy systems integration typically requires a customized approach
  although BPF has the infrastructure in place to support integration via XML Web Services,
  JDBC, and IBM Web Sphere MQ.
- **BPF operations** BPF operations are component steps that perform robotic Case-related processes as a background task. These operations can be placed on a process map to initiate and perform Case-related activities (like create Case, update Case, log event, etc.).

# **BPF Explorer**

# **Concepts**

The BPF Explorer is a Microsoft Management Console snap-in that allows configuring BPF and its features. BPF Explorer is an application that is typically only used by BPF administrators, not by runtime users. Below are descriptions of some major concepts that will help in the overall understanding of how to use the BPF Explorer.

#### Case

A Case is the major entity handled by the BPF. A Case represents a business object or transaction. Each Case is assigned a unique system-generated sequential number when the Case is created. A Case is comprised of:

- One or more work objects in the workflow roster when the Case is active. PE handles the work object routing.
- One or more documents in the Content Repository (as attachments).
- An instance of a custom object class in the CE repository that represents the Case. There are related custom object instances for audit log entries as well.

# Case type

Case type defines the type of the Case. There can be multiple Case types defined in the system allowing BPF to process different types of objects though the same user interface. Each Case type has its own set of fields defined.

A Case type represents the highest level of grouping for items within BPF. Cases that belong to a Case type have the same following characteristics:

- Process map
- Case field list

A Case type defines which workflow process the document is launched into when it enters the system. The Case type can be determined in a number of ways. For example, it could be based on a document property value that is known when the document is stored in the Content Repository.

BPF supports different process maps assigned to different Case types in order to handle different transactional needs. For example, automotive claims may need to be handled through one type of workflow and property and casualty claims through another type. Multiple Case types will support this type of requirement.

Additionally, each Case type can have different process maps to handle completely different business workflows. For example, one workflow may implement an account payables workflow, while another implements a human resources workflow.

#### Case fields

Case fields (also called application fields within BPF Explorer definition) are single-value fields that are displayed on the Case tab of the Case User Interface. That is, each Case field is represented by a single control on the user interface. Examples of the Case fields include Case ID, Received Date, Priority, etc.

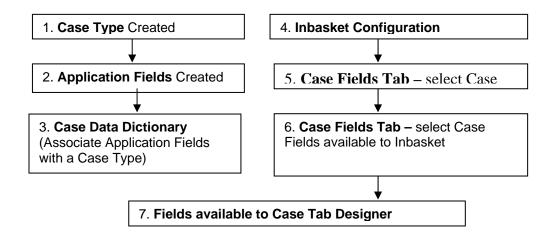
The following are the features of Case fields:

- Each Case field can be stored in up to three different back-end systems: in CE, in PE, and as a property value on attached documents.
- A set of system fields is provided automatically. Case fields custom to a specific configuration are created during the initial set up.
- The following field types are supported: String, Boolean, Date, Money, Numeric, and Workflow Group. BPF generates the Case User Interface automatically based on the field type: Text Box, Combo Box, Text Box with a Calendar Control, Text Area, etc. Data entry validation is automatic and based on the field type.
- Negative money values are supported.
- Field label, width, maximum number or characters, and number of rows are configurable.
- Case fields can be used on the Case tab (Case fields) and are defined under the application fields in the Case fields configuration section. Case fields should be exposed to the Case type via the Case Data Dictionary section in order to be available to this Case type.

### **Case Data Dictionary**

In the Case Data Dictionary section of the BPF Explorer, the BPF administrator can determine which Case fields will be available for each Case type. For instance, in the Case Data Dictionary, the BPF administrator can add a Case field to the list of selected fields for the Invoice Case type, and that field will then be available in the Case Fields tab definition for that Case type in the Inbasket properties. A single Case field can be used in multiple Case types and Inbasket/Case fields definitions.

The following diagram illustrates this relationship and sequence of definition:



# Logical order of configuration

This document describes all of the configuration capabilities of BPF Explorer in the order that they are presented in the BPF Explorer Tree View (top down). This is not necessary the logical order of configuration when defining a new application to BPF.

There are many dependencies to the order of configuration, meaning that some configuration must be performed before other areas of configuration can reference it.

Below is a guideline that describes the logical order of configuration. Not all of the configuration listed below is required.

# LDAP security definition and Workplace access roles

BPF supports three different models of role management configuration. They are:

- Manual Role membership is assigned and managed via BPF Explorer only.
- LDAP group integration Role membership is managed via LDAP security group membership. BPF roles are linked to LDAP groups.
- Workplace access roles Roles membership is managed via LDAP security group membership. BPF roles are linked to P8 Workplace access roles, which are linked to LDAP groups.

For performance enhancement reasons, it is recommend you use Workplace access roles instead of direct LDAP integration, especially in cases where the LDAP directory is large or complex (containing many levels of nested groups/folders).

A user's membership identified by their BPF role, defines a user's permissions within the context of a BPF application. Typically, user accounts are created in LDAP and are assigned to LDAP security groups. LDAP groups are used to secure Workplace access roles. Workplace access roles map to BPF roles. The BPF role determines the BPF application behavior as defined in BPF Explorer. A user can belong to one or more BPF roles.

## **Content Engine object definition**

Typically, you will begin by defining objects and their appropriate security settings in CE that are needed to support your BPF application. This includes:

- Document classes and their properties
- Custom objects and their properties
- Folders
- Event subscriptions
- Stored searches templates

#### Bp8 object — custom object class

The BPF installation provides a parent custom object class definition (Bp8Object) for all BPF classes that provides the foundation structure for Case object definition. It includes sub classes called:

Bp8Case – Container for the Case object class. A new custom object class should be
defined under the Bp8Case class for each BPF Case type and this becomes the template for
all Case objects created of that type.

**NOTE** See the sample Bp8Case object subclass called Case Management for an example of how to define a Case object class definition.

- Bp8Attachment Link object between the document and Case object.
- Bp8AuditLogItem Case audit log item definition.
- Bp8Settings Setting definition for last used Case ID.

#### **BPF** object security

It is important that the appropriate object security is setting for each CE object accessed by BPF. Make sure that you have full read/write access to each BPF related LDAP group that will be accessing the object.

### **Process Engine workflow and queue definition**

Next, you will want to design and define the work object, workflow process maps, and queues to be used for the BPF application. It is possible to have a Case field that is not stored in the work object. You should determine what data you need stored in the work object by the following criteria:

- Conditions Data needed for a conditional test on the process map
- Filters Data needed to filter a queue
- Reporting Data you wish to be stored for reporting purposes like Process Analyzer
- Sorting Data need to provide a sort sequence for a queue
- Component Manager Data to support processing in a component step
- Integration Data needed to link to external data sources for lookup

#### **BPF** requirements for Process Engine

BPF needs the following mandatory definitions in PE:

- Bp8CaseID must be a defined as an Integer work object field.
- Bp8Case and Bp8Attachment must be defined as attached objects (under Attachment Tab).
   Bp8Attachment should also be defined as an Array object.
- If workflow group values will be used in the BPF Application, they need to be defined as well.

#### **BPF** operations — component steps

The following BPF operations are available as component steps on the process map:

- Create Case Creates a new Case and links attached documents.
- Attach document Attaches a document to an existing Case or starts a new Case.
- Update Case Updates Case field(s) on one or more cases.
- Log event Creates an audit log entry for the current Case.
- Get next Case ID Returns the next available Case ID.
- Attach folder Attaches a folder to an existing Case.
- **Detach folder** Removes the folder attachment on an existing Case.

### **BPF** configuration

#### Import workflow configuration

See the Utilities section of this document for more information on how to import your workflow configuration. Once imported, the Workflow Configuration section of BPF Explorer is be populated with references to queues, steps, filters, and responses used the application.

#### All other BPF Explorer configuration

Now all other BPF Explorer configuration may be performed. Although you may not need all of the following items configured, this is generally the order you should configure the options in:

- Case types
- Application fields
- Case Data Dictionary
- Roles
- Miscellaneous
- Inbasket configuration

# **Launching BPF Explorer**

All BPF configuration additions, modifications, and deletions are accomplished via the BPF Explorer Console. Launch the BPF Explorer application Using Start > Programs > FileNet Business Process Framework > BPF Explorer.

A logon is required in order to access the BPF Explorer. The default logon is Bp8 and the default password is Bp8, but this should be reset to a site-specific logon and password once installed for obvious security reasons.



The BPF Explorer logon utilizes SQL/Oracle native user credentials. A default logon user ID of Bp8 is created during BPF installation but the database administrator can change the logon or the password, as long as the user has read-write access to data in the tables.

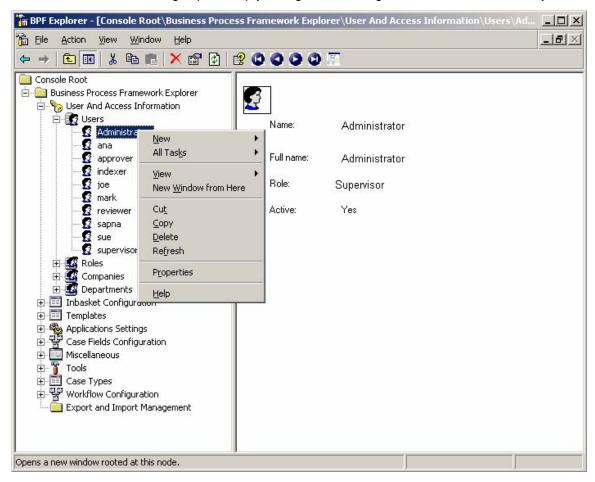
Once the logon is completed, the following screen capture is displayed to the BPF administrator.

**NOTE** This BPF Explorer Tree View selection will be repeatedly referenced throughout the remainder of this document.

### Add/Modify entries

To modify an existing entry in the tree view, use the mouse to select the item to be modified, click the right mouse button and select **Properties** to bring up the appropriate configuration dialog screen.

To add a new entry, use the mouse to select the item type you wish to add, click the right mouse, and select New. This action brings up an empty configuration dialog screen to enter a new entry.



**Caution** Changes to BPF Explorer on a production system can have a substantial and possibly negative impact on system operation without proper testing first.

# **User and access information configuration**

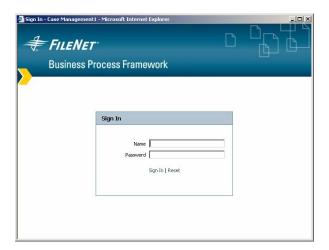
User and access information configuration requires set up of the following items, in this sequence:

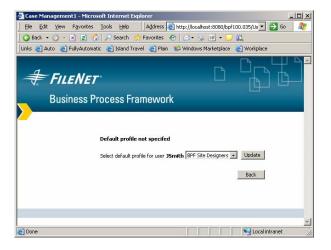
- 1. Users
- 2. Roles
- 3. Companies
- 4. Departments

#### **Users**

The Users section of BPF Explorer allows adding new users to the BPF-based application and modifying existing user properties. When you create a user, a record is inserted into the USERS table in the BPF Metastore.

Although BPF maintains a user account, the BPF Web Application authenticates the user at logon based on an LDAP user account. If it can authentic from LDAP, then it looks for a BPF user account (with the exact same user name) to retrieve additional BPF user attributes. If one exists, it retrieves all user attributes including the default role.





If there is not a BPF user account present, BPF will create one at run-time. BPF will prompt the user for a default role, and as long as there is a user account template defined for each security role, it will serve as the template to create the new BPF user account.

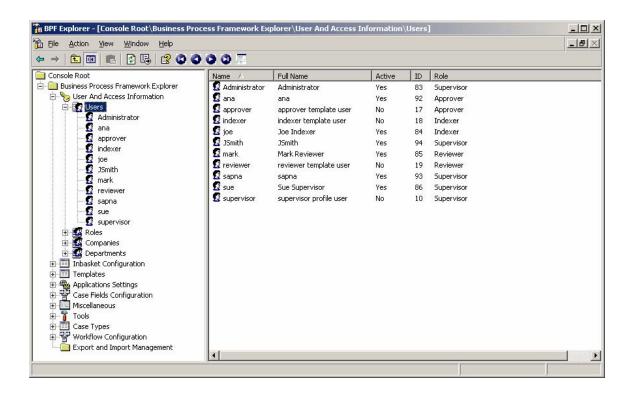
To create a user account template, you must create a BPF user account with the same name as each BPF Role you have defined. This acts as a template when BPF needs to automatically create a new user account for an individual with that default role.

What this means is that you should create LDAP groups and users first. Then at least define your BPF Roles and a user account template for each Role. It is a good practice to name your LDAP groups and BPF Roles the same name for clarity although it is not a requirement. Passwords are not maintained in the BPF Metastore.

Normally, user accounts are not deleted from BPF, although as the BPF administrator you can do this. Instead, de-selecting the Active check box deactivates them. A user account can continue to be referenced in the Case Audit Log regardless if the user was deactivated or deleted. Before a user

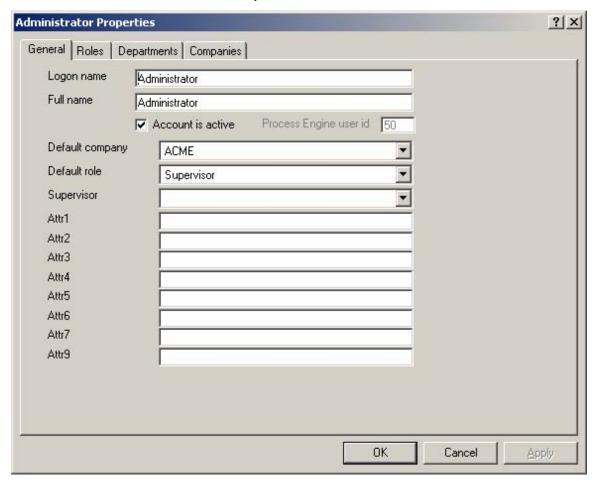
account is deactivated or deleted, all work assigned to that user should be completed or re-assigned to another user. No system check exists to prevent this.

BPM stores the workflow account ID to facilitate filtering work in personal Inbaskets. When a new user is created, the workflow user ID is set to blank. The workflow user ID is automatically populated the first time the user logs into the BPF Web Application. Personal Inbaskets cannot be accessed by the user until this field is populated.



#### **General Tab**

The General tab is used to enter or modify user attributes.

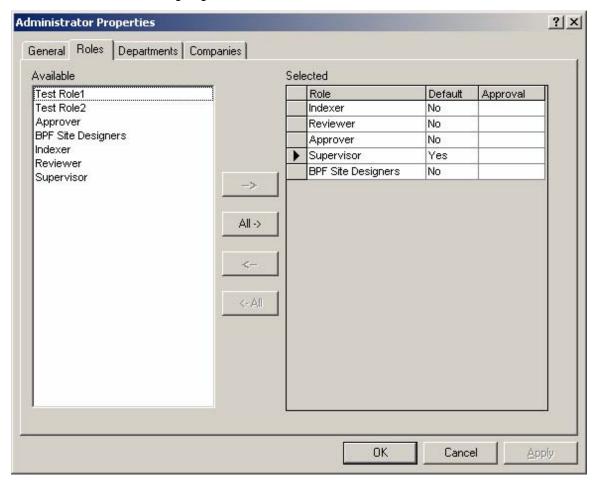


General tab	Description
Logon name	The logon name of the selected user. This is used to access the BPF from the logon screen. This must match a predefined LDAP account.
Full name	The full name of the user.
Account is active	A user may be set to Active (checked) or Inactive (unchecked). Inactive users are not permitted to logon to the BPF Web Application.
Process Engine user id	This is the user ID for BPM account. It is internally assigned. The value of this field is used to filter the content of system Inbox(0) queue for content that was assigned to the user. This value cannot be modified or deleted.
Default company	This is the default company the user is assigned to.
Default role	Users are logged in with this default role. If multiple roles are available for the user, the user can switch to another role.

Supervisor	This field contains the name of the person that the user reports to. It is used to establish hierarchical relationships.
Attr1 (thru Attr9)	This provides additional database fields for custom user attributes.  These attributes can be used for filters or picklists. Developers can also write their own code to retrieve these values from custom properties in BPF Explorer via JDBC should they decide to use these properties.

#### Roles tab

The Roles tab allows the BPF administrator to enter or change the roles available to the user. Roles must be defined before assigning them to users. See the section entitled Roles.



Roles tab	Description
Available	This section lists all of the defined roles available for selection.
Selected	This section lists all of the roles to which the selected user belongs.
	<b>NOTE</b> Users who belong to multiple roles can choose the role they want to work under by using the Roles drop-down list that is found at the bottom of the BPF Web Application user interface.
	Default – Indicates the role a user has when they log into the BPF

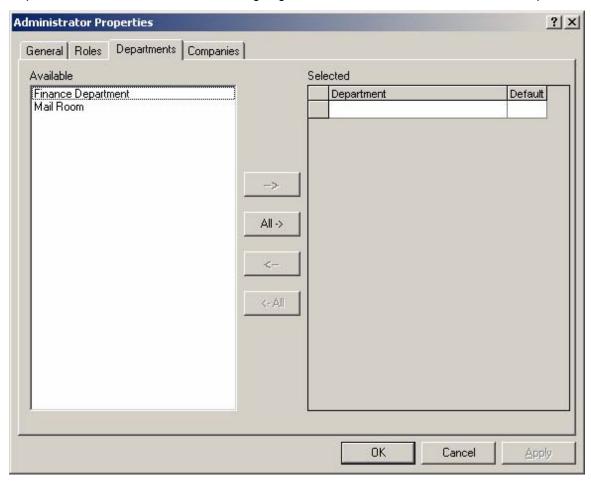
Web Application.

Approval – The Approval field is available for customizations. This is a string entry field and permits a user attribute to be associated with each role the user has defined.

An example of how this may be used is to enter an Approval limit in this field and create a pick list of approvers that have an approval limit higher than an invoice amount or some other know data point. This is especially useful if the user has different limits based on what role they are using.

#### **Departments tab**

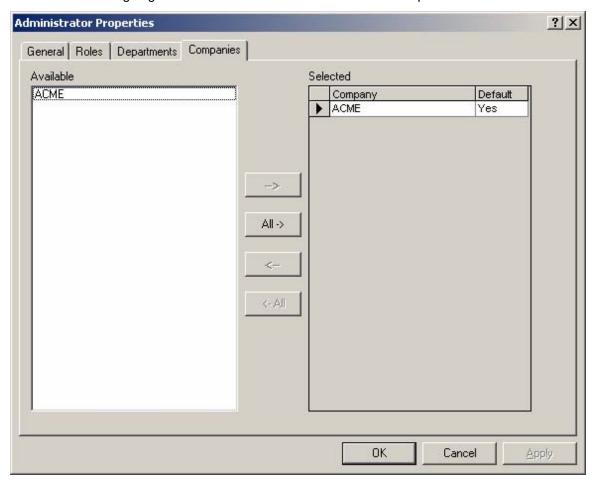
Departments provide configuration options for handling department information. Utilization of this feature typically requires custom coding. For example, users could be manually assigned to these using BPF Explorer, and a pick list could be created to return users in a particular department. Departments must be defined before assigning them to users. See the section entitled Departments.



Departments tab	Description
Available	This section lists all of the departments that are available for selection.
Selected	This section lists all of the departments to which the selected user belongs.
	Default – Indicates the department a user is a part of when they log into the BPF Web Application.

## **Companies tab**

The Companies tab provides organizational capabilities. Utilization of this feature requires custom coding. BPF requires at least one company to be set and assigned to all users. Companies must be defined before assigning them to users. See the section entitled Companies.



Companies tab	Description
Available	This section lists all of the company profiles that are available for selection.
Selected	This section lists all of the companies to which the selected user belongs.
	Default – Indicates the company a user belongs to when they log into the BPF Web Application.

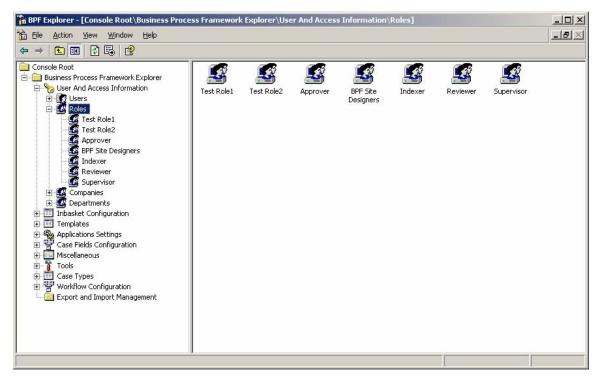
#### **Roles**

Roles determine user access to Cases in the system. It represents a group of users that have similar authorization within the organization, and similar access requirements. Roles determine which Inbaskets a user has access to and the overall behavior of the BPF Web Application for that role when working in a particular Inbasket.

User's can have membership in more than one role. If this is the Case, the user can switch between roles while using the BPF Web Application. Users also have a default role that determines the default role setting upon logon.

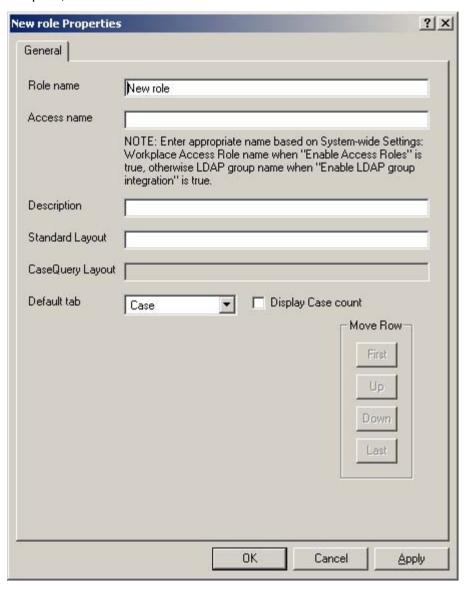
How BPF roles are used with LDAP and FileNet access roles definition is described in detail in the section titled LDAP Security Definition and Workplace access roles.

The Roles section in BPF is found under the User And Access Information section.



