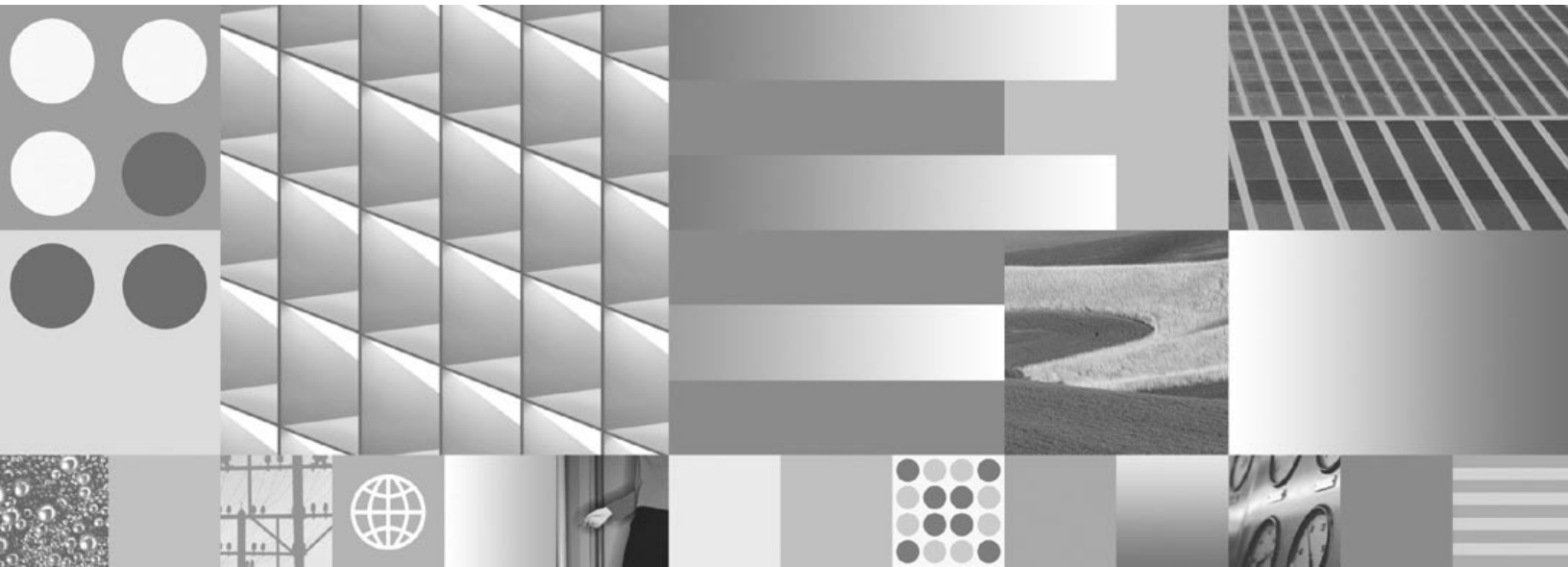


Web Application User Interface Guide



Web Application User Interface Guide

Note

Before using this information and the product it supports, read the information in “Notices” on page 31.

This edition applies to version 4.0.0 of IBM FileNet Business Process Framework (product number 5724-R75) and to all subsequent releases and modifications until otherwise indicated in new editions.

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Introduction

NOTE This document has not been updated for any new or changed functionality in BPF version 4.1.0. For information on new and changed functionality, see the *IBM FileNet Business Process Framework New Feature Addendum*.

The purpose of this guide is to provide you with functional information about the IBM® FileNet® Business Process Framework (BPF) Web Application components and how to use the BPF Layout Designer to customize the appearance of the BPF Web Application.

Intended audience

This document is intended for BPF Administrators that is, application architects and developers 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 has attended the BPF Administrator Training, has attended IBM training on FileNet Content Manager and Business Process Manager products, and has a general understanding of Java™ integration and database administrative 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.

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 two tools called BPF Explorer and the BPF Layout Designer. Specifically BPF Explorer configures run-time functionality and is documented in the *IBM Business Process Framework Explorer Handbook*. The BPF Web Application and its BPF Layout Designer tool, configures the appearance of the run-time application. This allows BPF Administrators building solutions 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 the FileNet default 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 and the BPF Layout Designer is a multi-part process; the process should be thoroughly understood before beginning the procedures.

BPF user interfaces

BPF Web Applications run on BEA WebLogic, IBM WebSphere®, and JBOSS and consists of dynamic HTML, HTML, JSP, XML, XSL, HTC, and Java Script files. The user interface and processes are configurable and data driven. BPF 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.

The BPF Web Application is the primary run-time user interface. The BPF Layout Designer is a secured tool accessed from the BPF Web Application that defines and customizes the appearance of the BPF Web Application. Multiple layouts can be created and assigned to specific roles, further tailoring the environment to the logged on user. A default Web Application user interface is delivered with the BPF Web Application and is the standard layout used if a custom layout has not been defined.

Once the user has successfully logged onto the BPF Web Application, they are at any point in time, in one of two display modes in the BPF Web Application. The user is either in the Inbasket Browsing mode where they will see the Browse List or they have opened a case and are in Case UI (User Interface) mode. Following is a sample screenshot of the default Web Application User Interface for each mode.

NOTE The minimum display resolution supported by BPF Layout Designer is 1024 x 768.

BPF Web Application – Browse List

Case Management - Microsoft Internet Explorer

Mode: Browse Edit Layout Create Case Search Preferences Sign Out

Page 1 of 1 First Previous Next Last [Print Preview](#)

Priority	ReceivedDate	Company Name	Account No	CaseID
Med	10/18/2006	FileNet	123	65875
Low	10/16/2006 2:16:26 PM			65776
Low				65885
Low	10/18/2006			65765
Low	10/23/2006 11:17:46 AM	ABC Company	98765	65895

Priority
 All

Account Number

Company Name

Received Date

Case ID

Inbaskets
 Index (5)
 Matching (0)
 My Work (0)
 Review (0)

Inbaskets: Index

Administrator

Role: Supervisor

BPF Web Application - Case UI

Case Management - Microsoft Internet Explorer

Save Close Action Mode: Browse Edit Layout Create Case Search Preferences Sign Out

FILENET

Case | Audit | Attachments | eForms

Case Information

Case ID: 65895

Account Number: 98765

Company Name: ABC Company

Designated Rep: Linda Smith

Effective Date: 10/16/2006 2:13:42 PM

Contract Amount: 1,000.00

Received Date: 10/23/2006 11:17:46 AM

Priority: Low

Contract Notes:

Document Type: Primary

Inbaskets

Index (5)

Matching (0)

My Work (0)

Review (0)

No documents attached to the Case Documents attached: 0

Inbaskets: Index Administrator Role: Supervisor

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 CE and in other content repositories via Content Federated Services.
- **Process** - Process integrated with FileNet BPM.
- **Business Objects** – BPF securely manages business data via CE and is implemented based on the object-oriented architecture.

A Microsoft® SQL, Oracle, or IBM DB2 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 operations** - BPF operations are component steps that perform robotic Case-related operations via FileNet Component Manager. 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 Web Application

Web Modules

The BPF Web Application user interface is made up of many components called Web Modules. The Web Modules represent a specific type of user interface functionality in the BPF Web Application. For instance, the screen functionality used to show and select Inbaskets is performed in the Inbasket Module. This modular approach to the user interface permits the BPF Administrator to arrange the Web Modules in the user interface and create customized appearances. Multiple layouts can be created and assigned to specific roles.

It is helpful to get familiar with these modules, their size, content and functionality first, in order to be better prepared to create your own custom layouts.

The following sections describe each of the Web Modules available in the BPF Web Application.

Browse List and Case User Interface

This module actually provides two different types of display mode presentation in the user interface. The module will either be displaying the Inbasket Browse List, or it will be displaying the Case User Interface. Typically the Browse List is presented upon user logon. The Case UI mode is invoked when a specific item is selected by a user from the Browse List, or the GetNext mode of operation is configured (which means that the current role/inbasket does not permit the user to select from the Browse List).

Favorite Field

The Favorite Field Module is an optional module which allows you to display a favorite case field value, if one has been configured in BPF Explorer. The favorite field can be helpful when you wish to see a consistent piece of key data presented in the UI, like an Account Number or Customer Name.

