Building Packages for Percussion CM System

Version 7.3

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CHAPTER 1

Building a Simple Package

To demonstrate the process of building a solution package, we will build a simple package based on the perc.example package used to demonstrate the process of installing and configuring a solution package.

NOTE: Before proceeding with this exercise, you should already be familiar with the process of installing and configuring a package. If you are not already familiar with this process, you should complete the exercises described in *Installing and Maintaining Packages for Percussion CM System*.

Preparing to Build the Package

A design object in the Percussion CM System can only be included in one package, so we will need to copy the perc.example.HelloWorld Content Type used in the perc.example package and rename the copy to einv.example.HelloWorld. The name of each design object should consist of three parts: the publisher prefix, the solution name, and the design object name.

- The publisher prefix is a three-to-five character string used to identify the publisher of the package and to help ensure uniqueness among the design objects and properties installed on the system. Solutions from different vendors may use the same names for design objects or their properties. Including a vendor prefix in the name of the design object or property allows the system to process all of these objects and properties correctly. Percussion Software uses *perc* as its publisher prefix.
- The solution name is the name of the solution in the package. The solution name should be a short but meaningful name for the solution included in the package, as in the solution names *example* and *exshared* ("example shared field") in the example packages provided by Percussion Software.
- The design object name is the name for the specific design object; this is the name you would give the object without the publisher prefix and solution name. In the example package, the Content Type design object is *HelloWorld*.

In the renamed design object:

- We will use the new publisher prefix *einv* (for Enterprise Investments).
- We will use the same solution name: *example*.
- We will use the same design object name:

HelloWorld. We will name the package *einv.example*.

We will use copies of the configuration files installed with the perc.example package, renamed for the einv.example package. We will modify the configuration files to refer to the new einv.example.HelloWorld Content Type.

Copying the perc.example.HelloWorld Content Type

In this procedure we will copy and rename the perc.example.HelloWorld Content Type using the vendor prefix einv, for the vendor of the EnterpriseInvestments package. (NOTE: You can substitute your own vendor prefix in this procedure.)

To copy the perc.exmaple.HelloWorld Content Type:

- 1 Start and log in to the Percussion CM System Workbench.
- **2** Click on the Content Design tab, expand the Content Types node. Select the perc.example.HelloWorld Content Type, right click, and from the popup menu, choose *Copy*.
- **3** Select the Content Types node, right-click, and from the popup menu, choose *Paste*. The Percussion Workbench displays the Content Type Copy dialog.

- **4** In the **Copy Name** column of the row of the perc.example.HelloWorld Content Type, enter *einv.example.HelloWorld*.
- 5 Click the [OK] button.

The einv.example.HelloWorld Content Type is added in the Percussion Workbench.

Copying and Modifying the perc.example Configuration Files

We will need new configuration files to refer to the new Template we have created.

Use the standard process in your operating system to copy the perc.example_configDef.xml and perc.example_defaultConfig.xml files and rename them to <code>einv.example.configDef.xml</code> and <code>einv.example_deafultConfig.xml</code>.

Open the files you copied. Search and replace perc with einv.

Building a Package

Once we have created our objects, we are ready to build the package. Use the Percussion Package Builder to build your packages.

The Percussion CM System Packager tool is part of the Percussion Developer Tools suite, and was installed with your Workbench, Server Administrator, and other developer tools. To start the Percussion CM System Packager tool, click on the Windows [**Start**] button, then choose *Programs* > *Percussion CM System* > *Packager*.

When you start the Packager tool, the main dialog is the Package List.

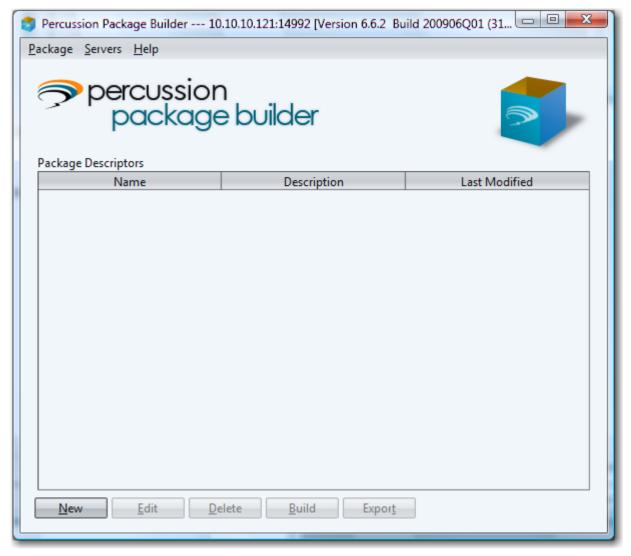


Figure 1: Package List Dialog

The Package List dialog lists the package descriptors that are defined on the server to which you are connected. If you do not see any packages listed, you are not connected to a server.

We will assume the following data for the connection procedure. Substitute your own connection data.

Host: 10.10.10.121

■ Port: 9992

Username: admin1Password: demo

To connect to your server:

1 In the Menu bar, choose *Servers > Connection Manager*.

Percussion Package Builder displays the Connection Manager dialog.

2 Click the [New] button.

Package Manager clears the Connection Manager dialog.

- **3** In the **Host** field, enter 10.10.10.121.
- 4 In the **Port** field, enter 9992.
- **5** In the **Username** field, enter *admin1*.
- **6** In the **Password** field, enter *demo*.
- 7 Click [Save and Connect].

This action connects and logs you in to the Percussion CM

Server. The process of building a package involves two phases:

- 1. Creating a package descriptor.
- 2. Building the package itself.

Creating the einv.example Descriptor

A descriptor defines the design elements that will be included in a package, and various supporting data for the package.

We will name our descriptor *einv.example*; the package will inherit this name. The descriptor will include the einv.example.HelloWorld Content Type and the einv.example_configDef.xml and einv.example_defaultConfig.xml configuration files. This will ber version 1.0.0 of the package, and the minimum version of Percussion CM System it will support will be 6.6.2. The publisher will be Enterprise Investments, using the URL www.enterpriseinvestments.com. The package will not include any file resources. The perc.exshared pacakge will be included as a required dependency for the package.

To create the einv.example descriptor:

- On the Package List dialog, click the [New] button.
 The Packager displays the Descriptor dialog with the General tab selected.
- 2 In the Package Name field, enter *einv.example*.
- **3** In the **Description** field, enter *A modifed example using the einv.example.HelloWorld Content Type*.
- **4** In the **Publisher Name** field, enter *EnterpriseInvestments*.

- 5 In the **Publisher URL** field, enter *www.enterpriseinvestments.com*.
- 6 In the Package Version field, enter 1.0.0.
- 7 In the Minimum CMS Version field, enter 6.6.2.

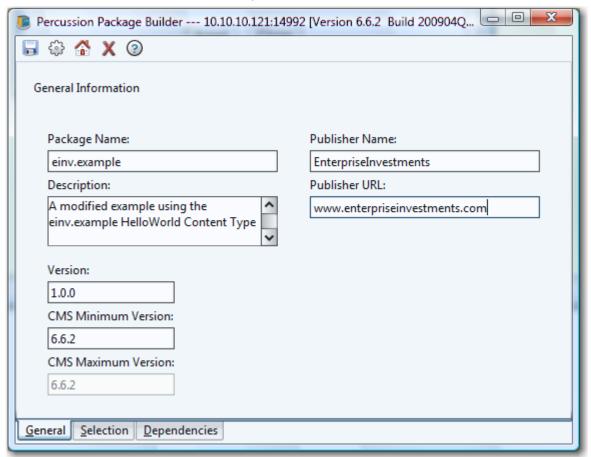


Figure 2: Package Builder General Tab with data for the einv.example descriptor

- **8** Click on the Selection tab.
- **9** In the Design Elements box, expand the Content Type node and check the box for the einv.example.HelloWorld Content Type.
- **10** Click the [...] button next to the **Configuration Definition** field. Browse to the file einv.example.config_Def.xml, select it, and click the [**OK**] button. The Packager adds this configuration definition file to the descriptor.

11 Click the [...] button next to the **Default Configuration** field. Browse to the file einv.example.default_Config.xml, select it, and click the [**OK**] button. The Packager adds this configuration file to the descriptor.

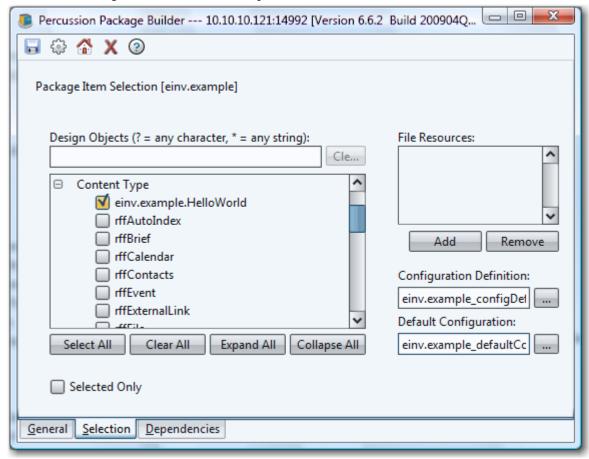
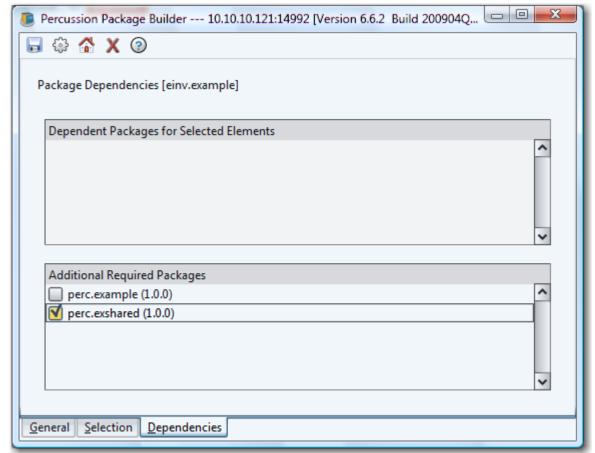


Figure 3: Package Builder Select tab with einv.example Content Type selected

12 Click the Dependencies tab.



13 In the Additional Required Packages list, check the perc.exshared package.

Figure 4: Package Builder Dependencies tab with perc.exshared package specified as a dependency

(Note: we are assuming that the perc.example package was in it's original installation configuration when it was copied to make einv.example. If you had not returned the perc.example.HelloWorld Content Type to its original configuration before copying it, the Content Type will include the New Field, and the perc.exshared package will be included as a required dependency.

14 Click the save button.

The Packager Builder saves the descriptor.

Building the einv.example Package

Once you have a descriptor, you can build a package. To build the einv.example package:

- 1 On the Package List dialog, select the einv.example descriptor.
- **2** In the Menu bar, choose *Package > Build*.
- **3** The Packager displays the Select Target Directory dialog. Enter the path to the root of your Percussion CM Server installation. You can also browse to the location where you want to store the package.

- 4 Click the [OK] button.
- **5** The Packager build the package, which is stored as einv.example.ppkg in the specified directory.

Now that you have built the package, you can test it. The most effective way to test the package is to deploy it to a Percussion CM Server installation that has no other implementation. Make the configuration changes described in the topic "Configuring the Hello World Package" in the document *Installing and Maintaining Packages for Percussion CM System* to confirm that your package is working correctly.

CHAPTER 2

Configuration Files

In the Percussion CM System, implementers can define allowable configurations for design objects. When a design object is installed, the customer specifies the configurations for their system.

Available configurations are defined by three XML configuration files:

The configuration definition XML file

This file defines the configurations available for the package. Configuration definitions contain Spring beans and must conform to the Spring bean schemas. Configuration definition files are stored in the directory <ServerRoot>/rxconfig/Packages/ConfigDefs. While configuration definition files can have any name during development, during installation the Percussion Package Installer renames the file according to the convention packagename_configDef.xml where packagename is the name defined for the package when you create it in the Percussion Package Builder tool.