#### Creating a new role

**NOTE** The Move Row buttons are grayed out and non-functioning for new roles. These buttons are used to set the order that the Inbaskets will be displayed in the Web Application. For new roles, there are no Inbaskets yet defined for this role, so the selection is disabled. After Inbasket definition is complete, the BPF administrator needs to return to the roles definition to set the order.



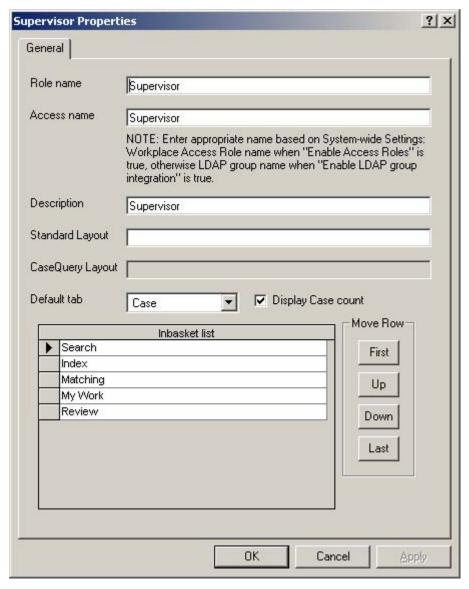
General tab	Description
Role name	Name of the role.
Access name	This will either be the name of the Workplace Access Role or the LDAP group name depending on how the System-side Settings are configured.
Description	The role name displayed to users.
Standard Layout	This field displays the name of the Layout Object that will be used in

	the BPF Web Application user interface when this role is active.
	If the field is blank, the Default Layout will be used. The value of this field can be changed here, or from the Layout Designer application.
CaseQuery Layout	Currently, only the Default Layout is active for the CaseQuery user interface. As this is not yet implemented, this field is not editable.
Default tab	The first tab the user will see upon opening the Case.
Display case count	If checked, a count of Case items waiting for processing will be displayed after the Inbasket name (for all Inbaskets) in the Web Application. If unchecked, no count information will be displayed.
Inbasket list	Displays the current list of Inbaskets configured for this role (via Inbasket Configuration).
Move Row	Use the buttons labeled First, Up, Down, and Last to change the order of the Inbaskets available to for role. This is the order in which the Inbaskets will be displayed in the BPF Web application user interface.

#### Modifying an existing role

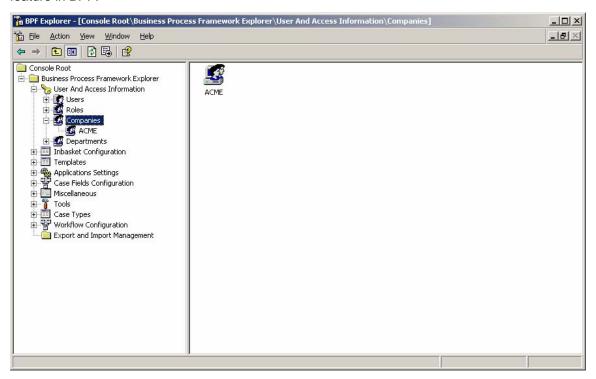
As previously mentioned, The Move Row buttons allow you to set the order that the Inbaskets will be displayed in the BPF Web Application for this role. The Inbaskets available to this role must have been previously defined in Inbasket Configuration. To rearrange the order of the Inbaskets, select the desired Inbasket, then use the First, Up, Down, and Last buttons to change the sequence.

**NOTE** Inbasket items cannot be added or removed using this window.

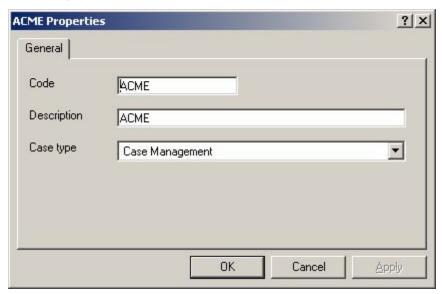


# **Company**

The company is used to represent the organizational structure in your company. The company is usually equal to a company or other organizational unit of a similar size. Although the use of company is optional, BPF requires you to configure at least one company, even if you choose not to utilize this feature in BPF.



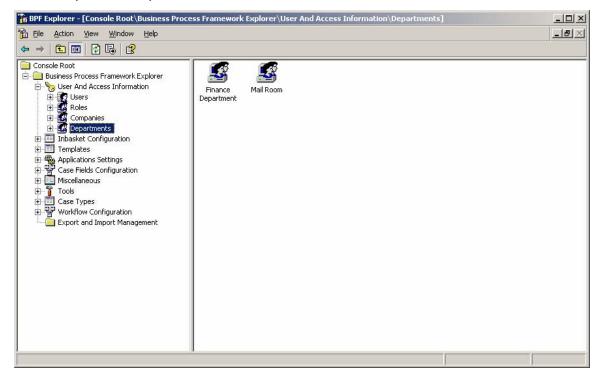
# **Company properties**



General tab	Description
Code	Code to be used for new company. In some implementations, the code corresponds to a cost center number or another number that represents the company.
Description	Company name that is displayed to users.
Case type	Select the default case type for the company.

# **Departments**

Configuring departments is optional and is typically used when implementing a hierarchical departmental structure. Utilization of this feature requires custom coding. For example, users could be manually assigned to departments using BPF Explorer, and a pick list could be created to return users in a particular department.



# **Department properties**

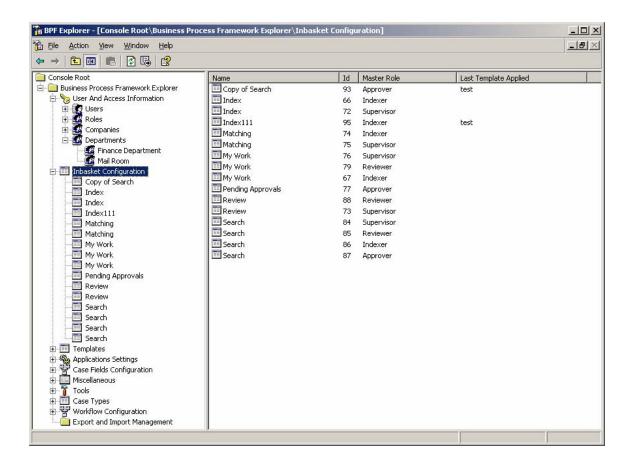


General tab	Description
Code	Internal customer-defined code denoting department. In some implementations, the code corresponds to a cost center number or another number that represents the department.
Name	The name of the department as displayed to users.
Reports to	Name of the department that is superior to the current department. This setting is not used in the out-of-the-box configuration and is usually used to implement customized hierarchical departmental relationships.

# Inbasket configuration

When a user logs into the BPF Web Application, a set of Inbaskets are displayed in the left hand pane of the user interface. The Inbaskets shown depends on the user's roles. Users view the Inbaskets to access Cases that have been assigned to them, or to access Cases that are in a shared queue. An Inbasket configuration is represents one or multiple steps in the workflow process. It is true to say that an Inbasket represents a set of Cases to be worked on by one or more roles and are at a specific stage in their workflow. This unique Inbasket configuration permits the BPF administrator to create unique behavior on what work is available, how it is viewed, and what functions are available to be performed on it by role.

Only the steps that are defined identically on the workflow map can be assigned to the same Inbasket. The process map determines if an Inbasket is public or private. A step is considered public when it is assigned to a queue. A step is considered private if it is assigned to specific workflow participants. For more information on workflow queues, reference the Process Designer documentation.



When a list of Inbaskets is displayed in the Reports mode in the right side MMC panel, the *Master Role* and the *Last Template Applied* columns are also displayed. If the *Last Template Applied* column is empty, this indicates that a template was not used to define the Inbasket.

# **Creating and Maintaining Inbasket Configurations**

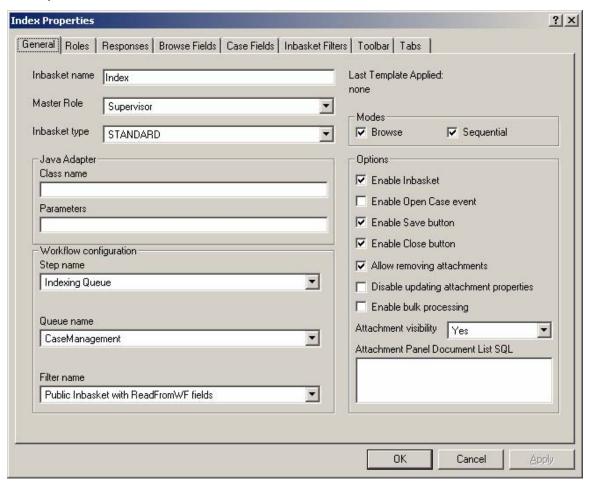
To facilitate creating and maintaining Inbasket Configurations more quickly, the BPF administrator can now:

- Create a single Inbasket Configuration for one or many roles. Changes to the Inbasket Configuration will affect all roles defined for the Inbasket. See the Inbasket Configuration -Roles Tab for more information.
- Use a Inbasket Template as the basis for one or more Inbaskets, allowing for template updates to be applied to many Inbaskets at one time. See the Templates option for more information.
- Copy and paste Inbasket Configurations in the BPF Explorer user interface to create a new Inbasket by using an existing Inbasket as a starting point for modification. Once the new Inbasket Configuration is made, it is completely independent from the original inbasket and can be modified. To copy an Inbasket, highlight an existing Inbasket, right-click the Inbasket, and select Copy. Right-click and select Paste to create new Inbasket.

Before creating a new Inbasket, many other areas must be configured that support the Inbasket Configuration. See the Logical Order of Configuration section.

#### **General tab**

The General tab defines some of the key attributes for the Inbasket such as the Name, Master Role, and the tabs available for that Inbasket. It also defines the source of work items to be available for processing, how they user will access the work items, and other functional options that may or may not be present.



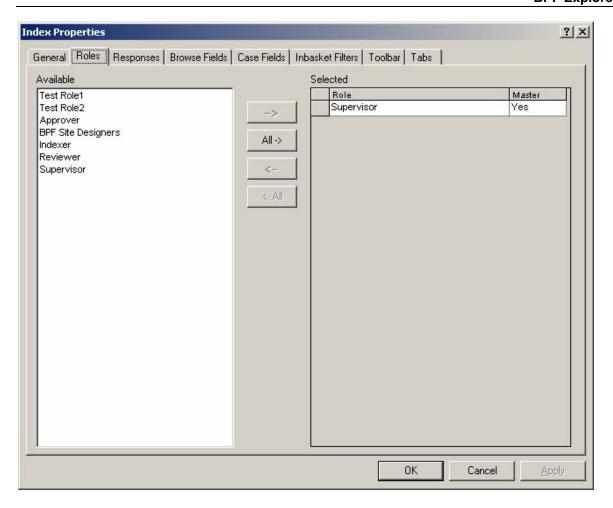
General tab	Description
Inbasket name	The name of the Inbasket that will be displayed to users. Name is limited to 18 characters.
Master Role	Select the Master Role that is permitted to access this Inbasket Configuration. If multiple Roles will be accessing this Inbasket, use the Roles Tab to add additional Roles. The Role must be predefined in order to select it as the Master Role. See the Users section for more information. If multiple roles ccess this Inbasket, it does not matter which is defined as the Master Role.
Inbasket type	Typically, the Inbasket type is set to STANDARD. If the Search feature should be available when using this Inbasket, you will need to configure a CASEQUERY Inbasket type as well.  NOTE Each role can have only one CASEQUERY Inbasket. Make sure you populate the CASEQUERY Inbasket with all available fields for all CaseTypes (typically making them all ready only). This configuration will cover all contingencies, since there is no way to know in advance which CaseTypes will be found or what steps in the workflow they may find themselves in at the time the Search is executed.
Java adapter/ Class name	This feature allows plugging a Java Class object to the Case open method. Developers could build custom Java Class objects that perform data validation or connect to external system when each Case is being opened.  In the Class Name field, enter the Java Class Name.
Java adapter/ Parameters	Enter any parameters that will be passed to the Java Class Plugin.
Workflow configuration/ Step name	The workflow configuration settings determine what Cases will be available in this Inbasket. Select the name of the workflow step that this Inbasket is associated with. Workflow step names are pre-defined on the process map and are imported into the BPF Explorer configuration. See the section entitled Workflow Configuration – Steps for more details.
	NOTE Make sure to leave the Step Name dropdown blank on CASEQUERY inbaskets or you will see abnormal behavior when opening cases from Search using _commandId=9000.
Workflow configuration/ Queue name	Select the name of the workflow queue that the above named step is assigned to on the process map. Workflow queue names are pre-defined in the process map and imported into the BPF Explorer configuration. See the section entitled Workflow Configuration – Queues for more details.
Workflow configuration/ Filter name	Select the queue filter that should be applied to this Inbasket. Select from a pre-defined filter list. See the section entitled Workflow Configuration – Filters for more details.
Last Template Applied:	This is a display only field, which indicates the last inbasket template to be applied to this inbasket configuration. If the inbasket configuration is not based on a template, it will say 'none'.
Modes/Browse	If checked, permits users to browse the Inbasket and select the desired Case. Recommended for personal Inbaskets. If left

	unchecked, this functionality is not available to the user. If both modes are checked, the Modes toolbar option will be displayed for users to switch modes.
Modes/Sequential	If checked, users are presented with the next Case from the Inbasket. They will not be able to pick Cases via a browse list. If both modes are checked, the Modes toolbar option will be displayed for users to switch modes.
Options/ Enable Inbasket	When checked, the selected Inbasket is visible. When unchecked, the Inbasket is not visible.
Options/ Enable open case event	Logs a Case Opened event to an Audit Log for all Cases accessed from this Inbasket. Is it recommended you use this feature with caution as it may generate unnecessary entries in the audit log.
Options/ Enable Save button	If checked, the Save option will appear on the Case user interface toolbar when a Case from this Inbasket is opened.
	When user clicks the Save button, the Case data is saved and user remains on the Case UI (then have to click the Close button to put Case back in the Inbasket). The Save button does not save the Case data if there have been no changes to any case fields. There is no confirmation displayed to the user when Case data is saved. If custom Plugin Tabs were developed that support the Save functionality, clicking on the Save button will save Plugin Tab data as well.
Options/ Enable Close button	If checked, the Close option will appear on the Case user interface toolbar when a Case from this Inbasket is opened. This allows the user to close a Case without saving any changes and puts the Case back in the same Inbasket it was opened from.
Options/Allow removing attachments	If checked, the user will be allowed to remove attachments from the Case in the case user interface. If this is enabled, a small 'x' will appear next to each document icon and if clicked by the user, will prompt for document deletion.
Options/Disable updating attachment properties	When this checkbox is selected, index values of the attached documents will not be updated. It is recommended that this always be checked unless there is a clear requirement not to update document properties.
Options/Enable bulk processing	When this checkbox is enabled, the Inbasket will be configured for bulk processing that presents the user of the BPF Web Application the ability to select multiple items from the Inbasket for processing. You also need to configure specific Inbasket actions for bulk processing as well. See the Inbasket Configuration – Actions tab for more details.  NOTE When enabling the Bulk Processing option, there is a practical and physical limit as to how many objects can be
	processed at one time. The optimum is to keep the number of items processed to less than 50 at one time. You can physically not exceed 150 at a time due to content engine limitations on the SQL query that is created, as runtime errors can result. If a user selects more than 150, an appropriate message will be displayed to limit the selection.

Options/Attachment visibility	When checked, the selected Inbasket is visible. When unchecked, the Inbasket is not visible.
Options/Attachment panel document list SQL	This field controls the documents that will be displayed on the Case Tab content bar when the Case is opened in this Inbasket. If left blank, then BPF will use the SQL query defined in the Web Application settings – Case attachments list parameter, which by default are all documents and folders attached to the case.
	If a CE SQL statement is entered, it can limit the documents displayed for this Inbasket.
	In this example it would limit the displayed attachments to those with a DocType equal to 1.
	Example:
	select a.Bp80bjectID as Id, a.Bp80bjectType 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

# **Roles tab**

The Roles tab determines what Roles are able to access the Inbasket that is being cnfigured. The Primary Role is already listed. This was entered on the General tab of the Inbasket Configuration. You may select additional Roles that can all access the same inbasket Configuration.



Roles tab	Description
Available	This section lists all of the Roles that are available for selection. Roles are defined in Roles definition under User and Access Information.
Selected	This section lists all of the selected Roles that can access the Inbasket being configured.
	Master – Indicates the Master Role as defined in the General tab of the Inbasket Configuration.

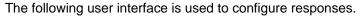
# Responses tab

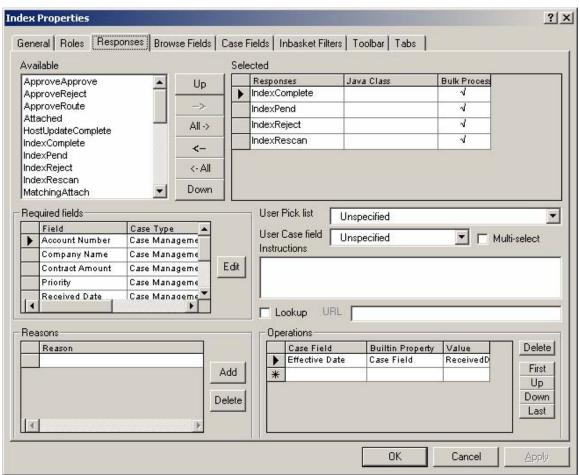
Responses appear as a drop-down menu in the BPF Web Application when a Case is open and the user places their cursor over the Action link on the toolbar. The user selects one of the available responses to complete the Case. Once a response is selected, the Case is closed and the workflow object is dispatched to the next step in the workflow. Generally, the set of responses defined for the Inbasket match responses defined on the workflow map.

BPF allows you to expose fewer responses on a particular Inbasket than there are responses on the workflow step. This feature allows you to build in an additional security level. For example, you may have a step on the workflow defined with two responses: Approve and Terminate. You may want to

expose Terminate to supervisor-level users only. All other users need access to Approve only. In this example, you would expose the Approve response to the regular user Inbaskets and both the Approve and Terminate responses for the supervisor Inbaskets.

Although the list of responses you expose on the Inbasket is static, BPF will validate the responses you configured against responses valid for the work object. It will not display a configured response if the work object does not support that that response on its process map. For example, when you initially define the step on the workflow map, you define Approve and Terminate as responses and expose the corresponding responses to the BPF Inbasket. Later on, you may decide to add a new response to the workflow step, called Reject. You will also need to expose the Reject response to the BPF Inbasket. At this point, you may have old and new workflow objects in the same Inbasket. BPF will display Approve and Terminate only for the old work objects, and all three responses for the new work objects.





Responses tab	Description
Available	Displays a list of all responses defined in BPF Explorer. Responses are pre-defined on the process map and imported into the BPF Explorer configuration. See the section entitled Workflow Configuration – Response for more details.
Selected	Select the responses that should be available for this Inbasket.
Java class	A plug-in Java class object can be configured and will be invoked when the response is executed. The plug-in object may perform more complex data validations and field checking based on the business rules.

Bulk Process	If Bulk Process is checked, this response is available as an action for the Bulk Processing Interface.
	NOTE If Bulk Process is checked for an action/response, no other operations (such as reason selection, required fields, custom validation, etc.) should be configured for it. Configuring these other operations on an action/response that will be used in Bulk Process mode really defeats the purpose of Bulk Processing itself, since Bulk Process is designed by its very nature to allow a selected subset of actions/responses to be applied immediately to a number of cases "all at once" without any additional processing or user interface. It is therefore strongly recommended that you do not configure any other operations (operations (such as reason selection, required fields, custom validation, etc.) on actions/responses that will be used in Bulk Processing mode.
	s provide for additional behavior on specific responses. You must fore entering the behavior. An arrow on the row of the selected at it is selected.
Required fields	Identifies fields that must be entered in order for the response to be accepted.
	Click Edit to update the list of required fields.
Field	Enter the Case field(s) that will be required.
Case Type	Select the appropriate Case type for the Case field entered.
User pick list	If the selected response requires a user selection, a user pick list can be selected from the list of available pick lists. An example would be a response called Route where you wanted to allow the user to select whom they wanted to route the work to.
User Case field	When a user pick list is entered, a "Please select user" dialog box will be displayed to the user when the response is selected.  The user Case field stores the results of the user selection from the user pick list and must be entered to enable the selection.  When the user Case field is selected, ensure this field is defined with a workflow group.  If the Case field is defined as a regular pick list, a drop down list is displayed. If the Case field is defined as a lookup, a text box is displayed. Whether the user's short name or full name is displayed.
Multi-select	depends on the Case field definition (CODE vs. DESCRIPTION).  When checked, the user pick list will be presented as a multi-select list on the user interface. Thus, the user can select more than one user from the list.  NOTE Use this option only after you thoroughly understand the
Instructions	concepts and workflow behind assigning work to multiple users.  Enter any instructions for the user that appear above the pick list. If not provided, default instructions will be presented.  Example: "You do not have sufficient authority to approve this

Lookup	If the response has a pick list assigned to it and the Lookup checkbox is selected, the user can type full or partial text in the combo box to lookup an entry, including masking characters.
URL	If the response is not defined as a pick list and you wish to provide external lookup capabilities, selecting this Lookup attribute will enable the Lookup service URL attributes on this form, and launch the Lookup service URL attribute entered. See the Lookup service URL section for more information.
Reasons	Use this list to add or delete reasons available to the user for a response to the Case. When reasons are defined for a response, the user will have to select one of the reasons before completing the response. The reason selected is captured in the audit log. The list of reasons must already be defined in the Miscellaneous – Reasons section.
	Add button: Select to add a new reason.
	Delete button: Select to delete an existing reason.
	Example: A response called Claim Denied may require the user to select a reason as to why the claim was denied, which will be logged in the audit log.
Operations	Operations can automatically assign values to Case fields for a specific response, similar to an assignment statement in many programming languages. The operations entered for a specific response will be executed in the order that they are entered. Operations override any field modifications that user makes. The First, Up, Down, and Last buttons can be used to change the execution order.
Case Field	Enter a valid Case field name that receives the assigned value.