Inbasket Filters

The Inbasket Filters Module displays the data entry fields configured for each Inbasket which provide the user the ability to further limit the contents of the Inbasket selected. Once a filter has been entered in these data fields, the Inbasket must be selected again in order to trigger refreshing of the Browse List contents. The number of data entry fields, their type, and size will be based on the Inbasket filters defined in the Inbasket Configuration of BPF Explorer.

Inbasket Toolbar

The Inbasket Toolbar Module displays those tools which are configured by BPF Explorer using the Inbasket Configuration. These tools may or may not be available based on the Inbasket selected and its configuration. See the Web Module called Toolbar for the tools which are static and not altered by BPF Explorer.

Inbaskets

The Inbaskets Module displays the list of selectable Inbaskets which are available to the current logged on user based on their role. An individual Inbasket can be selected simply by clicking on the name of the Inbasket. This selection triggers the contents of the Inbasket to be read and displayed in the Browse List Module. The available Inbaskets to be displayed is determined by the Inbasket Configuration in BPF Explorer.

Inbaskets Combo Box

The Inbasket Combo Box Module works almost identically to the Inbasket Module in that it provides for Inbasket Selection. With the Inbasket Combo Box Module, the selection is made by a drop down combo control rather than displaying all Inbaskets all the time on the screen as the Inbasket Module does. This control may be preferable if display space is limited in the presentation space.

Logo

The Logo Module is actually a user-defined web modules that is configured to display an image. This image is typically a graphical file of a corporate logo or application identity that you wish to display in the user interface. It serves as an example of how to register a new web Module as well. The logo module is simply for display and is not usable or selectable in any way.

Roles

The Roles Module displays the list of selectable Roles which are available to the current logged on user. The role that is selected determines almost all aspects of what is presented in the user interface including its layout appearance, and what data and functionality is available to the current user. The relationship between the user and their role membership is defined by LDAP, Workplace Access Roles, and BPF Explorer definition. See the *IBM Business Process Framework Explorer Handbook* for additional details.

Toolbar

The Toolbar Module is a traditional horizontal toolbar which exposes additional functionality to the user. Generally, the items found on the toolbar will be based on the logged on user and how tools are configured in BPF Explorer. A couple of tools are static and displayed for all users. The toolbar can optionally be configured to have menu structures hanging under specific tools as well. Tools are selected using point and click with the mouse, or can be configured with hot key equivalents for keyboard access.

User Name or Queue Name

The User Name or Queue Name Module either the currently logged on user, or if a search has been performed, the name of the queue(s) that the case is currently in.

Viewer Module

The Viewer Module allows you to imbed the viewing of content within the BPF Web Application UI. Typically in the BPF Web Application, content viewing is launched in one or more windows separate from the BPF Web Application window. In either case, the standard FileNet Viewer technology is used. By adding the Viewer Module in your layout, you will be embedding the content display in the BPF Web Application UI. This provides you an alternative viewing option and may reduce the time to bring up and tear down other viewing windows, but may also limit the geography in which you can view content.

If the Viewer Module is not used, then content is displayed in the standard separate window viewing method.

<User-Defined> Module

A user-defined module allows you to register and name your own web module(s) and place them in the BPF Web Application user interface. Once a user-defined web module has been created, you will see it in the list of available Web Modules to be used in the BPF Layout Designer. See the Logo Module for a sample of a user-defined web module, and see the section called Extending the Layout Designer for more information on how to create user-defined web modules.

BPF Layout Designer

This document describes all of the configuration capabilities of BPF Layout Designer tool. Prior to creating custom layouts using the BPF Layout Designer, the BPF Administrator should have already configured the application solution features via BPF Explorer since the BPF Layout designer needs this definition in place before it can present a layout in the BPF Web Application. The following sections of the document describe how to access the BPF Layout Designer and how to create and modify BPF Web Application user interface layouts.

Accessing the BPF Layout Designer

The BPF Layout Designer is accessed via the BPF Web Application. If an authorized site designer is logged on, the BPF Web Application will automatically add the **Edit Layout** toolbar option for access to the BPF Layout Designer.

The following screen shows the BPF Web Application with an authorized site designer logged on.

The screenshot shows the BPF Web Application interface in a Microsoft Internet Explorer browser window. The title bar reads "Case Management - Microsoft Internet Explorer". The interface has a dark blue sidebar on the left and a main content area on the right. The sidebar contains the FileNet logo, search filters for Priority (All), Account Number, Company Name, Received Date, and Case ID, and a section for Inbaskets (Index (5), Matching (0), My Work (0), Review (0)). The main content area displays a table of cases with columns: Priority, ReceivedDate, Company Name, Account No, and CaseID. The table shows 5 cases. At the bottom, there is a status bar with "Inbaskets: Index", "Administrator", and "Role: Supervisor".

Priority	ReceivedDate	Company Name	Account No	CaseID
Med	10/18/2006	FileNet	123	65875
Low	10/16/2006 2:16:26 PM			65776
Low				65885
Low	10/18/2006			65765
Low	10/23/2006 11:17:46 AM	ABC Company	98765	65895

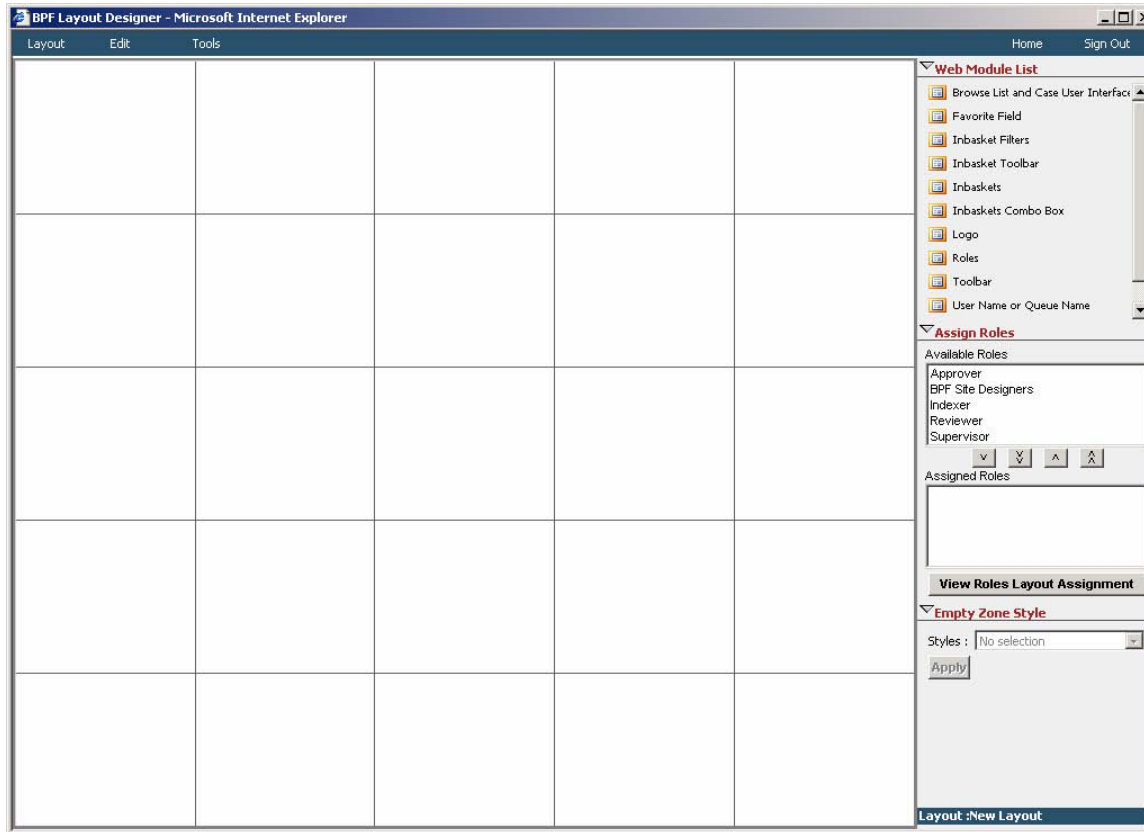
Authorized Site Designers

In order to access the BPF Layout Designer from the BPF Web Application, you need to have a BPF role called **BPF Site Designers**. This BPF role will be imported during the initial installation of the Case Management Sample Application. You will still need to create a matching role in Workplace Access Roles and/or an LDAP group based on your security settings in BPF Explorer. You must also add a user with membership in this role in order to access the BPF Layout Designer. This is the same setup as any other BPF role. See the *IBM Business Process Framework Explorer Handbook* for a detailed description of the security setup for BPF Roles.