- Two configuration specification XML files These files define the specific values for each configuration. Configuration specification files must conform to the schema localConfig.xml.
 - One of these files is the default specification file. It is stored in the directory <ServerRoot>/rxconfig/Packages/DefaultConfigs, and specifies the default values for all configurations in the package. When you are developing the package, this is the only specification file you need. At this time, the file can have any name. When the package is installed on the target server, the Percussion Package Installer saves it with the name packagename_defaultConfig.xml where packagename is the name defined for the package when you create it in the Percussion Package Builder tool.
 - The other file is the local specification file. It is stored in the directory <ServerRoot>/rxconfig/Packages/LocalConfigs and specifies the values to be used in the local environment for specific configurations (the values specified in this file override the values specified in the default configuration file). When you install a package, the Percussion Package Installer creates the local configuration file by saving a copy of the default configuration file in the LocalConfigs directory; the new

file is named packagename_localConfig.xml where packagename is the name defined for the package when you create it in the Percussion Packager tool.

Note that these configurations are optional. You can create a package that does not permit configuration. If you do allow configuration, however, both the configuration definition and the default configuration must be included in the package.

Default Configuration Files

The root node of the default configuration file is the <SolutionConfigurations> node. At a minimum, this node requires the following attributes:

- publisherPrefix The value of this node is your PublisherPrefix. The publisher prefix is a three- to five-letter abbreviation used to identify each publisher of packages. Packages, design objects, and properties from different publishers could have the same name. The publisher prefix should be included in the names to ensure uniqueness. iFor example, in the perc.example package, this attribute is publisherPrefix="perc".
- publisherName The value of this node is the name of your organization. For example, in the HelloWorld package, this attribute is publisherName="Percussion Software, Inc.".

The <SolutionConfigurations> node for the perc.example package is

```
<SolutionConfigurations publisherPrefix="perc" publisherName="Percussion
Software, Inc." type="config"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xsi:noNamespaceSchemaLocation="localConfig.xsd">
```

NOTE: The namespaces are not necessary, but if included, must be defined as in the example code above. For each solution in the package, you should include one <SolutionConfig> node. Each

<SolutionConfig>

node includes the configurations for the set of design objects in a specific solution. Each <SolutionConfig> must include a name attribute. The value of this attribute should be the name of the specific solution. For example, in the perc.example default configuration file, the value of the attribute is HelloWorld.

Each <SolutionConfig> node contains a set of one or more property> nodes, which specify the configurable properties for the design objects in the solution, and the value or values of each configurable property. All property> nodes require the name attribute, which specifies the name of the property. The name is arbitrary, but should have meaning for the user that will be configuring your package.

```
cproperty name="label" value="HelloWorld"/>
```

Rather than a simple list, a configuration may consist of a set of pairs of values, such as a name/value pair. The <pvalues> node is also used when specifying a set of pairs, but the child nodes are <pair> nodes.

Each pair node has two attributes, value1 and value2. The value1 attribute is the first value in the pair, while the value2 attribute is the second value in the pair. A common example of this approach to configuration is association Content Type/Template pairs with a Slot:

In this example, value1 specifies the Content Type for each association, while value2 specifies the Template that can be used with that Content Type in the Slot.

You also use this method to specify sets of name/value pairs. When specifying a name/value pair, the value1 attribute specifies the name in the pair and value2 specifies the value in the pair. You can use this approach to configure a set of binding variables for a Template:

Configuration Definition Files

A configuration definition file consists of a set of Spring beans that define the design objects and properties available to be configured. The root node is a standard Spring
 beans> node with all required Spring namespaces.

```
<!-- See Item 1 -->
<bean id="NewCopy"</pre>
class="com.percussion.rx.config.impl.PSObjectConfigHandler">
     < !-- See Item 2 -->
      cproperty name="name" value="NewCopy"/>
        < !-- See Item 3 -->
         <!-- See Item 4 -->
            property name="propertySetters">
              t>
              <!-- See Item 5 -->
                 <bean
class="com.percussion.rx.config.impl.PSRelationshipConfigSetter">
                    cproperty name="properties">
                                      <!-- See Item 6 -->
                                             <map>
                          <entry key="deepCloning"</pre>
value="${perc.SystemObjects.NewCopy.deepCloning}"/>
                          <entry key="shallowCloning"</pre>
value="${perc.SystemObjects.NewCopy.shallowCloning}"/>
                          <entry key="fieldOverrides"</pre>
value="${perc.SystemObjects.NewCopy.fieldOverrides}"/>
                                             </map>
                                         </property>
                                         </bean>
                 <bean
class="com.percussion.rx.config.impl.PSRelationshipConfigEffectSetter">
                    cproperty name="properties">
                                        <entry key="effects"</pre>
value="${perc.SystemObjects.NewCopy.effects}"/>
                                             </map>
                                         </property>
                                         </bean>
              </list>
      </property>
</bean>
```

1 The individual configurations are Spring beans. The value of the id attribute of the <bean> node is arbitrary, but best practice is to use the name of the design object being configured. The value of the class attribute of the <bean> node specifies the configuration handler class. In most cases, the value should be com.percussion.config.impl.PSObjectConfigHandler, which has no properties. Site and Location Scheme configuration each use their own handler:

- Site: com.percussion.rx.config.impl.PSSiteConfigHandler
- Location Scheme: com.percussion.rx.config.impl.PSLocationSchemeConfigHandler

See the configuration reference for details about these handlers.

A configuration bean includes either a name property node or a names property node. The name property is used for configuring a single design object. The value of the name property must be the name of the design object being configured. (Thus, it should match the value of the id attribute of the <bean> node.)

```
property name="name" value="NewCopy"/>
```

In some cases, a package may include multiple design objects that share the same name. In that situation, best practice is to append a suffix indicating the type of design object to avoid confusion. For example, if a package included both a Content Type and a Workflow named Generic, the name property of the configuration beans would be:

The names property is used for configuring multiple design objects. The value of the names property must resolve to one or more design object names. It may be a replacement variable (\${publisherPrefix.Solution.DesignObjectVariable}) or a wildcard expression using the star character (*; for example, "*invest*").

3 Each configuration bean must include a type property

```
node.
```

```
cproperty name="type" value="RELATIONSHIP CONFIGNAME"/>
```

The value specifies the type of the design object. See the DesignObjectConfigurationReference for details.

4 Configurable properties are defined in a propertySetters

node:

```
property name="propertySetters">
```

5 The property Setters node contains a bean that defines the property setter class:

```
<bean
class="com.percussion.rx.config.impl.PSRelationshipConfigSetter">
```

The property setter class specified must be the correct property setter for the type of design object. See the *Design Object Configuration Reference* (on page 33) for the correct property setter class for each type of design object.

6 Within the property setter class bean, the properties property node contains the actual configurations within a <map> node. The <map> node contains a set of <entry> nodes.

Each <entry> node defines a configurable property. An entry node requires two attributes. The value of the key attribute specifies the design object property you want to expose for configuration. The value of the value node is the fully-qualified replacement variable for that property. The fully-qualified replacement variable includes the following data from the default and local configuration files:

- the publisher prefix, as specified in the publisherPrefix attribute of the <SolutionConfigurations> node;
- the solution name, as specified in the name attribute of the <SolutionConfig> node;
 and
- the configuration name, as specified in the name attribute of the cproperty> child
 of the <SolutionConfig> node; this value is arbitrary, but the value chosen should describe the property in the business language of the user.

The replacement variable can include any valid XML character, including spaces. Characters that must be escaped in XML must be escaped in the replacement variable.

Note that some configurable properties are more complex, and may include additional properties. In these cases, the <entry> node will contain an additional <Map> child with further <entry> nodes.

CHAPTER 3

Building Packages

The process of building a package includes the following phases:

- 1 Plan your package, determining the design objects that will be in the package, supporting files, and other package data. This phase is optional, but will save you time, especially when creating the package descriptor.
- **2** Create the package descriptor.
- **3** Build the package.
- 4 If your package allows configuration:
 - a) Export a configuration definition file. Remove any configurations you do not want to allow for your package.
 - b) Build a default configuration file. Typically, the two files are developed and finalized concurrently.
 - c) Update the descriptor with the configuration files and rebuild the package.

Once you have built the package, best practice is to test the package by deploying it to a new server.

NOTE: The Package Builder does not package SQL views. If your package includes an XML application that uses a database view, you must create a SQL script to create the view and deliver it with the package to your customers. The SQL view must be added to the target environment before installing the package.

Planning a Package

Planning your package is an optional step, but it is a recommended practice to save time and reduce errors when creating the descriptor.

To plan your package, determine the following package data:

- The name of the package.
- The version of the package.
- Which versions of Percussion CM Server are supported for the package. In other words, to which versions can you install the package? The maximum version is always the current version of your server. When creating updates to a package on a later version of the server, you must decide whether you want to continue to support earlier versions of the Percussion CM Server. Packages can be installed to Percussion CM Server Version 6.6.2 or later. Packages cannot be installed to Percussion CM Server Version 6.6.1 or any earlier version of CM System. Best practice is to test installation of the package on each version supported to ensure that it works correctly.
- Which design objects will be included in the pacakge.
- Whether any of the design objects require supporting files. If so, which files, and where do they reside?
- Whether any of the design objects require design objects from another package to work correctly. Usually the Package Builder flags package dependencies automatically. If the Package Builder cannot detect a dependency, you must flag it manually.
- Whether the package supports configuration. If so, what properties of the design objects in the package are configurable. Note that configuration is optional; you do not have to allow configuration of the design objects in the package. If you do allow configuration, both the configuration definition file and the default configuration file are required. A package must either include both files or neither. If you include one but not the other, you will not be able to save your descriptor.

Ideally, planning your package begins even earlier, when you are architecting your solution. When defining the implementation plan for your solution, you should plan the name of your package, and the names of the design objects in your package. To avoid collisions with design objects in packages from other publishers, you should use a fully-qualified name for each design object consisting of the following:

- the publisher prefix
- the solution name
- the design object name

For example, the Content Type included in the example package provided by Percussion Software is perc.example.HelloWorld, where

- perc is the publisher prefix for Percussion Software;
- example is the name of the solution; and
- *HelloWorld* is the name for the Content Type itself.

(NOTE: If your package includes a Java extension you have created and you have implemented the init method of the extension, the init method is called when the package is installed. Any properties that the init method loads may not be available after the initial installation of the package. We recommend lazy loading of properties in extensions designed for packages.)

Creating a Descriptor

To create a descriptor:

- 1 On the Package Descriptor List dialog, in the Menu bar, choose *Package > New*.
 - The Package Builder displays the Descriptor Definition dialog.
- **2** The value in the **Package Name** field defaults to *New_Package_Descriptor*. Change this to the name you want to give the package.
 - Package names should take the format PublisherPrefix.SolutionName where PublisherPrefix is the three- to -five-letter prefix you have chosen as your publisher prefix, and SolutionName is the name of the solution you are packaging. For example, perc.Example is one of the example packages shipped by Percussion Software.
- **3** In the **Version** field, enter the version of the package.
- 4 In the **CMS Minimum Version** field, enter the minimum version of the Percussion CM Server that can successfully run the design elements in the package. (Note: The value in this field cannot be earlier than 6.6.2; packaging is only supported in Percussion CM System Verison
 - 6.6.2 and later.) The **CMS Maximum Version** defaults to the version of the Percussion CM Server to which the Package Builder is connected and cannot be changed.
- **5** Click on the Selection tab.
- 6 In the **Publisher Name** field, enter the name of your organization. In the **Publisher URL** field, enter the URL of your organization's Web site.
- **7** Click the Selection tab.
- **8** To add a design element, in the Design Elements, box, expand the node of type of the design element, then check the box next to the design element you want to include in your package.

To filter the list of design objects, enter a filter string in the unnamed field over the list of design objects. You can use the "?" and "*" characters as wildcards in the filter string. The "?" character matches one character, while the "*" character matches zero or more characters.

To select all displayed design elements, click the [Select All]

button. To clear all selections, click the [Clear All] button.

To expand all design object types, click the [**Expand All**] button. To collapse all design object types, click the [**Collapse All**] button.

To see only design objects that are currently selected for the descriptor, check the **Selected Only** checkbox.