# **Builtin Property** The Builtin property determines the type of value that will be assigned and how it will be assigned. Valid types are: Constant - Uses the literal value specified in the Value field and assigns it to the Case field identified. **Active user name** – Assigns the current run-time user logon name to the Case field specified. No value needs to be specified in the Value field. The Case field that receives an active user name should be defined as a valid workflow group. Active user ID – This assigns the current run-time BPF user ID. This is the value from the USERS table, USER ID column in the BPF Metastore. Active user Full Name – This assigns the current run-time users full name. No value needs to be specified in the Value field. Active user PE ID - This assigns the PE user ID. It is typically used for implementing personal work assignment. No value needs to be specified in the Value field. **Active user profile name** – Assigns the role name of the current run-time user. No value needs to be specified in the Value field. Active user profile ID - Assigns the role ID of the current runtime user. No value needs to be specified in the Value field. Case field – This type assigns the current run-time value of Case field specified in the Value field to the Case field identified. Value Enter the appropriate value (if applicable), based on the Builtin Property type identified above. Operation example: A response called Take Ownership moves the Case from a shared Inbasket to a personal Inbasket assignment using the following operation: Case Field: PERSONAL Group Builtin Property: Active User Name Value: <empty> This assignment populates the PERSONAL group Case field with the name of the current run-time user. **NOTE** The Case field has to be exposed on the Inbasket to participate in operations. **NOTE** When configuring the Operations on the Response Tab for an Inbasket, if the type of the Case Field is date/datetime and you select "Constant" as the Builtin Property, the value should be the milliseconds since January 1, 1970, 00:00:00 GMT. This value can, for example, be obtained by calling the getTime() methond on

**NOTE** The Response tab is one of the most complex areas in configuring runtime behavior because of the interactions created between BPF and the process map. Close examination of existing Inbaskets can help illustrate various options and the interactions created with BPF Explorer definition, the Web Application, and Process Designer.

a Date object in either Java or JavaScript.

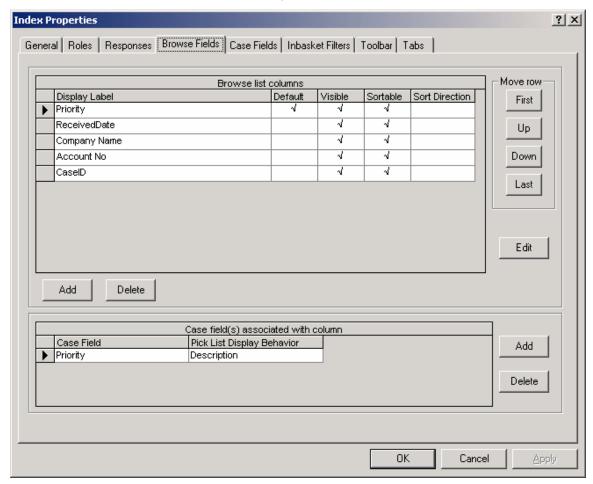
#### **Browse Fields tab**

The Browse Fields tab defines the columns that are displayed in the Inbasket Browse List. The Default Browse Column defines the default sort order for the Inbasket (for both Browse and GetNext modes).

At least one default browse column should be created for the Inbasket to function properly. Only sortable columns can be assigned as a default. Columns can be configured as sortable only when there is an exposed workflow queue field assigned to the Case field.

To create a new Browse field, create the Browse column first. Then, assign the Case field to the new browse field.

- Click the Browse Fields tab.
- 2. Change/enter information on the tab as required.
- 3. Click Apply.
- 4. Click Add in the Browse list columns area. (A default Label called Column0 will be displayed).
- 5. Enter the correct Display label and select any Default, Visible, Sortable, Sort Direction option applicable.
- 6. With the Browse Column selected, assign the Case Field by selecting the related Case field. (You do not need to click the Add button below.)



Browse Fields tab	Description
Browse list columns	
Display Label	This is the column title in the Inbasket browse list fields that will be displayed.
Default	Sets the initial sort order. The user may override the default sort order by selecting another sortable column on the screen but each refresh of the Inbasket will use this default field for the initial sort order.
	<b>NOTE</b> All Sortable fields MUST be defined in Process Engine as exposed fields in the queue for them to be sortable. BPF cannot check this at design time. Runtime errors may result if you have used a non-exposed queue field to sort on.
Visible	Allows the filed to be displayed or hidden.
Sortable	Allows the user to perform a run-time sort on this field. Once a browse column is defined as sortable, it is displayed underlined with an arrow next to the column title indicating sort direction.
	<b>NOTE</b> All Sortable fields MUST be defined in Process Engine as exposed fields in the queue for them to be sortable. BPF cannot check this at design time. Runtime errors may result if you have used a non-exposed queue field to sort on.
Sort Direction	Determines the default sort order to be either Ascending or Descending. When this column is selected, the sort direction is descending. When this column is not selected, the sort direction is ascending. The default is unselected: ascending sort.
Move rows	The order of entry in the browse list columns will determine the order of display at run-time with columns appearing left to right to the user. The Move Row buttons can be used to adjust the order of display.
Edit button	Allows changing the default sort order for the column. See the following section for information about custom sorting.
Add button	Allows creating additional browse columns to be displayed. Once a browse column is created, the Case field must be selected using Current Column Fields.
Delete button	Allows browse columns to be removed from display.
<b>NOTE</b> The following entries provide for additional information for an individual column. You must select the column first before entering the information. An arrow on the row of the selected column is an indication that it is selected.	
Case field(s) associated with column	Caution: Only one Case field may be associated with a browse column and it must be supported for all Case Types.
Case Field	Use to add or delete a single Case field that will be displayed in the browse columns.
Case Type	Keep the default entry of <for all="" types="">.</for>

Pick list Display Behavior	Select either Icon or Default. If Icon is selected, the icon graphic will be displayed to the user in place of the data value. If Default is selected, the data value will be displayed.
Add button	Allows additional Case fields to be displayed in the column. Items must be added here before adding them to the browse columns (see entry above).
Delete button	Allows Case fields to be removed from display.

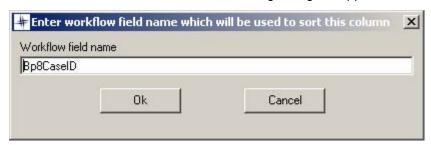
**NOTE** Only Case fields can be displayed in the browse list. Is it recommended you limit the number of columns defined in each Inbasket to achieve better performance. Only exposed workflow fields can be used to sort the contents of the Inbasket.

## Edit button - advanced sort

The default browse column determines the initial sort order of the Inbasket. Browse columns identified as sortable allow users to re-sort the content of the Inbasket at run-time. The way the Web Application performs these sorts is by locating the Case field associated with the browse column and retrieving the workflow field associated with the Case field. It then uses the exposed workflow field value to provide the sort from the workflow queue. The BPF administrator may override the assumed workflow field for sorting with another one using the Advanced Sort feature to provide more complex sort expressions. Predefining another workflow field and substituting that field name in the advanced sort for any sort column will accomplish this. 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.

To create an advanced sort, create and select the browse column first. Advanced sort is only effective on browse columns identified as Default or Sortable.

When the Edit Button is clicked, the following dialog will appear:



## Sample of Advanced Inbasket Sorting

#### Requirement:

Display all cases with a priority equal to 1 on top of the list, followed by priority 2, followed by priority 0. Sort by the Voucher Number field value within each group and display all voucher numbers that start with a U on top of the list. Sort cases as FIFO within the voucher groups.

Creating Inbasket sorting:

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

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

2. Create user Defined functions in workflow database (VWdb)

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

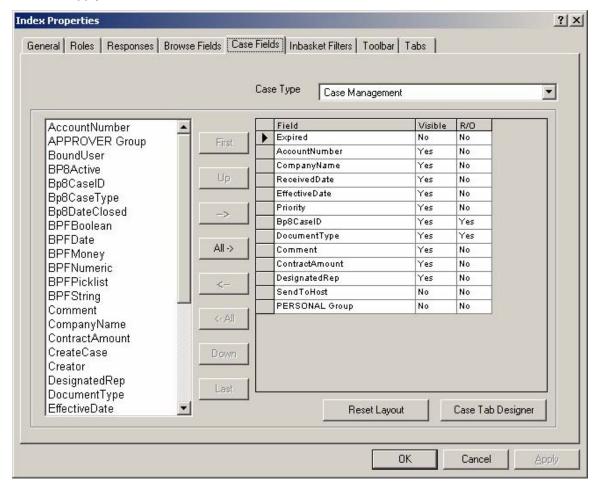
# **Case Fields tab**

The Case Field tab definition controls the order, visibility, and read/write attributes of the Case Tab on the Case User Interface in the BPF Web Application. By exposing Case fields on the Inbasket, you are determining the set of fields that could be changed both programmatically and by the end user.

To configure the Case fields for an Inbasket, a Case type must be selected first since Cases with different Case types can be present in an Inbasket. By default, all Case fields are displayed on the user interface in a single column fashion, in the order defined on this tab. However, you can create custom multi-column layout, multi-section layouts using the Case Tab Designer. The Case Tab Designer is a drag-and-drop visual editor that lets you design your own Case Tab layout.

#### To define the Case tab:

- 1. Click the Case Fields tab.
- Use the First, Up, Down, and Last buttons to arrange the list of fields in the desired order. Unless
  a layout has been created, fields will be displayed in this order when a user opens a Case from
  Web Application.
- 3. Click Apply.



Case Fields tab	Description
Case Type	Select the Case type to be configured. It is possible to configure multiple Case types for the same Inbasket. Based on the Case type value of the Case selected from the Inbasket, the appropriate Case tab will be displayed.
Available case fields displayed in left column	The list of available Case fields for the selected Case type is displayed. This list is created from the Case fields configuration/ Case Data Dictionary definition. Select the Case fields that you would like available to the Case tab.
Selection and movement buttons	The center buttons allow the user to perform selection and movement of Case fields.
->, <-	These buttons provide selection and de-selection of individual Case fields.
AII ->, <-AII	These buttons provide selection and de-selection of all of the Case fields.
First, Up, Down, Last	These buttons allow you to order the Case fields in the selection list. Select the Case field you wish to move and press the appropriate button.
Field	When a Case field has been selected, it will be displayed in the Field column.
Visible	Allows fields to be displayed or hidden. Fields are usually configured as hidden when need to be changed programmatically but be hidden from the users. Click on the pick list arrow to change between Yes and No. The default entry is Yes: Case field will be displayed.
R/O	Makes a Case field read-only on the Case tab user interface. This means that the user will see the Case field and its current value, but cannot edit or change its value. Read-only fields are displayed in gray to the user to distinguish them from editable fields. Click on the pick list arrow to change between Yes and No. The default entry is No: Case field will be editable.

**NOTE** A Case field must be exposed through the Case Data Dictionary for each Case type to be available for selection.

# **Reset Layout**

The Reset Layout button will reset the current layout back to the default layout, which is a single column of visible Case fields in the order listed in the Case Fields tab. If the button is selected, the user will be asked to confirm that this is what they would like to do before the reset occurs. Once a layout has been reset, the former layout cannot be recovered.

## **Case Tab Designer**

The Case Tab Designer allows you to tailor the Case tab user interface based on your needs, arranging fields in more than a single column and grouping fields with Expandos. An Expando is a title for a group of fields that could be collapsed, making fields temporarily invisible, and then reexpanded.

#### To design the Case tab:

- 1. Highlight the cell you want to place the field to. Use the Insert Row and Insert Column buttons to create the additional rows and columns, respectively.
- 2. Highlight the field to want to place on the Case tab by clicking the row on the Inbasket Fields list.
- 3. Click the right arrow button (>) above the Inbasket fields list. You can drag and drop fields from one cell to another.

NOTE You can place only one field to a cell.

### To expose the Expando:

- 1. Highlight the cell you want to place the Expando label in.
- 2. Highlight the Expando you want to place in the Case tab by clicking the row on the Expandos list.
- 3. Click the right arrow button (>) above the Expando list.

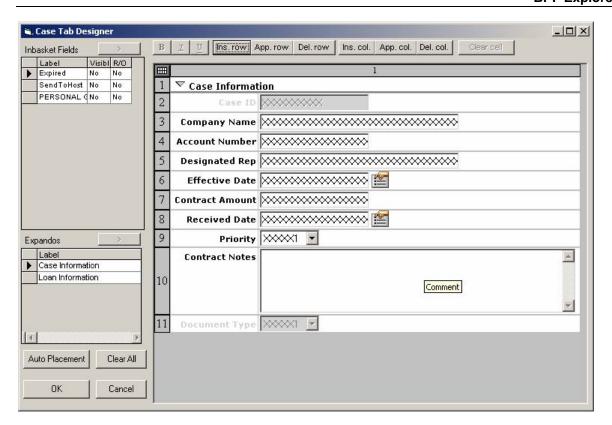
### More about using Expandos

- You can place only one Expando on a row. The Expando will occupy the entire row.
- If you need to configure a new Expando title, you can only do this by editing the Metastore directly. Add a row to the INBASKET\_EXPANDOS table.
- When a new expando is defined in the BPF Metastore, it has a property that indicates
  whether it's normally collapsed or expanded. The Case Tab Designer has a capability to
  override the Expando state for each Inbasket, whether it's collapsed or expanded, choosing
  the appropriate item on the right-click context menu.

#### More about formatting cells

The following features provide the additional flexibility:

- You can type additional text in any cell that is not occupied by a field. Text can be made bold, italic, or underlined.
- You can configure the field label to be display to the right of the field by right-clicking on the field and selecting the "display label on the right" menu item.
- If you want to change the label of a Case field, you must go back to the Application Field definition and edit the display label. It cannot be changed in the Case Tab Designer.
- You can merge two or more columns into a single cell to accommodate for long fields.
- You can configure expandos as enabled or disabled by default by clicking on the arrow next to the expando title. However, it is shown in the Case Tab Designer the way it will default to the user.



### Inbasket Filters tab

Inbasket filters can be added to any Inbasket. Inbasket filters provide the user the ability to limit the content shown in the Inbasket based on predefined criteria.

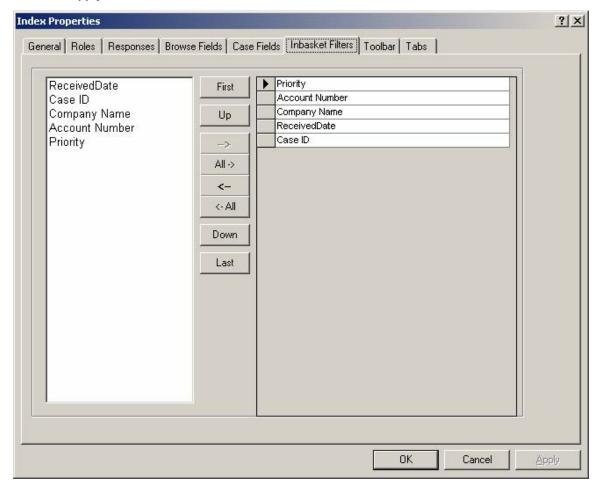
This filter is different than the work queue filter defined in the Inbasket Configuration/General tab, which provides the primary Inbasket queue filter and cannot be changed by the user. Inbasket filters can be based on active user properties or consist of a list of static values (pick list). Although there is not a limit to the number of filters defined in the system or the number defined for an individual Inbasket, it should be restricted to a reasonable number based on the screen space available.

Inbasket filter considerations:

- The Inbasket Filters tab allows you to configure the filter display order, display title, pick lists, display width, etc.
- Inbasket filters can be simple (one field) or complex (combination of fields).
- An All value can be configured for an added to Inbasket filters, which are pick lists. All can be configured as "All possible values from the full list" or "All values from the list that is limited to a current user."
- An Inbasket Filters defined as a pick list can be presented as a combo box or a text box.

# To configure an Inbasket Filter:

- 1. Click the Inbasket Filters tab.
- 2. Change/enter information on the tab, as required.
- 3. Click Apply.



Inbasket Filters tab	Description
Available case fields displayed in left column	The list of all the available Inbasket filters. Inbasket filters are defined in BPF Explorer under Miscellaneous/Inbasket Filters. See the Miscellaneous/Inbasket Filter section for more information.
Selection and movement buttons	The center buttons allow the user to perform selection and movement of Inbasket filters.
->, <-	These buttons provide selection and de-selection of individual Inbasket filters.
All ->, <-All	These buttons provide selection and de-selection of all of the Inbasket filters.

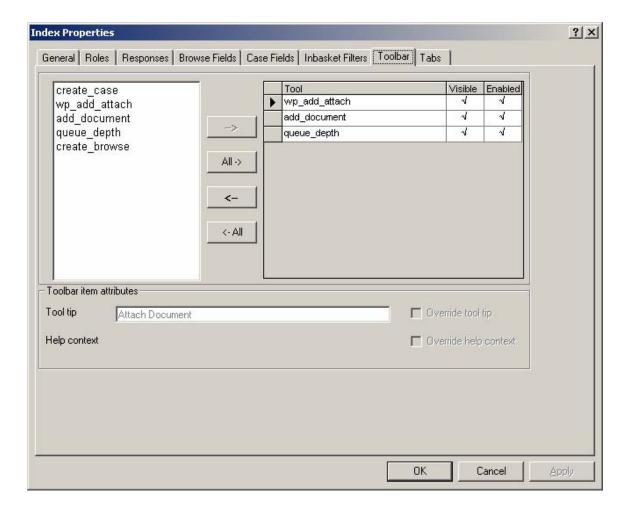
First, Up, Down, Last	These buttons allow you to order the Inbasket filters in the selection list. The order determines how they will be presented to the user at run-time. Select the filter you wish to move and press the appropriate button.
--------------------------	--

#### **Toolbar tab**

The Toolbar tab defines what tools will be available on the toolbar for the user at run-time, for the current Inbasket.

# To configure the Toolbar tab:

- 1. Click the Toolbar tab.
- 2. Change/enter information on the tab, as required.
- 3. Click Apply.
- 4. Click OK to save the Inbasket configuration and exit.



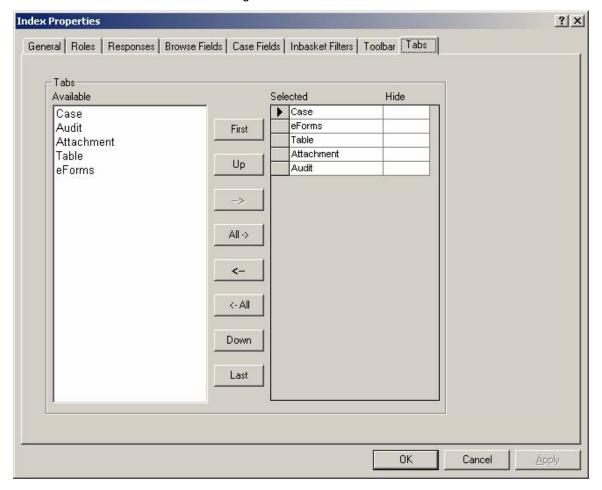
Toolbar tab	Description
Available case fields displayed in left column	The list of all the available tools. Tools filters are defined in BPF Explorer under Tools. See the Tools section for more information.
Selection and movement buttons	The center buttons allow the user to perform selection and movement of tools.
->, <-	These buttons provide selection and de-selection of individual tools.
All ->, <-All	These buttons provide selection and de-selection of all of the tools.
First, Up, Down, Last	These buttons allow you to order the tools in the selection list. The order determines how they will be presented to the user at runtime. Select the tool you wish to move and press the appropriate button.
Tool	When a tool has been selected for use with this Inbasket, it will be displayed in the Tool column.
Visible	Allows tools to be displayed or hidden. Tools are usually configured as hidden when they need to be hidden from the users. If the Visible field is selected, then the tool will be available to the user. If unselected, then it is hidden.
Enabled	Allows a tool to be deactivated if necessary. When checked, the selected tool is enabled. When unchecked, the tool is disabled.
	Example: A use case for disabling the tool, but keeping it visible, is if you were creating a prototype of an application and wanted to see the tool on the toolbar, but did not want to enable it because the functionality was not yet present or not yet tested. If a tool is set up as visible but not enabled, and the user selects it, they will see an appropriate message that the tool is not available.
Toolbar item attributes	
Tool tip	When the user passes their mouse over the tool, this is the text (tip) that will be shown.
Help context	Not yet implemented at this time.
Override tool tip	Not yet implemented at this time.
Override help context	Not yet implemented at this time.

#### Tabs tab

The Tabs tab defines what tabs are active in the Case User Interface for the current Inbasket and in what order they will be displayed.

# To configure the Tabs tab:

- 1. Click the Tabs tab.
- 2. Change/enter information on the tab, as required.
- 3. Click Apply.
- 4. Click OK to save the Inbasket configuration and exit.

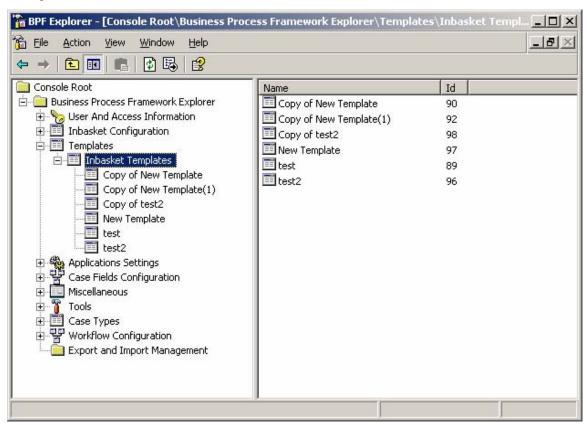


Tabs tab	Description
Available	The list of all the available tabs. The only tabs available out-of-the-box with BPF are: Case, Audit, eForms, and Attachments. Custom tabs may be defined programmatically and added to the available list. For more information about creating custom tabs, see the BPF Developer Guide.
Selected	When a tab has been selected for use with this Inbasket, it will be displayed in the Tab column.