If the security has been defined correctly, the user with this access will see the Edit Layout tool added automatically to their toolbar.

The first time the BPF Web Application is run, it will use a default layout, since no custom layouts have yet been defined. It will continue to use the default layout whenever a user runs the BPF Web Application and belongs to a role that does not have a custom layout defined. The default layout is not editable in the BPF Layout Designer.

Selecting the **Edit Layout** tool will launch the BPF Layout Designer. The BPF Layout Designer is started with the following 'empty' layout appearance. This is the starting place to create a new layout or check out an existing layout object for editing.



BPF Layout Objects

BPF is installed with a default layout that is an XML file. When a custom layout has not been defined, the BPF Web Application will use the default layout file for the UI presentation. Custom layout objects are a saved set of layout information, created and maintained by the BPF Layout Designer application, and are stored in the FileNet Content Repository. They can be controlled and managed just as any other content object would be. The BPF Administrator can define as many layout objects as needed and assign each layout object to one or more BPF roles. The BPF Web Application uses these layout objects at runtime to determine the appearance of the BPF Web Application based on the logged on user's role.

Typically, you will begin by defining a new layout object. This is done by designing the zone geography, placing Web Modules within the zones which represent specific data and functionality in the UI, and then assigning the layout to roles. The BPF Layout Designer is a very visual, drag and drop tool which makes it easy and intuitive to use.

Storing Layout Objects in Content Engine

When a new Layout Object is created in BPF Layout Designer, an XML document is created with all the layout attributes. This XML document is then saved and checked into the FileNet Content Engine.

All BPF Layout Objects are stored in a special Document Class called **BPF Site Layout** in the BPF configured Object Store. This special document class is defined (via an imported CE manifest) during the

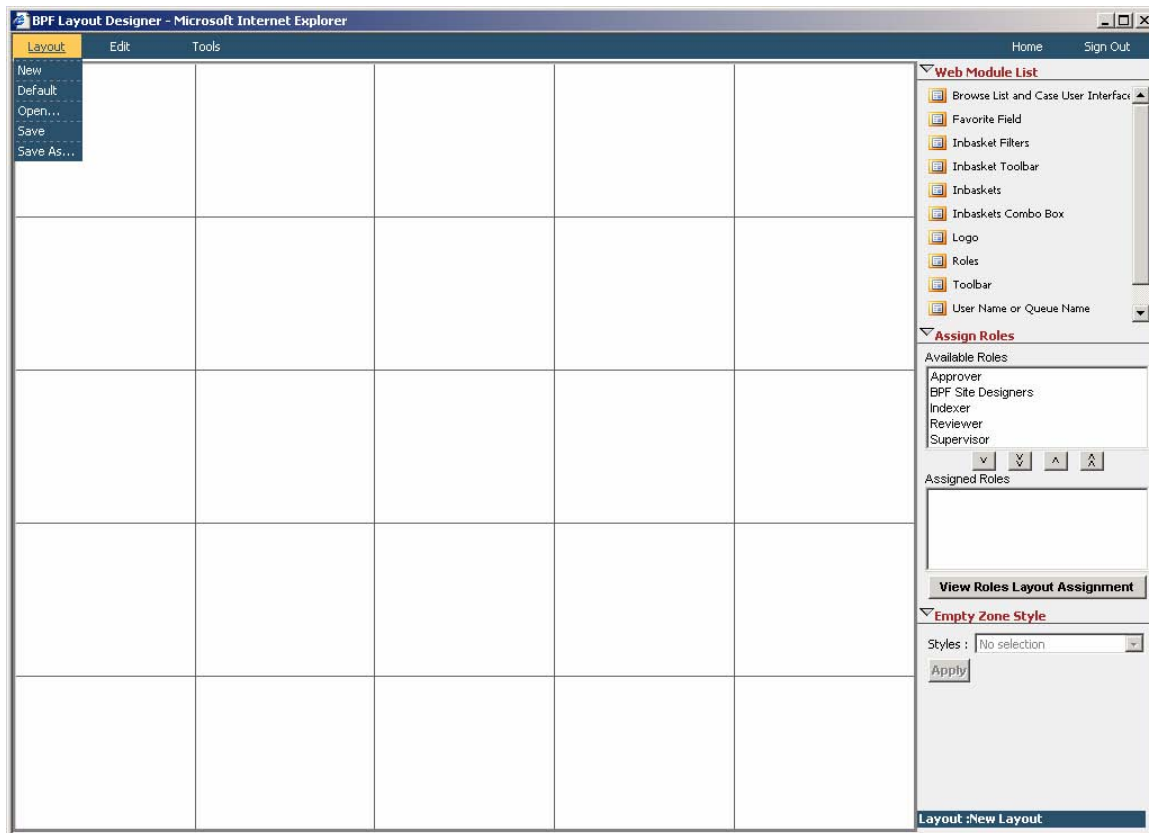
BPF installation process. This is where all of the Layout Objects, created by the BPF Layout Designer application are stored and controlled. The BPF Layout Designer performs all the check-in and check-out needed to manage these objects. There is security definition for this document class as well and it should not be altered. It is set as follows:

BPF Site Designers – full control

BPF users – View only

Managing Layout Objects

The **Layout** tool located on the BPF Layout Designer toolbar is used to manage the creation and modification of layout objects. Following are the options available under the Layout toolbar.



Layout / New

Using the New option will create a new Layout Object. A standard empty zone grid will appear when a new layout is started. New Layout Objects require that you define your zones, place Web Modules in the zones, and assign to roles prior to saving the new layout. If you select Layout / New and you have an layout already opened, you will be prompted to save that layout object before starting a new one.

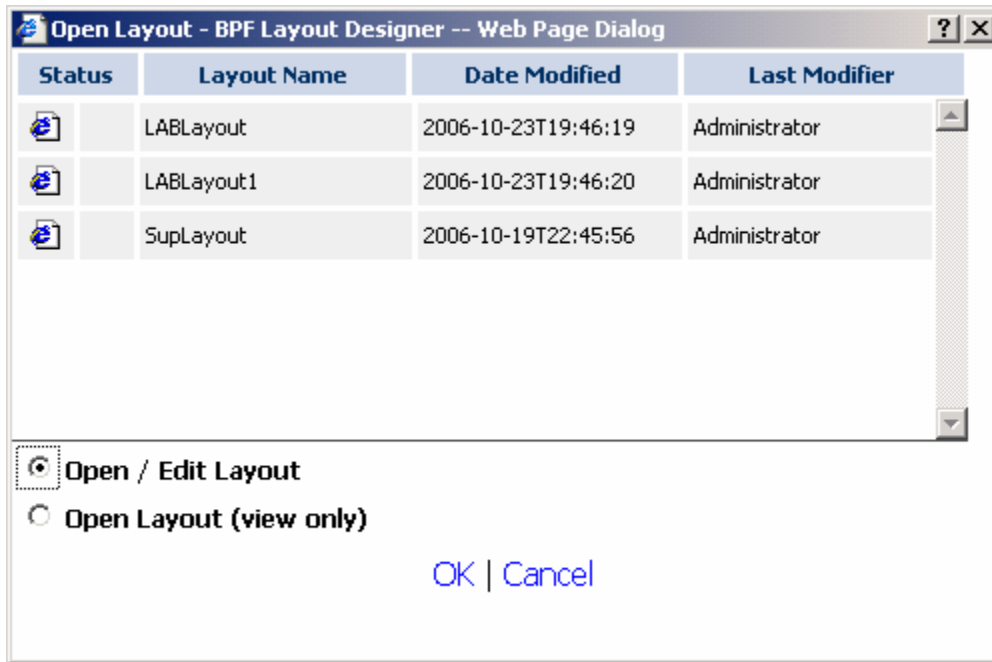
Layout / Default

Select the Default option to retrieve the Default Layout. The Default Layout will be displayed in the design area. The Default Layout is not a CE layout object and cannot be changed, but can be used as a starting point for a new layout objects. This provides backward compatibility with older versions of BPF and for those accounts that do not wish to deploy any custom layouts.

The default Layout Object is installed with the BPF Web Application and it is used at runtime if a custom layout has not been created for the logged on role.

Layout / Open...