- **9** Some design elements may require supporting file resources. To add a supporting file resource to the package:
 - a) Under the File Resources box, click the [Add] button.
 - Package Builder displays the File Resources dialog. Note that you can only add files that reside under the installation root of the server to which you are connected.
 - b) In the CM Server **File Structure** field, browse to the directory where the files you want to add reside. Select the files. Standard multi-select options are supported.
 - c) Click the [Add] button to move files to the File Resources field.
 - d) Repeat Steps b and c to select additional files to add to the
 - descriptor. e) Click the [OK] button to add the files to the descriptor.
- **10** Configuration files are optional, but if you include either configuration file in the descriptor, you must include both. To add a Configuration Definition file or a Default Configuration file:
 - f) Click the browse button next to the field for the type of configuration file you want to add to the descriptor.
 - The Package Builder displays a browse dialog.
 - g) Browse to the directory where you store the configuration file you want to add. h) Select the file you want to add.
 - i) Click [Select].

The Package Builder adds the selected file to the field.

11 Click the Dependencies tab.

If a design element in the package depends on another design element that is included in a different package, the other package will be listed in the **Dependent Packages for Selected Elements** table. The contents of this table cannot be changed. You must install these packages before you can install packages built from the descriptor you are creating.

- **12** All other packages are listed in the **Additional Required Package**s table. Check packages in this table to add them as dependencies that must be installed before you can install packages build from the descriptor you are creating.
- **13** To save the descriptor, click the save button. (screenshot).

Building Packages

To build a package

- **1** Start the process. Two options are available.
 - On the Package List dialog, in the Menu bar, choose *Package > Build*.
 - On the Descriptor dialog, click the butto

Regardless of the way you start the process, the Package Builder displays the Select Target Directory dialog.

- **2** Enter the directory where you want to build the package. You can use the browse button [...] to open a browse dialog you can use to choose the directory.
- 3 Click the [OK] button.
 - The Package Builder builds the package. When the process is complete, the Package Builder displays a completion dialog.
- 4 Click the [OK]

Testing a Package

Once you have built your package, you should test it to ensure that it is working as intended.

Install the package on a Percussion CM Server instance where the design objects in the package do not currently exist. This server may be a fresh installation or it can be a server from which a previous installation of the package has been removed. If the package you want to test has dependencies on other packages, confirm that these packages are installed on the target server before testing your package.

Confirm that the package is installed correctly and that no errors occurred during installation. Confirm that all supporting files were installed to the correct location. Review all design objects and validate that they are working as intended without configuration. For example, if your package included Content Types, confirm that you can create a new Content Item and move it through its Workflow. If your package included Templates, preview one or more Content Items using the Template. Publish the Site and confirm that the Content Items are published correctly and formatted as expected.

Modify the local configuration of each design object and confirm that the modified configurations are working as intended. You may want to try several different configurations to confirm that the design objects can be configured as you intend.

CHAPTER 4

Documenting a Package

Documenting your packages helps the package provide the most value to your customer.

At a mimimum, you should provide package installation and configuration documentation for your customer's Web master. This document informs the Web master about the following aspects of the package:

- any package dependencies for the design objects in your package, including how to obtain these dependent packages and any recommended configurations to support your package
 - the design objects included in the package, including their intended use and function
- the configuration options available for the solution, including any specific configurations recommended to enhance performance or to achieve a specific outcome.

You may also want to provide a package manifest for customer reference. To create a manifest, in the Package Builder, select the package for which you want to create a manifest, and in the Menu bar, choose *Export* > *Config Summary*.

A number of delivery options are available for this documentation, including printable formats such as the

.pdf format, or online delivery through HTML pages or wiki.

You can also provide documentation to the business user by extending the Help for the Content tab of Content Explorer. The Help for this tab is delivered in Sun Microsystem's JavaHelp? format. You can extend the Content tab Help by adding a JavaHelp? Helpset to your package. When the package is installed, a link to your helpset will be added to the Content tab Help, and your Helpset will be appended to the Content tab Help. To ensure maximum usability of your Helpset, be sure to include both an index and a full-text search database.

Each JavaHelp Helpset should be developed in a unique subdirectory of

<CMServerRoot>/Docs/Rhythmyx/Custom to ensure that the Helpset files will be delivered to the correct location when installing your package. When building your package, include all the files from your JavaHelp Helpset as File Resources for your package.

For details about JavaHelp, see http://java.sun.com/javase/technologies/desktop/javahelp; in particular, see the JavaHelp Users Guide

(http://java.sun.com/javase/technologies/desktop/javahelp/download_binary.html#userguide)).

NOTE: The Help for the Active Assembly interface is not extendable.

CHAPTER 5

Design Object Configuration Reference

The following types of design objects can be configured:

- Action Menus
- Content Lists
- Content Types
- Contexts
- Editions
- Keywords
- Location Schemes
- Relationships
- Sites
- Slots
- Templates

All property names are case-sensitive. Values are also case-sensitive, unless the value accepts free-form text, which is case-insensitive.

Action Menu Configuration Reference

Configuration Handler Class

com.percussion.rx.config.impl. PSObject Config Handler

Type

ACTION

Property Setter Class

com.percussion.rx.config.impl.PSActionSetter

Configurable Properties

Property	Description
The Action Menu Entry label, as defined in the Menu Entry label fiel the General tab of the Action Menu Editor in the Percussion Workber	

Property Des	cription			
visibility	Visibility of the Action Menu Entry as defined on the Visibility tab of the Action Menu Editor in the Rhythmyx Workbench. The following configuration properties must be used:			
	Property	Description		
	hideForAssignmentTypes	Valid values in the default and local configurations include <i>none</i> , <i>reader</i> , <i>assignee</i> , <i>admin</i>		
	hideForCheckoutStatus	Valid values in the default and local configurations include <i>checked in</i> , <i>checked out</i> , <i>checked out by me</i>		
	hideForContentTypes	Valid values in the default and local configurations include the fully-qualified names of all Content Types defined in the system.		
	hideForFolderSecurity	Valid values in the default and local configurations include <i>read</i> and <i>write</i>		
	hideForLocales	Valid values in the default and local configurations include all Locales defined in the system.		
	hideForObjectTypes	Valid values in the default and local configurations include <i>folder</i> and <i>item</i> .		
	hideForPublishable	Valid values in the default and local configurations include <i>archive</i> , <i>ignore</i> , <i>publish</i> , and <i>unpublish</i> and any custom choices added to the Publishable keyword.		
	hideForRoles	Valid values in the default and local configurations include all Roles defined in the system.		
	hideForWorkflow	Valid values in the default and local configurations include all Workflows defined in the system.		
	Action Menu will be hidden	Each conifiguration property node contains a list of contexts for which the Action Menu will be hidden. Configuration only allows hiding. Menus are visible by default unless specifically hidden by a configuration.		
url		The Action Meny Entry URL, as defined in the URL field on the Command tab of the Action Menu Editor in the Percussion Workbench.		
urlParams	table on the Command tab	teny Entry URL as defined in the Parameters of the Action Menu Editor in the Percussion ration definition file, the configurable properties ries.		

Example Configuration Bean

```
<bean id="Quick Edit"</pre>
    class="com.percussion.rx.config.impl.PSObjectConfigHandler">
          property name="name" value="Quick Edit"/>
          cproperty name="type" value="ACTION"/>
          property name="propertySetters">
              <bean class="com.percussion.rx.config.impl.PSActionSetter">
                 property name="properties">
                    <map>
                       <entry key="label"</pre>
    value="${perc.ActionMenuExample.ActionLabel}"/>
                       <entry key="description"</pre>
    value="${perc.ActionMenuExample.ActionDescription}"/>
                       <entry key="URL"</pre>
    value="${perc.ActionMenuExample.ActionUrl}"/>
                       <entry key="urlParams">
                          <!-- Like other collections, all params must be
    supplied, they replace current settings -->
                          <!-- Note in this example only the Workflow
    Action parameter (WFAction) is specified as configurable. -->
                             <entry key="sys contentid"</pre>
    value="$sys contentid"/>
    value="$sys revision"/>
<entry key="sys revision"</pre>
<entry key="sys view" value="sys All"/>
<entry key="WFAction"</pre>
   value="${perc.ActionMenuExample.DynamicParam}"/>
                       </entry>
                       <entry key="visibility">
                    <!-- Each visibility context is optional. The value in
    the default and local configuration files is a List of values
    appropriate to the context as defined in the table above. -->
                                                 <map>
                             <entry key="Assignment Types"</pre>
    value="${perc.ActionMenuExample.HideForAssignmentTypes}"/>
                             <entry key="Checkout Status"</pre>
    value="${perc.ActionMenuExample.HideForCheckoutStatus}"/>
                             <entry key="Content Types"</pre>
    value="${perc.ActionMenuExample.HideForContentTypes}"/>
                             <entry key="Folder Security"</pre>
    value="${perc.ActionMenuExample.HideForFolderSecurity}"/>
```

```
<entry key="Locales"</pre>
value="${perc.ActionMenuExample.HideForLocales}"/>
                          <entry key="Object Types"</pre>
value="${perc.ActionMenuExample.HideForObjectTypes}"/>
                          <entry key="Publishable"</pre>
value="${perc.ActionMenuExample.HideForPublishable}"/>
                                         <entry key="Roles"</pre>
           value="${perc.ActionMenuExample.HideForRoles}"/>
                          <entry key="Workflow"</pre>
value="${perc.ActionMenuExample.HideForWorkflow}"/>
                                              </map>
                   </entry>
                   </map>
                                      </property>
         </bean>
      </property>
</bean>
```

Example Default Configuration

```
<SolutionConfigurations publisherPrefix="perc" publisherName="</pre>
Percussion Software" type="config"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xsi:noNamespaceSchemaLocation="localConfig.xsd">
      <SolutionConfig name="ActionMenuExample">
         cproperty name="ActionLabel" value="Quick Edit"/>
         cproperty name="ActionDescription" value="Transitions the
current item into a Quick Edit state, check it out and opens it in edit
mode."/>
         cproperty name="ActionUrl"
value="../sys action/transitcheckoutedit.xml"/>
         property name="DynamicParam" value="Quick Edit"/>
         cproperty name="HideForAssignmentTypes">
            <pvalues>
               <pvalue>none
               <pvalue>reader</pvalue>
            </pvalues>
         </property>
         cproperty name="HideForCheckoutStatus">
            <pvalues>
               <pvalue>checked out</pvalue>
            </pvalues>
         </property>
         cproperty name="HideForContentTypes">
            <pvalues>
            </pvalues>
         </property>
         property name="HideForFolderSecurity">
            <pvalues>
            </pvalues>
         </property>
         cproperty name="HideForLocales">
            <pvalues>
            </pvalues>
         </property>
```

```
cproperty name="HideForObjectTypes">
            <pvalues>
               <pvalue>folder</pvalue>
            </pvalues>
         </property>
         cproperty name="HideForPublishable">
            <pvalues>
               <pvalue>archive</pvalue>
               <pvalue>ignore</pvalue>
               <pvalue>unpublish</pvalue>
            </pvalues>
         </property>
         property name="HideForRoles">
            <pvalues>
            </pvalues>
         </property>
         property name="HideForWorkflow">
            <pvalues>
            </pvalues>
         </property>
      </SolutionConfig>
</SolutionConfigurations>
```

Content List Configuration Reference

Configuration Handler Class

com.percussion.rx.config.impl.PSObjectConfigHandler

Type

CONTENT_LIST

Property Setter Class

com.percussion.rx.config.impl. PSC ontentList Setter

Configurable Properties

Property	Description
deliveryType	Name of the Delivery Type as specified in the Delivery Type drop list on the Content List Editor in the Publishing Design tab of Content Explorer.
expander	Name of the Template Expander as specified in the Template Expander drop list on the Content List Editor in the Publishing Design tab of Content Explorer.
expanderParams	Map of parameters for the Template Expander specified in the expander property, as specified in the fields associated with the Template Expander on the Content List Editor in the Publishing Design tab of Content Explorer.
filter	Name of the Item Filter as specified in the Item Filter drop list on the Content List Editor in the Publishing Design tab of Content Explorer.
generator	Name of the Generator as specified in the Generator drop list on the Content List Editor in the Publishing Design tab of Content Explorer.
generatorParams	Map of parameters for the Generator specified in the generator property, as specified in the fields associated with the Generator on the Content LIst Editor in the Publishing Design tab of Content Explorer.