Selection and movement buttons	The center buttons allow the user to perform selection and movement of tabs.
->, <-	These buttons provide selection and de-selection of individual tabs.
All ->, <-All	These buttons provide selection and de-selection of all of the tabs.
First, Up, Down, Last	These buttons allow you to order the tools in the selection list. The order determines how they will be presented to the user at runtime. Select the tab you wish to move and press the appropriate button.
Hide	Allows tabs to be displayed or hidden. Tabs are usually configured as hidden when you do not wish to display them to the user, but need the data on them to be available to the open case. An example of this is when you wish to use an eForm Tab in place of the Case Tab, but need the Case Tab data available to be updated.
	If the Hide field is selected, then the tab will be hidden to the user. If unselected, then it will be displayed.

# **Templates**

Templates are a new method within BPF Explorer for creating reusable configuration definition. Currently, Inbasket Templates are the only templates which can be defined and applied to Inbasket Configurations.



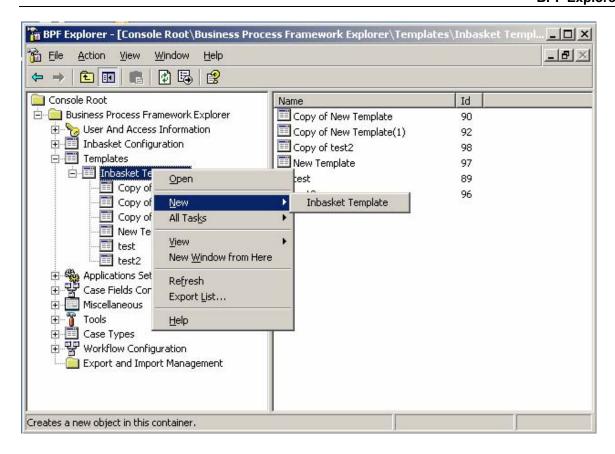
# **Inbasket Templates**

The Inbasket Template allows the user to design a set of Inbasket Configuration parameters that can be applied to many Inbasket Configurations. The advantage is that if many Inbaskets share the same common Case Fields, Browse Fields, or other General parameters, they can be defined just once in the template, and applied to many Inbaskets.

When Inbaskets have been defined using templates, the time to change your configuration can be greatly reduced by changing just the one template, and then reapplying the template to many Inbaskets. Especially in large, complex applications, you should consider the use of templates in the design and implementation of your Inbasket architecture. This will greatly reduce your overall maintenance time and effort.

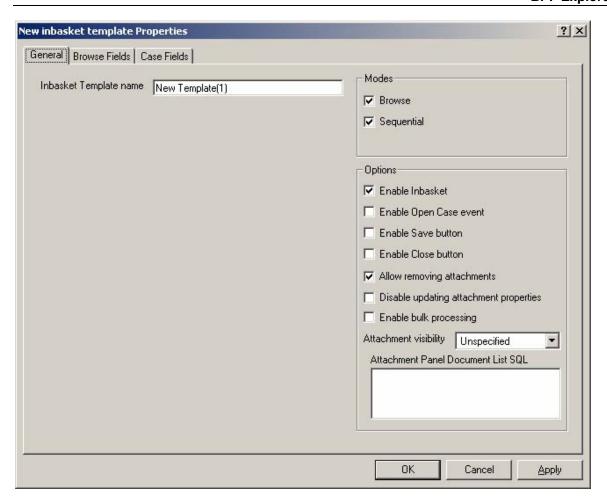
# **Defining Inbasket Templates**

Use the right mouse button to create a new Inbasket Template.



# **General tab**

The General tab defines some of the same type of key attributes for the Inbasket Template that would be defined for an Inbasket Configuration such as the Name, Modes and Options. These parameters on the general tab will be applied to any Inbasket that the template is used on.



General tab	Description
Inbasket Template name	The name of the Inbasket Template. Name is limited to 50 characters. Template names do not have to be unique. A unique template ID is automatically assigned to each template.
Modes/Browse	If checked, permits users to browse the Inbasket and select the desired Case. Recommended for personal Inbaskets. If left unchecked, this functionality is not available to the user. If both modes are checked, the Modes toolbar option will be displayed for users to switch modes.
Modes/Sequential	If checked, users are presented with the next Case from the Inbasket. They will not be able to pick Cases via a browse list. If both modes are checked, the Modes toolbar option will be displayed for users to switch modes.
Options/ Enable Inbasket	When checked, the selected Inbasket is visible. When unchecked, the Inbasket is not visible.
Options/ Enable open case event	Logs a Case Opened event to an Audit Log for all Cases accessed from this Inbasket. Is it recommended you use this feature with caution as it may generate unnecessary entries in the audit log.

Options/ Enable Save button	If checked, the Save option will appear on the Case user interface toolbar when a Case from this Inbasket is opened. This allows the users to save their changes and puts the Case back in the Inbasket.
Options/ Enable Close button	If checked, the Close option will appear on the Case user interface toolbar when a Case from this Inbasket is opened. This allows the user to close a Case without saving any changes and puts the Case back in the same Inbasket it was opened from.
Options/Allow removing attachments	If checked, the user will be allowed to remove attachments from the Case in the case user interface. If this is enabled, a small 'x' will appear next to each document icon and if clicked by the user, will prompt for document deletion.
Options/Disable updating attachment properties	When this checkbox is selected, index values of the attached documents will not be updated. It is recommended that this always be checked unless there is a clear requirement not to update document properties.
Options/Enable bulk processing	When this checkbox is enabled, the Inbasket will be configured for bulk processing that presents the user of the BPF Web Application the ability to select multiple items from the Inbasket for processing. You also need to configure specific Inbasket actions for bulk processing as well. See the Inbasket Configuration – Actions tab for more details.
	NOTE When enabling the Bulk Processing option, there is a practical and physical limit as to how many objects can be processed at one time. The optimum is to keep the number of items processed to less than 50 at one time. You can physically not exceed 150 at a time due to content engine limitations on the SQL query that is created, as runtime errors can result. If a user selects more than 150, an appropriate message will be displayed to limit the selection.
Options/Attachment visibility	When checked, the selected Inbasket is visible. When unchecked, the Inbasket is not visible.
Options/Attachment panel document list SQL	This field controls the documents that will be displayed on the content bar when the Case is opened. If left blank, all documents attached to the Case are displayed. If a CE SQL statement is entered, it can limit the documents displayed.

## **Browse Fields tab**

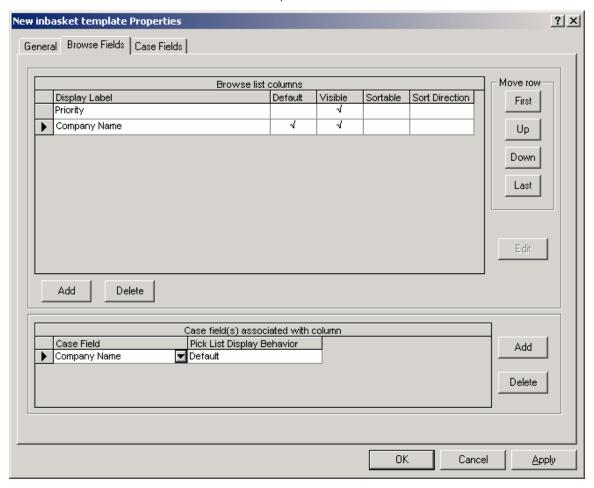
The Browse Fields tab defines the columns that are displayed in the Inbasket Browse List. He template definition here is identical to the definition done at the Inbasket Configuration level.

The Default Browse Column defines the default sort order for the Inbasket (for both Browse and GetNext modes). At least one default browse column must be created for the Inbasket to function properly. Only sortable columns can be assigned as a default. Columns can be configured as sortable only when there is an exposed workflow queue field assigned to the Case field.

To create a new Browse field, create the Browse column first. Then, assign the Case field to the new browse field.

1. Click the Browse Fields tab.

- 2. Change/enter information on the tab as required.
- 3. Click Apply.
- 4. Click Add in the Browse list columns area. (A default Label called Column0 will be displayed).
- 5. Enter the correct Display label and select any Default, Visible, Sortable, Sort Direction option applicable.
- 6. With the Browse Column selected, assign the Case Field by selecting the related Case field. (You do not need to click the Add button below.)



Browse Field tab	Description
Browse list columns	
Display Label	This is the column title in the Inbasket browse list fields that will be displayed.
Default	Sets the initial sort order. The user may override the default sort order by selecting another sortable column on the screen but each refresh of the Inbasket will use this default field for the initial sort order.
Visible	Allows the filed to be displayed or hidden.

Sortable	Allows the user to perform a run-time sort on this field. Once a browse column is defined as sortable, it is displayed underlined with an arrow next to the column title indicating sort direction.
Browse Fields tab	Description
Sort direction	Determines the default sort order to be either Ascending or Descending. When this column is selected, the sort direction is descending. When this column is not selected, the sort direction is ascending. The default is unselected: ascending sort.
Move row	The order of entry in the browse list columns will determine the order of display at run-time with columns appearing left to right to the user. The Move Row buttons can be used to adjust the order of display.
Edit button	Allows changing the default sort order for the column.
Add button	Allows creating additional browse columns to be displayed. Once a browse column is created, the Case field must be selected using Current Column Fields.
Delete button	Allows browse columns to be removed from display.
NOTE The following entries provide for additional information for an individual column. You must select the column first before entering the information. An arrow on the row of the selected column is an indication that it is selected.	
Case field(s) associated with column	A single Case field may be associated with a browse column although you may have multiple entries of a Case field to support multiple Case types.
Case Field	Use to add or delete the Case field that will be displayed in the browse columns.
Case Type	Select the appropriate Case type for the Case field entered or use the default entry of <for all="" types="">.</for>
Pick list Display Behavior	Select either Icon or Default. If Icon is selected, the icon graphic will be displayed to the user in place of the data value. If Default is selected, the data value will be displayed.
Add button	Allows additional Case fields to be displayed in the column. Items must be added here before adding them to the browse columns (see entry above).
Delete button	Allows Case fields to be removed from display.

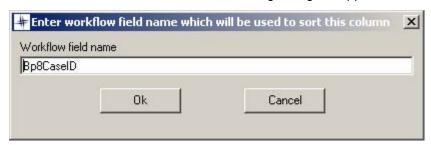
**NOTE** Only Case fields can be displayed in the browse list. Is it recommended you limit the number of columns defined in each Inbasket to achieve better performance. Only exposed workflow fields can be used to sort the contents of the Inbasket.

#### Edit button - advanced sort

The default browse column determines the initial sort order of the Inbasket. Browse columns identified as sortable allow users to re-sort the content of the Inbasket at run-time. The way the Web Application performs these sorts is by locating the Case field associated with the browse column and retrieving the workflow field associated with the Case field. It then uses the exposed workflow field value to provide the sort from the workflow queue. The BPF administrator may override the assumed workflow field for sorting with another one using the Advanced Sort feature to provide more complex sort expressions. Predefining another workflow field and substituting that field name in the advanced sort for any sort column will accomplish this. 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.

To create an advanced sort, create and select the browse column first. Advanced sort is only effective on browse columns identified as Default or Sortable.

When the Edit Button is clicked, the following dialog will appear:



## Sample of Advanced Inbasket Sorting

#### Requirement:

Display all cases with a priority equal to 1 on top of the list, followed by priority 2, followed by priority 0. Sort by the Voucher Number field value within each group and display all voucher numbers that start with a U on top of the list. Sort cases as FIFO within the voucher groups.

Creating Inbasket sorting:

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

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

2. Create user Defined functions in workflow database (VWdb)

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

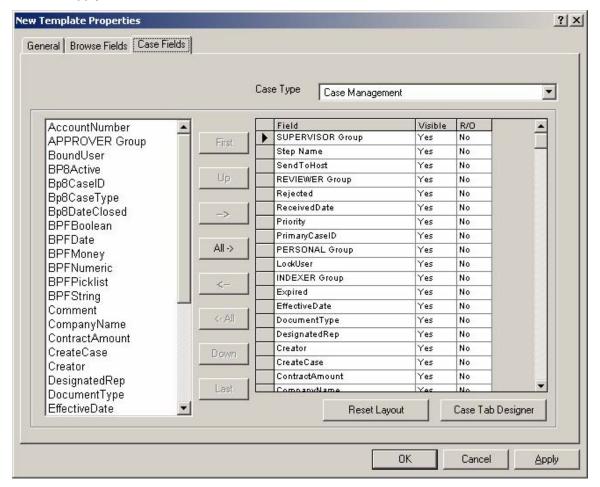
### Case Fields tab

The Case Field tab definition controls the order, visibility, and read/write attributes of the Case Tab on the Case User Interface in the BPF Web Application. By exposing Case fields on the Inbasket, you are determining the set of fields that could be changed both programmatically and by the end user.

To configure the Case fields for an Inbasket, a Case type must be selected first since Cases with different Case types can be present in an Inbasket. By default, all Case fields are displayed on the user interface in a single column fashion, in the order defined on this tab. However, you can create custom multi-column layout, multi-section layouts using the Case Tab Designer. The Case Tab Designer is a drag-and-drop visual editor that lets you design your own Case Tab layout.

#### To define the Case tab:

- 1. Click the Case Fields tab.
- Use the First, Up, Down, and Last buttons to arrange the list of fields in the desired order. Unless
  a layout has been created, fields will be displayed in this order when a user opens a Case from
  Web Application.
- 3. Click Apply.



Case Fields tab	Description
Case Type	Select the Case type to be configured. It is possible to configure multiple Case types for the same Inbasket. Based on the Case type value of the Case selected from the Inbasket, the appropriate Case tab will be displayed.
Available case fields displayed in left column	The list of available Case fields for the selected Case type is displayed. This list is created from the Case fields configuration/ Case Data Dictionary definition. Select the Case fields that you would like available to the Case tab.
Selection and movement buttons	The center buttons allow the user to perform selection and movement of Case fields.
->, <-	These buttons provide selection and de-selection of individual Case fields.
AII ->, <-AII	These buttons provide selection and de-selection of all of the Case fields.
First, Up, Down, Last	These buttons allow you to order the Case fields in the selection list. Select the Case field you wish to move and press the appropriate button.
Field	When a Case field has been selected, it will be displayed in the Field column.
Visible	Allows fields to be displayed or hidden. Fields are usually configured as hidden when need to be changed programmatically but be hidden from the users. Click on the pick list arrow to change between Yes and No. The default entry is Yes: Case field will be displayed.
R/O	Makes a Case field read-only on the Case tab user interface. This means that the user will see the Case field and its current value, but cannot edit or change its value. Read-only fields are displayed in gray to the user to distinguish them from editable fields. Click on the pick list arrow to change between Yes and No. The default entry is No: Case field will be editable.

**NOTE** A Case field must be exposed through the Case Data Dictionary for each Case type to be available for selection.

# **Reset Layout**

The Reset Layout button will reset the current layout back to the default layout, which is a single column of visible Case fields in the order listed in the Case Fields tab. If the button is selected, the user will be asked to confirm that this is what they would like to do before the reset occurs. Once a layout has been reset, the former layout cannot be recovered.

## **Case Tab Designer**

The Case Tab Designer allows you to tailor the Case tab user interface based on your needs, arranging fields in more than a single column and grouping fields with Expandos. An Expando is a title for a group of fields that could be collapsed, making fields temporarily invisible, and then reexpanded.

#### To design the Case tab:

- 1. Highlight the cell you want to place the field to. Use the Insert Row and Insert Column buttons to create the additional rows and columns, respectively.
- 2. Highlight the field to want to place on the Case tab by clicking the row on the Inbasket Fields list.
- 3. Click the right arrow button (>) above the Inbasket fields list. You can drag and drop fields from one cell to another.

NOTE You can place only one field to a cell.

### To expose the Expando:

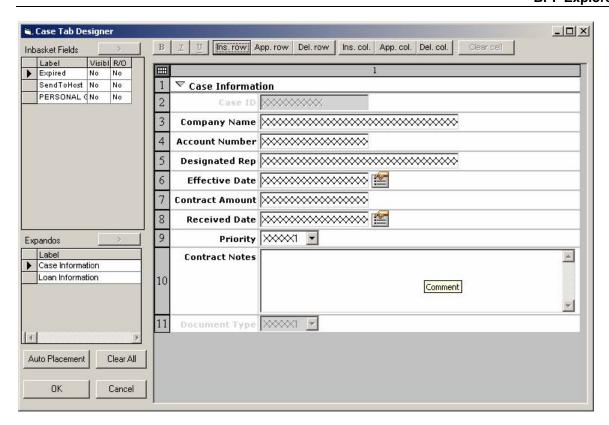
- 1. Highlight the cell you want to place the Expando label in.
- 2. Highlight the Expando you want to place in the Case tab by clicking the row on the Expandos list.
- 3. Click the right arrow button (>) above the Expando list.

NOTE You can place only one Expando on a row. The Expando will occupy the entire row.

If you need to configure a new Expando title, you can only do this by editing the Metastore directly. Add a row to the INBASKET\_EXPANDOS table.

The following features provide the additional flexibility:

- You can type additional text in any cell that is not occupied by a field. Text can be made bold, italic, or underlined.
- You can configure the field label to be display to the right of the field by right-clicking on the field and selecting the "display label on the right" menu item.
- If you want to change the label of a Case field, you must go back to the Application Field definition and edit the display label. It cannot be changed in the Case Tab Designer.
- You can merge two or more columns into a single cell to accommodate for long fields.
- You can configure expandos as enabled or disabled by default by clicking on the arrow next to the expando title. However, it is shown in the Case Tab Designer the way it will default to the user.



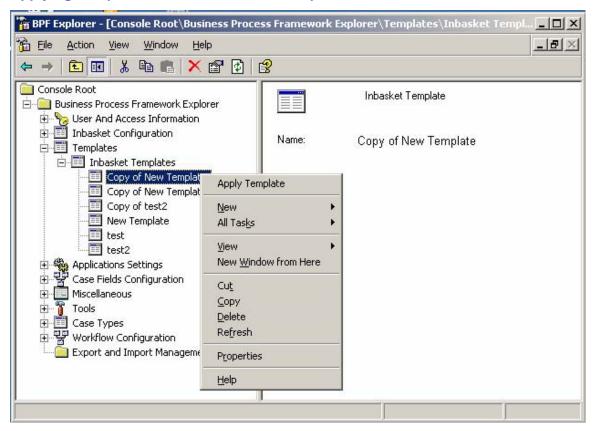
# **Applying Inbasket Templates**

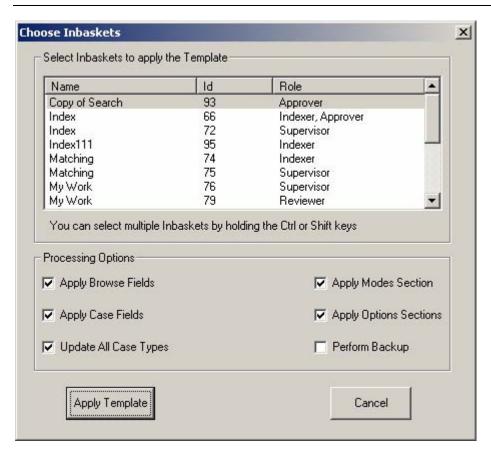
You can access the ability to apply an Inbasket Template to an Inbasket Configuration from two different locations. In either case, the Inbasket must be created first, before a template can be applied to it.

- Select the Inbasket Template, use the right mouse button and select the Apply Template option, and pick one or more Inbasket Configurations to apply the template to.
- Select one or more Inbasket Configurations, use the right mouse button and select the Apply Template option, and pick the Inbasket Template you wish to use.

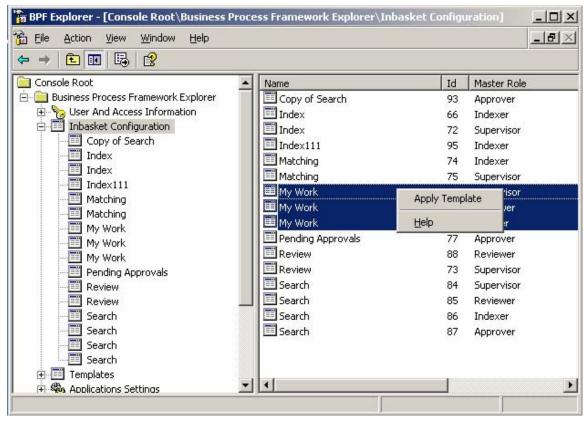
See the following screen examples for how to Apply Templates below.

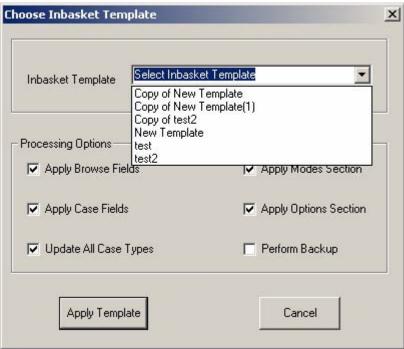
# **Applying Templates from the Inbasket Template Node:**





# **Applying Templates from the Inbasket Configuration Node:**





# **Apply Template – Processing Options**

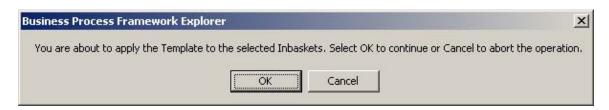
The following options determine what part of the template definition will be applied to the Inbasket Configurations selected.

Processing Options	Description
Apply Browse Fields	If checked, the Browse Fields definition of the Inbasket Template will be applied to all Inbasket Configurations selected. If left unchecked, it will not be applied.  Note: When Browse field changes are applied using templates the
	entire browse list view is overwritten with the template definition. The previous configuration is to be initialized before application of the template configuration.
Apply Case Fields	If checked, the Case Fields definition, including the Case tab layout, of the Inbasket Template will be applied to all Inbasket Configurations selected. If left unchecked, it will not be applied.
Update All Case Types	If checked, case type definitions and layouts are removed from the Inbasket where the template is applied. Then the definitions in the template are applied to the inbaskets.
	If left unchecked, only the field layouts case types defined in the template are initialized and overwritten with the template definition data. Case type layouts which are not defined in the template are left unchanged when unchecked.
Apply Modes Section	When checked, it will overwrite the Modes selections in the existing inbasket definitions with the Modes selections from the template being applied.
	If unchecked, it will not overwrite or change the existing inbasket definitions with the Modes selections from the template.
Apply Options Section	If checked, it will overwrite the Options selections in the existing inbasket definitions with the Options selection from the template being applied.
	If unchecked, it will not overwrite or change the existing inbasket definitions with the Options selections from the template.
Perform Backup	If checked, prior to applying any template changes, an export of the full BPF Manifest will be created. If left unchecked, a BPF Manifest backup will not be created and the template changes will be made.
	If a backup is to be performed, you will be prompted to supply the .xml file name and directory location that you wish to save the BPf Manifest in.