Select the Open option to retrieve and check out an existing Layout Object from the Content Repository. The following dialog box will be displayed to select the Layout Object to be opened:



The following fields are used to identify a Layout Object to be opened and the mode in which it should be opened:

Field	Description
Select Layout	The Select Layout list box provides a list of existing Layout Objects found in the BPF Site Layout document class that can be opened for viewing or editing.
Open / Edit Layout	Select the Open / Edit Layout option if you would like to check-out the object from the Content Engine Repository and revise.
Open Layout (view only)	Select the Open Layout option if you would like to open the object and view it but do not intend on editing it. NOTE If you open a layout in this mode, you can still modify it, but when you try to save it, it will not save automatically but prompt you with a 'Save As' dialog box. This is the basic difference between edit mode and view mode.

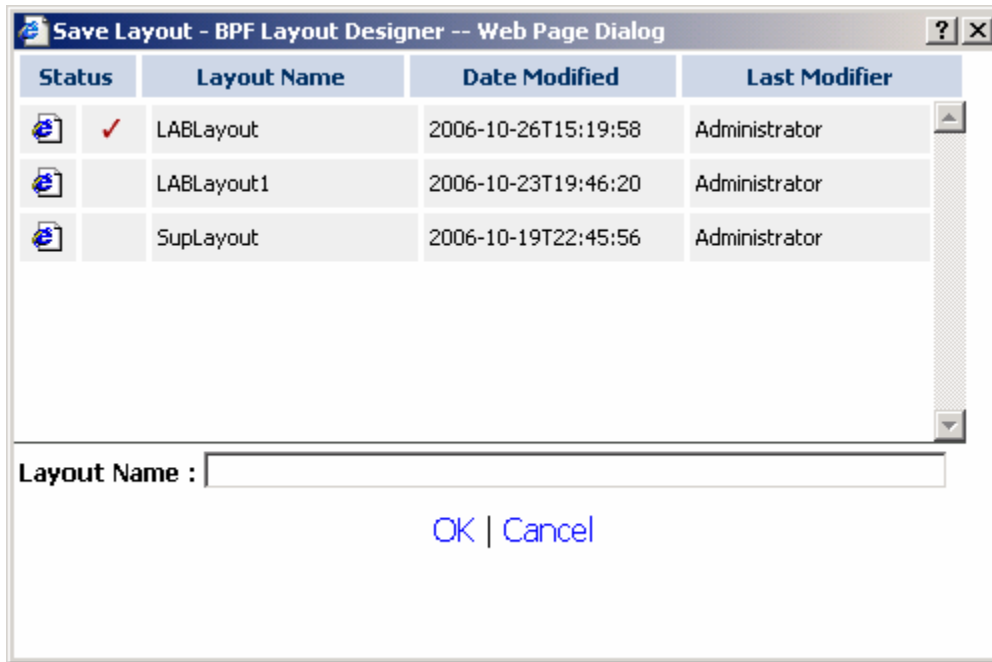
The Layout Object will be displayed in the design area. You may then edit and save your changes to the layout.

Layout / Save

The Save option will save the current layout object to the Content Repository. If you are creating a new layout, you will need to supply a new Layout Object name. If you are saving an existing Layout Object then a revision will be checked-in.

Layout / Save As...

The Save As option saves the current layout object to the Content Repository as a new object. The following dialog box will be displayed to save as a new Layout Object.



The following fields are used to identify a Layout Object to be opened and the mode in which it should be opened:

Field	Description
Existing Layouts	The Existing Layouts list box provides a list of existing Layout Objects found in the BPF Site Layout document class that can be selected to Save As. If an existing name is used, it will override a new version of the layout with the current layout in the designer. Typically you will want to Save As with a new layout name rather than overriding an existing layout. The Existing Layout list can also be used to show you which names have already been used and what the layout naming conventions look like.
Layout Name:	Enter a new unique layout name to create a new layout object. If an existing layout was selected, this name will display in the layout name field.

Defining a Layout

The BPF Layout Designer is broken down into the Design Area and the Layout Controls. The Design Area is where you will create a new layout, and is comprised of many smaller zones.

Layout Controls

The Layout Controls are all located on the right side panel of the BPF Layout Designer and include:

- Web Module List
- Assign Roles
- Empty Zone Style

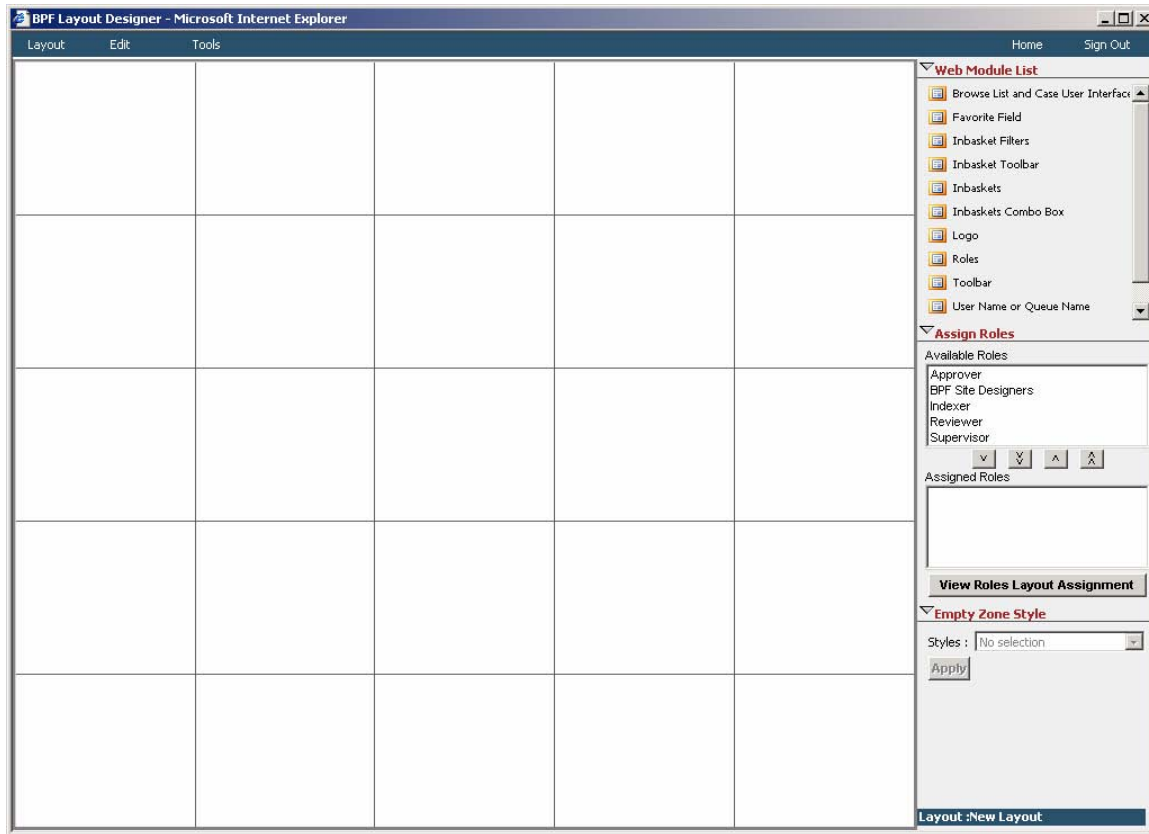
Each of these controls is described in more detail throughout this document. Each control can be collapsed or expanded. Collapsing a control provides more space for other controls, or can be used to hide features less used.

Design Area

The Design Area is comprised of zones. Zones are geographical areas within the user interface that define the location of specific data and functionality. The designer is free to change the size and number of the zones to achieve the user interface appearance they desire. A zone is a container for the web module that will be placed within it.

The maximum number of zones is 25. Typically, this is more than enough to construct any BPF layout.