Example Configuration Bean

Example Default Configuration

```
<SolutionConfigurations publisherPrefix="perc" publisherName="Percussion</pre>
Software" type="config" xmlns:xsi="http://www.w3.org/2001/XMLSchema-
instance" xsi:noNamespaceSchemaLocation="localConfig.xsd">
      <SolutionConfig name="ContentListExample">
         cproperty name="DeliveryType" value="filesystem"/>
         cproperty name="Filter" value="public"/>
         cproperty name="Generator"
value="Java/global/percussion/system/sys SearchGenerator"/>
         cpropertySet name="GeneratorParams">
               cproperty name="query" value="select rx:sys contentid,
rx:sys folderid from rx:rfffile,rx:rfffimage,rx:rffnavimage where
jcr:path like '//Sites/CorporateInvestments%'"/>
         </propertySet>
         cproperty name="Expander"
value="Java/global/percussion/system/sys SiteTemplateExpander"/>
         propertySet name="ExpanderParams">
         </propertySet>
      </SolutionConfig>
</SolutionConfigurations>
```

Content Type Configuration Reference

Configuration Handler Class

com.percussion.rx.config.impl. PSO bject Config Handler

Type

NODEDEF

Property Setter Class

com.percussion.rx.config.impl.PSContentTypeSetter

Configurable Properties

Property	Description
label	.The Content Type label, as defined in the Label field on the Properties tab of the Content Type Editor in the Percussion Workbench.
defaultWorkflow	Name of the Default Workflow, as defined in the Default Workflow field on the Properties tab of the Content Type Editor in the Percussion Workbench. The Workflow specified must be one of those defined in the workflow property.
iconValue	Value defining the icon representing the Content Type, as defined in the Content Type lcon drop list on the Properties tab of the Content Type Editor in the Percussion Workbench
	Valid values are null, indicating that no icon represents the Content Type; a file name, specifying the icon graphic file to represent the Content Type (the path to the file should be relative to the Percussion CM Server installation root).
fields	A set of fields to configure. Existing fields can be configured, and system or shared fields can be added and configured. New local fields CANNOT be added to a Content Type as configurations. Each entry consists of a field and a list of configurations of configurable propeties (see the table below).
template	List of Templates associated with the Content Type, as defined in the Allowed Templates node of the Content Type on the Content Tab in the Percussion Workbench
workflows	List of Workflows associated with the Content Type, as defined in the Allowed Workflows node of the Content Type on the Content Tab in the Percussion Workbench.

Configurable Properties of Content Type Fields

Content Type Field Property Setter Class

com.percussion.rx.config.impl. PSC ontent Type Setter

Property	Description	
label	.Field label as defined in the Label field on the Field Properties dialog of the Percussion Workbench.	
default	Default value of the field as specified in the Default Value field on the Field Properties dialog of the Percussion Workbench. Only literal values can be configured.	
sequence	The position of the field in relation to ther other fields defined for the Content Type.	
controlParameters	Parameters for the control used for the field as defined in the parameters table on the Control Properties dialog in the Percussion Workbench.	
showInPreview	Value of the Show in Preview flag on the Field Properties dialog of the Percussion Workbench. Valid values are true, false, yes, and no.	
userSearchable	Value of the Allow this field to be searched flag on the Field Properties dialog of the Percussion Workbench. Valid values are true, false, yes, and no.	
required	Value of the Required flag on the Field Validation dialog of the Percussion Workbench. Valid values are true, false, yes, and no. Only valid on a local field, or a system or shared field that has no other validation defined.	

Example Configuration Bean

```
<bean id="rffBrief"</pre>
class="com.percussion.rx.config.impl.PSObjectConfigHandler">
      property name="name" value="rffBrief"/>
      property name="propertySetters">
         st>
            <bean
class="com.percussion.rx.config.impl.PSContentTypeSetter">
               cproperty name="properties">
                  <map>
                     <entry key="label"</pre>
value="${perc.ContentTypeExample.CT.Label}"/>
                     <entry key="iconValue"</pre>
value="${perc.ContentTypeExample.CT.IconValue}"/>
                     <entry key="defaultWorkflow"</pre>
value="${perc.ContentTypeExample.CT.DefaultWorkflow}"/>
                     <entry key="templates"</pre>
value="${perc.ContentTypeExample.CT.Templates}"/>
                     <entry key="workflows"</pre>
value="${perc.ContentTypeExample.CT.Workflows}"/>
                     <entry key="fields"</pre>
value="${perc.ContentTypeExample.CT.Fields}"/>
                  </map>
               </property>
            </bean>
```

```
<bean
class="com.percussion.rx.config.impl.PSContentTypeFieldSetter">
                property name="fieldName" value="placeholder"/>
                cproperty name="properties">
                   <map>
                      <entry key="default"</pre>
value="${perc.contentTypeExample.FD.Default}"/>
                      <entry key="required"</pre>
value="${perc.contentTypeExample.FD.Required}"/>
                      <entry key="sequence"</pre>
value="${perc.contentTypeExample.FD.Sequence}"/>
                      <entry key="showInPreview"</pre>
value="${perc.contentTypeExample.FD.ShowInPreview}"/>
                      <entry key="userSearchable"</pre>
value="${perc.contentTypeExample.FD.UserSearchable}"/>
                   </map>
                </property>
             </bean>
             <bean
class="com.percussion.rx.config.impl.PSContentTypeFieldSetter">
                cproperty name="fieldName" value="callout"/>
                cproperty name="properties">
                   <map>
                      <entry key="label"</pre>
value="${perc.contentTypeExample.Callout.Label}"/>
                      <entry key="controlParameters"</pre>
value="${perc.contentTypeExample.Callout.ControlParameters}"/>
                   </map>
                </property>
             </bean>
         </list>
      </property>
</bean>
```

Example Default Configuration

```
<SolutionConfigurations publisherPrefix="perc" publisherName="Percussion</pre>
Software" type="config" xmlns:xsi="http://www.w3.org/2001/XMLSchema-
instance" xsi:noNamespaceSchemaLocation="localConfig.xsd">
      <SolutionConfig name="contentTypeExample">
         cpropertySet name="CT">
            property name="Label" value="Brief"/>
            cproperty name="IconValue" value="rffBrief.gif"/>
            cproperty name="DefaultWorkflow" value="Simple Workflow"/>
            property name="Templates">
               <pvalues>
                  <pvalue>rffSnCallout
               </pvalues>
            </property>
            property name="workflows">
               <pvalues>
                  <pvalue>Simple Workflow</pvalue>
                  <pvalue>Standard Workflow</pvalue>
               </pvalues>
            </property>
```

```
cproperty name="fields">
               propertySet name="placeholder">
                  cproperty name="default" value=""/>
                  cproperty name="required" value="false"/>
                  property name="sequence" value="7"/>
                  cproperty name="showInPreview" value="true"/>
                  cproperty name="userSearchable" value="false"/>
               </propertySet>
            </property>
         </propertySet>
         propertySet name="FD">
            cproperty name="Default" value=""/>
            property name="Required" value="false"/>
            cproperty name="Sequence" value="7"/>
            cproperty name="ShowInPreview" value="true"/>
            cproperty name="UserSearchable" value="false"/>
         </propertySet>
         cpropertySet name="Callout">
         property name="Label" value="Callout"/>
         cpropertySet name="ControlParameters"/>
         </propertySet>
      </SolutionConfig>
</SolutionConfigurations>
```

Context Configuration Reference

Configuration Handler Class

com.percussion.rx.config.impl.PSObjectConfigHandler

Type

CONTEXT

Property Setter Class

com.percussion.rx.config.impl.PSContextSetter

Configurable Properties

Property	Description
defaultLocationScheme	Name of the default Location Scheme for the Context, as specified in the Default Scheme drop list in the Context editor.

Example Configuration Bean

Example Default Configuration

Edition Configuration Reference

Configuration Handler Class

com.percussion.rx.config.impl. PSObject Config Handler

Type

EDITION

Property Setter Class

com.percussion.rx.config.impl.PSE ditionSetter

Configurable Properties

Property	Description	
priority	Priority of the Edition, as specified on the Priority drop list on the Edition editor. Valid values are LOW, LOWEST, MEDIUM, HIGH, or HIGHEST	
preTasks	List of tasks to execute before running the Edition, specified as a list of <pre>cpropertySet> elements</pre> . Tasks are executed in the order specified. The configured list of tasks overrides the list of tasks defined in the Edition. (Thus, any tasks you want to preserve must be specified in the configuration.)	
	To remove all pre-tasks from the Edition, define the list as a single empty <pre><pre><pre><pre><pre><pre><pre><pre></pre></pre></pre></pre></pre></pre></pre></pre>	
	See below for task configuration properties.	
postTasks	List of tasks to execute after running the Edition, specified as a list of <pre>propertySet> elements. Tasks are executed in the order specified. The configured list of tasks overrides the list of tasks defined in the Edition. (Thus, any tasks you want to preserve must be specified in the configuration.)</pre>	
	To remove all post-tasks from the Edition, define the list as a single empty <pre><pre><pre><pre><pre><pre><pre><pre></pre></pre></pre></pre></pre></pre></pre></pre>	
	See below for task configuration properties.	

Both pre-tasks and post-tasks use the following configuration properties:

Property	Description	
extensionName	Fully-qualified name of the task extension.	
extensionParams	List of task extension parameters as name/value pairs (parameter name/parameter value).	
continueOnFailure	Continue on failure flag. Valid values are true, false, yes, and no.	

Example Configuration Bean

```
<bean id="CI Full"</pre>
class="com.percussion.rx.config.impl.PSObjectConfigHandler">
      cproperty name="name" value="CI Full"/>
      cproperty name="type" value="EDITION"/>
      property name="propertySetters">
         <bean class="com.percussion.rx.config.impl.PSEditionSetter">
             property name="properties">
                <map>
                   <entry key="priority"</pre>
value="${perc.ExampleEdition.Priority}"/>
                   <entry key="preTasks"</pre>
value="${perc.ExampleEdition.PreTasks}"/>
                   <entry key="postTasks"</pre>
value="${perc.ExampleEdition.PostTasks}"/>
                </map>
            </property>
         </bean>
      </property>
</bean>
```

Example Default Configuration

```
<SolutionConfigurations publisherPrefix="perc" publisherName="Percussion</pre>
Software" type="config" xmlns:xsi="http://www.w3.org/2001/XMLSchema-
instance" xsi:noNamespaceSchemaLocation="localConfig.xsd">
      <SolutionConfig name="ExampleEdition">
         cproperty name="Priority" value="LOWEST"/>
         property name="PreTasks">
            propertySet>
               cproperty name="extensionName"
value="Java/global/percussion/task/sys editionCommandTask" />
               property name="extensionParams">
                  <pvalues>
                     <pair value1="command" value2="copy</pre>
c:\Rhythmyx\web resources \enterprise investments c: \Program
Files\Apache Group\Apache\htdocs\EI Home" />
                  </pvalues>
               </property>
               property name="continueOnFailure" value="false" />
            </propertySet>
         </property>
         property name="PostTasks">
            propertySet>
               cproperty name="extensionName"
value="Java/global/percussion/task/sys editionCommandTask" />
               cproperty name="extensionParams">
                  <pvalues>
                     <pair value1="command" value2="C:\Program</pre>
Files\Mozilla Firefox\Firefox.exe http://validator.w3.org/checklink?
uri=www.enterpriseinvestments.com&hide type;=all&depth;=✓=Check"
/>
                  </pvalues>
               </property>
```

Example Default Configuration clearing pre-tasks and post-tasks

Keyword Configuration Reference

Configuration Handler Class

com.percussion.rx.config.impl.PSObjectConfigHandler

Type

KEYWORD_DEF

Property Setter Class

com.percussion.rx.config.impl.PSKeywordSetter

Configurable Properties

Property	Description
choicePairs	The Keyword choices, defined as a set of name/value pairs. The configured set of values replaces the existing set of values. Therefore, any existing values that you want to preserve must be included in the configuration.