# **Apply Template Button**

Once all of the Processing Options have been set, The Apply Template button is used to initiate applying all the relevant Template definition to the selected Inbasket Configurations.

The following message will be displayed to warning you that you are about to change one or more Inbasket Configurations:

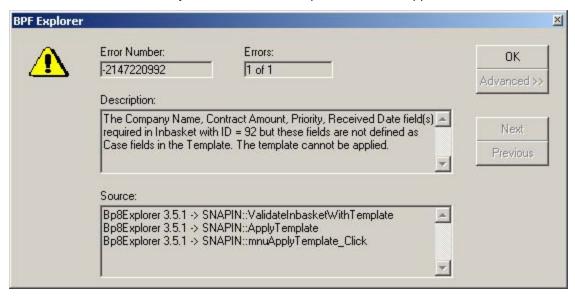


The following message will indicate a successful application of the Inbasket Template to the selected Inbasket Configuration.

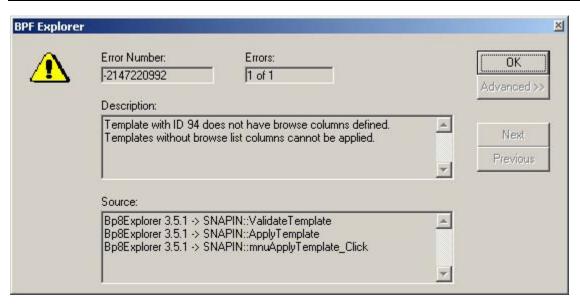


# **Apply Template – Error Messages**

There are conditions that may arrise where the template cannot be applied to the selected inbaskets.



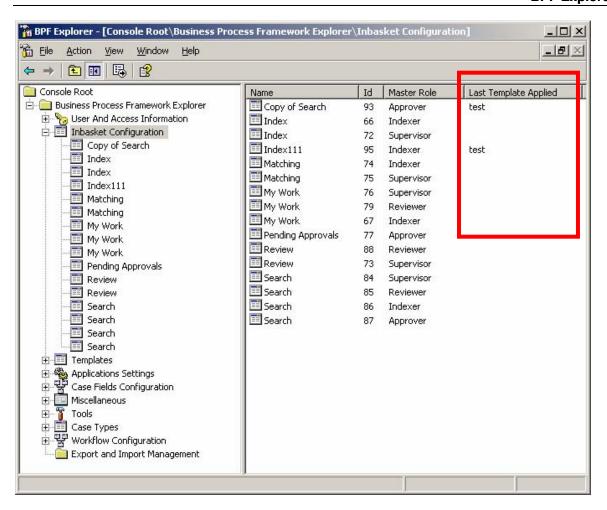
The above error message indicates that there are one or more fields being referenced on the Responses tab of the Inbasket Configuration that are missing on the template defintiion being applied. The template must be able to support all case field level operations on the Reponsees Tab.

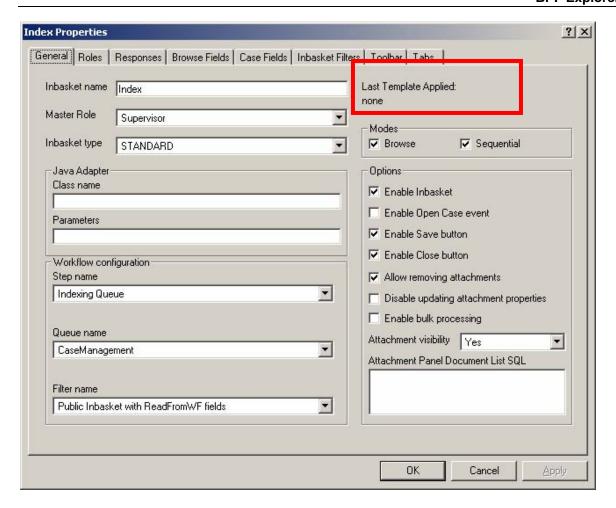


The above error message indicates that there are no Browse fields defined in the template being applied to an Inbasket Configuration and at least one Browse field is required for all Inbasket Configurations.

# **Last Template Applied**

Once a template has been applied to an Inbasket Configuration, the name of the template will be referenced on the Inbasket Configuration node listing and on the General Tab of the Inbasket Configuration properties for all Inbasket Configurations that had a template applied to them. This is for informational purposes only and can be used as a way to manage change control for inbaskets that were based on the same template. See the screen examples below for Last Template Applied references:





### **Other Template Operations**

Delete - It is possible to delete an existing Inbasket Template by selecting the template you wish to delete and using the right mouse click Delete option. Be aware that you may encounter the following error message if the try and delete an Inbasket Template that has already been applied to any existing Inbasket Configuration. You will not be permitted to remove these templates.



Cut, Copy – Select the template you wish to perform the operation on and ue the right mouse click to access Cut or Copy. These operations cuts or copies the selected template to the Windows® clipboard. The copied template can be pasted from the clipboard using the Paste operation in the Inbasket Templates node to create a new template.

# Application settings

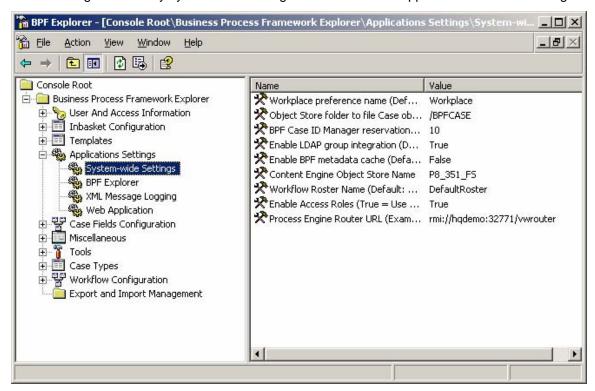
Application settings control global configuration aspects of BPF and are configured via BPF Explorer. Application settings are loaded and cached in the BPF Web Application when it is loaded.

There are several categories under application settings. The settings are application-wide settings and control system related settings, and server drive and path information. These settings control the path for logs, import, and other application related features.

The following screen capture illustrates the settings for the Common category within application settings. Each setting is further explained in the following sections of this document.

# **System-wide settings**

These settings control key system-wide settings for the BPF Web Application and Task Manager.



### Workplace preference name

Workplace access roles, which are utilized by BPF security, are configured in the Workplace site preferences. When access roles are defined, each role object is stamped with an application name (called a preference name). This mechanism allows you to define access roles within the same object store but for different applications. In order to retrieve the list of access roles, the application would need to know which preference name that was used to create the access roles. This BPF setting is used to specify the Workplace preference name of the access roles to be used.

### Object store folder to file Case objects

This setting specifies the name of the CE folder where the Case, attachment, and audit custom objects will be filed during creation. To avoid performance issues, it is recommended that this setting be empty in a production environment. Having this setting set to a particular folder name during development, configuration, and troubleshooting is helpful as it allows access to all Case-related objects from one convenient location. Note that the folder name needs to start with a "/".

# **BPF Case ID Manager reservation size**

BPF assigns unique Case ID numbers to all Case objects. The last available Case ID is stored in the special Settings object. There is a special Case ID cache manager that reserves a range of the Case IDs and serves Case ID to the requesting service that is creating a Case. This cache greatly minimizes the load on CE and improves response times. If the range reserved was not used up and application is shut down, unused Case ID's are lost and are not returned back to the pool. The BPF Web Application and BPF Task Manager each have their own instance of the Case ID cache manager. Is it recommended that you have a Case ID reservation size of 100 or greater in a production environment, and 10 or lower in a development environment. The default setting is 100.

### **Enable LDAP group integration**

If true, BPF Security use LDAP authentication and authorization based on the LDAP group specified in the role definition.

### **Enable BPF Metadata cache (Default: True)**

BPF Metadata cache is a persistent layer that greatly minimizes the volume of transactions executed against the BPF Metastore at run-time. Since the BPF configuration is data-driven, it is important to ensure that the Metadata cache setting is set to True in the production environment to avoid an excessive number of transactions against BPF Metastore and response time problems. When this setting is set to False, every request for configuration data made by the BPF Web Application client or the Task Manager will be executed against the BPF Metastore SQL database. During development, it may be advantageous to set caching to False so that when BPF Explorer configuration changes are made, their effect can be observed immediately on-the -fly. When Metadata Cache is changed to True, it can be reset by restarting the BPF Web Application or via the http://\$server:\$port/bpf/Bp8Admin.jsp page. The default setting is True.

### **Content Engine Object Store Name**

Specify the CE object store name under which all BPF content object definition has been performed. You must enter the exact spelling of the symbolic name of the object store as defined in P8 Enterprise Manager.

# **Workflow Roster Name (Default: DefaultRoster)**

When the Case is opened from a Search, BPF will try to determine the Inbasket name(s) for the active work objects. A search against the workflow roster is performed in order to identify the work object's location in the process. This setting allows you to specify a Workflow Roster Name to search other than the DefaultRoster, which is created by PE by default.

#### **Enable Access Roles**

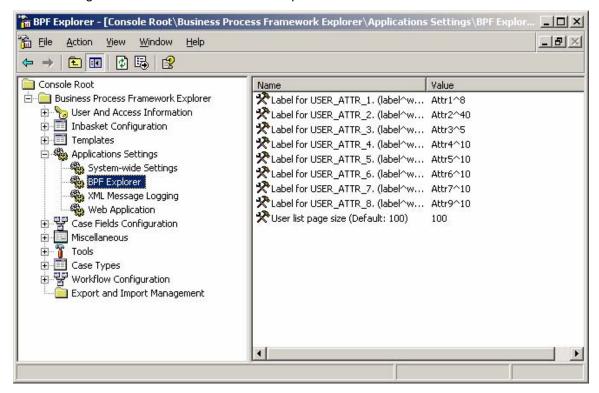
If true, BPF security will use the Workplace access roles defined for each LDAP group for authorization. If false, it uses LDAP groups directly for authorization.

#### **Process Engine Router URL**

Specify the BPM router URL of your FileNet system. For example: rmi://p8design:32771/vwrouter.

# **BPF Explorer**

These settings control behaviors within BPF Explorer.



# Label for USER\_ATTR\_1 (thru USER\_ATTR\_8)

These are used for custom extensions to BPF and provide for extended user attributes in the Metastore. See the Developers Guide for information about how to extend using these labels.

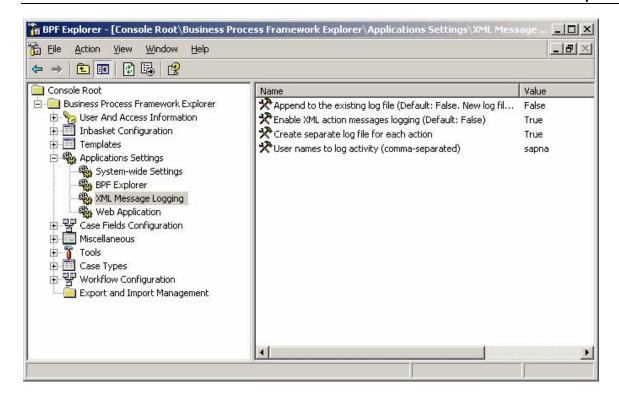
# User list page size (Default: 100)

Limits how many user records are displayed in the BPF Explorer. This is to support repositories with large number of users. If there are more records than the page size, you will get navigation buttons displayed.

### **XML Message Logging**

These parameters are used to turn on XML logging messages for diagnostic purposes. Turning XML logging on is helpful in troubleshooting the XML traffic between the web browser and the web server. All client-server XML message traffic will be output to the .../WEB-INF/logs/ folder on the Web server with XML files in the following format:

```
$userName_functionName_request.xml
$userName_functionName_response.xml
```



### Append to the existing log file

When XML logging is enabled, this setting allows storing all XML messages in a single file for the user name instead of generating a separate file for each XML message. The default setting is False, which means a new log file will be created for each message.

### **Enable XML action messages logging**

Set this option to True to enable the XML messages logging. The default setting for this option is False. Make sure that it is set to False in a production environment, as there is significant performance overhead when logging.

### Create separate log file for each action

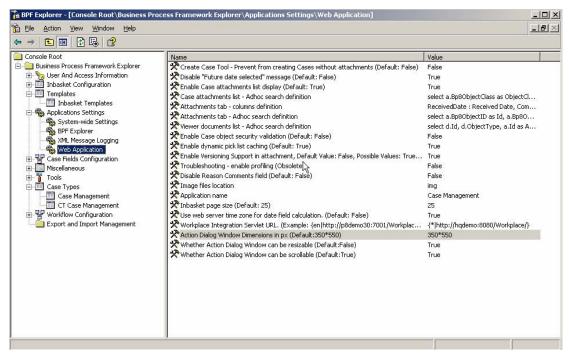
This option controls whether each message is captured in a separate file (when set to True), or if a new message for the same function overrides the old message.

# **User names to log activity (comma-separated)**

Specify the user names to turn XML logging on for. You can specify multiple user names by separating each name with a comma.

### **Web Application**

These options control the behavior of the BPF Web Application.



### **Create Case Tool - Prevent from creating Cases without attachments**

When set to True, an attachment is required when creating a new Case via the Create Case tool. If False, it is not necessary to specify a file to attach to the new case for creation.

### Disable "Future date selected" message

When set to False, the "You have selected date in the future. Ok to continue?" prompt will be displayed when a user selects a date from the calendar that is in the future. If set to True, no prompt is displayed and the future date entry is considered acceptable. The default setting is True.

### **Enable Case attachments list display**

This setting controls, at a BPF Web Application level, whether the Case attachments list should be displayed at the bottom of the Case tab. If true, the attachments list will be displayed. The default setting is True.

### Case attachments list - Adhoc search definition

Provides a CE adhoc SQL statement that defines the rules for retrieving the list of Case attachments displayed on the bottom of the Case tab. Using the default SQL statement, only documents and folders are displayed as attachments on the Case Tab.

#### **Default SQL Statement:**

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

Alternatively, in BPF release 3.5.2, you can change the SQL statement to support other Case Objects as attachments to a case. The following SQL statement retrieves attached Case Objects as well. Note that these attached Case Objects are not shown in the Attachments Tab, or in the Document Viewer. They can only be seen in the Case Tab.

### Alternative SQL Statement that supports Case Objects as Attachments:

select 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, c.Bp8CaseID from ((Bp8Attachment a left join Document d ON d.VersionSeries = a.Bp8VersionSeries) left join Folder f ON f.Id = a.Bp8ObjectGUID) left join CustomObject c ON c.Id = a.Bp8ObjectGUID where a.Bp8CaseID = ^1 and ^2 order by a.Bp8ObjectType desc, f.FolderName asc, d.DocumentTitle asc

#### Attachments tab - columns definition

This entry provides the list of Case properties to be displayed on the Attachments tab. The format for the columns is shown below:

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

#### Example:

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

#### Attachments tab - Adhoc search definition

Provides a CE adhoc SQL statement that defines the rules for retrieving the list of Case attachments to be displayed on the Attachments tab.

#### **Default SQL Statement:**

select 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 join Document d ON d.VersionSeries = a.Bp8VersionSeries) left 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

#### Viewer documents list - Adhoc search definition

Provides a CE adhoc SQL statement that defines the rules for retrieving the list of Case attachments to be displayed in the left pane of the BPF Document Viewer.

#### **Default SQL Statement:**

select d.Id, d.ObjectType, a.Id as AttachID, d.DocumentTitle, d.isReserved, d.IsVersioningEnabled, d.VersionSeries, d.VersionStatus, d.MajorVersionNumber, d.MinorVersionNumber, d.MimeType from Bp8Attachment as a left join Document as d on d.VersionSeries = a.Bp8VersionSeries where a.Bp8CaseID = ^1 and ^2 order by d.DocumentTitle asc

### **Enable Case object security validation**

This option provides the ability to disable or enable CE security checking when a Case is opened. Since BPF limits the work available to users based on their roles already, many sites found that it was not necessary to check the CE level object security as well. This adds extra system overhead (in terms of performance expense) to the open Case transaction. The default setting is False, meaning that the object level security check is disabled. If you wish to enforce security check at the object level, set this option to True.

### **Enable dynamic pick list Caching**

Caching dynamic pick lists provides significant performance benefits to those configurations what utilize dynamic pick list. The default behavior is True, but if this option is set to False, the caching will be disabled. Generally, you should not disable this caching unless you have a specific configuration requirement to do so.

#### **Enable Versioning Support in attachment**

When set to True, regardless of which version of the document was attached to the Case, users will always see the latest version available. Also, the versioning context menu (accessed via a right mouse) will be enabled on the attachments. If set to False, users will always see the version of the document that was originally attached to the Case. The versioning context menu option will also be disabled.

### **Troubleshooting - enable profiling (Obsolete)**

This option is obsolete and is not implemented at this time.

### **Disable Reason Comments field (Obsolete)**

This option is obsolete and is not implemented at this time.

#### Image files location

This setting points to the root folder of all image files. In practical terms, it should always be set to "img" and not changed as this is the standard practice for the location of image files.

### **Application name**

Specify the application name, which will be displayed as title on every browser window launched by the BPF Web Application.

### Inbasket page size

Specify how many records will be displayed on a single page in the Inbasket browse list. A higher number will require more server resources to fetch the result set. In a production environment, it is recommended that you have less than 100 records on the page.

### Use web server time zone for date field calculation (Default: False)

This setting defines whether the server or the client time zone is used to display date/time fields. Set to True to use the server time zone, set to False to use the client time zone. The default is False, matching the default setting used in Workplace. You want to ensure that BPF and Workplace date/time zone formats match.

### **Workplace Integration Servlet URL**

This setting contains the URL of the P8 Web Application used as an Integration Servlet provider. This setting allows you to specify different URLs for different languages:

Example: en|http://p8demo30:7001/Workplace\_en,de|http://p8demo30:7001/Workplace\_de

Use \* to indicate all languages.

### **Action Dialog Window Dimensions in px (Default 350\*550)**

(New in BPF-3.6.0-006) This setting contains the height and width dimensions for the Action Dialog window that appears when a user of the BPF web application selects an Action on which one or more Reasons have been configured.

### Weather Action Dialog Window can be resizable (Default: False)

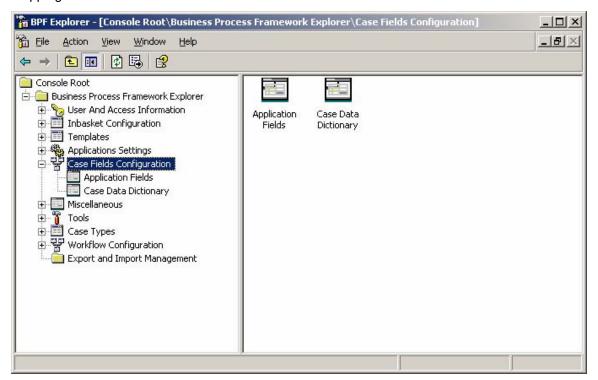
(New in BPF-3.6.0-006) When set to True, Action Dialog Window can be resized, when set to False, Action Dialog Window cannot be resized.

#### Weather Action Dialog Window can be scrollable (Default: True)

(New in BPF-3.6.0-006) When set to True, there will be scrollbar in the Action Dialog window if the Action Dialog window is not big enough to display all of the Reasons and buttons configured; when set to False, it will prevent the appearance of scrollbars in the Action Dialog window under any circumstances.

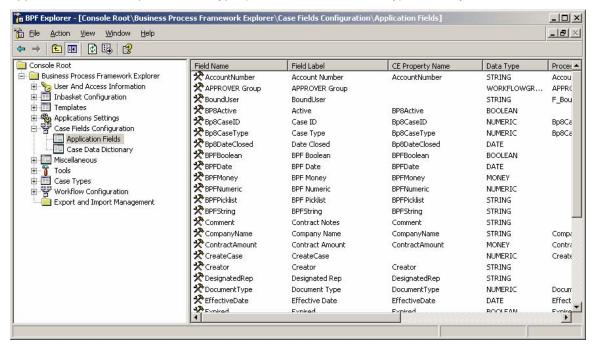
# **Case fields configuration**

The Case Fields Configuration section contains the configuration of all field definitions and the mappings used for specific Case types, field types, and sizes. Mappings to CE properties and mapping to PE fields are also defined in this area.

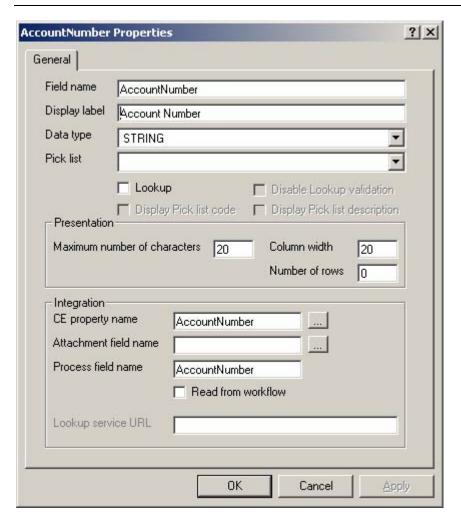


# **Application fields**

The Application Fields section allows configuring of all possible fields that are available to the application. This can be considered a global list of fields and their attributes. Once we assign an application field to a specific Case type (see Case Data Dictionary), then they become a Case field.