An 'empty' layout will start with the following default zone appearance:



Changing Zones

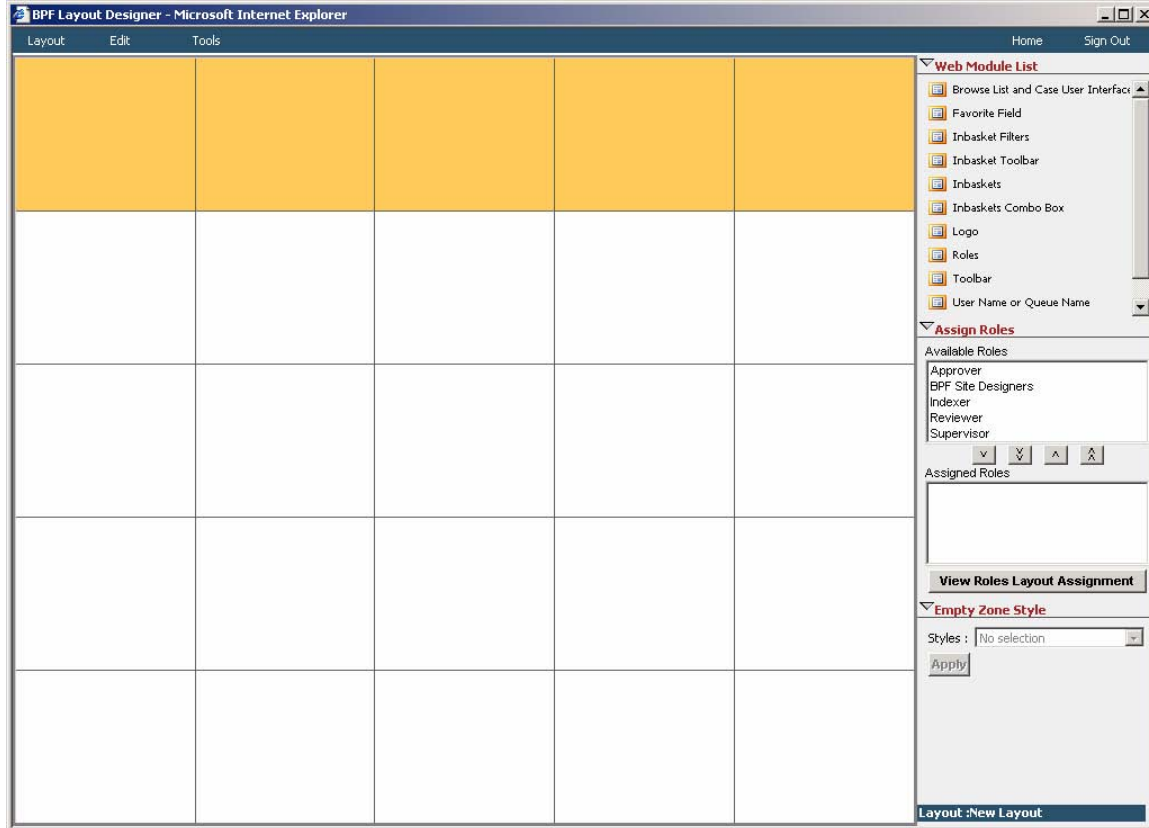
The design goal is to change the size, location, and number of zones to create a frame layout that matches the visual appearance of what you would like to display to the user at runtime.

There are two ways to manipulate the zones. The first are with mouse operations, and the second is by using the Edit Tool found on the toolbar to perform things like merge and clear layout.

Zones cannot be deleted or added per se, but by merging zones you arrive at the optimum number of zones needed for your layout.

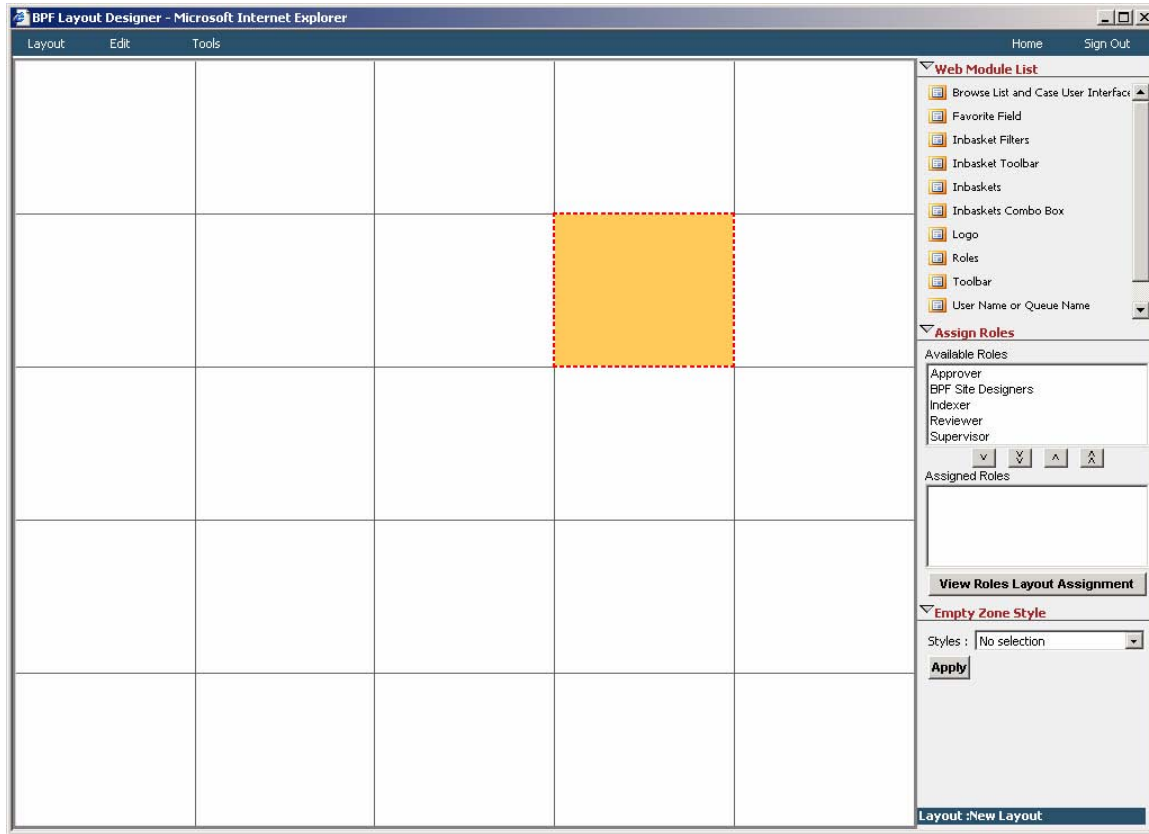
Zone - Mouse Operations

Identify one or more Zones – Mouse click anywhere in the zone to highlight the zone. Holding down the mouse button while moving over multiple zones will highlight them all, as long as they form a rectangular area. This is done to perform a zone operation on more than one zone at a time (i.e. merging three zones into one zone).



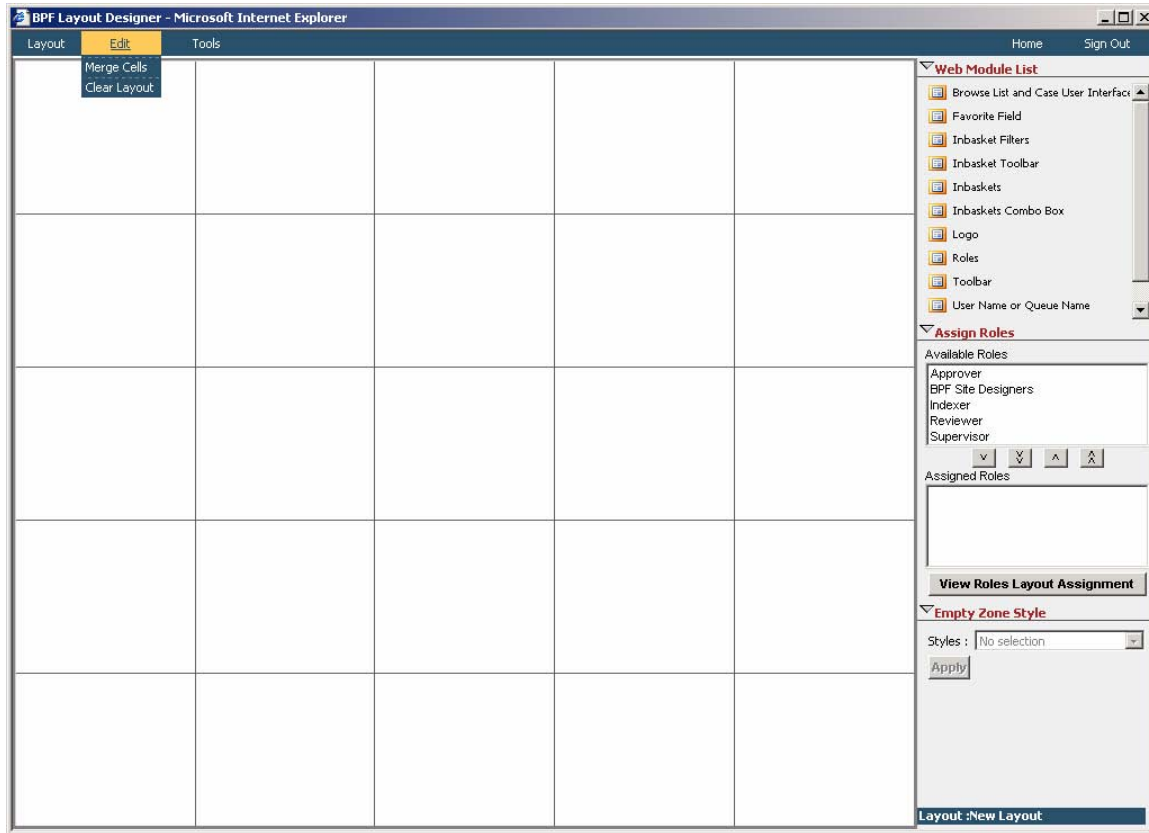
Changing Zone Size – Use the mouse to select any border of the zone to drag it to a new desired size.