Example Configuration Bean

Example Default Configuration

Location Scheme Configuration Reference

Configuration Handler Class

com.percussion.rx.config.impl. PSLocation Scheme Config Handler

Handler Properties

Property	Description	
contexts	List of existing Contexts to which the Location Scheme configurations will be applied. (Contexts cannot be added through confuguration.) The value of this property can be a list of Context names (applies the configurations to the specified Contexts), a simple wildcard ("*"; applies the configurations to all Contexts), a string with one or more wild cards ("*Site*" will match both "Publish_Site" and "Site_Folder_Assembly"; applies the configurations to all Contexts whose name matches the wilcards), or a replacement variable (\${perc.solution.replacementvariable}; applies the configurations to the Contexts specified in the replacement variable in the default or local configurations). Property is required.	
name	Name of a Location Scheme. Can be either an existing Location Scheme or a new one. The value name can be hard-coded, which applies the configuration only the specified Location Scheme, or a replacement variable (\${perc.solution.replacementvariable}), which applies the configurations to the Location Scheme specified in the replacement variable in the default or local configurations.	
	This property is required. The specified name must be unique within each Context. If a Context specified in the context property contains multiple instances of a name specified in this property, the server will return an error when attempting to apply the configuration.	
contentType	The name of a Content Type, as displayed on the Content Type editor in the Percussion Workbench. Required if adding a new Location Scheme; otherwise optional. Any specified combination values of the context, contentType, and template properties must be unique in the system. The specified Content Type must already be associated with the Template specified in the template property.	
template	The name of a Template, as displayed on the Template editor in the Percussion Workbench. Required if adding a new Location Scheme; otherwise optional. Any specified combination values of the context, contentType, and template properties must be unique in the system. The specified Template must already be associated with the Content Type specified in the contentType property.	

Type

LOCATION_SCHEME (NOTE: When using PSLocationSchemeConfigHandler, the type property is optional. If it is included, the value MUST be LOCATION_SCHEME.)

Property Setter Class

com.percussion.rx.config.impl.PSContextSetter

Configurable Properties

Property	Description	
expression	The JEXL expression of the Location Scheme. When this property is configured the system assumes that the sys_JexlAssemblyLocation Location Scheme Generator is being used.	
	When creating a new Location Scheme through configuration, either this property or the generator property must be used.	
	This property cannot be used if the generator property is being used.	
generator	The name of the Location Scheme generator extension. The value must be the short name of the extension, not the fully-qualified extension class name.	
	When creating a new Location Scheme through configuration, either this property or the expression property must be used.	
	This property cannot be used if the expression property is being used.	
generatorParams	Optional property used with the generator property to specify the parameters of the Location Scheme generator. Value is a list of name/value pairs, in the order that the parameters are defined for the generator extension. For extensions provided by Percussion Software, see the "Extension Reference" in the Percussion Technical Reference Manual. This information should also included in the package documentation provided to customers. Only String datatype parameters are supported. Backend-column parameters are not supported.	
	If used when configuring an existing Location Scheme, the parameter values specified override the existing parameters of the Location Scheme generator.	
	This property cannot be used if the expression property is being used.	

Example Configuration

Modifying a specified existing Context, using XML extension

Configuration Bean

Default Configuration

```
<SolutionConfigurations publisherPrefix="perc"</pre>
publisherName="Percussion Software" type="config"
xmlns:xsi="http://www.w3.org/2001/XMLSchema- instance"
xsi:noNamespaceSchemaLocation="localConfig.xsd">
      <SolutionConfig name="LocationSchemeExample">
         property name="Generator"
value="sys casDefaultAssemblyLocation"/>
         operty name="GeneratorParams">
            <pvalues>
               <pair value1="root" value2="/home/support"/>
               <pair value1="path" value2="publish"/>
               <pair value1="suffix" value2="html"/>
            </pvalues>
         </property>
      </SolutionConfig>
</SolutionConfigurations>
```

Example Configuration

Add new JEXL scheme to user-specified set of Contexts; this configuration is recommended for providing the most flexibility to the customer

Configuration Bean

```
<bean id="NewJEXLSchemeUserSpecifiedContexts"</pre>
class="com.percussion.rx.config.impl.PSLocationSchemeConfigHandler">
      cproperty name="name" value="BinaryLocations"/>
      cproperty name="contexts"
value="${perc.LocationSchemeExample.ContextSet}"/>
      property name="propertySetters">
         <bean
class="com.percussion.rx.config.impl.PSLocationSchemeSetter">
            cproperty name="properties">
               <map>
                                   <entry key="expression"</pre>
value="${perc.LocationSchemeExample.Expression}"/>
               </map>
            </property>
         </bean>
      </property>
</bean>
```

Example Configuration

Add new JEXL Location Scheme to wildcard-defined set of Contexts; the Location Scheme will be added to all Contexts that match the wildcard [in this case "pub", matches all Contexts that include the string "pub"]. This approach is best suited to an internal deployment package

Configuration Bean

Relationship Configuration Reference

Configuration Handler Class

com.percussion.rx.config.impl. PSO bject Config Handler

Type

RELATIONSHIP_CONFIGNAME

Property Setter Class

com.percussion.rx.config.impl.PSR elationshipSetter

Configurable Properties

Property	Description	
shallowCloning	Configuration for shallow cloning as defined on the Cloning tab of the Relationship Editor in the Percussion Workbench.	
	In the configuration files, this property consists of a set of two properties:	
	 enabled: value values are TRUE or FALSE; if the value is FALSE, the conditionproperty is ignored 	
	 condition, which defines the set of conditions in which the system will make a shallow clone of the object. Each condition is defined in a <pre>propertySet</pre> The first property in the set specifies the type of condition. Two options are available for the type 	
	 Conditional: the condition is processed by a conditional rule. See ""Specifying Conditions" below for details. 	
	 Extension: the condition is processed by a Percussion CMS extension. See "Specifying Extensions" below for details about specifying an extension. 	
	 If multiple conditions are specified, include a boolean property in each property. Valid values for the boolean property are AND and OR. Standard precedence rules apply. 	
deepCloning	Configuration for deep cloning as defined on the Cloning tab of the Relationship Editor in the Percussion Workbench.	
	Deep cloning is configured in the same manner as shallow cloning.	

Property	Description	
fieldOverrides		overrides when cloning a Content Item. The configuration for property set including the following properties
	Property	Description
	fieldName	specifies the field whose value will be modified during cloning
	extension	name of the extension that will process the override
	extensionProperties	optional; set of properties of the extension
	condition	optional; specifies one or more conditions for field override processing; see "Specifying Conditions" below for details about defining conditions
effects	List of effect configurations for the Relationship as defined on the Effects tab of the Relationship Editor in the Percussion Workbench. This is a distributed property; multiple Effects can be configured within one package configuration. See below for details about effect configuration beans.	

Specifying Conditions

Each condition is defined by a set of rules defined under the <rules> property. The <rules> must include at least the following properties

- variable 1 The value of the variable 1 property is a replacement value.
- operator properties. The value of the operator property must be one of the following:
 - =
 - =
 - **■** <
 - **■** <=
 - **■** >
 - **■** >=
 - IS NULL
 - IS NOT NULL
 - BETWEEN
 - NOT BETWEEN
 - IN
 - NOT IN
 - LIKE
 - NOT LIKE

Depending on the operator, a variable2 property may be required; like variable1, the value is a replacement value.

If multiple rules are being defined, a boolean property is required; valid values for the boolean property are AND and OR.

Specifying Extensions

Effect Configuration

Property Setter Class: com.percussion.rx.config.impl.PSRelationshipConfigEffectSetter

Property	Description	
executionContext	Condition in which the Effect will be invoked. Valid values include	
	 Pre-Construction 	
	 Pre-Checkin 	
	Pre-Clone	
	 Pre-Destruction 	
	Pre-Update	
	Pre-Workflow	
	 Post-Checkout 	
	 Post-Workflow 	
direction	When to trigger the Effect. Valid values include UP, DOWN, and EITHER.	
extension	Name of the Effect extension	
estensionParams	Effect extension parameters. See "Specifying Extensions" for details about defining an extension	
condition	Condition that determines whether the Effect will be processed.	

Example Configuration Bean

```
<entry key="deepCloning"</pre>
value="${perc.SystemObjects.Translation-Mandatory.deepCloning}"/>
                      <entry key="shallowCloning"</pre>
value="${perc.SystemObjects.Translation-Mandatory.shallowCloning}"/>
                      <entry key="fieldOverrides"</pre>
value="${perc.SystemObjects.Translation-Mandatory.fieldOverrides}"/>
                           </map>
                             </property>
            </bean>
            <bean
class="com.percussion.rx.config.impl.PSRelationshipConfigEffectSetter">
                cproperty name="properties">
                   <map>
                      <entry key="effects"</pre>
value="${perc.SystemObjects.Translation-Mandatory.effects}"/>
                         </map>
                </property>
            </bean>
         </list>
      </property>
</bean>
```

Example Default Configuration

```
<SolutionConfigurations publisherPrefix="perc" publisherName="Percussion</pre>
Software, Inc." type="config"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xsi:noNamespaceSchemaLocation="localConfig.xsd">
      <SolutionConfig name="SystemObjects">
         cpropertySet name="Translation-Mandatory.deepCloning">
            cproperty name="enabled" value="true"/>
            cproperty name="condition">
               cpropertySet>
                  cproperty name="type" value="Conditional"/>
                  cproperty name="rules">
                     cpropertySet>
                        cproperty name="variable1"
value="PSXOriginatingRelationshipProperty/category"/>
                        cproperty name="variable2"
value="rs promotable"/>
                        cproperty name="operator" value="="/>
                        property name="boolean" value="AND"/>
                     </propertySet>
                  </property>
               </propertySet>
            </property>
         </propertySet>
         propertySet name="Translation-Mandatory.shallowCloning">
            cproperty name="enabled" value="false"/>
         </propertySet>
         cproperty name="Translation-Mandatory.fieldOverrides">
            cpropertySet>
               cproperty name="fieldName" value="sys title"/>
               cproperty name="extension"
value="Java/global/percussion/relationship/sys CloneTitle"/>
               property name="extensionParams">
```

```
<pvalues>
                    <pvalue>[{0}] Copy of {1}</pvalue>
                    <pvalue>PSXSingleHTMLParameter/sys lang
   <pvalue>PSXContentItemStatus/CONTENTSTATUS.TITLE
                  </pvalues>
               </property>
            </propertySet>
            propertySet>
               cproperty name="fieldName" value="sys communityid"/>
               cproperty name="extension"
value="Java/global/percussion/cms/sys cloneOverrideField"/>
               property name="extensionParams">
                  <pvalues>
                     <pvalue>
../sys trFieldOverride/TranslationFieldOverride.xml
                    </pvalue>
                    <pvalue>CommunityId</pvalue>
                    <pvalue>sys contentid
  <pvalue>PSXContentItemStatus/CONTENTSTATUS.CONTENTID
                    <pvalue>sys lang</pvalue>
                    <pvalue>PSXSingleHtmlParameter/sys lang</pvalue>
                  </pvalues>
               </property>
            </propertySet>
            propertySet>
               cproperty name="fieldName" value="sys workflowid"/>
               cproperty name="extension"
value="Java/global/percussion/cms/sys cloneOverrideField"/>
               property name="extensionParams">
                  <pvalues>
                    <pvalue>
../sys trFieldOverride/TranslationFieldOverride.xml
                    </pvalue>
                    <pvalue>WorkflowId</pvalue>
                    <pvalue>sys contentid</pvalue>
   <pvalue>PSXContentItemStatus/CONTENTSTATUS.CONTENTID</pvalue>
                    <pvalue>sys lang</pvalue>
                    <pvalue>PSXSingleHtmlParameter/sys lang</pvalue>
                  </pvalues>
               </property>
            </propertySet>
            cpropertySet>
               cproperty name="fieldName" value="sys lang"/>
               cproperty name="extension"
value="Java/global/percussion/generic/sys Literal"/>
               property name="extensionParams">
                 <pvalues>
                    <pvalue>PSXSingleHtmlParameter/sys lang
                  </pvalues>
              </property>
            </propertySet>
         </property>
         property name="Translation-Mandatory.effects">
            propertySet>
               cproperty name="executionContext">
                  <pvalues>
```

```
<pvalue>Pre-Clone</pvalue>
                      </pvalues>
                   </property>
                   property name="direction" value="Down"/>
                   cproperty name="extension"
    value="Java/global/percussion/relationship/effect/sys isCloneExists"/>
                </propertySet>
                cpropertySet>
                   property name="executionContext">
                      <pvalues>
                         <pvalue>Pre-Workflow</pvalue>
                      </pvalues>
                   </property>
                   cproperty name="direction" value="Up"/>
                   property name="extension"
value="Java/global/percussion/relationship/effect/sys PublishMandatory"/>
                   cproperty name="extensionParams">
                      <pvalues>
                         <pvalue>no</pvalue>
                         <pvalue/>
                         <pvalue/>
                      </pvalues>
                   </property>
                </propertySet>
                propertySet>
                   property name="executionContext">
                      <pvalues>
                         <pvalue>Pre-Workflow</pvalue>
                      </pvalues>
                   </property>
                   cproperty name="direction" value="Up"/>
                   cproperty name="extension"
value="Java/global/percussion/relationship/effect/sys UnpublishMandatory "/>
                   cproperty name="extensionParams">
                      <pvalues>
                         <pvalue>no</pvalue>
                         <pvalue/>
                         <pvalue/>
                      </pvalues>
                   </property>
                </propertySet>
                propertySet>
                   property name="executionContext">
                      <pvalues>
                         <pvalue>Pre-Construction</pvalue>
                      </pvalues>
                   </property>
                   property name="direction" value="Down"/>
                   cproperty name="extension"
                   value="Java/global/percussion/relationship/effect/sys Atta
                   chTranslatedFo lder"/>
                </propertySet>
             </property>
          </SolutionConfig>
    </SolutionConfigurations>
```