- 1. To modify an existing Application Fields entry, right click on the desired Case Field entry and select Properties.
- 2. To enter a new Case Fields entry, right click on Application Fields and select New.
- 3. The Application Fields Properties dialog appears.
- 4. Enter modifications.
- Click Apply and then OK.



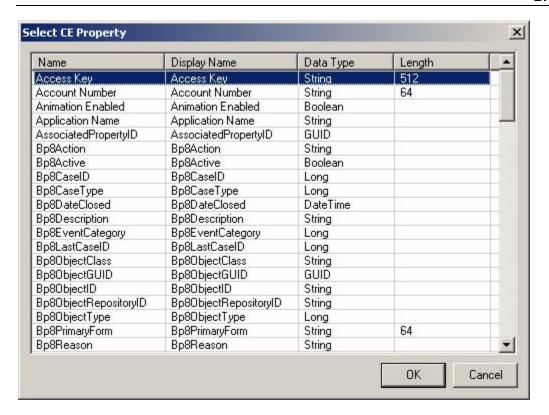
Application Fields properties	Description
Field name	This is the name of the Case field. When assigning field names, make sure the field is unique. Once created, do not modify the name. Modifying the name may have a negative impact on the run-time execution as many BPF features reference the field by this name.
Display label	This is the field label that will appear in on the Case tab in the Case User Interface.
Data type	The data type for the field is defined here. Normally, the data type should match the type of CE and/or BPM property. The possible choices include:
	DATE - Text box with date validation and calendar control (CE=Date/Time, PE=Time)
	BOOLEAN - Checkbox type field (CE=Boolean, PE=Boolean)
	MONEY - Text box with money validation (CE=Float, PE-Float)
	STRING - Text box with no validation (CE=String, PE=String)
	NUMERIC - Text box with integer data validation (CE=Integer, PE=Integer)
	WORKFLOWGROUP - Interface to workflow group
	NOTE BPF does not support a decimal (floating point) data type without money validation.
Pick list	If required, you may assign a pick list to the field. This provides a combo box entry at run-time for the user. The pick list must be already defined. See the Miscellaneous/Pick List section for information about how to define a pick list. If a pick list is assigned to the application field, by default it will be displayed as a single-value combo box.
	Note that the size of the entries in the pick list can exceed the maximum number of characters defined for this field. The maximum number of characters is not used if the entry is selected from a pick list.
Lookup	There are two ways in which to utilize the Lookup feature.
	If the application field has a pick list assigned to it, then selecting Lookup will provide additional lookup features in the pick list for data entry. It will allow the user to type text in the combo box for lookup, including masking characters.
	If the application field is not defined as a pick list and you wish to provide external lookup capabilities, selecting this Lookup attribute will enable the Lookup service URL attributes on this form, and launch the Lookup service URL attribute entered. See Lookup service URL for more information.

Disable lookup validation	When the Lookup attribute is selected, and the Lookup Service URL is entered, this field is enabled. If checked, a button will be provided on the field to perform validation rather than the validation happening when the user leaves the field.
Display pick list code	This check box determines if the user interface displays the CODE value for each item in the pick list. See the Miscellaneous/Pick List section for more details.
Display pick list description	This check box determines if the user interface displays the DESCRIPTION value for each item in the pick list. See the Miscellaneous/Pick List section for more details.
Presentation	
Maximum number of characters	The maximum characters that a user can enter into the field.
Column width	Width of the control in characters. This may be less than the maximum number of characters defined above, if screen territory is limited.
Number of rows	Height of the control in lines; 0-based. Normally, this field value is set to 0. If Rows is > 0 and Data Type is STRING, a text area control will be displayed on the user interface instead of the text box.
Integration	
CE property name	This field contains the symbolic name of the CE custom object property that the application field is associated with.
	[button] – Allows the user to lookup and select a valid CE property. See the following screen captures for a sample user interface.
Attachment field name	The field contains the name of the CE document property associated with the application field. If there are attached documents to a case, the system will attempt to update this document property value when the user changes the application field value. If the document property does not exist for all documents attached to the case, it will simply not update those documents that do not have this property.
	[button] – Allows the user to lookup and select a valid CE property. See the following screen captures for a sample user interface.
Process field name	If a process field is defined here, the process field value will be updated. Workflow field names are case sensitive. Ensure the field name specified matches the field name on the process map.  Tips  Ensure the workflow field is exposed on the steps in the process
	map where the field can be modified.
	Fields on the process map should be created only when they participate in the workflow routing conditions, facilitate filtering, or make a field sortable in the Inbasket. Not all application fields will be process fields.

Lookup service URL

The Lookup Service URL field is enabled when the lookup attribute is checked. By default, the lookup is triggered by the user leaving the field. If you wish to disable the default behavior and have the user trigger the lookup via a button, you will need to select the Disable Lookup validation attribute.

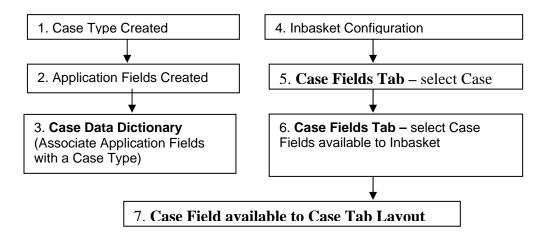




# **Case Data Dictionary**

When application fields are defined, the fields do not automatically become Case fields available to the Inbasket and tools until they are associated with a Case type. The application fields must be added to the Case Data Dictionary before they are available to BPF. The application fields must be exposed for each Case type where they are needed. A single application field can be exposed to multiple Case types. Once they are exposed for a Case type, they are called Case fields.

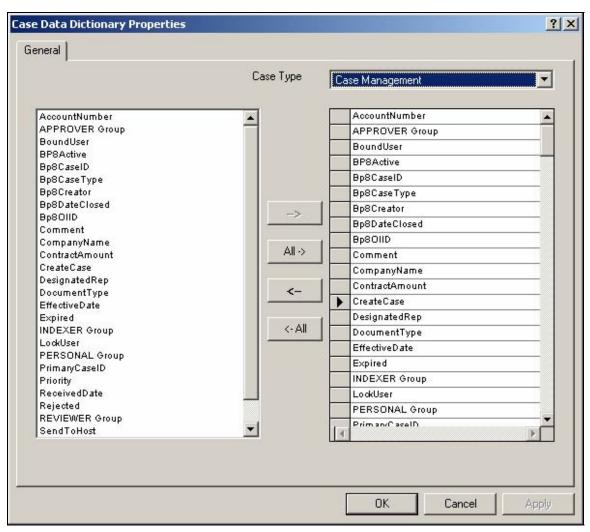
The following diagram describes the sequence and order of steps to create a Case field and make it available on an Inbasket:



1. To modify an existing Case Data Dictionary entry, right click on desired entry and select Properties.

The Case Data Dictionary Properties dialog appears.

- 2. Enter modifications.
- 3. Click OK.

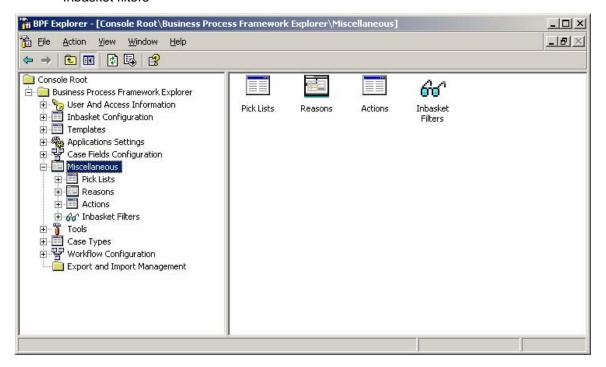


Case Data Dictionary properties	Description
Case Type	Select the Case type that you wish to create a Case Data Dictionary from.
Available application fields displayed in left column	The list of available application fields is displayed. This list is created from the Case fields Configuration/Application fields definition. Select the application fields that you would like available to the Case type.
Selection and movement buttons	The center buttons allow the user to perform selection and movement of application fields.
->, <-	These buttons provide selection and de-selection of individual application fields.
All ->, <-All	These buttons provide selection and de-selection of all of the application fields.
First, Up, Down, Last	These buttons allow you to order the tools in the selection list. Select the application fields you wish to move and press the appropriate button.
Selected application field displayed in right column	When an application field has been selected for this Case type, it will be displayed in the right column.

# **Miscellaneous**

The Miscellaneous section of the BPF Explorer is used to configure miscellaneous tables and lists referenced in other parts of the BPF configuration. They include the following:

- Pick lists
- Reasons
- Actions
- Inbasket filters



#### **Pick lists**

A pick list is a set of the pre-defined choices. When a pick list is associated with an application field, the user has to select one of the pre-defined pick list values at run-time. These lists can be defined as a literal list (static), or can be a complex SQL query that returns a result set (dynamic).

A static list contains a set of pre-defined values. For example, a list of priorities is static and defined for the entire system.

A dynamic list is generated during the reference to the pick list and may depend on multiple factors: properties of an active user, active Case data, Inbasket filter data, etc. An example of a dynamic pick list is: a list of users in a department that play the same role as the current user and who also have an approval limit greater than the current users limit.

The value presented for each pick list value may be expressed as an icon. Icons are small image files that graphically represent a value. For example, you may wish to have a red circle to identify an urgent priority.

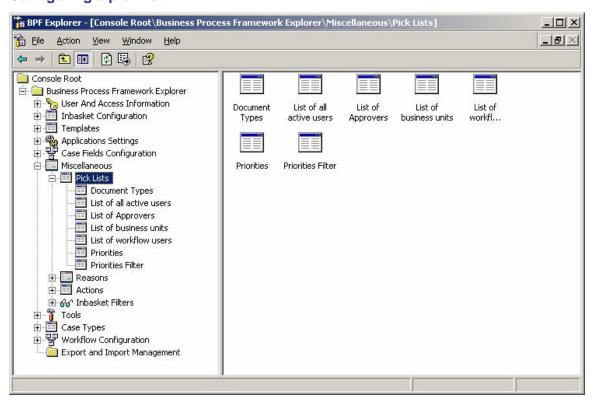
Each pick list consists of an ID, code (short description), description (long description), icon (optionally), and an Active column. Additional columns can be created in dynamic pick list to represent a more complex table.

BPF can store either ID or code to the workflow, CE, and the attached documents. The selected value to be stored and to which system it is to be stored to is configurable when defining application fields.

BPF can display the pick list code, description, or both (side-by-side as a dual pick list), or an icon to the user at run-time. The display of the pick list is configurable. For example, experienced users may prefer working with codes while inexperienced users may prefer working with long descriptions.

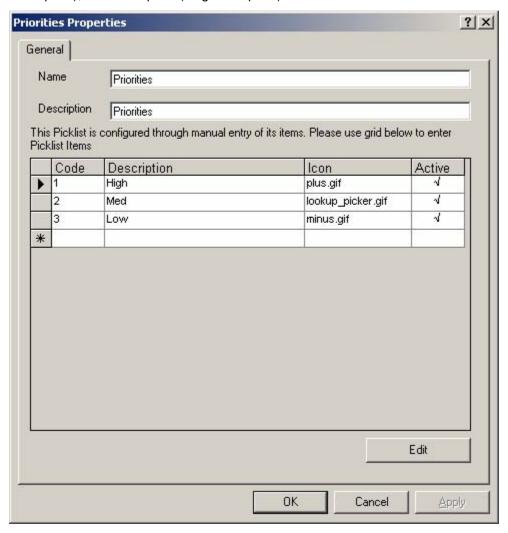
A default pick list assigned to the application field can be overridden on different levels (Inbaskets, tools, filters, etc).

# Configuring a pick list



### Static pick list

The following screen capture shows an example of a static pick list that consists of the ID, code (short description), and description (long description).



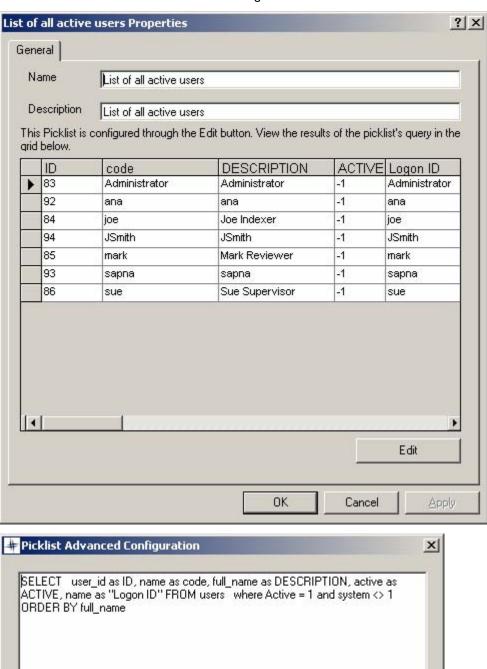
Static pick list properties	Description
ID (not shown)	The ID for each row entered is system-generated and is not displayed in this dialog but can be found in the BPF Metastore table.
Code	Enter the abbreviated code for the pick list entry. For example: A code of CA may be short for an entry of California.  NOTE Codes must be unique values.
Description	Enter the longer more descriptive value for the pick list entry.
Icon	Entry of an icon image file name is optional. If entered, this graphic file will be displayed as the pick list value instead of the data value.
	The icon file path will be the web root directory plus the folder specified in the BPF Explorer Application Settings > Web Application >Image File location parameter. The suggested default for this is 'img'.
	The icon file should be an image size of 16x16 pixels.
	The image needs to be deployed as part of the Web Application and be present in the specified URL.
Active	The Active checkmark is only useful for static pick list and determines if the entry will be available at run-time for user selection. If unchecked, it will not be available for the user to see, unless it was previously selected as a field value before be deactivated.

# **Dynamic pick lists**

Dynamic pick lists are defined by entering a SQL statement rather than a literal list. The execution of the SQL statement builds the pick list. The SQL statement by default runs against any table(s) in the BPF Metastore.

**NOTE** BPF does not support parameterized picklists. Please use the lookup interface functionality (documented in the BPF Developer Guide and its accompanying CODE\_SAMPLES.zip) instead, since it provides the same functionality that parameterized picklists would have done.

The following screen captures show an example of the dynamic pick list, where the result set is built by executing a SQL statement contained in the Advanced dialog box. The data appearing in the pick list is the first test that the SQL is functioning as desired.



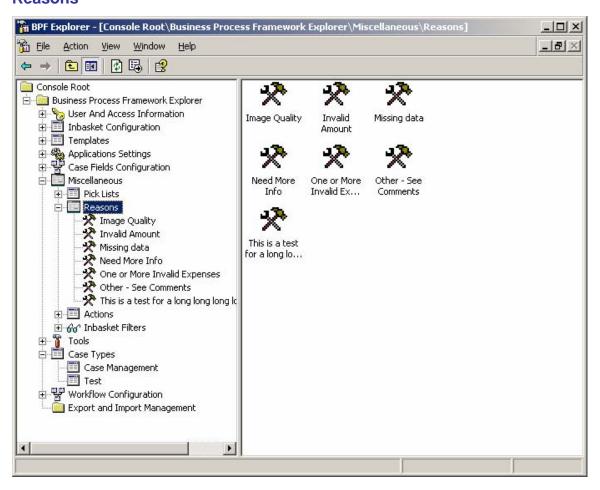
Cancel

OK

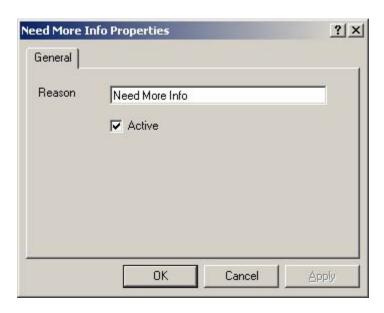
# Pick list example

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

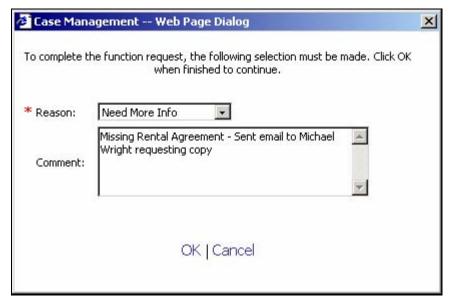
### Reasons



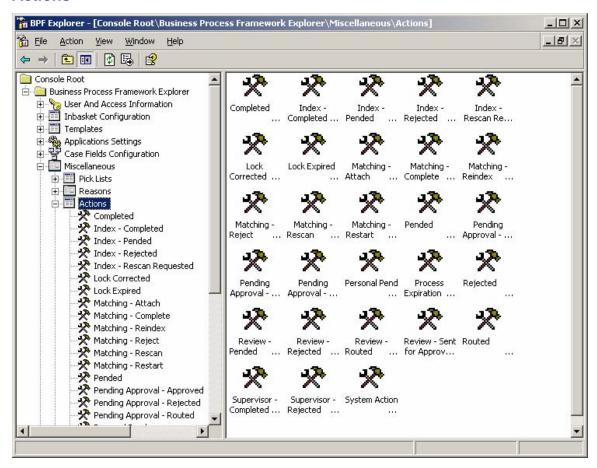
Reasons are typically added for an association with a response that the user selects. When reasons are assigned to a response, the user is prompted to select a reason from the list. When a reason is no longer used, it should be made inactive by clearing the Active check box.



The following dialog is displayed to the user upon executing a response that has one or multiple reasons assigned.

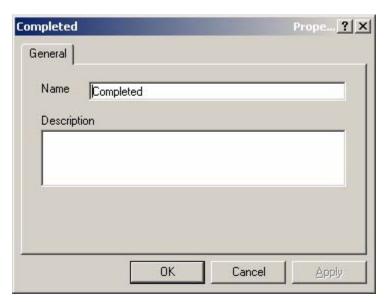


#### **Actions**

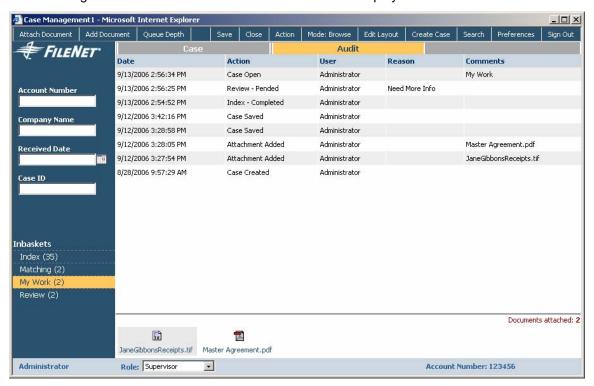


An action is associated with each response the user selects. The action is logged in Case audit log when a user selects the associated response.

A single action may be associated with multiple responses. It is advised to keep a one-to-one relationship between responses and actions to facilitate more accurate statistics collection. The actions data can be used for creating custom reports of activity in BPF.

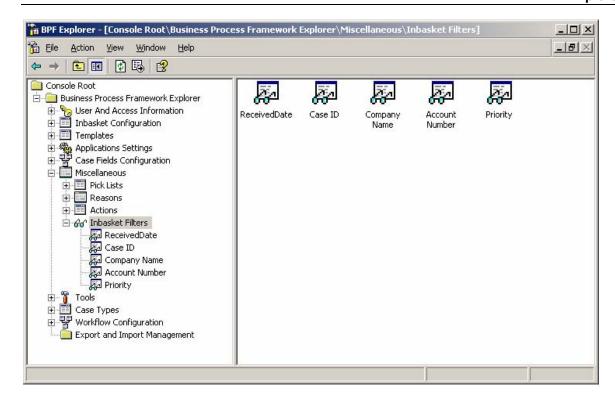


The following screen shot illustrates where the Actions are displayed:

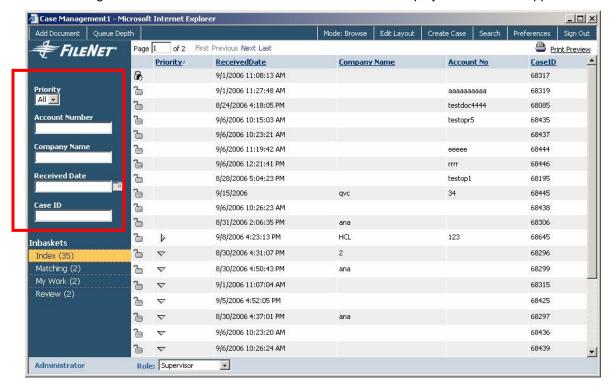


### **Inbasket Filters**

Inbasket Filters allow the user to limit the result set in the Inbasket or finding a particular Case on an ad-hoc basis.

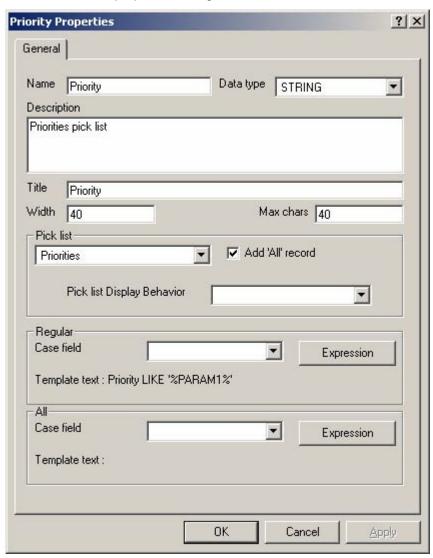


The following screen shot illustrates where Inbasket Filters are displayed in the Web Application:



Once exposed though the Inbasket interface, an Inbasket Filter allows filtering work in the Inbasket. Custom filters can be pick list based, where the user must select a value from the list, or text field-based, or date field-based, where the user can type in a field value to narrow down the browse list.

Only dynamic pick lists are supported for the pick list based filters. If your pick list is defined as static, create a new dynamic filter that reads data from the static filter. The following screen capture shows an Inbasket Filters properties dialog.



