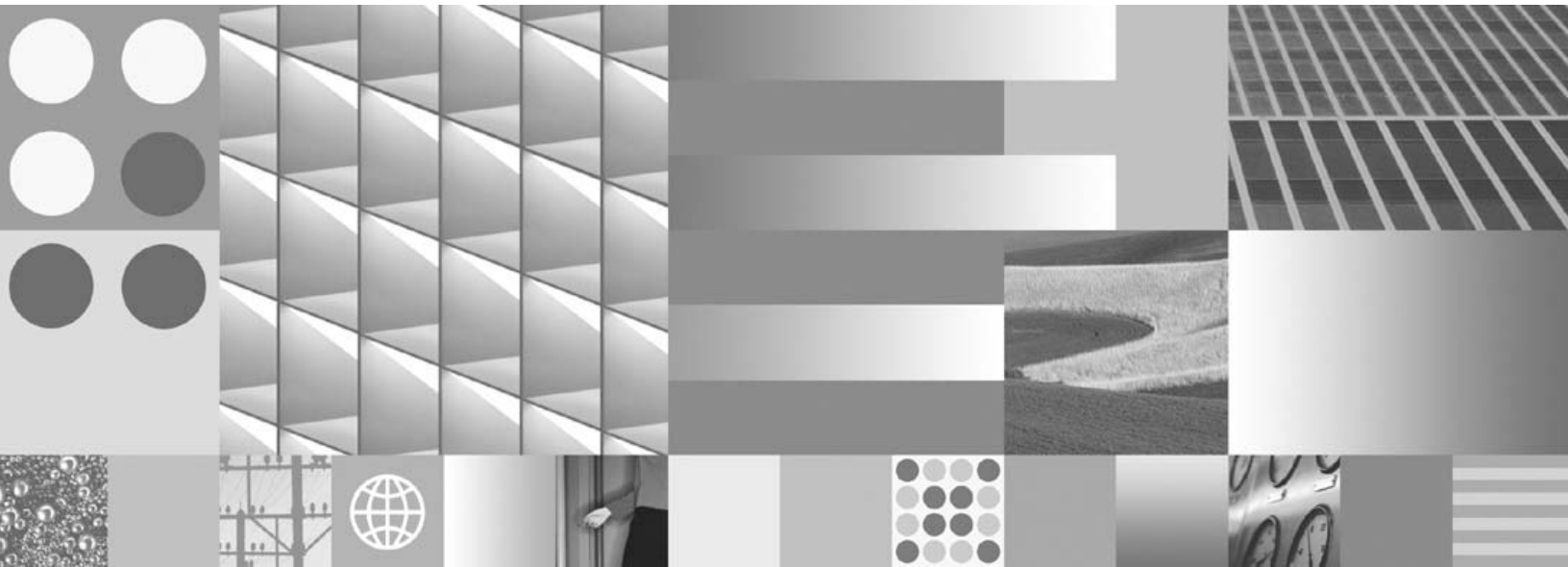


Localization Guide



Localization Guide

Note

Before using this information and the product it supports, read the information in “Notices” on page 11.

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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Revision Log

Date	Revision
04/13/06	Initial document posting.
11/22/06	Localization information for eForms integration added.
11/30/07	Made various changes throughout document to meet IBM requirements.

BPF Localization

Overview

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 *Business Process Framework New Feature Addendum*.

BPF Web Application

The IBM® FileNet® BPF Web Application provides the infrastructure support to localize the text displayed to the user while using the BPF Web Application. Multiple languages can be supported and served by the Web Server simultaneously for all BPF Metadata.

The BPF Web Application supports UTF-8 character sets and is designed in such a way that all BPF Web Application user interface text is delivered in a local language via a FileNet BPF Language Pack. In addition to the BPF Language Pack, each site must edit a custom language resource file to localize all application-specific, configured, metadata. A single Web Application can support an unlimited number of languages simultaneously. The localized metadata is cached to achieve best performance.

Users select their default language via the Internet Explorer preferences: Tools > Internet Options > Languages. All Web Application user interface content will be delivered in the language of the user's choice assuming this language has both a FileNet Language Pack installed, and a custom resource defined for that language.

The Case data is formatted based on the user desktop locale preferences. The data formatting preferences are managed via the Regional Options applet in the Windows® Control Panel.

- Numeric – based on the 'Numeric' preferences in the Regional Options.
- Money – based on the 'Currency' preferences in the Regional Options. Only a single format for the negative currency value is supported where the '-' sign is set to display prior to the value. The '-' sign after the value or the '()' sign are not presently supported.
- Date / Time – format is defined based on the 'Date' and 'Time' elements in the Regional Options. When year is entered as double digit instead of the four digit, the logic of assigning the proper year is based on the 'Calendar' setting in the 'Date' section of Regional Options.

BPF Explorer

BPF Explorer is the configuration tool used to configure application-specific behavior and text. BPF Explorer supports Latin 1 language entry only. This means that you must enter the metadata values using Latin 1 characters and then localize these values within the custom language resource files.

BPF Layout Designer

The BPF Layout Designer is a new visual design tool which permits the application architect to replace the default layout of the BPF Web Application user interface by creating new Layout Objects. Layouts are then assigned to one or more user Roles so that different layouts can be created for each role.

BPF Layout Designer supports Latin 1 language entry only. This means that you must design your layouts with the localized language in mind and test the layout in the BPF Web Application after localizing it to determine if your text labels fit correctly.