Site Configuration Reference

Configuration Handler Class

com.percussion.rx.config.impl. PSS ite Config Handler

Handler Properties

Property	Description	
name	Used to specify setter properties for a single Site. Specifies the Site to which the specified setter properties will be applied.	
	A Site configuration bean can use either the name property or the names property, but not both. They are mutually exclusive.	
names	Used to specify setter properties for multiple Sites. Specifies the Sites to which the specified setter properties will be applied. The value of this property can be a list of Site names (applies the configurations to the specified Sites), a simple wildcard ("*"; applies the configurations to all Sites), a string with one or more wild cards ("*Invest*" will match both EnterpriseInvestements and CorporateInvestments; applies the configurations to all Sites whose name matches the wilcards), or a replacement variable (\${perc.solution.replacementvariable}; applies the configurations to the Sites specified in the replacement variable in the default or local configurations). A Site configuration bean can use either the name property or the names property, but not both. They are mutually exclusive.	

Type

SITE (NOTE: When using PSSiteConfigHandler, the Type property is optional. If included, the value MUST be SITE.)

Property Setter Class

com.percussion.rx.config.impl.PSSimpleSitetSetter

Configurable Properties

Property	Description	
siteFolderPath	The path to the root Folder of the Site under the //Sites node in Content Explorer, as specified in the Rhythmyx Path field in the Site editor.	
publishedPath	The path to the location where the published HTML files will be published, as defined in the Published Path field in the Site editor.	
publishedUrl	The URL of the published Site, as defined in the Published URL field in the Site editor.	
globalTemplate	Name of the default Global Template used for the Site, as specified in the Global Template drop list on the Site editor.	

Property Des	cription	
unpublishFlags	Flag indicating Content Items on the Site should be unpublished, as specified in the Unpublish Flags field on the Site editor.	
ftpAddress	IP address of the FTP server used to deliver published output to the Site, as specified in the FTP Server IP Address field on the Site editor.	
ftpPort	Port of the FTP server used to deliver published output to the Site, as specified in the FTP Server Port field on the Site editor.	
ftpUser	User name of the account used to log in to the FTP server, as specified in the Username field on the Site editor.	
ftpPassword	Password of the account used to log in to the FTP server, as specified in the Password field on the Site editor.	
allowedNamespaces	Comma-separated list of XML namespaces to preserve when cleaning up namespaces in rich-text fields when assembling content for the Site, as specified in the Allowed Namespaces field on the Site editor. Entries in this list should have a corresponding entry in the file <rhythmyxroot>/rxconfig/server/stylesheetCleanupFilter.xml. If a namespace specified for the Site does not have a corresponding entry in the that file, it will be filtered out.</rhythmyxroot>	
navTheme	Theme indicator for stylesheet coding in Managed Navigation, as specified in the Nav Theme field on the Site editor.	
SiteVariables	Set of Context variables. Variables defined are merged with existing variables. Variables can be configured for a specific Site, a set of Sites, or all Sites	

Site Variables

Property	Description	
name	Name of the Site Context Variable, as specified in the Context Variable Name field on the Add Context Variable page.	
context	The Context to which the value of the variable will be applied, as specified in the Context drop list on the Add Context Variable page.	
value	Value of the specified variable for the specified Context, as specified in the Context Variable Value field on the Add Context Variable page.	

Example Configuration

Configure variables for one specific Site

Configuration Bean

```
<bean id="ciSite"</pre>
class="com.percussion.rx.config.impl.PSSiteConfigHandler">
      cproperty name="name" value="Corporate_Investments"/>
      property name="propertySetters">
            <bean class="com.percussion.rx.config.impl.PSSiteSetter">
               cproperty name="properties">
                  <map>
```

```
<entry key="siteFolderPath"</pre>
  value="${perc.SiteExample.CmsPath}"/>
                         <entry key="publishedPath"</pre>
  value="${perc.SiteExample.PublishedPath}"/>
                         <entry key="publishedUrl"</pre>
  value="${perc.SiteExample.PublishedUrl}"/>
                         <entry key="globalTemplate"</pre>
  value="${perc.SiteExample.GlobalTemplateName}"/>
                         <entry key="unpublishFlags"</pre>
  value="${perc.SiteExample.UnpublishFlags}"/>
                         <entry key="allowedNamespaces"</pre>
  value="${perc.SiteExample.AllowedNamespaces}"/>
                         <entry key="navTheme"</pre>
  value="${perc.SiteExample.NavTheme}"/>
                         <entry key="ftpAddress"</pre>
  value="${perc.SiteExample.ftp.IpAddress}"/>
                         <entry key="ftpPort"</pre>
  value="${perc.SiteExample.ftp.Port}"/>
                         <entry key="ftpUser"</pre>
  value="${perc.SiteExample.ftp.UserId}"/>
                         <entry key="ftpPassword"</pre>
  value="${perc.SiteExample.ftp.Password}"/>
                     </map>
                  </property>
               <bean class="com.percussion.rx.config.impl.PSSiteSetter">
                  cproperty name="properties">
                      <map>
                         <entry key="variables"</pre>
  value="${perc.SiteExample.SiteVariables CI}"/>
                         </map>
                  </property>
               </bean>
            </list>
         </property>
  </bean>
Default Configuration
  <SolutionConfigurations publisherPrefix="perc" publisherName="Percussion</pre>
  Software" type="config" xmlns:xsi="http://www.w3.org/2001/XMLSchema-
  instance" xsi:noNamespaceSchemaLocation="localConfig.xsd">
         <SolutionConfig name="SiteExample">
            <!-- Properties for the CI Site -->
            cyproperty name="CmsPath" value="//Sites/CorporateInvestments"/>
            cproperty name="PublishedPath" value="../CI_Home.war"/>
            property name="PublishedUrl"
  value="http://127.0.0.1:9992/CI Home"/>
            cproperty name="globalTemplateName"
  value="rffGtCorporateInvestmentsCommon"/>
```

cproperty name="IpAddress" value="127.0.0.1"/>

cpropertySet name="ftp">

</propertySet>

```
property name="UnpublishFlags" value="u"/>
         cproperty name="AllowedNamespaces" value=""/>
         property name="NavTheme" value=""/>
         <!-- Site (Context) Variables for the CI Site -->
         cproperty name="SiteVariables CI">
            propertySet>
               property name="name" value="rxs urlroot"/>
               cproperty name="context" value="Site_Folder_Assembly"/>
               property name="value" value="/CI Home"/>
            </propertySet>
            propertySet>
               cproperty name="name" value="rxs navbase"/>
               cproperty name="context" value="Preview"/>
cproperty name="value"
               value="../web resources/corporat
e investments"/>
            </propertySet>
            cpropertySet>
               cproperty name="name" value="rxs navbase"/>
               cproperty name="context" value="Site Folder Assembly"/>
               cproperty name="value" value="/CI Home/resources"/>
            </propertySet>
         </property>
      </SolutionConfig>
</SolutionConfigurations>
```

Example Configuration

Configure variables for a specific set of Sites, user specifies the Sites; this configuration is recommended for providing the most flexibility to the customer

Configuration Bean

```
<bean id="Corporate Investments"</pre>
class="com.percussion.rx.config.impl.PSSiteConfigHandler"
      cproperty name="names" value="${CommonConfigSiteNames}"/>
      property name="propertySetters">
         <bean class="com.percussion.rx.config.impl.PSSiteSetter">
             property name="properties">
                <map>
                   <entry key="siteFolderPath"</pre>
value="${perc.SiteExample.CI CmsPath}"/>
                   <entry key="publishedPath"</pre>
value="${perc.SiteExample.CI PublishedPath}"/>
                   <entry key="publishedUrl"</pre>
value="${perc.SiteExample.CI PublishedUrl}"/>
                   <entry key="globalTemplate"</pre>
value="${perc.SiteExample.CI GlobalTemplateName}"/>
                   <entry key="unpublishFlags"</pre>
value="${perc.SiteExample.CI UnpublishFlags}"/>
                   <entry key="allowedNamespaces"</pre>
value="${perc.SiteExample.CI AllowedNamespaces}"/>
                   <entry key="navTheme"</pre>
value="${perc.SiteExample.CI NavTheme}"/>
                   <entry key="ftpAddress"</pre>
value="${perc.SiteExample.CI ftp.Address}"/>
```

```
<entry key="ftpPort"</pre>
value="${perc.SiteExample.CI ftp.Port}"/>
                   <entry key="ftpUser"</pre>
value="${perc.SiteExample.CI ftp.User}"/>
                   <entry key="ftpPassword"</pre>
value="${perc.SiteExample.CI ftp.Password}"/>
                </map>
             </property>
         </bean>
      </property>
      <bean id="Enterprise Investments"</pre>
class="com.percussion.rx.config.impl.PSSiteConfigHandler">
         cproperty name="name" value="Enterprise Investments"/>
         property name="propertySetters">
             <bean class="com.percussion.rx.config.impl.PSSiteSetter">
                cproperty name="properties">
                           <map>
                    <entry key="siteFolderPath"</pre>
value="${perc.SiteExample.EI CmsPath}"/>
                    <entry key="publishedPath"</pre>
value="${perc.SiteExample.EI PublishedPath}"/>
                    <entry key="publishedUrl"</pre>
value="${perc.SiteExample.EI PublishedUrl}"/>
                    <entry key="globalTemplate"</pre>
value="${perc.SiteExample.EI GlobalTemplateName}"/>
                    <entry key="unpublishFlags"</pre>
value="${perc.SiteExample.EI UnpublishFlags}"/>
                    <entry key="allowedNamespaces"</pre>
value="${perc.SiteExample.EI AllowedNamespaces}"/>
                    <entry key="navTheme"</pre>
value="${perc.SiteExample.EI NavTheme}"/>
                    <entry key="ftpAddress"</pre>
value="${perc.SiteExample.EI ftp.Address}"/>
                    <entry key="ftpPort"</pre>
                 value="${perc.SiteExample.EI ftp.Port}"/>
                    <entry key="ftpUser"</pre>
value="${perc.SiteExample.EI ftp.User}"/>
                    <entry key="ftpPassword"</pre>
value="${perc.SiteExample.EI ftp.Password}"/>
                   </map>
                </property>
             </bean>
         </property>
      </bean>
      <bean id="CIEICommonConfigurations"</pre>
class="com.percussion.rx.config.impl.PSSiteConfigHandler">
         property name="names"
value="${perc.siteexample.commonConfigSiteNames}"/>
         property name="propertySetters">
             <bean class="com.percussion.rx.config.impl.PSSiteSetter">
                property name="properties">
                      <entry key="variables"</pre>
```

```
<SolutionConfigurations publisherPrefix="perc" publisherName="Percussion</pre>
Software, Inc." type="config"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xsi:noNamespaceSchemaLocation="localConfig.xsd">
      <SolutionConfig name="SiteExample">
         <!-- Properties for the CI Site -->
         cproperty name="CI CmsPath"
value="//Sites/CorporateInvestments"/>
         property name="CI PublishedPath" value="../CI Home.war"/>
         property name="CI PublishedUrl"
value="http://127.0.0.1:9992/CI Home"/>
         cproperty name="CI GlobalTemplateName"
value="rffGtCorporateInvestmentsCommon"/>
         cpropertySet name="CI ftp">
            cproperty name="IpAddress" value="127.0.0.1"/>
            cproperty name="Port" value="21"/>
            cproperty name="UserId" value=""/>
            property name="Password" value=""/>
         </propertySet>
         cproperty name="CI UnpublishFlags" value="u"/>
         cproperty name="CI AllowedNamespaces" value=""/>
         cproperty name="CI NavTheme" value=""/>
         <!-- Properties for the EI Site -->
         cproperty name="EI CmsPath"
value="//Sites/CorporateInvestments"/>
         cproperty name="EI PublishedPath" value="../CI Home.war"/>
         roperty name="EI_PublishedUrl"
value="http://127.0.0.1:9992/CI Home"/>
         property name="EI GlobalTemplateName"
value="rffGtCorporateInvestmentsCommon"/>
         propertySet name="EI ftp">
            cproperty name="IpAddress" value="127.0.0.1"/>
            property name="Port" value="21"/>
            cproperty name="UserId" value=""/>
            property name="Password" value=""/>
         </propertySet>
         cproperty name="EI UnpublishFlags" value="u"/>
         cproperty name="EI_AllowedNamespaces" value=""/>
         property name="EI NavTheme" value=""/>
         <!-- Site (Context) Variables applied to both Sites -->
         cproperty name="CommonConfigSiteNames">
            <pvalues>
               <pvalue>Corporate Investments
```

```
<pvalue>Enterprise Investments
               </pvalues>
            </property>
            cproperty name="CommonConfigSiteVariables">
               propertySet>
                  cproperty name="name" value="rxs urlroot"/>
                  cproperty name="context" value="Site_Folder_Assembly"/>
                  cproperty name="value" value="/Investments Home"/>
               </propertySet>
               propertySet>
                  cproperty name="name" value="rxs navbase"/>
                  cproperty name="context" value="Preview"/>
                  cproperty name="value"
   value="../web resources/common investments"/
               </propertySet>
               cpropertySet>
                  cproperty name="name" value="rxs navbase"/>
                  cproperty name="context" value="Site Folder Assembly"/>
                  property name="value"
   value="/Investments Home/resources"/
               </propertySet>
            </property>
         </SolutionConfig>
   </SolutionConfigurations>
Configuration Bean
   <bean id="Corporate Investments"</pre>
   class="com.percussion.rx.config.impl.PSSiteConfigHandler"
         cproperty name="name" value="Corporate Investments"/>
         property name="propertySetters">
            <bean class="com.percussion.rx.config.impl.PSSiteSetter">
               cproperty name="properties">
                  <map>
                      <entry key="siteFolderPath"</pre>
   value="${perc.SiteExample.CI CmsPath}"/>
                      <entry key="publishedPath"</pre>
   value="${perc.SiteExample.CI PublishedPath}"/>
                     <entry key="publishedUrl"</pre>
   value="${perc.SiteExample.CI PublishedUrl}"/>
                      <entry key="globalTemplate"</pre>
   value="${perc.SiteExample.CI GlobalTemplateName}"/>
                     <entry key="unpublishFlags"</pre>
   value="${perc.SiteExample.CI UnpublishFlags}"/>
                     <entry key="allowedNamespaces"</pre>
   value="${perc.SiteExample.CI AllowedNamespaces}"/>
```