Inbasket Filters properties	Description
Name	Name of the custom filter as it will appear in the Custom Filters tab of Inbasket properties.
Data type	Select data type of the field designated as a filter field. Selecting the data type causes type-specific data validation to be performed. Wildcard searches for the STRING fields are supported.
Description	Brief description of the filter.
Title	Label displayed next to the filter screen.
Width	Width of the text field for the filter value entry. This field is disabled for the following conditions:  • For Data types DATE and BOOLEAN  • Whenever a Pick List is entered
Max chars	The maximum characters that a user can enter into the field, not applicable to text area control (Data type = STRING & Rows > 1 – see below).  This field is disabled for the following conditions:  • Data types DATE and BOOLEAN  • Whenever a Pick List is entered
Pick list	Select pick list, if applicable.
Add "All" record	If this check box is selected, an "all" record will automatically be added to the pick list. See the attributes below under the "All" section that defines the "All" behavior.
Pick list Display Behavior	Select either the 'Code' or 'Description' option to determine what Pick list data will be presented to the user for the Inbasket Filter.  NOTE If left empty, the 'Code' value will be displayed.
Regular	
Case field	Select the application field that will be used for filtering. Only application fields configured with process fields will be displayed in this combo box for selection.
Expression button	Allows specifying the filter criteria expression.  NOTE See the following section for the Inbasket Filter macros that can be used in these expressions.
Template text	This is a non-editable field showing the current filter expression.
All	
Case field	Select a application field that will be used for filtering the "All" pick list value. Only application fields configured with process fields will be displayed in this combo box for selection.

Expression button	Allows specifying the filter criteria expression.
	<b>NOTE</b> See the following section for the Inbasket Filter macros that can be used in these expressions.
Template text	This is a non-editable field showing the current filter expression.

### **Inbasket Filter Macros**

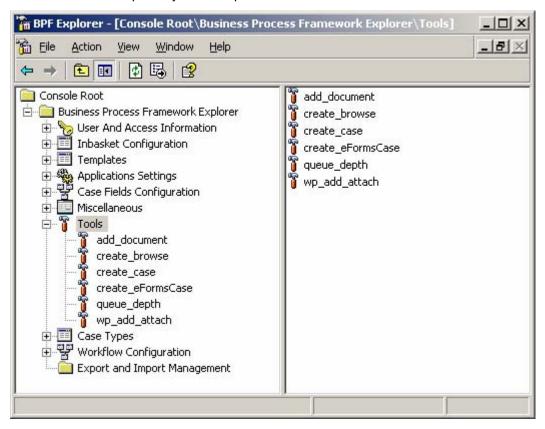
The following table defines the macros that can be used in the Inbasket Filter expressions.

Macro	Description
%PARAM1%	This macro represents the data entered by the user 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 are used instead of %PARAM1% to test the high and low boundaries of the data entered by the user in an Inbasket Filter date field.
	Example: ReceivedDate < (%CEILDATE%) and ReceivedDate >= (%FLOORDATE%)

# **Tools**

The options available in this section allow configuration of the appearance of all sample and custom tools and the fields used by the tool. The tools appear in the toolbar in the Case User Interface. The Search, Action, and Log Out tools are always available and do not need to be configured. Sample tools available for use are:

- add\_document Provides the ability to add a document from a local or network drive that will result in a new Case being created.
- **create\_browse** Provides the ability to create a new Case and add a document or folder from a FileNet repository via Workplace to the Case.
- **create\_ case** Provides the ability to create a new Case and optionally add a local file to the FileNet repository and attach it to the Case.
- **create\_eFormsCase** Provides the ability to create a new Case from an eForms Template.
- queue\_depth Provides a user display of all Inbasket counts.
- wp\_add\_attach Provides the ability to attach a document or folder to an existing Case from a FileNet Repository via Workplace.



**NOTE** Custom tools must be programmatically written and then linked into BPF using the Tools definition as described below. For more information on how to write a tool so that it is compatible with BPF, see the BPF Developer Guide.

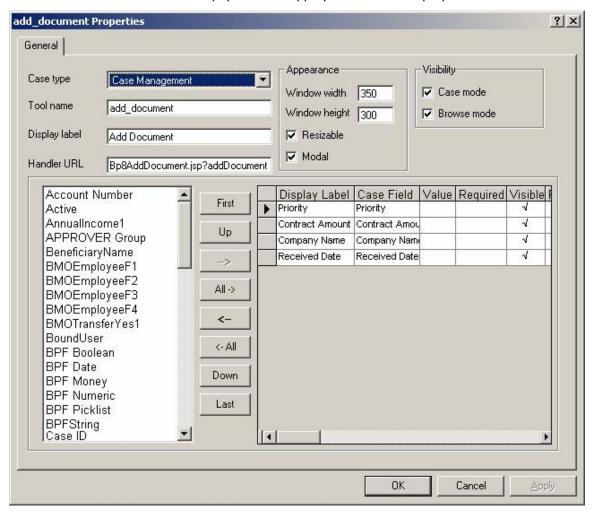
The following fields are required entry for any new tool and define the display attributes. The lower parameters deal with data passing and the custom tool design defines their usage so they are not described in this document. See the BPF Developer Guide for more information about how they may be used.

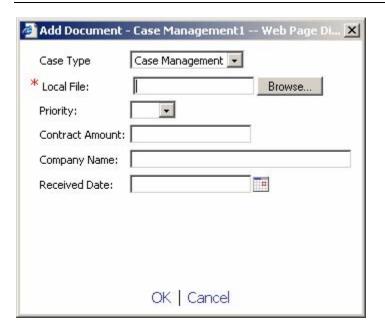
Tool properties	Description			
Case type	Name of the Case type that this tool is being configured for.			
Tool name	Enter a unique tool name that will appear within BPF Explorer to identify the tool.			
Display label	Enter a tool name that will be displayed to the user on the toolbar.			
Handler URL	Enter the Java Applet name that will be launched when the tool is selected.			
Appearance				
Window width	Enter the size of the window that will be built by BPF when the tool is executed. Specify the width of the window by number of horizontal characters in pixel notation.			
Window height	Specify the width of the window by entering the number of vertical rows in pixel notation.			
Resizable	If checked, the window is resizable by the user, if unchecked it is a fixed size based on the size attributes entered above.			
Modal	If checked, the window behavior will be modal, meaning no othe window activity can take place until the window is closed.			
Visibility				
Case mode	If case mode is selected, the tool will be available on the toolbar of the Case User Interface.			
Browse mode	If browse mode is selected, the tool will be available on the toolbar of the Inbasket browse list.			
Parameter passing				
Display Label	The display label is used for a user interface version of the Case field name.			
Case Field	Name of the Case field selected from the Case fields list on the left.			
Value	Enter a default field value. Once specified, this value will be prepopulated in the tool's user interface.			
Required	If checked, the user must enter a field value.			
Visible	Defines whether the field is visible or hidden.			
R/O	R/O Defines whether the field is read-only or read-write.			

#### add document

The add\_document sample tool allows attaching an electronic version of the document from a local or network disk to the current Case. The document will be checked into the Content Manager Repository.

The Case field attributes should be changed to reflect the Case fields that should be entered during the Add Document tool in order to populate the appropriate document properties.

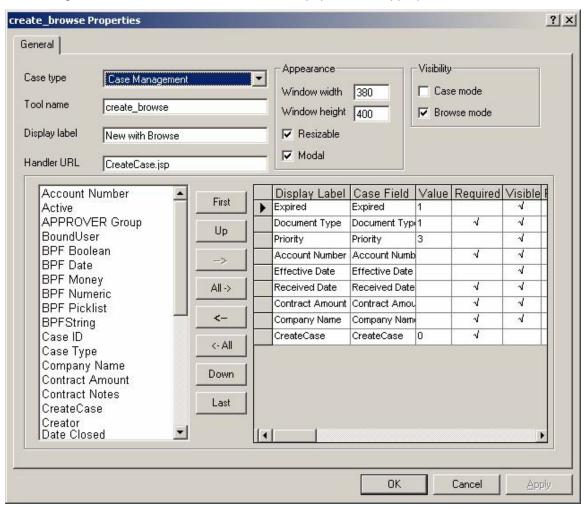


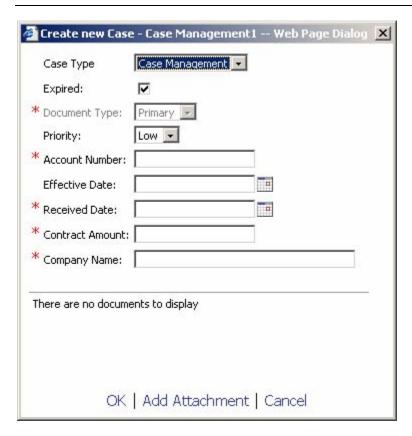


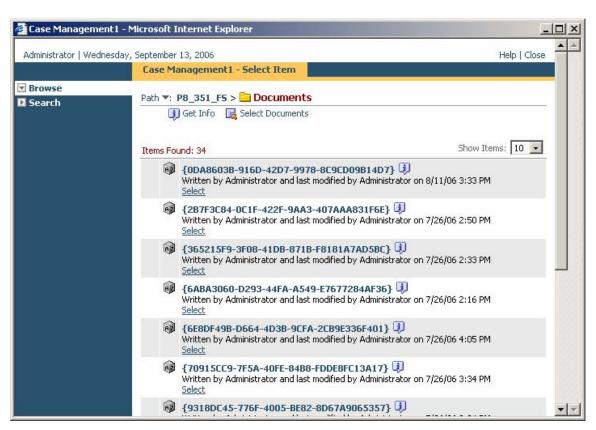
## create\_browse

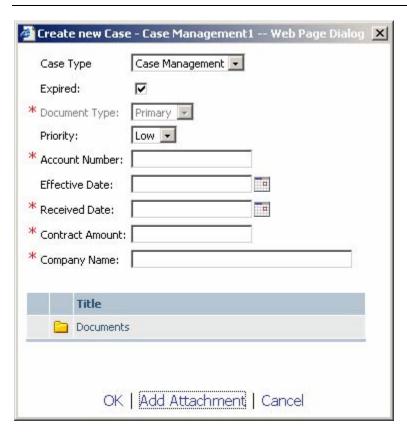
The create\_browse sample tool allows the user to create a new Case from within the BPF Web Application and attach an existing document or folder from the FileNet Content Manager repository via Workplace.

The Case field attributes should be changed to reflect the Case fields that should be entered by the user during the Create with Browse tool in order to populate the appropriate Case fields.



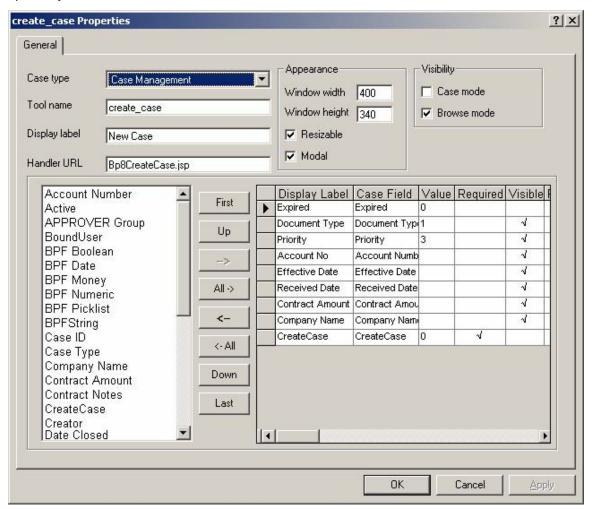


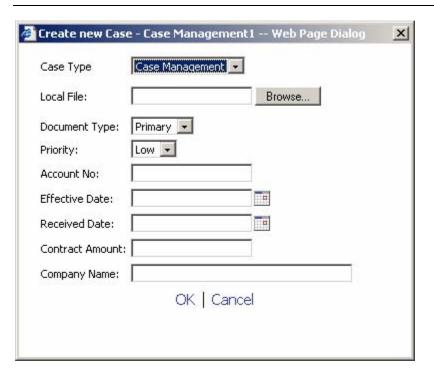




## create\_case

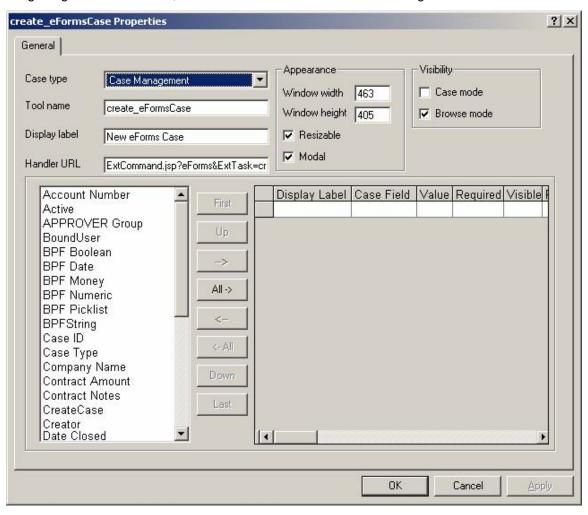
The create\_case sample tool allows users to create Cases from the BPF Web Application and optionally browse for an electronic version of the document stored on the local or network disk.

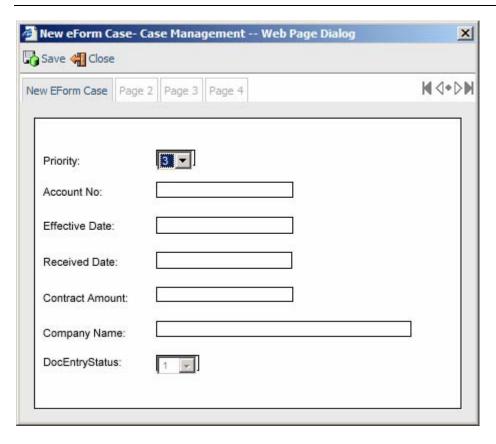




## create\_eFormsCase

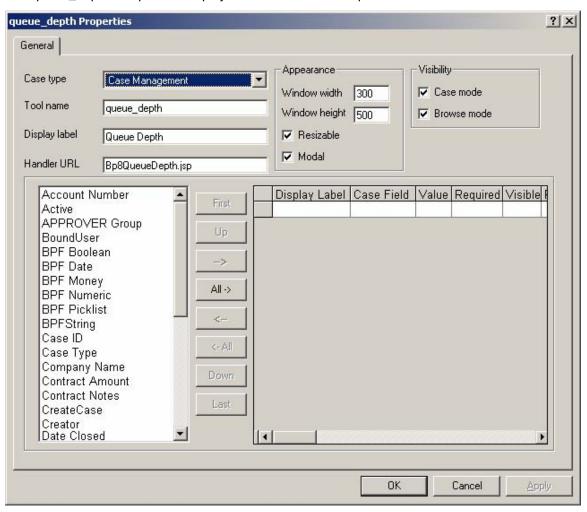
The create\_eFormsCase sample tool allows users to create new cases in the BPF Web Application from a pre-defined eForms Template. Once the new Case is created, the eForm associated with the case can be displayed in a Tab configured for a specific Inbasket. For more information about integrating eForms and BPF, read the document entitled "eForms Integration to BPF".

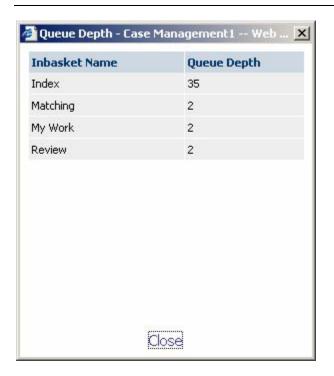




## queue\_depth

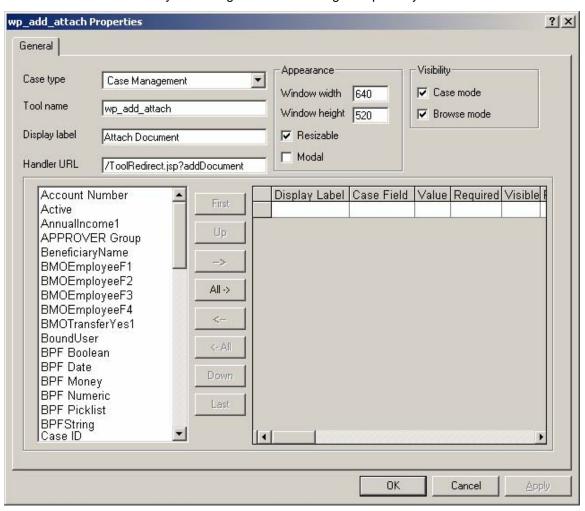
The queue\_depth sample tool displays all current Inbasket queue counts for the user.

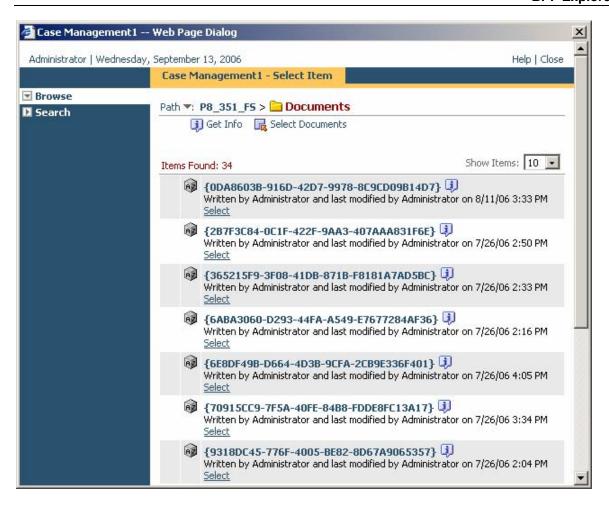




## wp\_add\_attach

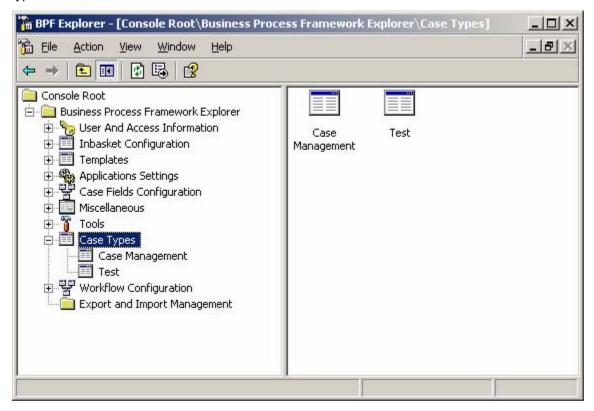
The wp\_add\_attach sample tool allows attaching an electronic version of an existing document or folder to the current Case by searching a Content Manager Repository.

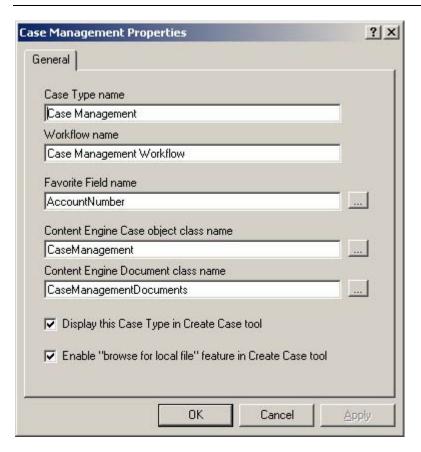




# **Case Types**

The following section defines the basic case types used by the application. Please review the section in this document entitled Concepts – Case types for more information before defining your case types.





Case Types properties	Description
Case Type name	This is the name of the Case Type. When assigning the case type name, make sure it is unique. Once created, do not modify the name. Modifying the name may have a negative impact on the run-time execution as many BPF features reference the field by this name.
Workflow name	Enter the name of the workflow process that should be attached to the case object when created.
Favorite Field name	A single Case field may be configured for display in the status bar area when a Case is opened. This data is shown irrespective of which tab the user is on. This is a useful feature when the Case has multiple tabs, and there is an important piece of information that is always in front of the user to identify the Case.
	[button] – Allows the user to lookup and select a valid CE property from the CE Enterprise Manager interface.
Content Engine Case object class name	Enter the CE custom object class name that contains the class definition for new case objects for this case type.
	[button] – Allows the user to lookup and select a valid CE class name from the CE Enterprise Manager interface.

Content Engine Document class name	Enter the CE document class name which contains the attached document for this case type.			
	[button] – Allows the user to lookup and select a valid CE class name from the CE Enterprise Manager interface.			
Display this Case Type in Create Case tool	If selected, when the user invokes the Create Case tool in the BPF Web Application they will see the Case Type name displayed. (The user is not able to modify it. It is display only).			
	If unselected, the Case Type will not be displayed in the Create Case tool at run-time.			
Enable feature "browse for local file" in Create Case tool	If selected, when the user selects the Create Case tool in the BPF Web Application they will be provided with a Browse button so that they can select a local file to attach to the case upon creation.			
	If unselected, they will not be able to browse and attach a local file.			

# **Workflow configuration**

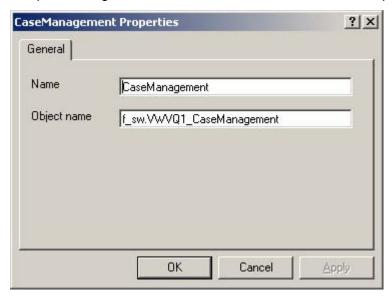
The workflow configuration section contains settings and parameters that allow connecting the BPF to the BPM system.

Workflow configuration is combined of the following elements:

- Workflow queues
- Workflow steps
- Workflow queue filters
- Workflow responses

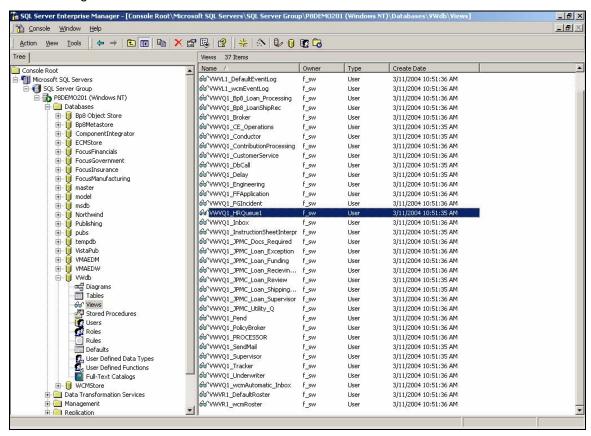
#### **Queues**

Queues represent the physical queues defined in PE, not an Inbasket that a user might see in the BPF Web Application, as these are really filtered views of physical queues. The number of entries in the queue configuration should match the number of workflow queues used by the process map.