Selecting a Zone – In order to change the properties of a zone, you must select an individual zone by clicking on the zone. Once this is done, you will see a red outline appear around the zone. If the zone is empty, the Styles property is enabled in the Layout Controls area for modification. See the Empty zone Style section of this document for more information on changing styles.



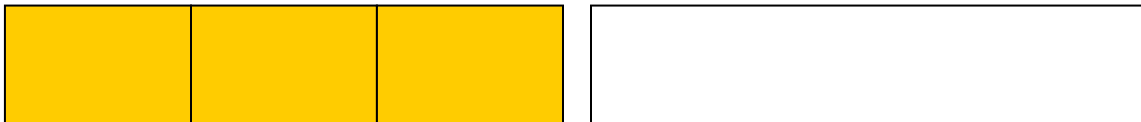
Zone - Edit Tool Options

The **Edit** tool options are found on the toolbar under the heading Edit and are also used to manipulate the zone layout. See the description below for each of the options.



Edit / Merge Cells

Prior to using this option, the designer should have selected more than one zone. The Merge Cells option will collapse all of the zones into a single zone. The size of the new zone will be the size of the boundaries of all of the previous cells combined. This can then be resized.



Edit / Clear Layout

This option clears the Web Modules from all of the zones but does not change the size of the zones themselves. The Layout / New tool should be used if you wish to completely reset all zones to the default empty layout starting point.

If an existing layout has not been saved, the user will be prompted to save prior to clearing the layout.

Empty Zone Style

You may have empty zones that do not have web modules in them. Typically you will not want to leave these zones white, but rather place a style on them so they blend in with adjacent modules.

The Styles property, under Empty Zone Style, is gray-ed out until an empty zone has been selected. The following table describes the property entries for the zone selected.

Field	Description
Styles:	BPF supports a list of predefined styles. These styles are classes found in a Microsoft custom style sheet file (Bp8Styles.css). Select the style you wish to add to the selected Web Module. This style is displayed in the background if the data presentation is smaller than the size of the zone.

NOTE If you have selected multiple zones and merge them, all property settings will be cleared in the resulting zone. For this reason, it is suggested that you define the number of zones you need first before setting properties on the zones.

Placing Web Modules into Zones

Web Modules represent pre-defined application data and functionality associated with BPF. Please refer to the section at the beginning of this document entitled Web Modules for a description of the data and functionality of each Web Module.

Web Modules are placed within each zone on the layout. Placing a Web Module within a zone determines the location and size of the display space in the user interface, for that specific module.

Required Web Modules

Each Web Module can only be placed in one zone of the layout at a time. The zone should be of sufficient size to display the information of the Web Module. Although not all Web Modules need to be used in a layout, some are required and must exist in the layout in order for BPF to function properly at runtime. They are:

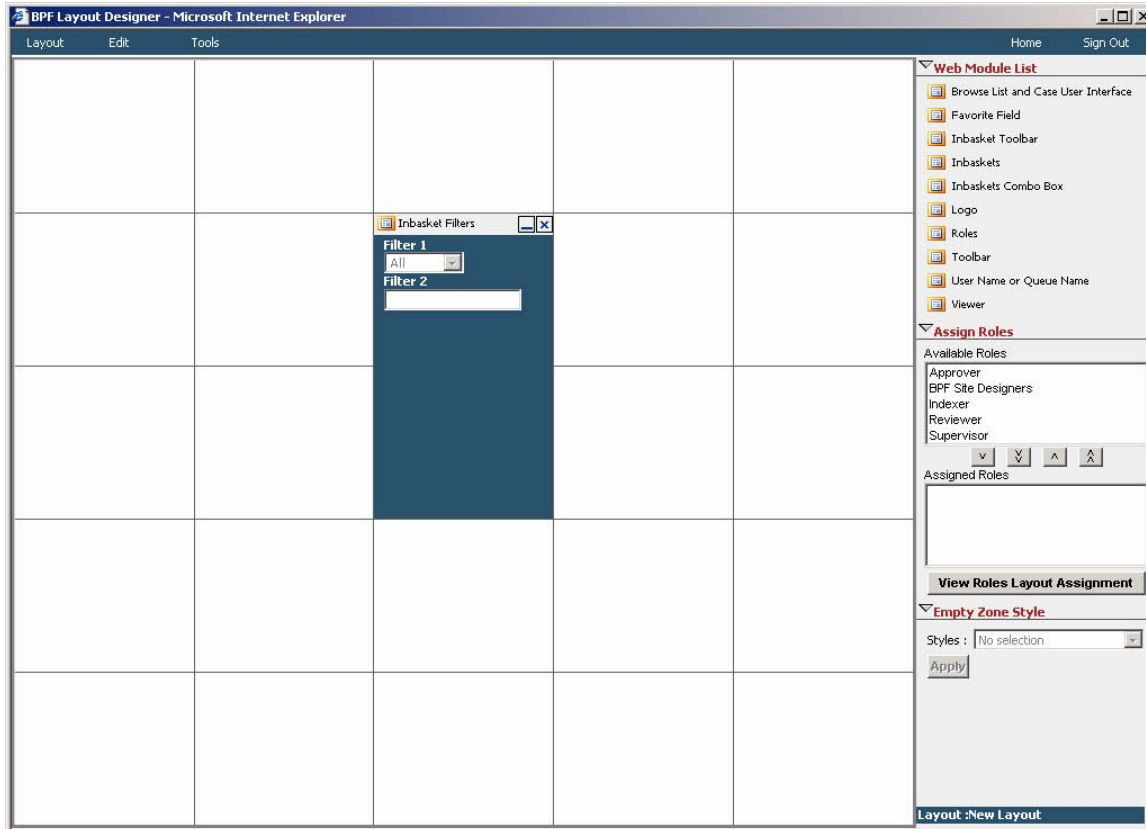
- Browse List and Case User Interface Module
- Inbaskets Module (or Inbaskets Combo Box Module)
- Toolbar Module

Moving a Web Module to a zone

Simply select a Web Module from the Web Module List by clicking on it, and then drag and drop the Web Module into the zone location you wish it to appear in. You will see a title bar with the name of the module as you drag the Web Module to a zone. This is the handle of the module and should be the area that you click and drag with.

Web Module Display

A sample html rendering of the Web Module appearance will be displayed when the Web Module is placed in a zone. This does not represent the actual contents of the module based on your BPF Explorer configuration or the actual size of the data at runtime. If the actual contents do not fit in the zone provided at runtime, scrollbars are displayed to the user for that module. You may need to try each layout in the BPF Web Application runtime environment before you are satisfied with the overall appearance based on your site-specific configurations. You may find it necessary to change layouts as BPF Explorer configurations are added or changed over time.



Removing a Web Module from a zone

To remove a Web Module from a zone and make it available again in the Web Module List, use the 'X' icon in the upper right corner of the Web Module display. It is also possible to move Web Modules from one zone to another by drag and drop method using the title bar as the handle.