<entry key="navTheme"</pre>

<entry key="ftpPort"</pre>

<entry key="ftpUser"</pre>

<entry key="ftpAddress"</pre>

value="\${perc.SiteExample.CI NavTheme}"/>

value="\${perc.SiteExample.CI ftp.Port}"/>

value="\${perc.SiteExample.CI ftp.User}"/>

value="\${perc.SiteExample.CI ftp.Address}"/>

```
<entry key="ftpPassword"</pre>
value="${perc.SiteExample.CI ftp.Password}"/>
                       </map>
             </property>
         </bean>
      </property>
</bean>
<bean id="Enterprise Investments"</pre>
class="com.percussion.rx.config.impl.PSSiteConfigHandler">
      cproperty name="name" value="Enterprise Investments"/>
      property name="propertySetters">
         <bean class="com.percussion.rx.config.impl.PSSiteSetter">
             cproperty name="properties">
             <map>
                   <entry key="siteFolderPath"</pre>
value="${perc.SiteExample.EI CmsPath}"/>
                   <entry key="publishedPath"</pre>
value="${perc.SiteExample.EI PublishedPath}"/>
                   <entry key="publishedUrl"</pre>
value="${perc.SiteExample.EI PublishedUrl}"/>
                   <entry key="globalTemplate"</pre>
value="${perc.SiteExample.EI GlobalTemplateName}"/>
                   <entry key="unpublishFlags"</pre>
value="${perc.SiteExample.EI UnpublishFlags}"/>
                   <entry key="allowedNamespaces"</pre>
value="${perc.SiteExample.EI AllowedNamespaces}"/>
                   <entry key="navTheme"</pre>
value="${perc.SiteExample.EI NavTheme}"/>
                   <entry key="ftpAddress"</pre>
value="${perc.SiteExample.EI ftp.Address}"/>
                   <entry key="ftpPort"</pre>
value="${perc.SiteExample.EI ftp.Port}"/>
                   <entry key="ftpUser"</pre>
value="${perc.SiteExample.EI ftp.User}"/>
                   <entry key="ftpPassword"</pre>
value="${perc.SiteExample.EI ftp.Password}"/>
                                            </map>
                                        </property>
         </bean>
      </property>
</bean>
<bean id="InvestConfig"</pre>
class="com.percussion.rx.config.impl.PSSiteConfigHandler">
      property name="name" value="*invest*"/>
      property name="propertySetters">
         <bean class="com.percussion.rx.config.impl.PSSiteSetter">
             property name="properties">
                                             <map>
                   <entry key="variables"</pre>
value="${perc.SiteExample.InvestSiteVariables}"/>
                                            </map>
                                        </property>
         </bean>
      </property>
</bean>
```

```
<SolutionConfigurations publisherPrefix="perc" publisherName="Percussion</pre>
Software, Inc." type="config"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xsi:noNamespaceSchemaLocation="localConfig.xsd">
      <SolutionConfig name="SiteExample">
         <!-- Properties for the CI Site -->
         cproperty name="CI CmsPath"
value="//Sites/CorporateInvestments"/>
         cproperty name="CI PublishedPath" value="../CI Home.war"/>
         cproperty name="CI PublishedUrl"
value="http://127.0.0.1:9992/CI Home"/>
         cproperty name="CI_GlobalTemplateName"
value="rffGtCorporateInvestmentsCommon"/>
         propertySet name="CI ftp">
            cproperty name="IpAddress" value="127.0.0.1"/>
            cproperty name="Port" value="21"/>
            cproperty name="UserId" value=""/>
            property name="Password" value=""/>
         </propertySet>
         cproperty name="CI UnpublishFlags" value="u"/>
         property name="CI AllowedNamespaces" value=""/>
         property name="CI NavTheme" value=""/>
         <!-- Properties for the EI Site -->
         cproperty name="EI CmsPath"
value="//Sites/CorporateInvestments"/>
         property name="EI PublishedPath" value="../CI Home.war"/>
         cproperty name="EI PublishedUrl"
value="http://127.0.0.1:9992/CI Home"/>
         property name="EI GlobalTemplateName"
value="rffGtCorporateInvestmentsCommon"/>
         propertySet name="EI ftp">
            property name="IpAddress" value="127.0.0.1"/>
            cproperty name="Port" value="21"/>
            cproperty name="UserId" value=""/>
            property name="Password" value=""/>
         </propertySet>
         cproperty name="EI UnpublishFlags" value="u"/>
         cproperty name="EI AllowedNamespaces" value=""/>
         cproperty name="EI NavTheme" value=""/>
         <!-- Properties for the CI Site -->
         cproperty name="CI CmsPath"
value="//Sites/CorporateInvestments"/>
         cproperty name="CI PublishedPath" value="../CI Home.war"/>
         cproperty name="CI_PublishedUrl"
value="http://127.0.0.1:9992/CI Home"/>
         property name="CI globalTemplateName"
value="rffGtCorporateInvestmentsCommon"/>
         cpropertySet name="CI ftp">
            cproperty name="IpAddress" value="127.0.0.1"/>
            cproperty name="Port" value="21"/>
            cproperty name="UserId" value=""/>
            property name="Password" value=""/>
         </propertySet>
```

```
cproperty name="CI UnpublishFlags" value="u"/>
         cproperty name="CI AllowedNamespaces" value=""/>
         cproperty name="CI NavTheme" value=""/>
         <!-- Properties for the EI Site -->
         cproperty name="EI CmsPath"
value="//Sites/CorporateInvestments"/>
         cproperty name="EI_PublishedPath" value="../CI_Home.war"/>
         cproperty name="EI_PublishedUrl"
value="http://127.0.0.1:9992/CI Home"/>
         cproperty name="EI GlobalTemplateName"
value="rffGtCorporateInvestmentsCommon"/>
         propertySet name="EI ftp">
            property name="IpAddress" value="127.0.0.1"/>
            cproperty name="Port" value="21"/>
            cproperty name="UserId" value=""/>
            property name="Password" value=""/>
         </propertySet>
         cproperty name="EI UnpublishFlags" value="u"/>
         cproperty name="EI AllowedNamespaces" value=""/>
         property name="EI NavTheme" value=""/>
         <!-- Site (Context) Variables applied to all Sites that include
the string "invest" -->
         cproperty name="investSiteVariables">
            propertySet>
               cproperty name="name" value="rxs urlroot"/>
               cproperty name="context" value="Site Folder Assembly"/>
               property name="value" value="/Investments Home"/>
            </propertySet>
            propertySet>
               cproperty name="name" value="rxs navbase"/>
            cproperty name="context" value="Preview"/>
            cproperty name="value"
value="../web resources/common investments"/>
         </propertySet>
         propertySet>
            cproperty name="name" value="rxs navbase"/>
            cproperty name="context" value="Site Folder Assembly"/>
            cproperty name="value" value="/Investments Home/resources"/>
         </propertySet>
         </property>
      </SolutionConfig>
</SolutionConfigurations>
```

Site/Template Configuration Reference

Configuration Handler Class

com.percussion.rx.config.impl. PSS iteConfigHandler

Handler Properties

Property	Description	
name	Used to specify setter properties for a single Site. Specifies the Site to which the specified setter properties will be applied.	
	A Site configuration bean can use either the name property or the names property, but not both. They are mutually exclusive.	
names	Used to specify setter properties for multiple Sites. Specifies the Sites to which the specified setter properties will be applied. The value of this property can be a list of Site names (applies the configurations to the specified Sites), a simple wildcard ("*"; applies the configurations to all Sites), a string with one or more wild cards ("*Invest*" will match both EnterpriseInvestements and CorporateInvestments; applies the configurations to all Sites whose name matches the wilcards), or a replacement variable (\${perc.solution.replacementvariable}; applies the configurations to the Sites specified in the replacement variable in the default or local configurations). A Site configuration bean can use either the name property or the names property, but not both. They are mutually exclusive.	

Type

SITE (NOTE: When using PSSiteConfigHandler, the Type property is optional. If included, the value MUST be SITE.)

Property Setter Class

com.percussion.rx.config.impl.PSSiteTemplateVisibilitySetter

Configurable Properties

Property	Description	Description			
visibility		Defines the visibility of the specified Templates on the specified Sites. Must contain two properties:			
	Property	Description			
	sites	List of Site names, as specified in the Name field on the Site editor. The value of this property can be a list of Site names (makes the specified Templates visible to the listed Sites), a simple wildcard ("*"; makes the specified Templates visible to all Sites), a string with one or more wild cards ("*Invest*" will match both EnterpriseInvestements? and CorporateInvestments?; makes the specified Templates visible to all Sites whose name matches the wilcards), or a replacement variable (\${perc.solution.replacementvariable}; makes the specified Templates visible to the Sites specified in the replacement variable in the default or local configurations)			
	templates	List of Template names, as shown on the Template editor. The listed Templates will be associated with the Sites specified in the sites property. The Templates will be removed from any Sites not listed in the sites property. Thus, if you want to maintain a existing association between a Site and a Template, you must include the Site and the Template in the configuration.			