Localization Resource Files

All localization resources are stored as text files. The localized text which appears in the BPF Web Application is broken down into two different types called BPF Resources and BPF Custom Resources. Both file types are found in the WEB-INF\lib folder in the deployed Web Application.

BPF Resources (bpfLangResources.jar)

The first type of localized resource is BPF Resources. The BPF Resource file contains a text file (strings.ll_CC.txt) that provides native BPF Web Application text used to support all 'core' BPF behavior. Words like 'Sign Out' and 'Preference' are examples of text strings found in this resource. A FileNet BPF Language Pack would provide the translated resource files for a specific language.

BPF Custom Resources (bpfCustomLangResources.jar)

The second type of localized resource is BPF Custom Resources. The BPF Custom Resource file contains a text file (strings-custom.ll_CC.txt) that must be edited for each customer, to support text strings that are site-specific based on configurable metadata that has been defined in BPF Explorer. For example, Roles Names, Inbasket Names, Case Field Names, Tools, Tabs, etc. are unique for each application and will need to have the appropriate entry made in the BPF Custom Resource file to support a local language version of these resources. These resources are found in the bpfCustomLangResources.jar file. The next section describes the format of this file and how to edit the BPF Custom Resources to support a site specific application in a non-English language.

Adding New Language Support

File Name

All localization resources for each specific country and (or) language are located in a separate file. The name of the file contains both language and country names as follows:

File Name: strings-custom.ll_CC.txt

where:

- ll two-letter language code in lowercase, for example: en, fr, de, ru.
- cc two-letter country code in uppercase, for example: US, FR, DE, RU.

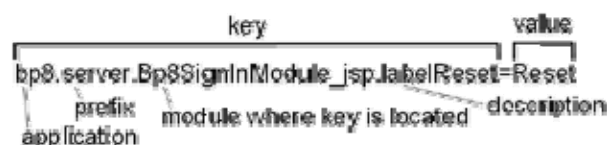
Example: strings.en_US.txt for US English

Note: Country is optional and can be omitted, for example: strings.en.txt.

Data Format

The resource file is stored in the UTF-8 format and contains the key and value pairs. The Key is an internal name of an application resource in the form of a text string; Value is the localized representation. Everything to the left of the '=' character is considered a Key; all characters after the '=' represent the Value. Commented lines start with the '#' character.

Format: Key=Value



Example: **Bp8.server.calendar.January=January**

^Key

^Value

Opening the BPF Custom Resource File

To extract strings-custom.en.txt from the bpfCustomLangResources.jar, open the jar file in a ZIP archiver of your choice and extract the file. To add other language resource files to the bpfCustomLangResources.jar, use ZIP archiver to add the files to the jar file. If jar file is modified, you need to stop the Web Server for it to take the change.

Editing the BPF Custom Resource File

By default, all resources in the strings-custom.en.txt file are commented out. To add a new language and/or country resource file, copy the strings-custom.en.txt to a new file with the name corresponding to your locale as described above. Use a text editor of your choice with Unicode UTF-8 support (like Notepad) to edit the resource file. Remove the '#' character from the beginning of the resource line and translate English messages to the target language. Be careful not to change the key portion of the resource string, which may or may not contain spaces, and is case sensitive due to its inclusion in Javascript™. Do not remove the '#' character from the lines that are comments or section separators.

When adding BPF user-defined actions to P8 Workplace, such as openCase, refer to ECM Help for localizing entries in Actions.xml.

When using Single Quote Marks (') in Strings:

Although BPF uses the same Java™ API (java.txt.MessageFormat) for formatting server-side resource strings as Workplace, BPF differs from Workplace in using the AJAX model to the extent that many of the resource strings configured in these files are actually used by JavaScript on the client rather than being rendered exclusively on the web server by compiled Java code. The only real difference in behavior between the two is that, **for “server” strings, single quote marks (') need to be “escaped” with another single quote mark – i.e. represented by two single quote marks (')**. These will then show up in the web application as a single quote mark ('). For “client” strings, on the other hand, each single quote mark (') configured will appear “as is” in the web application. Consequently, BPF has followed the standard practice recommended by Sun Microsystems for the MessageFormat class in dividing “server” strings from “client” strings by organizing them in groups within the resource files, usually with “server” or “client” as part of the actual resource string name (key). **If neither “server” nor “client” appears as part of the name (key), the resource string is a “server” string (default).**

NOTE For more information about the MessageFormat class, refer to the *Java™ 2 Platform, Standard Edition, v 1.4.2 API Specification* on the Sun Java Web site.

For example, the first of these two strings is a “server” string and the second is a “client” string:

```
bp8.server.Bp8CreateCase_jsp.labelCreateNewCase='Create new Case'
bp8.client.exceptions.invalidDateFormat='Value must be a valid date. For example: </BR>{0}'
```

In each case, the message will appear between one set of single quote marks (') when displayed in the BPF web application.

BPF eForms Integration

As part of the BPF eForms Integration feature, BPF will also support eForms localization based on the existing functionality of the eForms product as deployed within P8 Workplace. To achieve this, BPF will need to have localized copies of

- eformsResources.jar
- p8workplaceResources.jar

deployed from within the “\bpf\WEB-INF\lib” folder of the BPF Web Application itself. This localization support will include any “out-of-the-box” eForms localization feature that is available in Workplace. No

localization-specific code for eForms will exist within BPF itself. Localization will therefore be limited and specific to the support provided by and through the JAR files listed above.

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