Assigning Roles

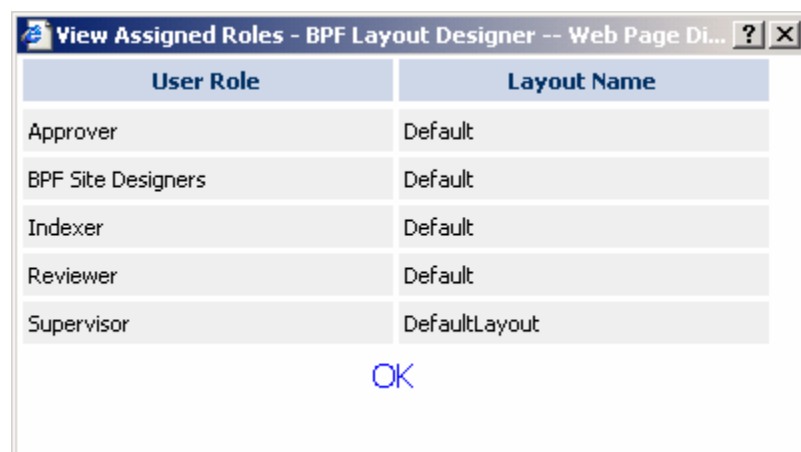
The last part of creating a Layout Object is to assign the layout to one or more roles. You cannot save a layout that does not have at least one role assigned to it. A role can only have one layout associated with it. If a role has already been assigned to a layout object, and a subsequent layout is assigned to that role, it will override the initial one and assign it to the current one. The list of roles available must have previously been created in BPF Explorer.

Field	Description
Available Roles	Select the Role(s) to be assigned to the current layout. It is possible to assign multiple roles to the same layout. When a user logs on to the BPF Web Application with a role, the assigned layout is used to determine the runtime appearance.

Field	Description
Selection and movement buttons	The center buttons allow the user to perform selection and movement of Roles.
^ ... v	These buttons provide selection and de-selection of individual Roles.
^ ... v ^ v	These buttons provide selection and de-selection of all Roles.
Assigned Roles	When a Role has been selected, it will be displayed in this list. Selection can be made from this list to deselect roles as well.

View Roles Layout Assignment (button)

The View Roles Layout Assignment button provides a list of the layouts that are currently assigned to roles. This can be used to avoid assigning a role to a new layout that is already assigned to an existing layout.

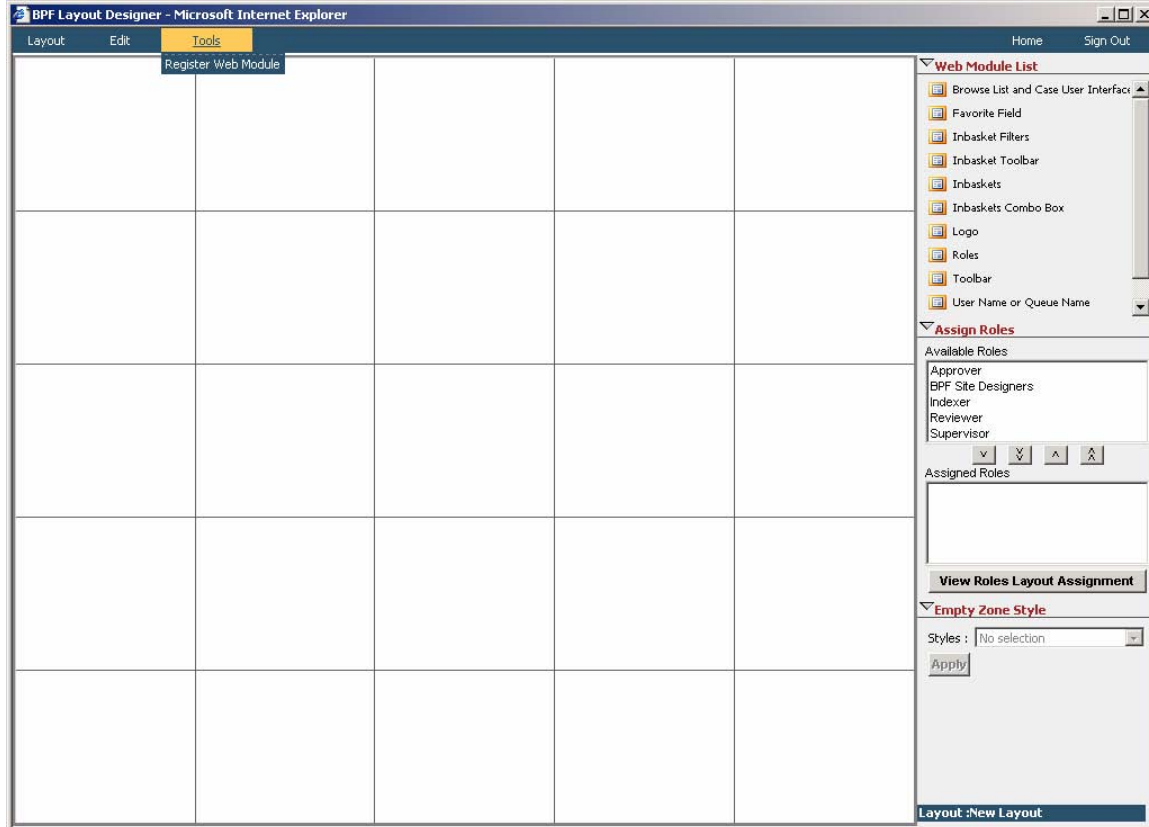


Extending the Layout Designer

The Layout Designer provides specific tools to further customize the appearance of the BPF Web Application. This includes:

- Adding site-specific Web Modules which introduce other non-BPF related information into the user interface.

The Tools option is where these extension options are located.



Tools / Register Web Module

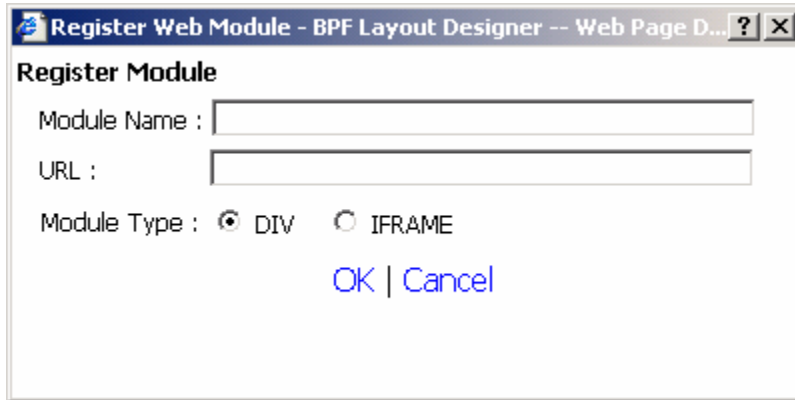
The Register Web Module provides the ability to create new site-specific Web Modules which can be included in the layout. This allows you to introduce anything that can be accessed via a URL into the BPF Web Application user interface.

NOTE You should use static URLs only, those with updates or popups may make the Layout Designer difficult to use as they will transfer active control to the URL while you are trying to design. Parameters cannot be passed with the URL.

The information for all Web Modules included the site-specific registered ones, is stored in the following location and XML file name. This file will need to be copied when you are promoting a BPF application to a new environment.

- `<web application deployment folder>\WEB-INF\BPFModules.xml`

The following dialog box will display when you select the Tools / Register Web Module option.