Example Configuration

Make Templates visible to one specific Site

Configuration Bean

```
<SolutionConfigurations publisherPrefix="perc"
publisherName="Percussion" type="config"</pre>
```

Example Configuration

Make Templates visible to a specific set of Sites, user specifies the Sites; this configuration is recommended for providing the most flexibility to the customer

Configuration Bean

```
<bean id="siteVariables"</pre>
class="com.percussion.rx.config.impl.PSSiteConfigHandler">
      property name="names"
value="${perc.SiteTemplateVisibility.SiteList}"/>
      property name="propertySetters">
         <bean
class="com.percussion.rx.config.impl.PSSiteTemplateVisibilitySetter">
            property name="properties">
               <map>
                   <entry key="visibility"</pre>
value="${perc.SiteTemplateVisibility.Visibility}"/>
               </map>
            </property>
         </bean>
      </property>
</bean>
```

```
<SolutionConfigurations publisherPrefix="perc"</pre>
publisherName="Percussion" type="config"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xsi:noNamespaceSchemaLocation="localConfig.xsd">
      <SolutionConfig name="SiteTemplateVisibility">
        property name="SiteList">
            <pvalues>
              <pvalue>Corporate Investments
              <pvalue>Enterprise Investments
            </pvalues>
        </property>
        cproperty name="Visibility">
            <pvalues>
              <pvalue>rffBnImage</pvalue>
              <pvalue>rffBnBinary</pvalue>
              <pvalue>rffSnCallout
```

Example Configuration

Make Templates visible to a specific set of Sites specified by wildcards; all sites that match the wildcard [in this case *invest*; matches all Sites whose name includes the string "invest" will be updated with the configurations; this approach is best suited to in internal deployment package where sites share common data

Configuration Bean

```
<bean id="siteVariables"</pre>
class="com.percussion.rx.config.impl.PSSiteConfigHandler"
      cproperty name="names" value="*invest*"/>
      property name="propertySetters">
         <bean
class="com.percussion.rx.config.impl.PSSiteTemplateVisibilitySetter"
            property name="properties">
               <map>
                           <entry
                      key="visibility"
value="${perc.SiteTemplateVisibility.Visibility}"/>
               </map>
            </property>
         </bean>
      </property>
   </bean
```

```
<SolutionConfigurations publisherPrefix="perc"</pre>
publisherName="Percussion" type="config"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-
instance"
xsi:noNamespaceSchemaLocation="localConfig.xsd">
      <SolutionConfig name="SiteTemplateVisibility">
         property name="Visibility">
            <pvalues>
               <pvalue>rffBnImage</pvalue>
               <pvalue>rffBnBinary</pvalue>
               <pvalue>rffSnCallout
               <pvalue>rffSnImageLink</pvalue>
               <pvalue>rffSnTitleLink</pvalue>
            </pvalues>
         </property>
      </SolutionConfig>
</SolutionConfigurations>
```

Slot Configuration Reference

Configuration Handler Class

com.percussion.rx.config.impl. PSO bject Config Handler

Type

SLOT

Property Setter Class

com.percussion.rx.config.impl. PSS lot Setter

Configurable Properties

Property	Description	
finderParams	Set of Content Finder parameters. The set specified in the configuration overrides the set defined in the Slot.	
	The set should be specified in a <pre></pre>	
contentTypeTemplatePairs	Set of Content Type/Template pairs associated with the Slot. The set specified in the configuration overrides the set defined in the Slot.	
	The set should be defined as a list of pairs of values.	
	If the package is uninstalled, merged associations will be removed.	
	A Content Type/Template pair cannot be specified in more than one package. If a later package attempts to add an existing Content Type/Template pair, it will fail validation and the configuration will fail.	

Example Configuration Bean

```
<bean id="slotExample"</pre>
class="com.percussion.rx.config.impl.PSObjectConfigHandler">
      property name="name" value="rffEvents"/>
      cproperty name="type" value="SLOT"/>
      property name="propertySetters">
         <bean
class="com.percussion.rx.config.impl.PSTemplateSlotSetter">
            property name="properties">
                                            <map>
                   <entry key="finderParams"</pre>
value="${perc.SlotExample.FinderParameters}"/>
                  <entry key="contentTypeTemplatePairs"</pre>
value="${perc.SlotExample.SlotAssociations}"/>
                                           </map>
                                       </property>
         </bean>
      </property>
</bean>
```

Example Default Configuration

```
<SolutionConfigurations publisherPrefix="perc" publisherName="Percussion</pre>
Software" type="config" xmlns:xsi="http://www.w3.org/2001/XMLSchema-
instance" xsi:noNamespaceSchemaLocation="localConfig.xsd">
      <SolutionConfig name="slotexample">
         property name="SlotExample">
            <pvalues>
               <pair value1="rffEvent" value2="rffSnTitleLink"/>
                        </pvalues>
         </property>
         propertySet name="FinderParameters">
            cproperty name="query" value="select rx:sys contentid,
rx:sys contentstartdate from rx:rffcalendar where jcr:path like
:sitepath order by rx:sys contentstartdate asc"/>
            cproperty name="type" value="sql"/>
            cproperty name="template" value="rffSnTitleCalloutLink"/>
            property name="max results" value="4"/>
            cproperty name="sys lang" value=""/>
         </propertySet>
      </SolutionConfig>
</SolutionConfigurations>
```

Template Configuration Reference

Configuration Handler Class

com.percussion.rx.config.impl.PSObjectConfigHandler

Type

TEMPLATE

Property Setter Class

com.percussion.rx.config.impl. PST emplate Setter

Configurable Properties

Property	Description		
label	Template label, as defined in the Template label field of the General tab of the Template Editor		
globalTemplateUsage	Only has meaning for Page Templates. Specifies the way the Global Template for the Page is determined. Valid options are <i>Default</i> (uses the default Global Template for the Site or Folder), <i>Defined</i> (uses the specified Global Template; requires the globaleTemplate Property), or <i>None</i> (no Global Template is applied to the Page).		
globalTemplate	Only has meaning if the value of the globalTemplateUsage property is <i>Defined</i> . Specifies the Global Template to use for the Page Template.		
mimetype	Specifies the MIME Type of the output of the Template, as defined in the Mime Type field on the Template Editor. Valid values are the same as the valid values for that field.		
charSet	Specifies the character set used for the output of the Template, as defined in the Character Set field of the Template Editor. Valid values are the same as the valid values for that field.		
locationPrefix	Optional prefix for the filename of the published Template, as defined in the Prefix field on the Template Editor.		
locationSuffix	Optional suffix for the filename of the published Template, as defined in the Suffix field on the Template Editor.		

Property Des	cription		
publishWhen	Specifies the circumstances when the Template should be published when publishing to a Site Folder as defined by the Publish Option on the Template Editor. Valid values include:		
	Value	Description	
	Always	Always publish this Template.	
	Default	Publish this Template if it is the Default Template for the Content Type	
	Never	Never publish this Template	
bindingSet	List of bindings to replace the existing set of bindings on the Template		
bindings	List of bindings to merge with the existing set of bindings on the Template. If a binding in the list already exists, the value from the list overrides the existing value. If a binding in the list does not exist, it is appended to the list of existing bindings. The default or local configuration can include the optional entry binding_sequence to re-order the sequence of bindings		

Example Configuration

No Global Template override, merge bindings

Configuration Bean

```
<bean id="rffPqCiGeneric"</pre>
class="com.percussion.rx.config.impl.PSObjectConfigHandler">
      cproperty name="name" value="rffPgCiGeneric"/>
      property name="propertySetters">
         <bean class="com.percussion.rx.config.impl.PSTemplateSetter">
            property name="properties">
               <map>
                  <entry key="label"</pre>
value="${perc.TemplateExample.Label}"/>
                  <entry key="publishWhen"</pre>
value="${perc.TemplateExample.PublishWhen}"/>
                  <entry key="mimeType"</pre>
value="${perc.TemplateExample.MimeType}"/>
                  <entry key="charset"</pre>
value="${perc.TemplateExample.Charset}"/>
                  <entry key="locationPrefix"</pre>
value="${perc.TemplateExample.LocationPrefix}"/>
                  <entry key="locationSuffix"</pre>
value="${perc.TemplateExample.LocationSuffix}"/>
                  <entry key="bindings"</pre>
value="${perc.TemplateExample.Bindings}"/>
               </map>
            </property>
         </bean>
```

Default Configuration

```
<SolutionConfigurations publisherPrefix="perc"</pre>
publisherName="Percussion" type="config"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xsi:noNamespaceSchemaLocation="localConfig.xsd">
      <SolutionConfig name="TemplateExample">
         cproperty name="Label" value="P - CI Generic"/>
         cproperty name="PublishWhen" value="Default"/>
         cproperty name="MimeType" value="text/html"/>
         property name="Charset" value="UTF-8"/>
         cproperty name="CocationPrefix" value=""/>
         cproperty name="LocationSuffix" value=""/>
         cproperty name="Bindings">
            <pvalues>
               <pair value1="$rxs navbase 2"</pre>
value2="$sys.variables.rxs navbase 2"/>
               <pair value1="$rxs navbase"</pre>
value2="$sys.variables.rxs navbase"/>
               <pair value1="$rxs navbase 1"</pre>
value2="$sys.variables.rxs navbase 1"/>
            </pvalues>
         </property>
      </SolutionConfig>
</SolutionConfigurations>
```

Example Configuration

Global Template Override and binding set override

Configuration Bean

```
<bean id="rffPqCiGeneric"</pre>
class="com.percussion.rx.config.impl.PSObjectConfigHandler">
      cproperty name="name" value="rffPgCiGeneric"/>
      property name="propertySetters">
         <bean class="com.percussion.rx.config.impl.PSTemplateSetter">
            property name="properties">
                  <entry key="label"</pre>
value="${perc.TemplateExample.Label}"/>
                  <entry key="globalTemplate"</pre>
value="${perc.TemplateExample.GlobalTemplate}"/>
                  <entry key="globalTemplateUsage"</pre>
value="${perc.TemplateExample.GlobalTemplateUsage}"/>
                  <entry key="publishWhen"</pre>
value="${perc.TemplateExample.PublishWhen}"/>
                  <entry key="mimeType"</pre>
value="${perc.TemplateExample.MimeType}"/>
                  <entry key="charset"</pre>
value="${perc.TemplateExample.Charset}"/>
                  <entry key="locationPrefix"</pre>
value="${perc.TemplateExample.LocationPrefix}"/>
```

```
<entry key="locationSuffix"</pre>
value="${perc.TemplateExample.LocationSuffix}"/>
                   <entry key="bindingSet"</pre>
value="${perc.TemplateExample.BindingSet}"/>
                </map>
             </property>
          </bean>
      </property>
</bean>
```

```
<SolutionConfigurations publisherPrefix="perc"</pre>
publisherName="Percussion" type="config"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xsi:noNamespaceSchemaLocation="localConfig.xsd">
      <SolutionConfig name="TemplateExample">
         cproperty name="label" value="P - CI Generic"/>
         cproperty name="GlobalTemplate"
value="rffGtCorporateInvestmentsCommon"/>
         cproperty name="GlobalTemplateUsage" value="Default"/>
         cproperty name="PublishWhen" value="Default"/>
         cproperty name="MimeType" value="text/html"/>
         cproperty name="Charset" value="UTF-8"/>
         cproperty name="LocationPrefix" value=""/>
         cproperty name="LocationSuffix" value=""/>
         property name="BindingSet">
            <pvalues>
               <pair value1="$rxs navbase"</pre>
value2="$sys.variables.rxs navbase"/>
               <pair value1="$rxs_navbase_1"</pre>
value2="$sys.variables.rxs navbase 1"/>
               <pair value1="$rxs navbase 2"</pre>
value2="$sys.variables.rxs navbase 2"/>
            </pvalues>
         </property>
      </SolutionConfig>
</SolutionConfigurations>
```