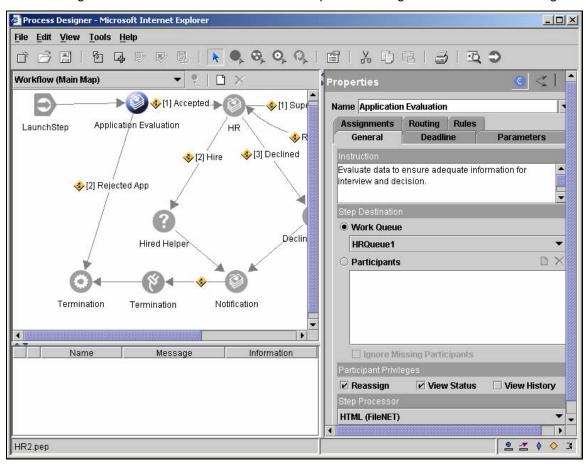


Field	Description			
Name	Name of the workflow queue. This field is case sensitive.			
Object name	Name of the database view that points to the workflow queue. The field is case sensitive. The name of the workflow view is in the following format:			
	<pre><database_user>.VWVQ<isolated_region>_<queue_name></queue_name></isolated_region></database_user></pre>			
	Example: f_sw.VWVQ15_PROCESSOR.			

The following screen shot illustrates the list of the workflow views in the PE database.

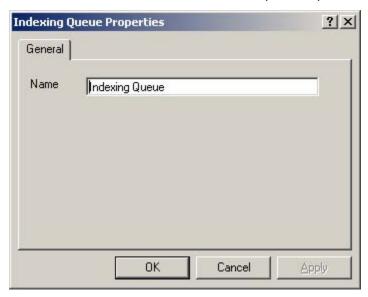


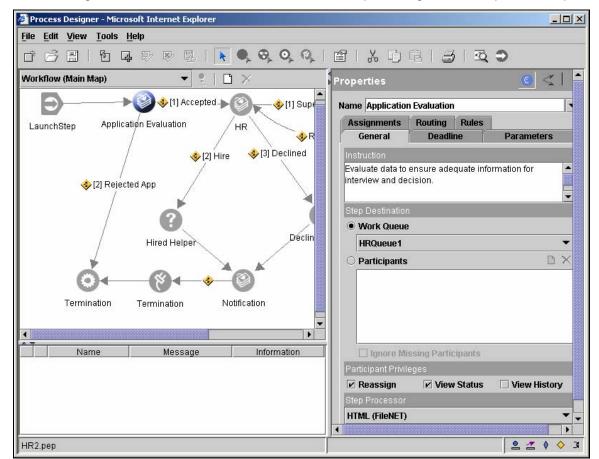
The following screen shot illustrates where the work queue is configured in the Process Designer.



## **Steps**

Steps are used to relate an Inbasket to a particular step on the process map. A step must be created for each step on the process map that is assigned to a public or personal queue. The name of the step in BPF must be an exact match of the name of the step on the process map. The Inbasket name does not have to match the name of the step on the process map.





The following screen shot illustrates where the workflow step is configured on the process map.

#### **Filters**

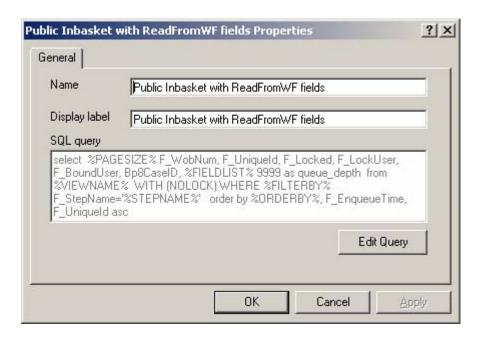
A filter on a workflow queue is an SQL statement that is executed against the workflow queue table in the workflow database when browsing for Inbasket content. The queue filter is usually set to retrieve all work objects that are at a particular step on the process map. However, a queue filter can also be used to further limit the list of work objects returned. A filter can be created that excludes the work objects that are locked or a filter can be created that displays only those work objects that have a field or set of fields set to a pre-defined value.

The default sort order is also specified in the queue filter. The Inbasket default sorting column works as the primary sorting criteria. The sorting formula defined in the queue filter works as the secondary sort criteria.

Two major queue filters are pre-defined in the system: Public Inbasket Filter and Private Inbasket Filter. Additional queue filters can be defined using the existing filters as a template.

The following table defines the set of macros that could be used in the queue filter SQL statement.

Macro	Description			
%FIELDLIST%	The %FIELDLIST% is an Inbasket Queue Filter macro that is populated at runtime with the workflow field names of the BPF Case Fields that are exposed in the browse list and defined as 'read from workflow'. If there are 'read from workflow' BPF Case Fields exposed in the Inbasket browse list, this macro has to be present in the Inbasket Queue Filter SQL statement.			
%FILTERBY%	This macro is substituted with the user-selected Inbasket filter conditions if the Inbasket filter is defined for the current Inbasket			
%ORDERBY%	This macro is substituted with the default or user-selected sort order for the Inbasket.			
%PAGESIZE%	This macro is substituted with the page size of the Inbasket, as specified in BPF Explorer Application settings > Web Application > Inbasket Page Size.			
%STEPNAME%	This macro is substituted with the name of the workflow step associated with the Inbasket.			
%USERID%	This macro is substituted with the workflow user ID of the active user.			
%USERNAME%	This macro is substituted with the name of the active user.			
%VIEWNAME%	This macro is substituted with the name of the workflow queue associated with the Inbasket.			



#### **Examples of filters**

#### **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

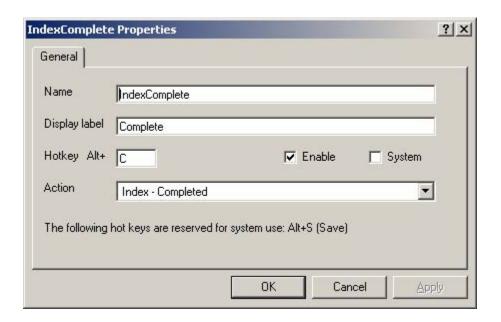
#### Personal Inbasket filter returning number of records in the gueue

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%, \_EnqueueTime, F\_UniqueId asc

#### Responses

A response is required to complete a Case from the Case User Interface once it is opened. Executing a response dispatches the work object to the next step in the workflow. A response must be created for each response defined on the process map. You can change the response label via modifying the Display Label property.

Fields	Description			
Name	The name of the response. This name has to match the name of the response on the process map.			
Display label	The label that appears in the user interface when a user selects a response.			
HotKey Alt +	When a user holds <alt> and the Hotkey defined here, the response is selected without using the mouse.</alt>			
Enable	This check box enables the response. If turned off, it will hide the response from all Inbaskets.			
System	If a response is checked as a system response, it is still present in the user interface and accessible programmatically.			
	One example is having a Host Down response defined on the workflow map, in addition to a regular Approve response. When the user executes the Approve response, custom code will validate a condition on the mainframe and allow the user to proceed with the action. If the mainframe is down, custom code may execute the Host Down response, so that the item is routed to the proper step, the proper action is reflected in the audit log, and the item will disappear from the user's view.			
Action	The action controls what is written to the audit trail for each response. For example, there can be a response in the user interface of Complete and by using an action named differently in the audit trail could show Invoice Approval Complete.			



# **Export and Import Management**

The Export and Import Management option allows the BPF architect to backup all or selected parts of the metadata information configured via BPF Explorer to an XML Manifest file. This file can then be stored in a versionable and secured manner in Content Manager. It can also be used to move the configuration to another FileNet environment for deployment.

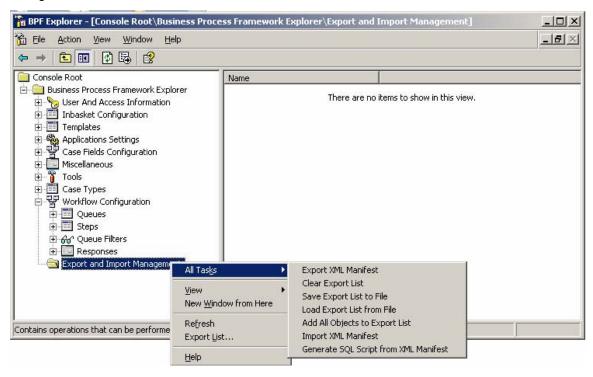
**Caution:** Currently the Export and Import Management tool only allows you to export and import full and complete metadata files. Although partial export has been implemented in this release, partially importing a configuration has proven to be very problematic since many object types in the BPF metastore have IDs associated with them that need to be keep in sync with other object type records. For this reason, we currently do not recommend or support partial imports. Any of the options that support partial Export/Import are greyed-out and noted as "Not implemented at this time" in this document and the option should not be used.

## **Manifest Properties**

Not implemented at this time.

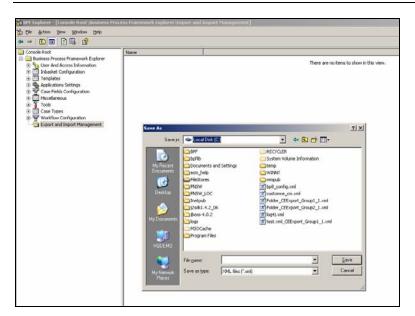
#### **All Tasks**

Under the Export and Import Management option you will find a number of options under the All Tasks option. These options perform various tasks relative to exporting or importing the BPF Explorer configuration metadata.

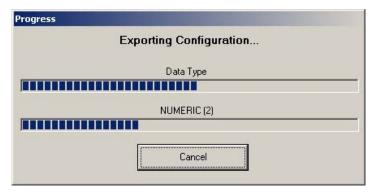


#### **Export XML Manifest**

The Export XML Manifest option exports the Explorer metadata to an XML Manifest file based on the contents of the current Export List. If this option is disabled, it means that there is currently not an Export List to export. See the task title "Add All Objects to Export List" in order to build an Export List.



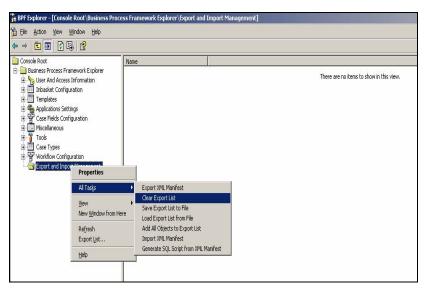
When the Export XML Manifest tasks is selected, the user will need to identify the location and name of the XML output file to be created.



Once the file has been identified, the progress window will be displayed. The export will take a number of minutes depending on the number of objects being exported and the overall configuration size.

#### **Clear Export List**

Clearing the Export List clears the current contents of the Export List. Many items on the menu are disabled when the Export List is empty. It is a good practice to clear the current export list before building a new one to support exporting a new export Manifest.



There will be a confirmation message before the Export List is cleared. Select Yes to continue with clearing the export list or select No to cancel the Clear Export List task.



#### Save Export List to File

Not implemented at this time.

#### **Load Export List to File**

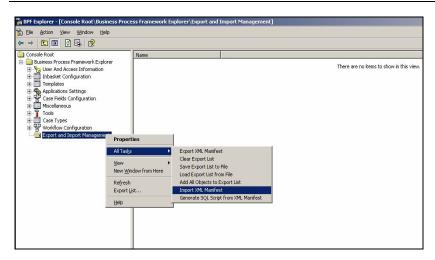
Not implemented at this time.

#### **Add All Objects to Export List**

This option must be run in order to build an Export List. An Export List must be present for an export to be performed. The Export List is a list of object types that will be exported when an export is run. This option creates an Export List with all object types in it, meaning a complete and full export of the BPF Explorer metadata. There is no user interface shown when this option is selected, but other options like 'Export XML Manifest' should be enabled once the Export List has been built.

#### **Import XML Manifest**

The Import XML Manifest option allows you to identify a previously created BPF XML Manifest and import it into your currently connected BPF meta database.

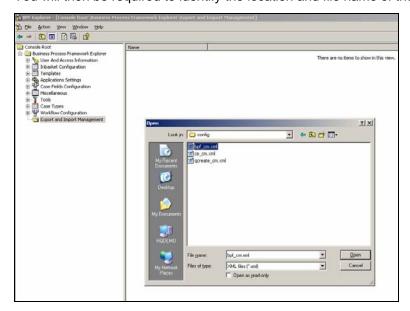


Because the Import XML Manifest option will be clearing out the existing configuration currently in the BPF meta database before introducing the contents of the XML Manifest, you will be given the following warning message, to verify that you understand the need to create a backup (XML Manifest) of your existing work if you haven't done so already.



Select Yes to continue with the import. Select No to exit the import option.

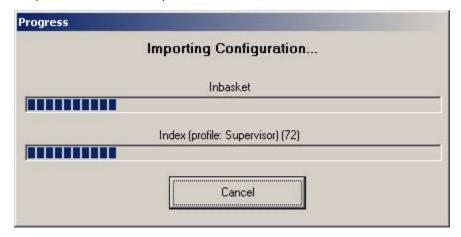
You will then be required to identify the location and file name of the XML file to be imported.



Because the BPF meta database contains user information which may differ from system to system, you will be asked if you wish to preserve or keep the current users in the BPF meta database. Select Yes to retain the existing user records, select No to remove the current user records, or press Cancel at this point if you have any question about proceeding with the import.



The import progress will be reported to the user. Depending on the size of the import, it may take a couple of minutes to complete.



If Cancel has been selected at any time during the import process the following message will be displayed:



# **Generate SQL Script from XML Manifest**

When BPF is importing an XML manifest, it parses the XML file content and generates a set of SQL statements that represent the data in XML. The SQL statements get executed against the BPF Metastore and import the data that was initially present in XML.

To import an XML Manifest, BPF Explorer installation is required and the Import Manifest step needs to be performed manually.

This option, allows you to convert the XML manifest to a SQL script file, which could be executed against the BPF Metastore directly without having a need to run BPF Explorer. That is, the XML manifest is converted to a SQL manifest. This feature allows fully automating the import of the BPF configuration manifest, where the import could be done via a script.

The SQL script generated from the XML manifest is platform specific, so the SQL files generated for Oracle and MS SQL platforms will be different.

## **New/Add Remove Columns**

This option is a standard Microsoft Manager Console user interface option and has no additional benefit in relationship to BPF Explorer.

#### **View/Customize**

This option is a standard Microsoft Manager Console user interface option and has no additional benefit in relationship to BPF Explorer.

#### **New Window from Here**

This option is a standard Microsoft Manager Console user interface option and has no additional benefit in relationship to BPF Explorer.

# **Utilities**

# **WFImport**

WFImport is a Wizard that allows you to synchronize the workflow map with the BPF configuration and minimize manual work. WFImport reads the following data from the workflow map PEP file and stores it in the BPF Metastore:

- List of workflow queues is read from the workflow map and stored in Workflow Configuration >
  Queues.
- List of workflow steps is read from the workflow map and stored in Workflow Configuration > Steps.
- List of workflow responses is read from the workflow map and stored in Workflow Configuration > Responses.
- Optionally, actions are created for each response imported.

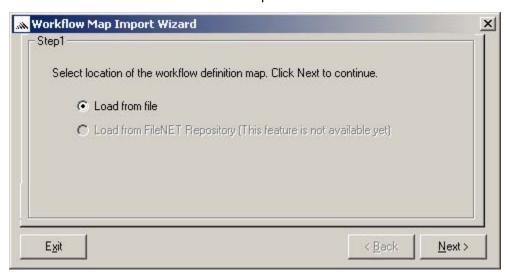
# **Running WFImport**

WFImport.exe utility can be found and executed from the following location:

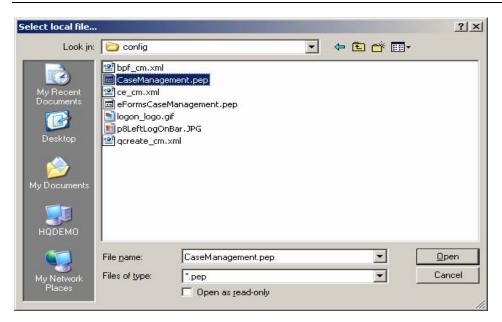
...\Program Files\FileNet Business Process Framework\BPF Explorer\Utils

#### Step 1:

- Once the program is run, the following dialog will be displayed. Currently the WFImport utility can only import Workflow Configuration information from a local .PEP file. (Loading from a FileNet process engine repository directly is not yet implemented.)
- Select Next to continue with the import.

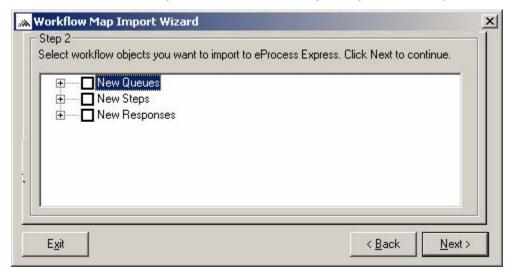


 Next you need to identify and select the .PEP file to be used. PEP files are created using FileNet Process Designer tool and stored in a local file. Location and select the correct .PEP file for import.



#### Step 2:

- The WFImport Utility will identify which workflow objects are new or have been changed (since last import) in your configuration and need to be imported. Those can be viewed in the following dialog by opening each of the workflow areas. You are free to select or deselect any of the objects by clicking the checkbox to determine what will be imported.
- Select Next when you have identified exactly what you wish to import.



## Step 3:

- Select any additional options you wish to have enforced during the import.
- Select Finish to begin the import process.



 You will be asking a verifying message to make sure you wish to import the workflow configuration into BPF Explorer. You may wish to backup your configuration prior to running WFImport.



• When the import is complete the following message will be displayed.



# **Saving/Moving BPF Configurations**

This section outlines the steps necessary to save or move a BPF configuration, and its supporting P8 configuration, from one environment to another.

The P8 Content Engine and Process Engine use the concept of manifest files to move repository configuration from one environment to another. This is also true of BPF. When you perform the task of exporting a manifest you are in fact creating an .XML file that contains all of the configuration information that can then be moved to another environment for import. Manifest files can also be saved and managed in the Content Engine providing safe storage and revision control for all your critical configuration information.

The following sections describe the configuration data that comprises all of the necessary information to support a BPF application when moving it to a new environment. Once all of these files have been created and saved, they can then be backed up and moved to another location to be imported.

#### **BPF Metadata**

The BPF Metadata is all of the information configured in BPF Explorer.

#### **Export**

See the section in this document entitled "Export and Import Management" for detailed instructions on how to create the manifest for the BPF Metadata. The following two export tasks need to be run in order to create a BPF Metadata Manifest:

- Add All Objects to Export List
- Export XML Manifest (remember name and location of saved manifest file)

Caution: If any custom tables have been created in the BPF Meta database, these tables will need to be defined in the BPF Meta database on the new system first before importing the BPF Manifest.

#### **Import**

See the section in this document entitled "Export and Import Management" for detailed instructions on how to import a BPF Manifest in BPF Explorer. The following two import tasks need to be run:

- Verify you are not importing over a configuration that has not yet been backed up.
- Import XML Manifest

# **Content Engine Object Store Definition**

You will need to export and import definitions for following classes that relate to your BPF application. You can export the whole Object Store if desired, or just export the structures that pertain to BPF support.

- Document Classes
- Custom Case Objects (Bp8Objects Class and all sub-classes)
- Object Properties (user-defined property templates as well as property templates that begin with 'Bp8')
- Stored Searches or Stored Search Templates (when searches are imported to the Target CE repository, each search needs to be opened and saved in Search Designer to update the Repository name)

- Object Security (these should only be exported and imported if the target CE repository is in the same LDAP domain)
- Folders, etc.
- Event Subscriptions (currently there are known issues when moving these objects between systems due to the Workflow Map GUID getting changed. It is recommended that you manually create these on the target CE system)

Caution: The BPF 'Settings' custom object, which is typically found in the root folder of the Content Store, should also be included in your export Manifest. This object holds the last Case ID used. When the Settings object is imported, the last Case ID may need to be reset to a desired start sequence number.

## **Export/Import CE Object Classes**

To create an XML manifest for the previously mentioned CE object classes, access FileNet Enterprise Manager, logon with the appropriate credentials, select the object class level you wish to export and right click to access the Export options. See the P8 Enterprise Manager documentation for a detailed description on how to perform these functions.

# **Process Engine Definition**

A BPF application runs on top of FileNet Business Process Manager. The following PE configuration definition will need to be exported in order to support your BPF application:

- FileNet Process Maps
- Process Engine Isolated Region (Includes definition for Queues, Roster, Event Logs, Indicies, etc.)

## **Export/Import Process Maps**

Process Maps are defined by BPM's Process Designer application. Process Map definition can be saved as a local .PEP file from within Process Designer, using the Save As option under the File toolbar option. These .PEP files can also then be opened in Process Designer in the same manner on a new system and saved to the Process Repository. See the P8 BPM Process Designer documentation for a detailed description on how to perform these functions.

# **Export/Import Queue Definition**

The Process Engine Isolated Region contains all the work queues which are the physical containers for work as it moves through its workflow. The definition of these queues is needed to support your BPF application and can be exported using the Workplace/Admin/Process Configuration Console. Select the Isolated Region, and use the right click option to Export and Import the XML file. See the P8 Process Configuration Console documentation for a detailed description on how to perform these functions.

# **Security Definition (Users/Groups/Roles)**

Depending on your BPF security schema, this may optionally include LDAP groups and users, and/or Workplace Acess Roles, and BPF Roles. In generally, typically you will need to manually define the appropriate LDAP users for each system rather than move then from system to system via an export /import technique.

## **LDAP Users and Groups**

Consult your site Security Administrator for information on how to access LDAP users and groups from system to system.

# **Workplace Access Roles**

Currently there is not a way to move these definitions easily between systems by export and importing files. These must be manually defined in Workplace Site Preferences for each system.

#### **BPF Roles**

These will be handled by the BPF Manifest export/import. Users can optionally be imported from the BPF Manifest, as they may different between systems.

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