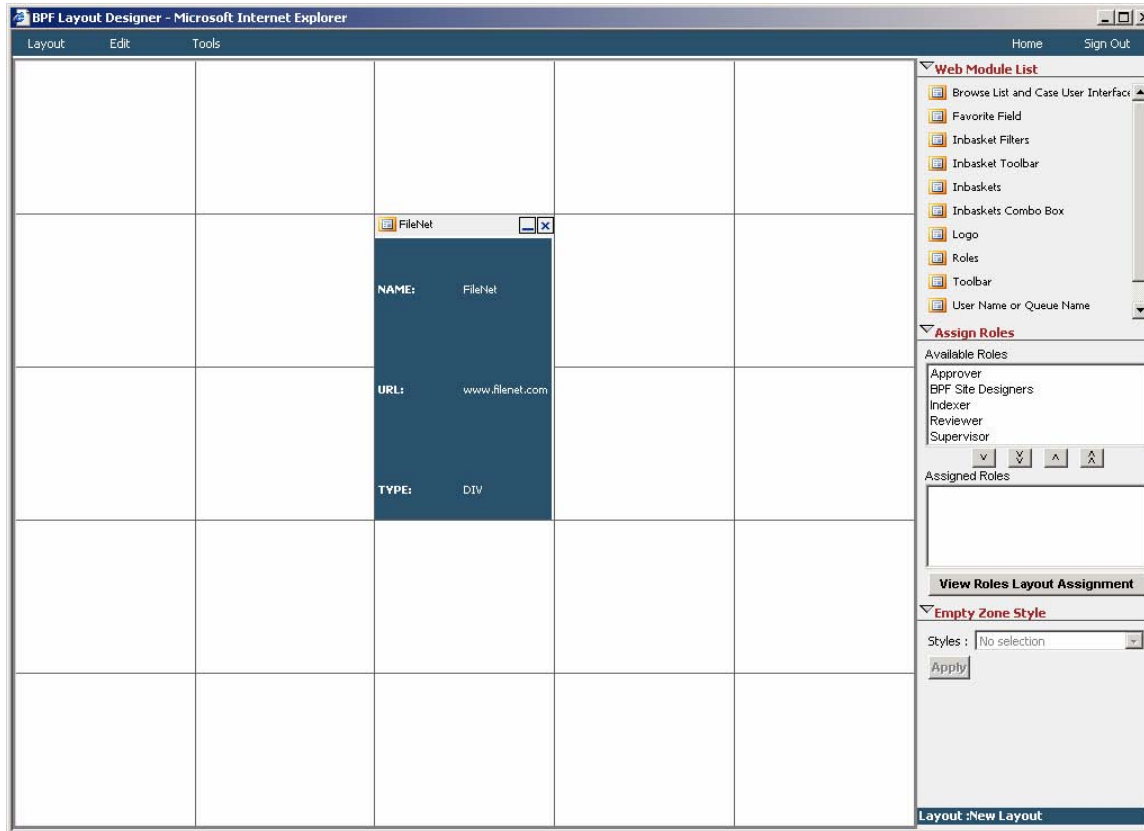


The image shows a Windows-style dialog box titled "Register Web Module - BPF Layout Designer -- Web Page D...". Inside the dialog, there is a section titled "Register Module". Below this title, there are three input fields: "Module Name:" followed by a text box, "URL:" followed by a text box, and "Module Type:" followed by two radio buttons labeled "DIV" and "IFRAME". The "DIV" radio button is selected. At the bottom of the dialog, there are two buttons: "OK" and "Cancel".

The following describes the properties that must be entered to create a new Web Module.

Field	Description
Module Name:	Enter the name of the custom Web Module. This should reflect the nature of the information being displayed in the module. Example: Customer Service Portal
URL:	Enter the data provider URL reference for access to this module. This needs to have a fully qualified path. Example: http://custserv/portal/main.asp
Module Type:	The BPF Web Application can support custom web modules with the follow module type behavior: DIV – When DIV is selected, BPF will render the HTML and insert it in the corresponding DIV using the innerHTML method. This is the most standard module type. The limitation of this methid is that JavaScript™, VBScript, and Java applets will not render properly. IFRAME - When IFRAME is used, BPF will still use a DIV to define the boundaries of and position the web module. However, it will add an IFRAME component inside the DIV and assign the SRC property of the IFRAME to the URL configured. In this case, IFRAME will render the URL This should be used only when you know that you want the URL rendered by IFRAME.
OK (button)	Saves and registers the new custom Web Module. The new Web Module will display is the available Web Module list. NOTE Once a custom Web Module is saved it cannot be removed or its attributes changed since there may be layouts dependent on this module.
Cancel (button)	Does not save the new custom Web Module and exits the Register Web Module process.

The following is an example of a layout which includes a site-specific Web Module.



Exiting the BPF Layout Designer

Home

The **Home** toolbar option exits the BPF Layout Designer and returns to the BPF Web Application. If the current layout has not been saved, the user will be prompted to do so.

The Home option returns to the BPF Web Application with the logged on user at the time BPF Layout Designer was started. If the layout has been alternated for the role of the logged on user, the new layout will be reflected when the BPF Web Application returns. If you wish to test another layout, you will need to sign out of the BPF Web Application and sign in with a user/role assigned to the new layout. It is suggested that the BPF Site Designer has access to all BPF Roles at runtime making the validation of layouts easier.

NOTE If the browser Refresh (F5) option is used while in Layout Designer, it will return the user back to the BPF Web Application just like the **Home** option, unless layout changes have been made in the current session. If the layout is in a changed state, the Refresh (F5) command will be ignored.

Sign Out

The **Sign Out** toolbar option exits the BPF Layout Designer and does not restart the BPF Web Application. If the current layout has not been saved, the user will be prompted to do so.

The Sign Out option may be preferable if you need to make changes in BPF Explorer or for some other reason do not wish to restart the BPF Web Application.

Customizing User Interface Styles

BPF provides a stylesheet method to determine the style appearance of the BPF Web Application user interface. This means you can set unique styles for each BPF Web Module including its background color and textual attributes like font choice, color, and font size. A Web Module is defined as a specific BPF control used in the BPF Web Application user interface like the Toolbar or Inbasket Filters. Customizing the style of the BPF Web Application allows you to incorporate a style that fits with your corporate style.

All style definition is contained in a file delivered with the BPF Web Application called *Bp8Styles.css*. This is a standard Microsoft stylesheet file and is organized with sections for each web module. *Bp8Styles.css* is deployed in the following directory path: `<web_root>\css\`

Modifying BPF Styles

We suggest that if you wish to apply custom styles to your BPF Web Application, you do not change the *Bp8Styles.css* file delivered with BPF, as this can be overwritten by an upgrade to a newer version of BPF. Instead, you should make a copy of this file in the same directory and rename it *Bp8CustomStyles.css* and make your changes to this new file. The BPF Web Application will automatically use the *Bp8CustomStyles.css* file at runtime instead of *Bp8Styles.css* as long as the application can locate it.

The defined style will be applied at runtime whether you are using the Default Layout or a custom Layout Object defined by the Layout Designer tool. This means that you can only have one style definition per BPF instance running.

Empty Zone Style Properties

If creating a custom Layout Object using the Layout Designer, you will notice that you can pick a style property for an zone in the layout which is empty (does not have a web module in it), see the Empty Zone Style section in this document. The options found in the style properties list box, are read from the *Bp8Styles.css* file. The name of the empty zone style selected is written to the Layout Object. The BPF Web Application at runtime retrieves the attributes of the empty zone style like all other style attributes from either the *Bp8Style.css* or *Bp8CustomStyles.css* file.

NOTE It is possible to add new colors to this section of the *Bp8Styles.css* file, but be aware that they can be overwritten if an upgrade version of BPF is applied, and if not properly added can affect the use of the Layout Designer tool. Always make a copy prior to modifying the *Bp8Styles.css* file for this purpose, and also copy the change to the *Bp8CustomStyles.css* file for runtime use.

Format of the Bp8Styles.css file

The following example illustrates a single section of the *Bp8Styles.css* file. The section shown is the Toolbar section. Each web module in the user interface (like Toolbar) has its own section in the file with a similar format.

NOTE Between BPF 3.5.2 and BPF 4.0, the format of the *Bp8Styles.css* file changed to support the BPF Layout Designer Tool. If you are upgrading to BPF 4.0 from BPF 3.5.2 and you are using custom styles, you will need to recreate a new *Bp8CustomStyles.css* file from the BPF 4.0 *Bp8Styles.css* file, and add your custom edits back in.

In the following example you should easily be able to identify the beginning of the section, the UI control being described, its attributes, and the end of the section. Typically you will be modifying the color, font-size, and font-family attributes only. Other attributes can be modified but could negatively affect the runtime appearance, or could even be unreadable by the BPF Web Application so ALWAYS make these changes to a copy of the *Bp8Styles.css* (and call it *Bp8CustomStyles.css*), and then test this file with the BPF Web Application.

```
/* ----- Toolbar [Start] ----- */
.ToolbarTable {
    border: 0; padding: 3px; border-spacing: 0;
```

```
margin: 0;
border-collapse: collapse;
width: 100%; height: 1.4em;
background-color: #2A526E;      /* dark blue */
border-bottom: 1px ridge white;
overflow: hidden; }
.ToolbarButton, .ToolbarButtonHighlite {
  cursor: hand;
  border-left: 1px solid white;
  border-right: 1px solid white;
  padding-left: 10px; padding-right: 10px;
  color: White;
  font-size: 8pt;
  font-family: tahoma, arial, helvetica;
  white-space: nowrap;
  border-top: 0.1em ;
  margin-left: 1em; }
.PrintPreviewButton{
  cursor: hand;
  padding-left: 5px; padding-right: 5px;
  white-space: nowrap;
  text-decoration: underline; }
.ToolbarButtonHighlite {
  text-decoration: underline;
  background-color: #fec85c; /* peach */
  color: #2a526e;          /* dark blue */ }
/* ----- Toolbar [End] ----- */
```

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